Writing A Dissertation

Writing A Dissertation

Introduction

This tutorial will provide an overview of the process required to undertake an extended piece of work such as doctoral thesis, research proposal, dissertation, project, extended essay etc.

The term dissertation will be used to describe the work throughout the tutorial. Your dissertation supervisor will play a key role in supporting you through the research process.

Elements of a Good Dissertation

A good dissertation should demonstrate:

1. An ability to carry out independent, original research.
2. Familiarity with related academic literature in the relevant subject, including the main issues and research methodologies employed.
3. An ability to criticise and evaluate the work described in the literature and your own work as reported in your dissertation.
4. An ability to write a concise, focused report of your research work in good English, in a logical order and in your own words.

Once you have an idea of what you are doing, make sure you refer to relevant in-depth research methods texts and be guided by your dissertation supervisor at all stages of the process.

Academics say:
It's an original piece of work. It's an opportunity for you to do something that interests you, maybe there's something on the programme you thought was interesting and would have liked to have done more about or maybe there's something you didn't do in the programme that you would have liked to.

Your Supervisor

You will be allocated a supervisor who will advise you throughout the project.
You need to be aware of their obligations and deadlines.

- It's the student's responsibility to communicate with the supervisor.
- Keep your supervisor informed of your progress, generally students do better if they maintain regular contact.
- Communicate early. Don't send work to your supervisor, just before your deadline – you won't have time to make any adjustments based on their suggestions, such as interview a bigger sample.
- The supervisor role is to advise and guide – not just tell you what to do! If you're not sure of something, they can advise you. But you need to start the discussion with your suggestions.

Academics say:
Your supervisor is not your editor or proof-reader. They're not going to pre-mark the work and tell you it is good enough.

Academics say:
It is your responsibility to communicate with the supervisor. We are not your Mum, we're not going to remind you to do things!

Academics say:
So, you proposed a topic and a supervisor was allocated to you. That's the start of what will hopefully be, a very pleasant and fruitful relationship – if you do it right!

What Should My Dissertation Look Like?

The first question which occurs to most people is “What should my thesis look like?”

Most departments deposit good examples of theses in the Library for students to look at.

Some tutors keep copies of previous good work. There are also some MBA examples online on the University of Bolton’s repository.

Your dissertation should state the objectives of your investigation, describe your research methods, and present and discuss your results.

However, your supervisor will provide direction in terms of the layout, word count and structure of your dissertation.

Always check with your supervisor.

Structure Of A Dissertation

On the next page you will see a brief description of each part of a dissertation.

Some subjects require the submission of a research proposal, which has to be approved before you start data collection. If you have been asked to write a research proposal click on Research Proposal first.

If you haven't been asked to write a Research Proposal please ignore it!

Note that not all subjects require this – **check with your supervisor** if you are unsure.

Structure Of A Dissertation

1. Research Proposal

Only complete a research proposal if you have been asked to do so by your dissertation supervisor.
A research proposal involves a similar approach to writing a full dissertation except for actually carrying out the research. It is a way of checking that your proposed dissertation is valid, rigorous and achievable in its aims, objective and research design.

A good research proposal should briefly:

- Describe what you want to do.
- Show how you intend to do it.
- Outline what you hope to achieve.

Pay close attention to the guidelines that you have been given, and then work through the following sections listed below except Results and Discussion. Once your research proposal has been accepted, you will be ready to begin collecting the data.

Structure Of A Dissertation

2. Title

You should state:

- The title of the dissertation: Potassium uptake in potatoes.
- Your full name and any academic qualifications you may have: Hannah Turner B.Sc. (Hons).
- A statement in this format: A dissertation submitted in partial fulfilment of the requirements for the degree of Master of Science in Environmental Geotechnology.
- Institution: The University of Bolton Place: Bolton.
- Date submitted: May, 2017.
- Name of supervisor (if required): Supervisor: Joe Bloggs.

Some students choose to illustrate the front page with graphics or pictures etc. Only do this if it is appropriate to the subject, as too much detail may trivialise the academic nature of your work.
The same principle applies throughout the document. Illustrations should only be included to convey information, and not just for artistic effect.

Structure Of A Dissertation

3. Abstract

This is a summary of your thesis condensed into a short paragraph. You should include a brief outline of the following:

- The issues that you have researched and why.
- Research methods chosen and why.
- Your results.
- Your conclusions.

It does not matter that your conclusions are obvious from the beginning; it is the rigour that you have applied in reaching them that matters.

Structure Of A Dissertation

4. Acknowledgements

If anyone has helped you during your research, you should acknowledge it. You will have got help from someone, whether it was staff in the Library who helped you search for information, your lecturers, your colleagues, or experts who may have sent you material or given you interviews.

