

Secrets of postgrad success

Think of your research proposal as a road map to your goal

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In last month's edition of *Getting Ahead* I discussed how important it is to choose your research supervisor carefully and to explore all avenues of funding and how a project-management approach to my own postgraduate studies benefited me and could do so for you as well.

In this, the second of three articles in which I draw on my master's and doctoral experiences to offer tips for postgraduate success, I explore the next step, namely the research proposal and basic principles of research design and methodology.

You may have to submit a short research proposal with your application for funding but, if not, you are likely to be required to do so by the faculty or department in which you are studying. Proposals are not always compulsory but I would recommend that you still prepare one and submit it to your supervisor for consideration and feedback.

A research proposal can be likened to a road map of what your intended project will be about and how you will go about conducting your research. Preparing your proposal helps you to focus on your research question – the hypothesis that you wish to test – and to determine optimal and practical ways of answering it.

A good proposal contains:

- Some background to the research problem;
- A concise, short literature review;
- Identification and discussion of a gap in the existing body of knowledge on a particular topic and how your research intends to fill the gap;
- A clear "problem statement" detailing what the research project will be investigating;
- Practical procedures the research will follow in leading up to answering the research question;
- A detailed methodology that explains the rationale for using particular methods. You should include draft questionnaires or interview questions, if appropriate;
- A schedule and budget, if needed;
- Details of any special authorisation that may be required. For exam-



Be methodical: A good research proposal should contain clear objectives and sufficient detail about the methodology

ple, if human or animal subjects are to be involved in the research, the approval of your university's ethics committee is likely to be needed;

- Details of any collaborators or other people involved in carrying out the proposed research, including their roles and responsibilities;
- A quality control framework within which the proposed research will be assessed continually and the validity of results and conclusions checked; and
- A risk analysis of possible factors that could hinder the research project and a contingency plan showing how these risks can be prevented or minimised.

Often students produce a research proposal that is replete with background information but does not contain clear objectives of the proposed research or sufficient detail about the methodology to be used. Considering these practical issues in

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the initial stages of your postgraduate study will stand you in good stead later because it will give you a focused approach to your research project from the outset.

Research design and methodology

Research can be quantitative or qualitative. Quantitative research approaches, such as surveys and laboratory experiments, focus on obtaining so-called "hard data" – numbers. Qualitative approaches, on the other hand, such as interviews and focus-group discussions, focus on obtaining "soft data" – people's feelings, thoughts, perceptions and opinions, which can be subjective.

Quantitative and qualitative approaches can be combined and this is called triangulation. Although triangulation is more complex and resource intensive, qualitative and quantitative approaches can complement each other to provide deeper insight into the research problem.

Any research approach has its own benefits but also limitations, which means that it is important that you justify your approach and its associated methodology. It could be, for example, that you have chosen to administer a survey because you do not have the necessary resources (such as time and interviewers) to conduct interviews.

You would then have to acknowledge that, even though you would be able to ascertain how many respondents agree or disagree with a particular statement, this is not likely to provide insight into why respondents have answered as they have. This in turn will affect how you formulate your research objectives and draw conclusions from your findings.

I cannot overemphasise the impor-

tance of a considered, planned and structured methodology. Even if you are going to be performing only desk research (as opposed, say, to laboratory work) and so think that articulating your methodology is not relevant, think for a moment: you will still need a strategy to sift through all the literature on your desk. What are you looking for and how are you going to look for it?

You must be able to justify why you are performing each step or activity in your proposed methodology and how each step or activity will contribute towards meeting your research objectives and ultimately answering your research question.

If possible, conduct pilot studies. These often provide crucial information about whether your broader approach is likely to achieve the results you hope to achieve.

You need to remind yourself constantly of your research question so that you do not lose focus and become side-tracked by interesting information or findings that are certain to arise as your research proceeds (this is one of the pleasures of postgraduate study) but are not relevant to your specific research project.

Finally, students sometimes shy away from methods or techniques with which they're unfamiliar.

I'll take statistical analysis as just one example. Students daunted by such analysis might want to avoid such methods completely, or try to develop their own competence in these methods, for example by attending workshops or reading textbooks, or to outsource this function, say to a collaborator in the university's statistics department.

If you decide to outsource, it is



important not to abdicate responsibility for this section

of your research. Try to learn the basic principles underlying the expert's function so that you can understand how your data is analysed, which may enable you to detect errors. It is your research, after all, so take ownership of it.

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● This is the second of a three-part series aimed at students considering postgraduate study. Part three, to be published in the September 24 edition of *Getting Ahead*, will focus on thesis writing and writing for academic publication. Cassim writes in her personal capacity. Contact her at renaissance2@absamailco.za