From Finding an Advisor to Creating Hypotheses: The Dos and Don'ts of Beginning a Thesis

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As a student in a research-based program, completing a thesis was my number one priority when I started graduate school. At the time, I had no idea what beginning a thesis involved. I found myself completing many thesis-related tasks (creating deadlines, reading example theses, memorizing APA format, searching for conference opportunities and applying for funding) that, although important, were not actually getting me anywhere. Not every new graduate student will make the same mistakes I did, but every new graduate student is, at least to some extent, lost when it comes to beginning a thesis. Geared towards new graduate students, this article includes the basics of beginning a thesis in the form of a step-by-step process of what *to do* and what *not to do*.

Step 1 — If You Don't Already Have an Advisor, Find One

You must do research within the realm of interest and expertise of a professor in your program's faculty. So peruse faculty biographies for their research interests and when you come across an area that you too are interested in, go talk to that professor. *Do* know a bit about the area prior to speaking to the professor and maybe even a specific topic in mind within that area of interest. Repeat this process until you have someone willing to work with you. Prior to requesting to work with a particular professor it may be useful to talk to current and recent graduate students of theirs (desJardins, 2004). This can offer insight into the how frequently you might expect to meet or how hands on the professor will be concerning your research. *Do not* be shy about popping the question, "Would you be willing to supervise me on project X?" The professor is familiar with the process of finding an advisor and knows that you are considering asking. *Do not* be offended if the professor says no. Sometimes professors are unable to take on students because of a heavy work load. They may be covering extra courses that semester, or they may be taking on a large research initiative of their own, or they may be supervising several graduate students already. Whatever the reason, be happy that the professor was honest with you rather than consenting and then not having any time for you.

Step 2 — Identify Your Focus Within Your Advisor's Area of Interest

So, you have an advisor (great!) and you share an area of interest (fantastic!) but what do you do now? Quite likely the area of interest that you share with your advisor is a broad one. This is the time where you need to work on creating your own focus within the area. This means you should spend time browsing the literature. It is easy to be overwhelmed by the amount of reading you think you "should" do (desJardins, 2004). At the beginning it is good to limit yourself to the seminal articles in the area and the newest articles published in the best journals. Seminal articles tend to provide you with an overview of key theories or experiments, and the newest articles provide you with the best impression of where current research has left off. *Do not* attempt to do an in depth reading of everything within the area. At this point, you are merely narrowing your focus by deciding what you do and don't like. Extensive reading in the area is not an efficient use of time. As you learn more about the scope of the area

eliminating topics that are not of interest to you is useful in narrowing your focus. *Do* meet with your advisor during this time and explain the topics you are leaning towards as well as those you are leaning against.

Step 3 — Literature Review

It is important that you have decided on a sufficiently narrow research topic because the next step is to learn as much as possible on that topic. *Do* a complete review of the literature. This includes top journal articles, conference proceedings, peer-reviewed books, and other applicable publications. Keep in mind that a literature review should be an iterative process. This means that you *do not* find all relevant literature and then read it. Instead, let each article you read lead you to the next. Everyone has differing opinions regarding how broadly one should review the literature (Feldman, 2004). However, if your topic is very focused, as it should be, it will be possible to have a very good understanding of the literature on your topic. One indicator that you have covered the area well is when the literature consistently repeats itself, meaning, authors and key studies you have already read are continually cited. Finally, as you complete your literature review, *do* take note of key theories and common methodology. An understanding of these basics will allow meetings with your advisor to be more productive and will help you down the line. As always, keep your advisor updated during this time and be sure to explain what you've learned with examples from key studies.

Step 4 — Research Question and Hypotheses

After having thoroughly researched your area, the next step is to create a research question that, when answered, adds a significant contribution to the field. In my experience, it is here that many students get confused about the difference between research questions and hypotheses. A research question is a question of theoretical importance that has not yet been addressed through scientific inquiry. Theoretical importance means that it is contributing to our understanding of "why" a phenomenon occurs. For example, a phenomenon worthy of investigation could be why some employees are more satisfied with their jobs than others. Offering a new explanation for why this occurs would then be considered a significant contribution to our understanding of job satisfaction. So, assuming it had not previously been addressed, a possible research question could be, "Does supervisor leadership style affect employee job satisfaction?" This research question is the overarching question from which the hypotheses will evolve. A hypothesis is a statement that, when supported or unsupported, offers information regarding the research question. In this case, an example of a hypothesis would be "An authoritarian leadership style will lead to decreased employee job satisfaction." If after hypothesis testing this statement is supported, (as well as your other hypotheses) then you have provided evidence that leadership style does affect job satisfaction and therefore, have successfully contributed to the literature.

Identifying a good research question may be the most difficult part of any research project (Mackey & Gass, 2005). The example above is simplistic, and in real life, a good research question requires a large amount of creativity on your part. *Do* think outside of the box. Your own thoughts and perspectives can offer unique insight into the area. For help, try De Bono's book on lateral thinking (1990), which offers advice on how to challenge assumptions, brainstorm, and generate alternative ideas. Write down all the possibilities, think it over, add more, read more, think more, add more, and *do not* stop generating ideas. *Do not* think anything is too crazy. Once you have reached a point of saturation, it is time to evaluate the questions you have generated. Take what you consider the top three to five research questions and talk to

your advisor about the merit of each. *Do not* be crushed if you are sent back to the drawing board, keep reading and keep generating ideas.

Once you and your advisor have settled on a research question then you can begin to formulate hypotheses. As you have been discussing research questions, it is likely that possible hypotheses have began to naturally evolve. *Do not* think you have to test every hypothesis that is feasible. *Do* keep the scope of your project limited to a set of hypotheses that will provide solid information that is directly related to your research question. Hypotheses that are not properly aligned with the study's research question cause theoretical "fuzziness" and are a common reason for rejecting an article on theoretical grounds (Feldman, 2004).

The advice in this article was based on my own experience as a new Masters student, but I hope that in offering this information to you in advance it will smooth the first stages of beginning your thesis. Keep in mind that beginning any research project is difficult (even for seasoned researchers!), and no one expects new students to have it perfect upon first try. Feel free to contact me with any questions about my experiences and good luck!