Structure Of A Dissertation

5. Introduction

Introduce the subject of your dissertation and describe your aims and objectives. You should explain the significance and relevance of what you are trying to prove, how you are going to prove it and what methods you will use in the process. You should outline the content of each section:

Chapter 1 will examine the development of Robert Frost's poetry and the factors that influenced it….Chapter 2 will analyse the poems that concentrate on Nature being unfriendly and expand upon the theme of darkness….Chapter 3 is concerned with the darker side of Frost himself. The Conclusion will show that Frost and his poems are one.
(With grateful thanks to Kenneth Akroyd for permission to adapt his work)

The introduction is your opportunity to demonstrate that you have a grasp of the appropriate language, style and grammar required for writing an academic piece of work. Adherence to these standards will create a positive impression to build on throughout the rest of your thesis.

Structure Of A Dissertation

5. Literature Review

You must critically review relevant past research. Listing summaries of articles in chronological order is not appropriate. You must identify research themes in the literature or analyse papers according to alternative methodologies for comparison.

A good literature review is comprehensive, critical, and informative. You should conclude it by identifying your intended contribution to the current literature. In order to carry out an in-depth review of the literature, you should be familiar with the research techniques described in the Advanced Research Skills sections.
See the Literature Review section of this tutorial for full details.

Structure Of A Dissertation

6. Methodology

Development and description of your research framework. This is where you describe the research methods, data collection and data analysis methods that you have chosen and explain why these methods are appropriate for your research. Its content will differ depending on the particular research undertaken.

Structure Of A Dissertation

7. Results & Discussion

You must describe, display, interpret and evaluate your results. You must also identify any limitations and discuss the strengths and weaknesses of your reported research.

Structure Of A Dissertation

8. Conclusion

This is where you combine all the strands of your argument to give a convincing answer to the question you originally posed. You should be able to justify your conclusion and show how the stages in your reasoning are connected. You should identify any potential future developments for your research topic and if there are any practical implications for management or government policy.

Structure Of A Dissertation

9. Bibliography & References

Your thesis must contain either a bibliography or a bibliography and a reference list according to the expectations of your supervisor. Failing to cite your sources correctly could result in accusations of plagiarism and the failure of your dissertation. Consult our referencing section for further help.

Structure Of A Dissertation

10. Appendices

This section should include examples of items you have used to gather evidence for your research, such as questionnaires, surveys, letters, illustrative material, statistical tables etc. Similar materials should be included in the same appendix and should be numbered accordingly, e.g. two different questionnaires should be in the same appendix numbered 1a and 1b.

Starting to Write

Once you have an idea of the recommended structure that a dissertation should follow you should start writing.

For further information and tips on presentation style see Preparing for Dissertations and Projects by David Rudd [PDF].

Academics say:
Try to always say 'why'. Don't forget that you won't be there when the reader reads it. It needs to be understandable by someone who comes at it with no previous knowledge.

Planning

Completing a dissertation is a time-consuming task. It can be easy to be overwhelmed by the amount of work that you have to do.

Being organised and planning your activities will help you include all of the aspects that you need and avoid a last minute rush that may affect the quality of your work.

There a several organisational tools that could help you such as log books and Gannt charts.

Academics say:
It's a piece of work that you might be spending 400 hours on. That's going to produce a big fat document, it's not something you can leave until the last minute. If you try to do that you will be unpleasantly surprised!
It involves originality, it involves you designing what you want to do and all of that takes time.

See our study skills booklet Preparing for Dissertations and Projects [PDF] for further planning techniques by David Rudd.

Log Book

You may find it useful to keep a log of the many different aspects of your research. It will help you to keep track of what you intend to do and what you have already done.

Keeping a log book may not be expected by your supervisor, but it will be an invaluable personal record of your progress.

Your log book might include any or all of the following:

- **Diary of what you did and when.**
- **Target dates and deadlines.**
- **Ideas that you have in the middle of the night, or more convenient times.**
- **Current awareness alerts.**
- **Potential problems and possible solutions.**
- **Search terms you have used.**
- **Sources you have consulted or intend to consult.**
- **References for your bibliography.**
- **Queries for your supervisor.**
- **Questions for the librarian.**
- **Names and contact details of relevant people.**
- **Web addresses.**
- **Expenses, if applicable.**

