
Preparing for and Writing up your Doctoral Thesis

Abstract

This paper will outline how to prepare for, and write up, a good doctoral thesis. It will review strategies to help candidates through the whole process. It will start by looking at the purpose of a thesis, and the importance of developing a good academic and personal support structures for candidates. It will go on to outline the pivotal role of planning and preparation of the structure and content, not only at the start, but by reviewing and amending the plan throughout the process. Some of the common psychological and practical dilemmas and experiences that are likely to unfold during the writing up process will be reviewed and a range of strategies for dealing with these will be provided, including some given by recent doctoral graduates. It will explain the importance of developing a relationship with the supervisory team that supports and facilitates the doctoral candidate’s progress and the importance of complying with departmental/university requirements. The authors also give suggestions about the organisation and structure of a thesis and map out core milestones and a time line which should make successful completion of a doctorate more likely and less stressful.

Key words doctoral thesis, preparation, writing up
Preparing for and Writing up your Doctoral Thesis

First steps first: What is the purpose of your doctoral thesis?

The criteria contained in the Quality Assurance Agency for Higher Education (QAA, 2011) will usually be used to assess doctoral work and you may find it helpful to have these in mind when planning your thesis and while you are writing it:

- Evidence of an original contribution to knowledge (which may also translate into recommendations for training and/or professional practice).
- The creation and interpretation of new knowledge through original research or other advanced scholarship, of a quality to satisfy peer review, extend the forefront of the discipline and merit publication.
- A systematic acquisition and understanding of a substantial body of knowledge that is at the forefront of an academic discipline or area of professional practice.
- The general ability to conceptualise, design and implement a project for the generation of new knowledge, applications or understanding at the forefront of the discipline, and to adjust the project design in the light of unforeseen problems.
- A detailed understanding of applicable techniques for research and advanced academic enquiry.

Rawson (2016) has written on the topic of planning, conducting and writing up research within counselling psychology and you may find this helpful. In addition, you should also bear in mind as you are writing your thesis, that you will need to prepare for your doctoral viva (Tribe & Tunariu, 2016).

Preparatory work - developing academic support networks

Most candidates will never have completed a doctorate before and anxieties about whether the work is of an acceptable academic standard are quite normal. At times, it can feel like a lonely journey so, right at the beginning of the process it is useful to make the most of the formal and informal networks which are available and take every opportunity to review or
discuss your work. Networks may exist within your department, the wider university, or relevant professional organisation/s, as well as family and friends. Just bear in mind that family and friends may not be as interested in the minutiae of the research being conducted as you are, particularly when they have heard about it over several years.

Discussing your work with others in a similar position can be very helpful, although it is important to remember that it is not a race and each candidate will work at a different speed and find some aspects of the work more challenging than others. Developing a support network early on and using it regularly will enable you to obtain useful tips and feedback on your thesis, as listening to others talk about their work can lead to insights and help you to develop your own ideas. At the same time, ensure that you take the lead in organising regular meetings with your supervisory team, as these can provide a valuable structure and help divide the work into manageable sections. These meetings will help provide space for creative thinking to take place, support the conceptual and methodological evolution of your thesis, and provide you with useful deadlines for your work. You may also find attending conferences and workshops useful and most have discounted rates or bursaries for students. There you will hear other people discuss their research, become familiar with customs and standards endorsed by researchers in your academic community, and discover useful networking opportunities. In addition, by presenting at conferences, you may gain useful feedback from a variety of viewpoints, which is not only invaluable for calibrating your work and progress, but may also be a way of getting parts of your thesis published.

**Planning your thesis**

Writing a thesis can appear to be a long and complex task, particularly at the outset, and it can be tempting to consider the task of writing up your thesis as one that begins only after you have prepared your research question(s), piloted and completed your interviews, finalised the data and completed the analysis. This is not the best strategy as it can make the task more difficult than it might be. It is better to start the process much earlier, so it takes place alongside your developing thesis. In fact, it can be helpful to think about the
preparations for the writing up as soon as you start your doctoral work, rather than when you are conducting research, as this will facilitate the whole process.

Academic conventions within your discipline will largely determine the structure of the thesis and you will receive guidance on this from your university or department. It may be helpful to look at completed doctoral theses either via the university’s library, a specialist resource, or the British Library or similar institution, to get a good feel of what the structure should look like.

