

# The Thesis Process: A Guide for Graduate Students

Psychology Department  
Southwest Missouri State University  
*Revision Date: October 1, 2004*  
*(Committee: Fanetti, Mitchell, Kane, Levesque)*

## 1. **Definition**

A thesis is designed to be an empirical project, which contributes to several broad goals relevant to the student's educational and professional development. In addition to helping build the analytic skill expected of masters level students, a thesis project also helps students accomplish the following:

1. Thoroughly learn the research process that sets the foundation of the scientist-practitioner perspective,
2. Complete a project that serves as concrete evidence of mastery over a topic domain and the research process,
3. Make an empirical contribution to the research base in psychology,
4. Prepare the student to meet the demands of applied or educational settings encountered after graduating from their master's program.

There are many ways that these goals can be met and many different mechanisms of empirical exploration. However, each professor may have their own expectations regarding how a thesis should be completed and which projects appropriately meet the requirements of a thesis. These may include, but are not being limited to:

1. Experimental projects which include a variable manipulation,
2. Archival studies which examine previously collected data in novel ways,
3. Technique development studies,
4. Survey studies which utilize field-appropriate techniques.

Often the form of a thesis has dramatic implications for its effectiveness in helping the student to meet specific goals. Some may be more or less effective for improving the chances of gaining entry into quality Ph.D. programs, and other may be more or less effective for improving the chances of finding quality M.S. level employment. The utility of differing types of theses may depend upon the field. For example, certain types of projects may be more expected in clinical settings, while others are more expected in I/O settings.

The thesis supervisor is the best resource for helping the student decide what thesis project best meets his/her professional objectives.

## II. **Format**

While there may be some variation in the thesis supervisor's preferred thesis format, there is very little variation in the format required by the Graduate College for submission of the thesis. It remains the responsibility of the student to translate the

completed thesis into the appropriate format. To make this an easier task, students are directed to read and understand all relevant requirements posted by the Graduate College. These requirements and format guidelines can be found and downloaded at the Graduate College home page: (i.e., <http://graduate.smsu.edu/>).

Additionally, the APA Publication Guide provides valuable information about completing thesis projects and we recommend that students use the APA Publication Guide as a resource.

### III. **Process**

#### *Selecting the thesis chair / Idea generation*

Students in the Experimental Track often have their thesis chairs selected prior to admittance to the program.

Other than within the experimental track, the first step of the thesis process is to talk to faculty members about specific or general interests. Based on the interests of the student and the faculty member, the student can select a thesis supervisor. As faculty across program tracks often collaborate on projects, students should be aware they may request any graduate faculty member, regardless of their affiliated track, to serve as their thesis supervisor. However, faculty members from specific tracks often have the most information about success within that track. The thesis supervisor will guide students through the process of transforming their general interests into a feasible research project.

#### *Literature acquisition and synthesis*

After the thesis chair has been selected and the preliminary idea has been worked out, the supervisor will generally require the student to complete an extensive literature review. The student objective is to master the relevant empirical literature as it relates to their thesis topic. While this can be a tedious part of the process, it may well be one of the most important. A thorough review will ensure that all perspectives on the issue have been examined and may ensure that time will not be spent on a project that has been done before. In addition, a comprehensive understanding of the relevant literature helps the student to better understand the project and how their findings can potentially contribute to the field. This said, a thorough literature review will enhance the quality of the written product, the thesis defense, and later attempts to publish or present thesis data. Once the student has identified the literature that will be used to write the thesis, the student might find it useful to write summaries of each article in their own words. Summaries can then be cut and pasted into the text of the thesis, making the writing process easier to complete. Remember that cutting and pasting refers to writing done by the student.

#### *Methodology idea generation /Outlining the project*

Once the student and supervisor have a thorough understanding of the relevant literature and how they wish to contribute, it is time to generate empirically sound procedures to address the research question. This is often a lengthy, thought-intensive process and should never be rushed. The thesis supervisor will guide the student through discussions

aimed at brainstorming different ways to address the problem. Different research methods will inevitably have strengths and weaknesses and it is the student's responsibility to understand the strengths and limitations of their chosen research design. Always take notes about the ideas considered and impressions of the costs and benefits. These notes will be invaluable in later discussion of the research. Weaknesses in the research design make wonderful questions at the thesis defense! If the student has done a sufficient job of thinking through possibilities, he or she will have the information needed to answer those questions.