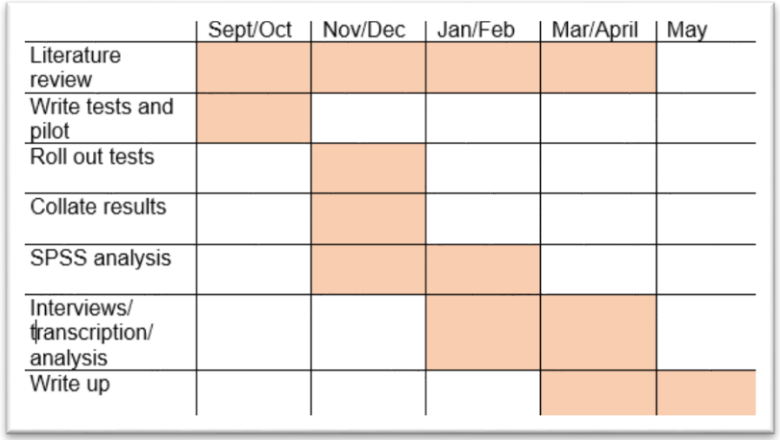
Academic say:
You rely on external factors, e.g. people you want to interview people are not going to be as motivated as you, so you have to fit in with their deadlines and timescales. If you leave things until the last minute you may not be able to interview the people you want to interview or you may not be able to distribute as many questionnaires as you would have liked. From the very beginning you need to think about time management and planning.

Gantt Chart

Another planning tool is a Gantt chart. This a simpler tool than a log book, but requires you

to estimate the time you will spend on each section of your dissertation and when you can expect to complete different milestones. It is essentially a timetable. It will help you meet deadlines and avoid time drifting, so that you don't have a rush at the end. It will also help you judge if what you have planned is feasible in the time available.

To draw a Gantt chart, draw a grid, enter the tasks down the left-column and the months or weeks across the top.



	Sept/Oct	Nov/Dec	Jan/Feb	Mar/April	May
Literature review					
Write tests and pilot					
Roll out tests					
Collate results					
SPSS analysis					
Interviews/ transcription/ analysis					
Write up					

Academics say:
People create them because they are a requirement, but they don't look at them, they don't use them! Don't just do it because the assignment brief says so, actually use it, it's a project management tool.
It doesn't have to be a Gantt chart if you've other ways that you like to do things, you may have a time line or a 'to do' list.

Choosing Your Topic

You may have a clear idea of the topic you wish to investigate. However, if you are struggling to think of something, ask yourself the sequence of questions below.

Which part of your degree interests you most and why?
E.g. local history, because I feel close to the people of the area in which I live.

Having identified the subject area, can you think of an issue which can be explored effectively?
E.g. the role of women in the growth of trade unions in the cotton mills of Bolton.

Will this issue be sufficiently academic to engage both you and your examiner?
Hopefully, if you include evidence from relevant primary sources. You may wish to carry out a preliminary literature review to explore existing work on the topic.

Can you now pose a question based on the above?
This will be the basis of the title of your dissertation. E.g. how effective were women in influencing the growth of the Trade Union movement in Bolton before the Great War?

Choosing Your Topic

If you are still unsure, try thinking about the following approaches.

Choose a theory relevant to your subject are and explore its significance
E.g. are Talcott Parsons' theories of the family still relevant in the 21st Century?

Compare your subject with something else happening at the same time or with something that is similar in nature
E.g. which was the most influential in the improvement of the daily lives of the Lancashire mill workers in the early 20th century; the Trade Union movement or the Co-operative movement?

Re-evaluating existing research
E.g. has Britain moved closer to Young and Willmott's 'symmetrical family' in the last thirty years?

Address a topical issue or problem and discuss what the implications are or how they can be resolved
This will be the basis of the title of your dissertation. E.g. how effective were women in influencing the growth of the Trade Union movement in Bolton before the Great War?

Setting Aims and Objectives

The requirements for setting aims and objectives and where you present them will vary according to academic discipline. Use this information to guide you, but make sure you complete your work as required by your supervisor.

Aims and objectives may be required at various points in the dissertation process, such as the research proposal or the dissertation introduction or they may be required by your supervisor before you are given approval to begin your planned investigation.

There is sometimes confusion between aims and objectives.

Aims

Aims are what you hope to achieve by the end of your dissertation.
They should be clear and concise statements, but expressed in general terms.

Objectives

Objectives are how you intend to achieve those aims. They will include the specific means of answering the research question that you have posed and details of the key issues involved.

Setting S.M.A.R.T. Objectives

It can be difficult to develop realistic research objectives. There are common pitfalls such as the scope being too broad, not including enough detail, being too simplistic, being too ambitious, etc.

Use these S.M.A.R.T. guidelines to try and develop your objectives.

Specific
Avoid general statements, include detail about what you are going to do.

Measureable
There should be a definable outcome.

Achievable
Be realistic in what you hope to cover, don't attempt too much. A less ambitious but completed objective is better than an over-ambitious one that you cannot possible achieve.