A thesis needs to have a clear and logical structure which guides the examiners/readers through the work in a way that makes the most of the arguments and the thesis. It is a worthwhile investment to spend time planning the writing carefully, without procrastinating too much. While it is possible to present the work in various ways, the guiding principle should be clarity and lucidity for the reader. It may prove helpful to plan each chapter/section before beginning. This should make the thesis easier to undertake and it should enhance clarity.

A likely contents page or a rough outline can prove useful in, not only getting you to think about the structure of your thesis in a logical manner, but also encouraging you to think about the flow of the thesis and which sub-headings may be used. Thinking about the thesis as a series of sections can make the process seem more manageable and achievable. You may wish to add some points, potential issues or references next to each heading as you make progress and continue to add to these as the thesis develops. You may also wish to write down several key points for each chapter, perhaps those that might be used in an internal monitoring review/upgrade meeting or a formal conference presentation of your work. Some students find it useful to estimate word counts for each section, although these will inevitably vary depending on the area of research. However, a well-researched area may have many more key references than a more obscure one and to try and define this in advance can be counter-productive. You should also ensure that each section leads on to the next. Concise summaries at the end and beginning of each chapter can work well in assisting with the flow of your work.
How to start the writing-up process

A blank computer screen can feel intimidating when there are between 25-100 thousand words to be written before a thesis is submitted and you may understandably feel a little anxious and uncertain about putting words onto a blank page. However, if you wait for the perfect sentence or paragraph, you may have a long wait. It is therefore important not to procrastinate on this and to start writing something to get over this ‘blank page syndrome’. For instance, you could begin with your current thoughts on the topic, current understanding of gaps in the literature review or current methodological tasks and associated decisions. This can always be edited, changed or improved later. You will find it is easier to write 100 words than 20 thousand, so do small amounts at a time and the task will seem much more manageable and less daunting. It may be helpful to realise that at the beginning of writing a thesis, most candidates feel they will never achieve the required word count, yet when they get near the end they are usually struggling to edit out words. To avoid it feeling like an insurmountable task, we suggest getting started on some aspect of the writing-up as soon as possible. Think which area seems most straightforward and start with that. For example, the methods section, as core information, has probably been discussed and fine-tuned on numerous occasions at your supervision meetings and should provide an easy starting point.

Alternatively, you could begin to type up your references. Typing them all up at the end can feel like a long and rather boring or dreary task, as it does not require any original thought or critical analysis. You could compile a long list as you read them, which can then be amended throughout the writing up phase. It is helpful to ensure that the format is consistent with that required by your university or department at this stage as this may save a lot of work later. Some universities require Harvard referencing, some American Psychological Association (APA) or other form. The commas, underlining or bold type face need to be exactly as required and they need to be complete and accurate. Getting started on this can also help a candidate feel that they are achieving something at times when progress with other aspects of the research is proving difficult or there are unexpected obstacles, for example recruiting participants. This is also a task that can be completed when the candidate feels lacking in energy or inspiration. It is a good idea to develop a
system for yourself, using italics or a colour as a way of identifying references that have been used as some, after further development of your thesis, may not fit with your work or the angle you are taking.

Drafting the abstract can be another place to start. While this will inevitably change, it can focus your thinking. You may not have any results at this stage. The purpose of an abstract is a concise description of the research questions, the method of addressing these and a summary of results and conclusions. It may be helpful to think of it as an executive summary. Abstracts do not contain references. The abstract should show why the research has been completed this way, what the results show and why it is important. Anyone reading it should understand what has been done, why it has been done and what your results show, as well as a sentence or two on the implications. An abstract is normally around 300 words - check the exact requirements of your university on this. It may be helpful to think of the following headings when writing the abstract: theoretical background, methodology, results, analysis of results, discussion, conclusions and implications for knowledge and practice. There may be some slight variation on these depending on your discipline and the university requirements. Looking at abstracts in relevant journals will also provide clear examples of what is required.