### *Selecting the committee*

The purpose of the thesis committee is to provide constructive input for the thesis project and to provide differing perspectives of criticism. Criticism should always be expected in research and better anticipation of it is valuable. Ideally the committee should be selected because their specific expertise contributes to the conceptual or methodological framework of the project. Students may consult with their committee at any stage of the thesis development process. However, students should have their committee's approval before implementing the thesis project. It is the student's responsibility to keep the committee informed and gain approval of any changes in the study that may be a consequence of discussions with the thesis supervisor or other reasons.

Once the student has a supervisor, a research question, a thorough understanding of the supporting literature, and a relatively sound idea about how to answer the research question, it is time to organize the thesis committee.

Thesis committee members are generally selected because their knowledge or skills can be used to improve the thesis project in some way. This should always be the first consideration and the supervisor will have suggestions for the appropriate members to be selected. It is the responsibility of the student to provide a rationale for the selection of any committee member, while the supervisor retains a right of veto. Also, if the thesis supervisor believes a specific faculty member is necessary as a committee member for the project's success, the supervisor can mandate the inclusion of that person.

The committee will consist of at least three members, the supervisor (i.e., chairperson) and two readers. Generally, the only departmental requirement is that one committee member be from the student's track and all committee members must have graduate faculty status. It is possible to select one, non chairperson, committee member from another SMSU department, as long as that committee member has graduate faculty status.

Now is the time to have discussions with the committee members about what the student plans to do. Members will generally contribute advice or thoughts. The student should be non defensive and write these down. The supervisor will make the final decision about whether to implement the advice. If the student and supervisor do not implement

the advice, then the student can explain why this was the case and it will usually not be a problem.

\*\* Some tracks require that the student's thesis comply with the track's requirements, even if a non track supervisor is chosen.

#### *Writing the literature review*

If the student has done a thorough review of the literature and has a collection of article summaries, it is time to explicate the logical argument for doing the study. There are many ways to complete a literature review, but what is important is that all thesis literature reviews should be designed to convince the reader that the research question is important. The student should remember this as a guide as he or she writes and thus may be better able to organize the facts into coherent logic.

#### *Writing the method section*

The method section of a thesis is not simply a statement of what will be done. It is also an argument for why they will be done. Everything which is done should have a purpose which can be explicated.

As the student writes, he or she should remember that the overall goal is replicability. Everything that is done is important. Note not only the steps, but exactly how each step is completed. The thesis supervisor will often provide feedback which simply requests more information. The student may know how he or she intends to complete a step, but the reader won't. A very comprehensive method section will prevent confusion in the committee and will make the process easier. If the student is wondering whether to write about something, do it. It can always be removed later.

The final section of the method will be the ideas for data analysis. The student should discuss the statistics that will be used, why they have been chosen, and how the important assumptions of the selected statistics will be addressed. In addition, the student may wish to discuss how he or she will proceed if a range of problems become apparent. No study can predict all possible problems, but a thorough attempt to catch the obvious possibilities will make the project run smoother and will be more impressive to the committee.

#### *Consulting with committee members*

The student should have open dialog with the committee, while remembering that the supervisor is the ultimate authority on what is done. The student should not make changes to the study without the approval of the chair and without informing the committee.

#### *Preparing the oral thesis proposal defense*

Before running a thesis, there is usually a thesis proposal defense. The purpose of the proposal defense is to strengthen the design of the thesis before it is implemented and to

be certain that the entire committee understands and approves the thesis project. This is a meeting of all committee members and the student. The student will present the research argument, method, and data analysis. If the student has had an open dialog with all of the committee members, then there should be few surprises at the proposal defense. However, preparation is the key.

Even though the committee will be informed of the study, think of the proposal defense as an opportunity to practice educating non informed consumers. The student will be expected to put together a formal presentation which describes all aspects of the study, including the literature review. Many people use presentation programs, such as PowerPoint, or overhead transparencies. Be professional in preparation and in attire. The student will typically be given about 30 minutes to make the presentation. Afterwards the student will take questions for 15-30 minutes.