Realistic
Think about logistics. Are you practically able to do what you wish to do? Factors to consider include: time; expense; skills; access to sensitive information; participant's consent; etc.

Time constrained
Be aware of the time-frame of the project.

Example

Look at the Title, Aims and Objectives to see how they fit together

Title → Aims → Research Objectives

Title. An investigation into the student use of e-books at Bolton University.

Aims. Many academic libraries have expanded their library provision by the acquisition of e-books. Despite this strategic direction, the literature reveals that relatively little is known about student perceptions and attitudes towards e-books. Consequently, this research aims to narrow this research gap and conduct empirical research into student perceptions towards e-books and their frequency of use. The results will be used to provide recommendations to library management to improve the quality of service provision regarding e-books.

Research Objectives. The above aim will be accomplished by fulfilling the following research objectives:
1. Review the literature concerning the student uptake and experience of e-books in academic libraries.
2. Investigate perceptions and attitudes towards e-books and the usage of e-books at the University of Bolton.
3. Compare usage statistics between various user-groups, e.g. full-time, part-time, course type, etc.
4. Identify if any improvements or alterations are required to facilitate a high service quality provision in relation to the e-books service at Bolton University library.

Literature Review

Before you start any serious research you must undertake a literature review, i.e. seek out existing research that has been done on your topic and evaluate it.

What you are required to produce as a literature review will vary according to your academic subject and length of project. Make sure you seek guidance from your tutor.

The Literature Review:

- Provides the academic context for your proposed research.
- Ensures that you do not replicate any previous research - your work needs to be original.
- Contributes to increasing your knowledge of your chosen subject and suggests new avenues for you to explore.
- Lends validity and substance to your contribution by referencing the work of recognized authorities in the field.
- Allows you to examine previously used research methodologies.

Literature Review

The review is not merely a description of past research, it must be a critical evaluation, i.e. what is your view of past research? How does it relate to your research proposal?

- You must show insight and awareness of differing arguments and methodologies.
- You must identify research themes in the literature or analyse papers according to alternative methodologies for comparison. What are the strengths and weaknesses in the research you are reviewing? Where are the gaps in the research?
- A good literature review is comprehensive, critical and informative.
- Try and consult primary sources where possible.
- You should conclude it by demonstrating how your proposed study will contribute to the current literature.

Academics say:
We want you to be aware of what has gone before, you don't start from nothing, that's why there's a literature review.

Literature Review

For in-depth review of the literature you must consult many sources, but make sure that they are academically valid and relevant to your topic.

It is essential that you have the skills to identify the necessary information effectively and manage it properly to avoid plagiarism and time wasted trying to find papers you have mis-placed!

Make sure you are familiar with the research techniques described in the My Research Needs section. In addition tips on note-taking and bibliographic management are also useful.

Use the Library's academic databases as the place to start searching.

As your literature review must be as comprehensive as possible you may wish to use the Library's Inter Library Loan service. You can use this service to order books or journal articles which are not in Library stock.

Academics say:
Keep your references! We've all been in the situation where we've had a fantastic reference and then you can't find it again. If you keep a record as you go along it will make things easier and less stressful as you move towards the deadline.

Structure Of A Literature Review

1. Introduction

- Describe the purpose of the review, i.e. the subject you are investigating and why?
- Describe the structure or outline of your review, i.e. the order of main topics covered.
- Explain the criteria you have used to analyse and compare the literature.
- If you have decided to exclude certain categories of literature explain why, e.g. not anecdotal accounts, not articles in foreign languages or unscientific findings.

Structure Of A Literature Review

2. Main Section

- Discuss the main points that you identified in your review.
- Group together authors with similar or related findings/methodologies and compare and contrast with those that differ for each point.
- Critically analyse each piece of literature and state how you view its significance.
- Show how each point relates to your own research arguments.
- Use the first sentence of each paragraph to draw attention to its content. As you proceed, use ‘signposts’ to show the direction you are heading in and then create a logical path through to your conclusion.

Structure Of A Literature Review

3. Conclusion

- Summarise how what you have read has contributed to the topic under review, drawing particular attention to the most significant studies. Make sure that it relates to what you have outlined in your introduction.
- Evaluate the current state of development of your topic, pointing out any major gaps or methodological flaws in previous research. It is important to point out any inconsistencies in existing theories and findings.
- Point out areas or issues worthy of future study which you might pursue.
- Relate the topic of the literature review to the larger academic discipline.

Structure Of A Literature Review

4. Final Check

Review what you have written, ask yourself the following questions and amend as appropriate:

- Have you included sufficient evidence to support your views? Does the argument flow in a logical manner through the main points?
- Do you relate the points mentioned to your own arguments and proposed research?
- Is the English and grammar appropriate and correct?