Some people like to write a plan for each section or to write some key bullet points or notes before beginning. You can also leave gaps to return to later. If so, make sure these are clearly marked, perhaps in a different font colour, so that they are easily identifiable. The authors have come across submitted thesis with the words “to add later” written in them, which the student must have forgotten about. As mentioned above, there is no correct order to write in, and what seems the easiest may be a good place to start. This might be the methodology section or the literature review. Making a start and having some words on the page can feel psychologically good and make the task seem less onerous. You do not have to write the thesis chronologically.

**Other tips**
It is helpful to ground yourself in the relevant literature and keep up with developments as these arise. There are now a range of technology-based tools to make this even easier, for example, setting up alerts around key words or organising concepts to be used within the thesis. All candidates find that they have written or read material which it later becomes apparent will not make the final version of the thesis. Not only can this feel annoying but it can feel difficult to just delete this work. It can feel easier, psychologically, to place this is in a file labelled ‘additional material’ or some similar title or to use systems designed for this very thing, such as EndNote. This work then is available to you, should the structure of your thesis shift, as well as for any subsequent research or publications. Writing a list of what needs completing and putting those which seem to be easy to deal with on one side of the page and those that seem more challenging on the other side can be helpful. Start with those which seem easy, as experience shows us that things which were initially deemed difficult will move to the easy side of the page over time.

It can be useful to get peers or friends to read through your work to check that it flows and the meaning is conveyed as clearly as possible. There are benefits from having both specialists and non-specialists to do this. Also, undertake a thorough spelling, grammar and reference check. Errors will not endear you to the examiners. The thesis should contain a significant amount of material deemed worthy of peer-review publication as detailed by the QAA (2011), so it may be helpful to bear this in mind when considering the writing-up. Information relating to this can be located at Tribe & Tunariu (2016).

Think about the aim of a literature review in the context of a doctoral thesis. The strategy used needs to be clearly stated, the key words given and any other relevant information detailed. The literature review is not just a description of the papers which have been reviewed but a critical evaluation of them. You also need to clearly delineate how they relate to your own topic. It may be helpful to think of the structure as a map for the reader to guide them through your work and ensure you are using appropriate sub-headings. One way to approach the write up of this chapter is to examine the thesis title. What are the key concepts mentioned? What relationship between them is implied or declared? Then add to
this: what are the key points of your rationale? Your answers to these questions are a good guide to what needs to be covered. Also, stay open to fresh angles that will emerge from your reading of the relevant literature. Remember, you need to include reviews of theoretical papers, chapters, empirical work and other relevant documents. Together, these need to start panoramically with a broad view and then funnel down towards the point, i.e., the thesis’ aims and research questions.

Good and methodical organisation of the references, research instruments used, and data will save time in the long term and is likely to lead to you feeling more organised. Make sure you have a system for clearly documenting what has been read. In addition keeping a summary of the findings or other features which are pertinent to your study may prove useful. Many students report having read something on ‘x’, but cannot remember in which paper, and then cannot then locate it! So, developing a systematic recording system early on is important. There are computer packages which will help with referencing, such as the EndNote software. Inevitably you may find you have been over inclusive at the beginning of the process. There will be papers which seemed important but may prove not to be when your research idea has been refined. It is useful to make notes about important papers over the years. If you have summarised those papers, then you will have the basis for the review. Unless you are using research methodologies such as Grounded Theory, the literature review can be started as soon as you have an initial idea and are going to submit your research proposal. Also, writing the methodology section should be straightforward as it a description of what you are hoping to do.

The process of writing

You will find it helpful to develop writing habits that work for you and accommodate other life demands. Some people write every day for a set length of time, some do so for longer with less regular writing slots, and others write as and when they can. Experience shows that most writing (and research) takes longer than anticipated, so it is important that candidates build in time for things to not work out as planned or for the writing not to flow. Most students must draft and re-draft, following additional reading, the course of their
research or comments from their supervisors. It is good practice to develop a time line with your supervisor, so that you have some clear objectives and milestones. This can also make the task seem more manageable.

As stated before it is important not to wait until you feel that you have the perfect sentence or paragraph, but to start writing – it can always be polished or improved later. Most students will have been required to provide a Gantt Chart to show what they will complete when. Whilst it is important to try and keep to this, there may be slippage in some sections and take longer than anticipated. If there are delays or problems with one section, there is nothing to stop you working on another. If you are suffering from issues which mean that your original timetable is completely unrealistic, it may be helpful to discuss this with your research supervisor. If it is just a couple of weeks, this time can usually be caught up. If the slippage runs into a month or more, it is useful to re-work the timetable in consultation with your supervisor/s as soon as this becomes apparent. Writing a thesis is stressful enough without adding to this by having unrealistic time objectives.

