

Producing a successful PhD thesis.

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Evidence Based Nursing: Research Made Simple Series

Title: How to produce a successful PhD thesis

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All doctoral students strive for the day after years of often all-consuming study, their thesis is ready to submit. For both doctoral students and supervisors there is often trepidation about whether the thesis will meet the criteria to merit the award of a Doctor of Philosophy (PhD). As anxieties increase, doctoral students often ask what makes a good PhD, something we explored in a recent 'Research Made Simple' article,¹ but perhaps the more important question is '*what makes a PhD student successful*'. In this article we outline the core criteria on which PhD programmes of studies are judged and offer suggestions in relation to how to become a successful PhD student.

How are PhDs assessed

Traditionally, a PhD involves three to four years of full-time study (or a longer part-time programme), which is assessed by the student submitting the work they have undertaken as a thesis or - less commonly - a portfolio of published papers and an associated narrative (sometimes referred to as 'PhD by publication'). In addition, the student must undertake an oral defence of their work through a discussion with examiners, who are deemed to be experts in the field of study or with related methodological expertise.² A thesis is a self-contained monograph written by the student which:

- 1) Sets out the problem and context of the research including theoretical perspectives.
- 2) Outlines existing approaches that have addressed the problem or related issues before, typically by undertaking a thorough critical analysis of literature, to identify a gap in the evidence.
- 3) Justifies and critically evaluates the research methodologies and methods chosen to address the problem.
- 4) Presents the finding of the research and how they add to existing knowledge.

5) Makes recommendations as to how the findings can advance the discipline, and in healthcare improve practice, and / or suggest further research directions.

What criteria are used to assess a PhD thesis?

The core criteria for PhD success - ubiquitous to all disciplines and universities - are that the student; has made an original and significant contribution to knowledge of the topic under investigation, and draws on a well-argued and cohesive conceptual/theoretical framework; demonstrates the ability to critically evaluate and justify the research methodology and methods adopted and convey information (written and verbally) succinctly; the work is of sufficient rigour that it is publishable in a relevant discipline specific journal.

Justifying methods

The justification of methodological choices is usually presented in a methodology chapter, and typically has two components: first the big picture that describes the theoretical perspective and methodological justification (sometimes called the research approach), second an account of procedure (methods) of how the research was undertaken.

Critical writing

An essential criterion expected from examiners is that students demonstrate criticality in the way they present information and defend their work during the oral examination. Student must be able to write succinctly and critically. Graduate Schools of Universities have been criticised for only focussing on communicating the administrative requirements of the thesis such as layout, font styles and sizes, type of binding, with the assumption that students arrive on a PhD programme of study, with the ability to communicate well. Similar to developing knowledge and understanding of research methods, students need the knowledge and skills for effective writing.³ Many PhD students find writing the thesis a challenge and perceive there is little guidance about how to develop effective arguments and few opportunities to develop critical writing skills.^{2,3} Consequently, there has been increased focus on supporting students to develop their ability to communicate ideas. A good PhD will 'tell a story' but a thesis is not a 'whodunit' novel where the reader is left wondering what the purpose of the study was till the end.^{2,4}

A thesis should open with a clear outline of the problem, in other words inform the reader what this thesis about and why the topic is important, detail what contexts and perspectives are relevant and offer an outline to the layout of your thesis. In all chapter's students should consider the following:

- Use of 'signposts' to tell the reader where they are going to go, summarising afterwards, and providing appropriate links throughout.

- Meaningful headings: the content of chapters and sections need to reflect the heading.
- Not using vague terms or superfluous words, keep sentences clear and focussed, in other words ensure the points made are clear. Sentences should make sense in isolation to the paragraph.
- Paragraphs should be about one clear issue that is evaluated; paragraphs must link to ensure the thesis flows. A general rule of thumb is that a paragraph should be about half a page, any less and there is limited criticality, any longer and there is a tendency to ramble and lose focus, you need to keep the reader engaged.
- Work on grammar, word choices are important and can convey criticality.
- A PhD is not about how much you can write: it is about how well you articulate and critically analysis information.

Critical writing at PhD level is essential to establish the quality of the research and the credibility of the researcher. A good thesis creates a portrait of an authoritative and competent researcher. Critical writing is crucial for building peer confidence in the research undertaken. Table 1 highlights some of the key ingredients of PhD success, in terms of the study, thesis and viva.