Research Design

The point of research design is to put your strategies into action and to enable you to find answers to the questions you have raised. It is important to choose a method that is appropriate, achievable and manageable.

Your methodology section should include the rationale for your choice of methodology, data collection and analysis. Discuss alternatives that may have been used in related studies and why you didn't use them.

So, for example, if you have chosen to use questionnaires, why? Justify the sampling and data analysis techniques that you have used. If possible cite a relevant study which used similar techniques.

Academics say:
Description is not enough, there needs to be justification and explanation of why you did something.

Useful Questions to Consider

You should think about the following:

- What is your research philosophy, e.g. positivist or interpretivist?
- Which research methods are you going to use and why?
- When and how will you collect your data and on how many occasions?
- Who or what is the subject or your research and how will you select them?
- How will you analyse your data?
- How does you research fulfil your aims and objectives?
- How does your research design fit with the existing literature?
- Have you planned a schedule? You must make time for seeing your tutor, reading, writing up etc.
- Have you got enough money to cover potential expenses?
- What are the limitations of your methodology?

The following section of the tutorial will you help answer the above questions

Research Methods

Primary research methodologies can generally be categorised into **quantitative** or **qualitative** techniques, although sometimes a **mixed method** approach is used. It is important that you understand the difference between them, the advantages and disadvantages and when they would be appropriate to use.

You must justify your choice of method(s) and explain how this relates to the literature that you have discussed in the literature review.

For example, you may choose a similar technique used in related studies on the basis that it has already been used successfully and you can easily compare findings; conversely, if research on particular topic has been carried out using qualitative methods only, you may consider this a weakness or a gap in the research and put forward a case for a quantitative study.

Research Philosophy

You may be asked to discuss your **research philosophy** (epistemology):

- If you prefer a factual perspective (positivist) you may be more likely to select a quantitative approach
- If you prefer to identify and discuss themes (interpretivist) you may be more likely to select a qualitative approach.

Before you consider your techniques, first consider your intended sample. Think about the subject of your research, whether it is people, plants, animals, events, processes etc. Which would be the most appropriate technique for answering your question? You should then think about how you are going to select your sample.

Selecting Appropriate Research Methods

Work through the following sections to develop your research design and identify the most appropriate research methods for your research. These sections contain brief descriptions designed to allow you to select the most appropriate method(s). Once you have made your selection, you must consult research methods texts for more in-depth information. See the further reading section for suggestions.

Qualitative Research Methods

Introduction

Quantitative techniques are primarily concerned with numbers, generating a dataset which can be analysed to give definitive conclusions. This type of data can be used to prove or disprove a hypothesis.

Data analysis: the numeric data that you will generate in the quantitative research context may be analysed using software such as SPSS. You can use SPSS to conduct frequency tests, correlations, produce graphics such as pie charts, bar charts etc. You can obtain your own copy of SPSS by ordering it at the Help Desk within the Library.

Quantitative Research Methods

Experimental

This is a quantitative method which uses experiments to collect measurable data. The process should be totally objective, e.g. you may want to prove whether eating chocolate decreases stress levels; or what is the best method of teaching someone to read. Your experiments should try to establish the cause and effect between the dependent and independent variables, usually in a controlled environment. Any extraneous variables must be identified and acknowledged.

You may need to consider Sampling Techniques and ethics depending on your subject. The resulting data will be analysed in order to prove or disprove your hypothesis. Think about the analysis you intend to do as part of your experiment design. You will need a certain level of statistical knowledge, to be able to analyse and manipulate the data effectively. Commonly used software packages are SPSS and EXCEL.

Quantitative Research Methods

Surveys

Surveys are used to prove a universal truth by identifying a relatively small sample to represent a population as a whole (in research terms, population refers to the group of people or things which fit the criteria you want to study). In social research surveys usually use questionnaires as the data collection techniques. In scientific subjects you may survey populations of, e.g. flora or fauna using quadrant counts.

Quantitative Research Methods

Questionnaires

The questionnaire is probably the most frequently used quantitative method of collecting data. It is usually a set of written questions decided upon in advance by the researcher and given to the sample group for completion. It is not usual to ask additional questions, give clarification or exchange views whilst the questionnaire is being completed.

The Main Advantages of a Questionnaire Are:

- It is a cheap and efficient method where no special conditions or equipment are required.
- Information can be collected from a large group of people, fairly quickly.
- The data collected can be anonymous, which might improve the response rate.
- Questions are standardised for all respondents so the answers can be compared more easily.