Hanley, Steffen & O’Hara (2016) have written about the process for counselling psychologists in moving within research from consumer to producer. Kasket, (2016) has also written about conducting research in counselling psychology. All candidates will struggle at some point in the process, so it is better to deal with difficulties as they arise, rather than hope that they will just disappear. Completing a doctorate requires motivation, perseverance, dedication and personal willpower, in addition to academic excellence and rigour. After all, it is a developmental process leading up to that rite of passage when you receive your doctorate.

It may be beneficial to develop a system for organising your work both, hard copies of papers or materials and computer files. It is a good idea to use the same headings and structure where ever possible for the electronic and hard copies so that they can be cross referenced. Save work regularly, perhaps with that day’s date and time, so that you can immediately see which the latest file is. It is also useful to save this work on a portable
device, CD or in another location - computers do crash or get viruses, so it is important that any work is protected.

A Gantt Chart or time table should include proposed dates for submission of the first and subsequent drafts of each chapter or section of your thesis. This structure will help organise your time and provide milestones and targets along the way. The supervisors of your thesis will also be able to give you a realistic estimate of the time it will take to read and provide comments on drafts or sections. It is helpful to negotiate a timetable and timescale with them well in advance, so that they can allocate time appropriately and you can have clear milestones and deadlines to aim for. Also, you will know when you are likely to receive feedback.

If you have not undertaken academic writing recently, it may be helpful to look closely at a high impact and recently published journal volume and to locate several papers where the methodology is like the one that you are using. In addition, many universities run courses on academic writing. The conventions are different to other forms of writing. After working on a thesis for several years, doctoral candidates are frequently so familiar with their work that they do not pay sufficient attention to ensuring that the meaning is clearly conveyed. Examiners may only read it through once or twice prior to the viva examination, therefore getting a peer or your supervisor to read through it is important, as is listening to their comments. They will bring experience, expertise and a new perspective.
**Style and presentation**

Usually a thesis will be examined by two examiners, one internal and one external, although if the candidate holds an academic post or for some other reason there may be two external examiners. They will be selected based on their expertise on either the subject matter or the methodology, ideally both. In addition, most universities have a chair person present. While the chair person plays no role in the decision making, they are there to ensure the appropriate procedures are followed and that the process is fair.

Your thesis should follow the appropriate academic conventions for your discipline. Having said that, it is important that your thesis is well written and follows the appropriate grammatical rules. You need to make the task of the examiners as straightforward and easy as possible, so clarity is vital. Remember to keep to the word limit and check whether the number includes references. Most universities require a clear word count on the front or second page. Different disciplines or epistemological positions require slightly different styles. Within psychology for example, the *passive voice is usually used*. For example, “the frequency count was x”, rather than the active voice, “I noted that the frequency count was x”. Some researchers prefer the passive voice as they believe that it is more professional and avoids the constant repetition of the word ‘I’. Qualitative research which positions the role of the researcher rather differently to that of positivist paradigms may encourage the use of the active voice. It may be useful to discuss this issue with your research supervisor before writing is started.

Each university has slightly different requirements and it is essential that they are followed exactly as specified. A thesis is usually submitted on A4 paper, printed on one side only, with double or one and a half line spacing. Quotes and references are frequently written using single spacing and the font size should be 11 or 12. However do follow your university’s **exact** guidance. Pages must be numbered and some university’s request consecutive numbering, others have each section numbered. Requirements for the front cover and the type of binding will be clearly stated in your university’s regulations and must
be adhered to. Candidates want to present a professional academic thesis; therefore, the use of colour is recommended only if it serves a purpose such as in a diagram or to highlight examples of text, but is not appropriate within the main text and there should be no illustrations on the cover. Diagrams, figures or tables can be used and can save words and assist with clarity, and these should be labelled clearly and numbered consecutively.