The more preparation that is done, the better the student will answer the committee's questions. The student should have a thorough understanding of the project to answer questions about why a particular research design was selected, strengths and weaknesses of the design, why certain statistical techniques will be used, and the implications that the findings have for theory and practice. Realize, however, that the committee will respond best to answers that are supported in research and theory. This means that thorough preparation is a necessity! It also means that the student may benefit from several practice presentations with the supervisor or with peers. Practice will decrease nervousness and help the student anticipate questions that will be asked.

#### *The oral thesis proposal defense*

The student should dress well and treat the presentation as a professional exercise. The student should do their best to be clear and coherent in the proposal. The student should display no defensiveness when taking questions or criticisms. The student should proofread materials and make sure all of the equipment works. The student should relax and do their best - the committee is on the student's side.

After giving the presentation and fielding the committee's questions, the student will be asked to leave the room while the committee discusses the project. The supervisor will negotiate the changes to be made in order to get approval from the other members. Once a vote is taken and all members agree, the final form of the project is largely concluded.

The supervisor will then meet with the student to discuss the changes that must be made.

#### *Submitting the IRB*

After the committee has agreed on the final form of the student's thesis, a Human Subjects Review Board (a.k.a., HSRB or IRB) proposal can be created. It is important to wait until after the proposal defense, because this is when the method will be finalized.

Earlier HSRB approval may result in the need to submit changes. This wastes the time of the review board and may be viewed negatively by committee members.

The HSRB now requires that all researchers pass the NIH ethics in research online course. This is a short and easy exercise that will take less than an hour. However, it must be done and an online certificate of completion will be available. The student should make several copies of this and submit one with the HSRB proposal. The supervisor probably already has one on file, but may also need to file one as this is a relatively new requirement. In addition, any research assistants (undergraduate, graduate, para professions or professions) are also required to have passed this ethics exam and they to should have their certificate on file and be listed in the HSRB proposal.

The supervisor will help the student organize an HSRB proposal, but there are some general requirements which can be found online at (<http://cme.nci.nih.gov>).

Remember that after submission, the student may need to wait as long as one month or more to receive a response from the HSRB. The results may include approval, revisions, requests for more information, or rejection. Plan enough time to make any revision or provide any more information requested. The HSRB generally does not care if the student is running short on time. They have a serious job and will proceed as they see fit at their own pace.

#### *Running the project*

When running the project, it is important to follow the proposed and committee-approved methodology. If there are unanticipated problems, the student may need to make revisions. However, these will always be cleared first through both the thesis committee and the HSRB. The supervisor may make a decision that very minor changes do not require HSRB approval.

#### *Analyzing the data*

By the time the data has been collected, most students are eager to be done. However, this is not a time to cut corners. The student must complete all analyses proposed. In addition, the student may need to complete other *post hoc* analyses that are informative. This should be a positive and exciting part of the project. This is the student's opportunity to genuinely understand the data he or she has worked to collect.

#### *Preparing the final (post defense) version of the thesis*

The student will need to provide information about the results of data analysis and discuss the results. Well-prepared documents are always still open for revision. Be prepared to make necessary stylistic and content changes to the literature review which improve the thesis. There may be many such revisions.

Discuss any problems in the study or unusual events. Describe everything that actually occurred as fully as possible.

### *Preparing and completing the final thesis defense presentation*

This will be much the same as the proposal defense with some important differences. First, the supervisor may or may not require that the student verbally present an exhaustive review of the literature and the method. More important, the student will need to be exhaustive in the discussion of the data collected and analyzed, as well as the implications. Discussion should include weaknesses and strengths, how things worked or didn't work, and what the student might do differently next time. The supervisor will provide information about what should be emphasized in the defense.

There is generally no need to have a successful project. But the student will always be expected to understand what went right or wrong. Being informed is the key to success: not just supporting the hypotheses, but carefully and professionally researching and testing the ideas. Other responsibilities of the student include scheduling the defense time and date, reserving an appropriate room to hold the defense, and posting (in the Hill Hall 109, on the Psychology Department's bulletin boards, and in the Graduate Student Office) the thesis defense time and date at least one week prior to the defense. Do recall the thesis defense is open to the public and other faculty members and students may wish to attend.