Quantitative Research Methods

Questionnaires - Continued

The Main Disadvantages of a Questionnaire Are:

- Response rates are often low, particularly by post.
- There is no opportunity to clarify what a question means.
- The choice of answers may be restricted, not allowing the respondents' views to be reflected accurately.

Designing an Effective Questionnaire

- Designing an effective questionnaire takes a lot of planning. Make sure that you consult relevant textbooks for design information. Factors that you need to consider include the following:
- How will the questionnaire be distributed - by post, personally or some other means?
- Are the questions relevant, self-explanatory, concise and jargon-free?
- Will you need to follow-up your questionnaire with some interviews to expand on the information you have received?
- Are there ethical concerns? Do you need to ensure participant anonymity?
- How much time and effort can you reasonably expect your participants to spend on your questionnaire?
- Will the questions included provide enough data to answer your research objectives?
- Have you included all possible response options to closed questions, including 'don't know' or 'not applicable'?
- Have you included any leading questions which direct the participant to answer in a particular way?

Qualitative Research Methods

Introduction

Qualitative research methods are designed to help researchers understand people and the society and culture in which they live. It may deal with more subjective concerns, such as perception, emotion, motivation, etc. This type of research is not statistical, but seeks to identify why types of human behaviour occur.

Qualitative data analysis techniques include content analysis, thematic analysis etc. Consult a relevant text to determine which technique is appropriate for your chosen research method and why. Typically the researcher looks for common themes, areas of commonality and areas of difference.

Qualitative Research Methods

Action Research

Action research is particularly useful in the fields of health, social sciences and education. It is a qualitative method of research. Action research is a method of examining and finding answers to real problems, usually involving people, as they arise. The resulting changes are in turn monitored, evaluated and amended as appropriate.

It's applied to a practical rather than a theoretical situation. The researcher works e.g. as a nurse, health visitor or teacher. People who are the object of the research are actively encouraged to take part in the research to the mutual benefit of the researcher and the researched.

Qualitative Research Methods

Case Study

Case studies are used most often in the social sciences and are qualitative in nature, usually concentrating on a single issue in its natural environment. You might choose an example which typifies the subject you are researching. Perhaps you want to study binge drinking in new towns, so you could choose Milton Keynes to represent all new towns.

The subject is studied in context, over a long period of time, with no manipulation by the researcher. It enables one subject to be studied in great depth, rather than examining it superficially i.e. you would study binge drinkers in Milton Keynes every Saturday night for a year, rather than visiting a different new town every week.

Qualitative Research Methods

Case Study - Continued

The findings of a single case study should provide you with a model which can be applied to the subject as a whole. Simplistically, if the average profile of a binge drinker in Milton Keynes is white, adolescent and of a particular social class, you could assume that the same applies in other new towns. However, there are question marks over how much it is possible to generalise from one particular scenario.

Case studies can involve various methods of data collection, typically interviews or observations. Triangulation should be used to validate your results.

Qualitative Research Methods

Case Study - Continued

Before beginning your case study consider the following points:

- Whether it is possible to choose a typical example, which allows you to generalise from your findings.
- Your presence may affect the behaviour of the subject. You need to be inconspicuous.
- You should not try to manipulate events or impose any control on the participants.
- Are there ethical considerations? Do you need participant's permission?

Cases are often chosen because they are more practical or convenient for the researcher, which is acceptable as long as there are valid reasons for the choice.

Qualitative Research Methods

Ethnography

Ethnographic research is qualitative in nature. Its aim is to understand another culture in its natural setting, usually by participating in the way of life of the people being studied.
It is often used by anthropologists to study cultural groups, either entire populations or sub-groups, such as the habits of shoppers. The data will be collected mainly through observation, informal conversations or possibly more formal interviews. However, it is important to realise that the presence of the researcher may have an influence on the data being collected.

A common ethnographic method is participant observation. This allows researchers to immerse themselves in the situation under investigation. It enables them to develop a deep understanding of the motives and actions of the people they are studying and may reveal perspectives that the researcher may not have predicted. The researchers may decide to undertake their observation either overtly or covertly.

Qualitative Research Methods

Ethnography - Continued

You should consider the following before beginning:

- An understanding of the underlying culture of the society that you are studying is required. This applies equally to a society with which you think you are familiar.
- Considerable time may be needed to integrate into the group and build up enough experience to draw meaningful conclusions.
- Your personal prejudices may influence the data that is collected and its interpretation. How can you ensure that your findings remain objective?
- You need to be an 'observer' as well as a 'participant'. This enables you to gain an insider's view and then put the knowledge obtained into a wider context.
- The study group needs to be representative of the entire group or population in order for the research to have any validity.
- Are there ethical issues, particularly if observation is covert?
- Overt observation may influence participant behaviour and skew outcomes
- Reliability of data collected can be low as observations are often personal and non-repeatable.
- How will you infiltrate the membership of the group if working covertly?