Table 1: Key principles to PhD study success

The study	The thesis	Defence and the Viva
<p>Auditable, clear rationale of purpose, question, aims and methods: contribution to knowledge needs to be unique and show originality</p> <p>Well-articulated conceptual/theoretical framework</p> <p>Issues of ethics considered for both studying the topic and how the study is undertaken</p> <p>Evidence of quality appraisal and reflexivity where appropriate</p> <p>Clear development of ideas -the initial proposal is usually not the final study</p>	<p><i>Title</i> conveys what the study is about do not over complicate</p> <p><i>Abstract</i> is well structured, briefly outlines the issue and methods and key findings; easily conveyed to a non-expert audience</p> <p><i>Structures and flow of chapters</i></p> <p>It is clear to the reader <i>what</i> you are doing and contributing</p> <p>Well justified question</p> <p>Well articulated methodology and application of methods</p> <p>Discussion and conclusion enables the reader to understand how research answered the question/aims and is cognisant of the methodological choices</p> <p>Do not overuse appendices/foot notes</p>	<p>Convey passion for subject and methods</p> <p>Can articulate what has been undertaken, what and why decisions were made</p> <p>Consideration of how and in what other ways the subject/area of interest could have been addressed - be critical of own and other options</p> <p>Clear articulation of the contributions to knowledge BUT also awareness of the field and what are others are doing</p> <p>A considered trajectory of what else is needed and would add to understanding the problem/issues</p> <p>A considered trajectory of publication</p>

Rigour and publish ability

Publishing in refereed journals and conferences is the traditional way the research community disseminate findings and build knowledge, although there is increasing recognition of the role of social media platforms as a means of rapidly sharing knowledge. Refereed journals use recognised standards (such as the CONSORT guidelines for trials)⁵ and rigorous review processes to assess the quality of a research paper, which must be met for successful publication. It is therefore unsurprising that many examiners view a thesis favourably if a student provides evidence of having published elements of their work.⁶ Unlike undergraduate assessment, there is a paucity of research exploring the assessment of PhDs. However, a study that explored the process and judgments of experienced examiners,³ identified the characteristics of a poor and excellent thesis (Table 2).

Table 2: Characteristics of a poor and excellent thesis³

Poor thesis	Excellent thesis
<p>Lack of coherence</p> <p>Lack of understanding of the theory</p> <p>Lack of confidence</p> <p>Researching the wrong problem</p> <p>Mixed or confused theoretical perspectives</p> <p>Mixed or confused methodology and methods</p> <p>Research poorly conducted</p> <p>Research not original</p> <p>Unable to articulate key findings /implications of findings</p>	<p>Excellent artistic endeavor</p> <p>Elegance of design, synthesis, and executions of the research</p> <p>Creativity and originality evident throughout</p> <p>Well-articulated problem, question / aims</p> <p>Methodology seamless and cohesive</p> <p>Rigorous application of methods</p> <p>Well-sculpted thesis</p>

Conclusion

This article has outlined some of the steps that a PhD student should consider in order to produce a high-quality thesis and ensure a successful viva. We have considered how it is important that decision-making is transparent in the thesis, and defensible in the oral defence/viva. A PhD thesis should show evidence of originality and theoretical/conceptual cohesiveness, communicated via the student's critical writing ability. The thesis and defense provide students with the opportunity to share their knowledge and expertise in the field, offers them a methodological stage, and gives the pace to share their critical perceptions, experiences and expertise.

References

- ¹ Rodriguez A, Smith J, Barrett D What are the foundations of a good PhD? *Evidence-Based Nursing* 2020;23:94-96
- ²Rüger, S. *How to write a good PhD thesis and survive the viva*. 2016, The Open University, UK.
- ³Fergie G, Beeke S, McKenna C, *et al.*, "It's a Lonely Walk": Supporting Postgraduate Researchers through Writing *International Journal of Teaching and Learning in Higher Education*, 2011; 23: 236-245.
- ⁴Wellington, J. (2010). *Making supervision work for you*. London: Sage.
- ⁵Campbell, M. K., Elbourne, D. R., & Altman, D. G. (2004). CONSORT statement: extension to cluster randomised trials. *Bmj*, 328(7441), 702-708.
- ⁶Mullins G, Kiley M. 'It's a PhD, not a Nobel Prize': How experienced examiners assess research theses. *Studies in Higher Education* 2002; 27: 369-386. doi: 10.1080/0307507022000011507.