It is sensible to build in some extra time before submitting a final version as other aspects of life can intervene and printing, photocopying, proof-reading and binding can all take longer than envisaged. Almost all universities will also want an electronic copy submitted, usually accompanied by a document certifying that the thesis has been run through the plagiarism software used by the university. Some universities want this report attached, others will run the check themselves on the final draft. Plagiarism is a major academic crime and if candidates are found guilty of this, the sanctions are extremely serious.

**A possible thesis structure**

Check your university or departmental requirements regarding the expected structure. If a theoretical PhD is being undertaken, the structure may be different. As stated earlier devising a possible contents page early on can be helpful, as this will show an initial map of your work. It can then be helpful to work out some sub-headings and even write some bullet points next to each chapter heading. Candidates can add to this as their work progresses and in this way the thesis will develop incrementally but consistently. The list below is given as a guide only to help candidates with the organisation and presentation of their material.

**Acknowledgements**

The candidate may wish to thank individuals or an organisation that has assisted them in the production of the thesis. This is optional.

**Table of contents**

The table of contents should clearly show the section/ chapter and subsection/titles as well. Page numbers for these should be given.
List of figures and tables

You may find it helpful to number figures and tables making the first numeral the section/chapter number, e.g. 1.2, 1.3 in chapter one and continuing in this vein. Page numbers should also be given.

Glossary or table of abbreviations used

This is not always necessary, but can be helpful when deemed appropriate.

Introduction

This chapter is one that some universities require, whilst others do not want it. The chapter should introduce the reader to the topic through providing the background to the study, the related research and if appropriate the professional setting or framework. The abstract has already provided an overview, the introduction provides background and contextual information.

Aim

This should:

• Be clearly and succinctly stated.
• Should also include the research question(s) posed in the thesis.

Rationale

This should represent an overview of what justifies your thesis – theoretical, conceptual, empirical and applied elements, as relevant:

• Why this aim? Why these question/s?
• Why are the topic area and your proposed investigation important? (Including, if appropriate, your epistemological position).
• Reference should be made to the research literature and any relevant contextual issues (for example, this is a hard to reach group; or the literature is scarce). Likewise, reference should be made to the origins of the study if relevant.
• The anticipated distinctive contribution of the research to wider knowledge and to the relevant discipline or sub discipline needs to be stated.
Evidence of the use of reflexive thinking, as relevant, will be beneficial throughout this section.

**Literature Review**

This should provide a comprehensive overview of the relevant literature and how it relates to your topic. It is important to critically evaluate all the literature cited in the thesis. A list or description of the literature is not sufficient for a doctorate thesis. A critical evaluation might consider issues of research quality, gaps in research, participant selection and other relevant issues. It can also be important to note gaps in the literature and issues of generalisability or not as the case may be. The review provides the context in which the research is positioned. It should be possible for the reader to understand what is already known about this issue and where the research questions you have developed arose from. The literature review might also document what other methods or interventions have been tried to address this or similar issues. The review should be organised in a logical manner around concepts or topics, not as a list of individual publications. It might include definitions and mapping of the relevant literature. It will also include the theoretical underpinnings of the study and its justifications, ending with a statement of the hypotheses or research questions.

Typically, towards the end of the literature review chapter you should:

- Demonstrate a grounded understanding of the main epistemological and methodological issues and debates in the relevant field.
- Identify and address issues, controversies or debates which have not benefited from enough academic scrutiny or have not been addressed to date.
- Provide a clear and well-argued rationale for the research questions addressed, research methodology and the links with the theory and practice of the discipline.

**Methodology**

This chapter needs to describe the methodology used, including participant information, questionnaires/materials, design and procedures. You should demonstrate that the research methods, data collection and analyses used were one of the best means of addressing the
research questions. You also need to provide a clear and concise description of the research carried out, including methodology, ethical issues, findings, and analysis. You should demonstrate how the research findings relate to the research questions being addressed.

It is usual to include the following:

- Hypotheses / research questions.
- Research design and epistemological position taken (the later briefly).
- Positioning of the researcher (if relevant to the research paradigm selected).
- Sampling strategy and participant selection.
- Measures/instrumentation (including justification, reliability, validity, use of pilot studies etc.).
- Procedure for the collection of data.
- Data analysis (exploratory and confirmatory).
- Reliability, validity and power to generalise findings for quantitative studies.
- Credibility, reflexivity/accountability, and transferability (amongst other things) for qualitative studies.
- Relevant ethical and professional issues.