Qualitative Research Methods

Interviews and Focus Groups

Interviews can be carried out on a one-to-one basis or in groups of varying size. A group interview is more commonly referred to as a focus group. Both types are carried out to gain insight into people's views on your research issue. A moderator (which may or may not be you) facilitates the discussion, but tries to keep intervention to a minimum. The moderator introduces topics or questions based on the research objectives, taking care not to influence or manipulate the answers.

The objective is to let the participants do most of the talking, with the moderator keeping the focus on the research objective – usually by working from a pre-prepared outline. How people are selected depends on your Sampling Technique and you also need to think about how data is collected and analysed. In-depth interviews and focus groups are usually audio or video recorded.

The interviews/focus groups can be structured, semi-structured or unstructured. The structured technique uses very specific questions. Conversely, unstructured interviews encourage conversations to develop, giving the opportunity for more original and detailed answers. You may even discover issues that you hadn't previously considered.

Qualitative Research Methods

Interviews and Focus Groups - Continued

Things to consider before selecting this method:

- Do you have the skills to facilitate an in-depth interview/focus group or know someone who is willing to do it?
- Do you have access to equipment needed to record the interviews/group sessions?
- Will in-depth interview/focus groups provide you with enough information or evidence to prove your research theory? How many will you need to carry out?
- Are the questions relevant, straight-forward, jargon free and in language appropriate for the target audience?
- Have you included any leading questions which may direct the respondents towards giving the answer you are looking for?
- Do you have a suitable venue? This is important for focus groups in particular.
- Have you allowed yourself enough time to complete all the interviews and transcribe?

Once you are happy with your design, you should pilot your interview with one or two people and adjust if necessary. Make sure you have chosen an appropriate sampling technique before you continue with your main interviews/focus groups.

Sampling Techniques

Introduction

Samples should be chosen to be representative of the population as a whole. The term population refers to the entire group or sub-group of people, plants, animals or things which you intend to study.

Once you have identified the population to be studied, you will probably find that it is unrealistic and too time-consuming to survey the whole group. However, if you choose too small a proportion of the population you may find that the sample is insufficient to be representative. How big your sample needs to be depends on the context of your research. Consult textbooks and past research to determine an acceptable number of subjects or seek advise from your supervisor.

Sampling Techniques

Random Sampling

This is probably the most common method and uses specific probability techniques to select a specific proportion of a population with the minimum of bias.

First, the sampling frame must be determined, i.e. you need to have obtained a complete (as possible) list of the population so that every subject in the population has an equal chance of being selected. So, for example, if you are surveying international students at The University of Bolton, you need to try and locate or compile a list of all international students, e.g. from the International Society; if you were studying people in a particular geographic area, you could use a telephone directory; if you were sampling the flora or fauna in a field or wood, you could divide the area into a grid.

Sampling Techniques

Random Sampling - Continued

Once your sampling frame is identified, you need to decide on required sample size and choose a random sample in an objective way. The sample should be selected using probability methods such as selecting names/grid numbers from a hat, picking every second name on a list, or using a random number table.

If applicable, you should ensure that your sample is representative of the whole population by using stratified random sampling, i.e. the sampling frame is subdivided into sub-categories of the population before the random sampling occurs. In the case of the international students, different nationalities could be grouped together and a random sample of equal number taken from each group to ensure that the sample represents the population as a whole.

Sampling Techniques

Quota Sampling

Quota sampling is a purposive method, i.e. you purposely choose a population because they possess a particular characteristic. It is particularly useful for small-scale research.

Quota sampling requires you to decide upon the characteristics you are looking for and then find a sample which meets them, by randomly approaching individuals who may fit your requirements. You can use your own knowledge or experience to make informed decisions about whom you survey, e.g. female mature students might be easy to identify.

Once you have chosen enough people with the characteristics you require, you need to choose a quota of subjects roughly proportionate to the population as a whole. Because this method is more subjective than random sampling, you should always acknowledge its potential weaknesses in your report.

Pilot Study, Triangulation, Ethics

Triangulation

Triangulation is a way of assuring the validity of research results through the use of a variety of research methods and approaches. It is a means of overcoming the weakness and bias, which can arise from the use of only one of the methods we have described, such as observation, questionnaires, etc.

For example, researchers might choose to begin their research with an unstructured interview. This will allow them to identify key issues and appropriate terms which they can then use as a basis for more formal interviews, questionnaires, etc.