### *Making the required changes and obtaining signatures*

After the defense, the committee is not required to provide signatures until each member is satisfied that all concerns have been addressed. If the concerns are very minor, the committee members may provide signatures immediately under the conditions that the concerns be addressed. For this reason, the student should have signature forms available at the defense. However and more often, changes will be requested before signatures are granted. Usually, these changes are related to additional analyses. *Do not* attempt to convince the committee to rush their signature because a deadline is approaching. Hopefully the student will have planned ahead and have plenty of time.

### *Preparing the thesis for the Graduate College*

Now that the thesis is completed, probably in APA style, the student will need to format the paper to conform to the Graduate College guidelines. This is the student's responsibility. The web address for the guidelines is: (<http://graduate.smsu.edu>).

### *Issues in Copyrighting*

Numerous students wish to include a copyright statement in their respective thesis. As noted in the Graduate College guidelines a thesis is eligible for copyright protection. However the ownership of the research and data embodied in a thesis may be subject to debate. Sources of funding (e.g., federal, state, or university grants; contracts, etc.) that have supported the project may be a factor influencing ownership. Placing the copyright notice in your thesis implies there is intent on behalf of the student to file for a formal copyright, which in turn means then that no one can make a copy of your thesis without paying a fee. Once a formal copyright has been filed, this then introduces other issues regarding dispersing (presenting and publication) of the thesis data. Also, if a student

wishes to place a copyright notice, the student should discuss this with his/her thesis chairperson early in the thesis process.

Students should realize that they are responsible for the legal ramifications of a formal copyrighted document. For example, numerous students have put in a copyright notice in their thesis, however the thesis included previously copyrighted material (e.g., standardized testing materials that are copyrighted and owned by professional associations, questionnaires developed by others in the field, previously published stimuli developed by other researchers, etc.) which the student does not own and cannot personally copyright. The simple side of this issue is that, once the thesis data has been presented and/or are on file at the university the thesis is protected and you, the student, have safe ownership. If you, the student, do discover or develop something new that could be patented and/or marketed, the university has procedures already in place to protect you and to insure that you and the university receive the generated funds for this new discovery. The particulars of this discovery should not be included in the thesis document. If the particulars of this discovery are necessary for the thesis defense or the bound thesis document then the legal issues should be worked out with SMSU prior to the defense and the distribution of the thesis.

#### *Fees and expenses*

This research is a valuable part of the university community and it will be bound and kept in the library and the department of psychology. The student must provide bound copies for the Graduate College, library, the Psychology Department office, and the supervisor. The student may provide bound copies for himself/herself and the committee members. The graduate school has information about the current fee amounts. (<http://graduate.smsu.edu>).

#### IV. **Presentation/Publication**

The thesis should be designed as a highly professional and scholarly endeavor, which provides a contribution to the field. Therefore, some form of dissemination is expected. This may include presentation at a national or regional conference or publication in a professional journal. Once again, the format and substance requirements for these expectations may be somewhat different from the thesis and it is the student's responsibility to make these changes.

#### V. **Authorship and Intellectual Ownership**

Because the thesis supervisor provides substantial intellectual and developmental input into the thesis project, the thesis is sometimes considered primarily the intellectual property of the supervisor, though the student does maintain intellectual rights as long as they make progress and complete the project. Occasionally and according to APA ethical guidelines, the student may be entitled to first authorship, or committee members may be entitled to some form of authorship. These issues can and should be negotiated with the supervisor before work on the publication has begun.

What this means is that if a student chooses to leave supervision of one advisor and work with another supervisor, a generally acceptable behavior, they do not automatically have the right to take the project idea with them. In fact, in most but not all cases, the project will stay with the supervisor. The project idea may then be given, by the supervisor, to another thesis student or an employed Graduate Assistant for completion. However, any intellectual contribution of the first student will be given due credit. This credit may be given in the form of publication authorship or acknowledgment in the text according to degree of contribution. This is at the discretion of the supervisor within the framework of professional conduct.