**Results and Analysis of Results**

Raw data should usually be place on a CD and appended to the thesis, as this may be too detailed and substantial to include in the main text. Your examiners may wish to look at this. Summaries of the data should be presented in a form that is accurate and makes the results clear and easy to understand. The statistical results and/or qualitative analysis should be similarly presented. Tables and/or figures should be presented clearly and marked with relevant headings. The use of colour may be usefully employed here. For quantitative analysis, results should be presented in the standard format used in quantitative research. Qualitative analysis is likely to include quotes from participants. Choose a consistent coding system to clarify the (anonymous) source of direct/verbatim quotes. You need to ensure that there is a clear audit trail from the data to the themes given. The epistemological
position taken and methods of analysis employed should be justified both in terms of the research questions and the nature of the data. For qualitative analyses, a detailed justification of the specific approach employed together with a description of how it was undertaken should be given.

This section should also:

- Clearly demonstrate how the research findings provide a significant contribution to and advance knowledge of the area/investigation (e.g., in relation to existing methodology, theory and practice).
- Spell out the implications of research findings for professional and clinical practice.
- Report research which is of potentially publishable quality for professionally relevant and refereed journals.

**Discussion**

This section should start with a clear summary of the research findings, initially centred on the research questions asked, then adding other findings that were found during the research. The intention should be to:

- Offer a direct (succinct yet comprehensive) set of answers to the research questions that underpin the thesis.
- Then place this take-home-message into the literature and describe and comment on the effects or ‘ripples/waves’ that emerge from doing so; these may include conceptual and/or empirical ripples and/or offer issues for professional practice, policy making, teaching and training etc.

Candidates may find these questions as useful prompts in this process of identifying and commenting on such ‘ripples’:

- Do your findings support the literature?
- Do your findings show something different, is so, why might this be?
- How was your participant group similar or different to that used in previous research?
- Do your findings help us think about a certain phenomenon in different ways?
The discussion may detail how your findings relate to the theoretical framework or previous research discussed earlier in the thesis. It may review and critically evaluate the methods, participant selection or any psychometric instrument used and question if they were the most appropriate. The positioning of the researcher may require discussion. The latter would typically be expected under a sub heading “Reflexivity” (offering context and being accountable for your knowledge claims for qualitative studies).

Any ethical issues which arose or unexpected issues may also usefully be discussed here. Finally, any further questions which may have arisen from the work should also be discussed, as should alternative explanations of the results – e.g., ideas for further research.

Most importantly, ensure that in your discussion chapter the relevance and contribution of the work and findings to theory, practice and/or policy has been reviewed in relation to the criteria which will be used to evaluate the thesis. (These are summarised in the first paragraph of this paper).

**Summary and conclusion**

It is possible to have a separate summary and conclusions chapter, particularly if your discussion chapter is long. If so it is advisable to start this chapter with a clear statement of your findings in relation to your hypotheses/research questions. Address your distinctive and original contribution and possible serendipitous or counter-intuitive findings. You should also provide an interpretation of their findings as well as suggestions about how your work could be developed (implications for future research and implications for practice).

**References (see also under literature review)**

As stated earlier references should be alphabetical and adhere to the layout required by your department/university.

**Appendices**

If there is material that should be in the thesis, but which would either break up the flow or is large to be included in the main body of the thesis, it should go into the appendices. Such material might include large data files, tables, or pictures or diagrams of results which are not compact enough to keep in the main text, examples of letters, copies of instruments
such as questionnaires, examples of forms, ethical approvals obtained, and the related correspondence statements of policies or guidelines. Appendices are not usually included in the word count, but it is important to check this. Also, bear in mind that examiners may or may not read the appendices.

**Conclusion**

This paper has set out to share the issues and good practice other doctoral candidates have found useful. The authors have used their extensive experience as doctoral supervisors and external examiners to offer a series of steps, tips and suggestions to aid you in preparing for, and writing up, a doctoral thesis. This does not, and cannot, substitute for the guidance, support and insights of your supervisory team. However, it is offered as another resource to help you successfully write up and submit your doctoral thesis.

**References**