Triangulation also allows researchers to collect both quantitative and qualitative data from both primary and secondary sources.

Pilot Study, Triangulation, Ethics

Triangulation - Continued

There are four types of triangulation:

- Data triangulation involves time, space and persons. For example, research can be carried out at different time periods across different cultures, using a number of different people.
- Investigator triangulation uses multiple rather than single observers to record the same event.
- Theory triangulation employs a number of different theories to explain the conclusions of the research.
- Methodological triangulation is a combination of any of these methods.

Pilot Study, Triangulation, Ethics

Pilot Study

Once you have determined which research methods, data collection, sampling and data analysis methods are appropriate, it is usually a good idea to undertake a pilot study, i.e., test your methods on a small sample.

This will identify any weaknesses in your methodology, e.g. test your questionnaire on a small group. The responses will give you an insight into the quality or relevance of the questions. As a result you may adjust some of the questions.

If, as a result of the pilot study, you choose to make any changes, you cannot use the results of the pilot study as part of your subsequent research. You should also use a different sample from the one you used in the pilot study, when you start your research for real. So, be careful not to use too large a proportion of your original sample for your pilot.

Bear in mind that you will need to allow additional time in your schedule for conducting a pilot.

Pilot Study, Triangulation, Ethics

Ethical Considerations

All research proposals involving data collection usually require prior ethical approval to ensure the safety, rights, dignity and well-being of both the participant and the researcher. You are required to declare whether or not this applies to your dissertation and, if so, how these ethical issues are to be addressed, e.g. how are you going to ensure the anonymity of your research subjects; how will you communicate this to them?

Ethical approval should not be considered as a bureaucratic obstacle; it is a mechanism for ensuring and demonstrating that the design of your research respects the rights of those who are the participants of the research.

Pilot Study, Triangulation, Ethics

Ethical Considerations - Continued

Examples of activities for which approval is required include questionnaire and interview based research involving sensitive or confidential issues, telephone interviewing or recording by audio or video tape and contact with participants who are children or considered as potentially vulnerable adults.

Your supervisor will advise you if the nature of your research requires you to seek ethical approval. Please refer to the University's Research Ethics Framework for guidelines and forms such as RE1.

Methodology

Research Methods

Pilot Study

Once you have determined which research methods, data collection, sampling and data analysis methods are appropriate, it is usually a good idea to undertake a pilot study, i.e., test your methods on a small sample.

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Bear in mind that you will need to allow additional time in your schedule for conducting a pilot.

Results and Discussion

Once your data collection and analysis is complete, you should report your findings. This section should be a combination of:

Description - what did you find?

Interpretation - what do the results mean? What are the reasons for them?

Evaluation - how reliable or meaningful are the results?

Your supervisor will inform you if you need a separate discussion section or if you are expected to integrate your discussion as you describe your results.

Results and Discussion

You should relate your results back your original research question and the themes that were developed in your literature review. Does your research provide confirmation of your hypothesis and existing research or does it suggest an alternative theory? Don't worry if your findings do not support your original theory. It is more important to show that your research methods were appropriate and carried out effectively, than it is to manipulate your data to fit your assumptions. You must also identify any limitations and discuss the strengths and weaknesses of your reported research.

If you have quantitative data and have analysed the data using SPSS or Excel, you should use it to generate graphics to include in this section, such as pie charts, bar charts, etc.

If you have qualitative data, it is important to support your interpretation by presenting examples of direct quotes that relate to the topic of discussion. Take advice from your supervisor as to how lengthy these quotes should be.

Conclusion

This is where you combine all the strands of your argument to give a relatively short convincing answer to the question you originally posed.

You may summarise your findings from the results and discussion, but make sure that it not merely repetition.

Your conclusion is an evaluation of your research as a whole. You should be able to justify your conclusion and show how the stages in your reasoning are connected.

You should identify how your research could be developed further for future research and if there are any practical implications for management or government policy.

Submission

After completing the above sections, you should compile your appendices and submit. However, make sure you have revised your dissertation thoroughly through several drafts. You should review your text, as well as spelling, grammar, logical flow, style consistency and ensure your citation and referencing is correct.

Points to consider:

- Make sure you do not miss your submission date – there could be penalties involved.
- Remember that other people are submitting at the same time as you and this puts pressure on services such as Turnitin, printing, copying and binding within the University.
- Make sure you know how many hard copies you need to submit and what kind of binding you must use.
- Allow enough time for the binding of your work in the required format. Note that if you need hard back binding it can take up to a week.

Further Reading

Writing a Dissertation

Research Methods

Text for Specific Subjects

Interviews

Questionnaires

Qualitative Research

Quantitative Research

Focus Groups

Data Analysis