#### VI. **Student Responsibilities**

The thesis is a demanding project. It is common for a quality thesis to take as long as two years to complete. The student must be prepared for a substantial time and effort commitment. If shorter routes are desired for the completion of the M.A. in psychology, other types of projects, such as seminar papers, may be more suitable.

The student should make the decision regarding the form of the culminating project carefully, because faculty members will devote much of their own time to assist the student and an uncompleted project or one with slow/no progress may become a burden to both student and supervisor.

The student must understand these guidelines. They are intended to prevent many of the common complaints, barriers, and misunderstandings that can arise.

Completion of the thesis is the responsibility of the student. The student must:

- 1) Actively seek help when needed
- 2) Continue to make progress on the project
- 3) Respect the critical feedback offered by advisors and committee members
- 4) Respect the time lines and deadlines stated or negotiated.

#### VII. **Faculty Responsibilities**

Faculty members understand that students wish to complete their projects, hope they are successful and want to learn. Understanding this, the faculty member who agrees to work with a student agrees to provide the necessary support to make these things happen. This support may include progress meetings (e.g., as many as necessary), which help the students learn how to think about the project, how it fits into the larger picture being addressed and how to complete each step in the process.

While faculty members understand that the completion of each step is ultimately the responsibility of the student, the faculty has the responsibility to ensure the student knows how to do these tasks. Faculty members are expected to communicate expectations up front, including: turnaround times, time lines or goals & objectives, as well as summer semester & sabbatical availability.

## VIII. **Performance Contract**

*Schedules* - Students will benefit from working especially hard early on! No one can with 100% accuracy predict all that can happen along the path to thesis completion, so it is very important to work hard to complete the project. A thesis defense can be scheduled as soon as the project is completed and does not have to put students in a rush as they run against deadlines. It might be a good idea for students to sit down with their supervisor and set a time line of activities to complete early on in the process. The student should be very mindful of falling behind.

When the project begins, the supervisor may help the student to set a general time line for the project. Generally, these include the steps mentioned above and when they should be completed in order to graduate on time. The thesis supervisor understands best the time requirement for each step. Understand that if significant time is assigned to a specific step, it generally means that the step takes this time. Do not procrastinate in completing it. For example, literature reviews often take considerable time and are often seen as a non exciting step in the process. However, this step is very important in that it may better educate the student as to the areas in a specific field which need to be addressed or how they have been addressed before.

*Deadlines* - Some faculty will set deadlines for the completion of steps in the thesis process, either all steps or only major steps. If there will be deadlines, the student should understand clearly the ramifications for failing to meet a deadline. While most supervisors will be understanding about missing one or two, repeated problems or substantial delays which are not remedied may, at the supervisor's discretion, result in project termination. This is a rarely used option and will only occur after extensive communication between the supervisor and student. More often the termination of the project is a joint decision. Please remember that the thesis is a graded activity.

*Progress* - The department expects all students to make regular progress in the completion of their culmination project, including the thesis. However, lack of progress is a common problem, but it is considered the responsibility of the student.

The faculty members do understand how daunting the thesis can seem at first. We also understand how easy it is to allow this perception to generate procrastination. However, procrastination is the primary reason for late completion of the thesis and late graduation.

Students must be proactive in developing strategies that minimize procrastination. Supervisors can help with this, but never have the responsibility to make it happen. Additionally, it is unprofessional and unreasonable to request or expect that a supervisor will allow the rushed completion of the thesis simply because the standard two-year graduation date is fast approaching. The steps of the thesis take as long as they take and attempting to squeeze six months of work into one month or two years of work into one year will more often produce a lower quality thesis.

Nevertheless, a committed student may be able to dedicate more time than is expected to the project and may be able to meet deadlines or tasks sooner than expected. This is the best way to speed the process along and finish sooner than predicted while maintaining high quality standards. The student must make these important choices.

IX. **Acknowledgment**

A. I certify that I have read this document and understand all components.

\_\_\_\_\_  
Thesis Student

\_\_\_\_\_  
Date

B. I certify that I will be available under reasonable circumstances to the student for assistance in the completion of the thesis process.

\_\_\_\_\_  
Thesis Supervisor

\_\_\_\_\_  
Date