#### MS Program Thesis Guidelines

There are a number of options available to MS students in terms of completing their thesis projects. Most students complete a traditional empirical research study, for which they collect and analyze data, for their thesis project. However, for some students, one or more of the alternatives to the traditional empirical study may be more fitting and more helpful to them in furthering their career goals. In such cases, the student has a number of alternatives available to him or her. These alternatives include research focused options such as the analysis of secondary data or a meta-analysis of published empirical studies. More clinically-based thesis projects are possible as well. These include program assessments; case studies, in which published empirical research is applied to the treatment of an individual clinical case; or analyses of empirical evidence for certain treatment approaches. These alternatives are described below in some detail so that the expectations for each are clear from the outset. While these descriptions have been created to help provide guidance and standards for each type of project, it will be up to the student's advisor and committee to determine whether the project is of sufficient quality and substance to be the equivalent of a more traditional thesis project. These alternatives will be equally stringent and will require the same level of work and commitment to complete. Further, a thesis project, regardless of type, shall be a scholarly document that enhances existing empirical or clinical science. It should be noted that not all thesis advisors will be open to serving as a mentor for all options listed below, therefore, a student interested in doing an alternative type of thesis must ensure their advisor is capable of and willing to mentor that type of project.

The following are options available to MS students to meet the thesis requirement:

#### (1) Original empirical study

This type of project entails the student working closely with his or her thesis advisor to formulate original research questions and hypotheses and to design a study that will evaluate and test these questions. Original data will be collected and analyzed and IRB approval will be necessary prior to beginning this stage of the thesis project. A written manuscript will result and will be in the format of the traditional APA research-style manuscript that includes sections for an introduction (a review of relevant literature and introduction to the present study), methods (participants, materials and procedures of the study), results (outcome of the data analysis) and discussion (an analysis of the meaning of the results and what these results mean for the field as well as limitations to the study conducted). A committee of three faculty members (the advisor plus two others) is required and will meet at least twice throughout the duration of the project: once after a written thesis proposal (introduction, methods and proposed analyses) is prepared and again after the final thesis manuscript is complete. During these meetings the student is expected to present his or her project to the committee and answer any questions regarding the project prior to the committee determining whether the project is ready to move on to data collection in the case of the proposal meeting or whether the project meets approval for completion in the case of the final thesis. While this type of project may entail a more lengthy process than some other alternatives, it is highly recommended for those who plan to continue on to traditional research-based Ph.D. programs.

### (2) Analysis of archival or existing dataset

This type of project is identical to the original empirical study except in the collection of data. For an archival analysis, the student analyzes data that has previously been collected, typically through a study done by the mentor. It is a requirement for this type of project that the research questions to be answered in the thesis project be original and not previously tested or analyzed in other studies using this data. Even though this type of project does not involve the collection of new or original data, IRB approval is still required prior to initiating the analyses of the existing data. The remainder of the procedures for this type of project are the same as described above for the original empirical thesis project.

## (3) Meta-analysis

A meta-analysis is a statistical reanalysis of previously published studies on a related topic. The idea is to combine, and in some cases contrast, the results of prior studies in order to detect overall patterns of findings regarding a particular topic. For this type of thesis project, the student would identify a topic that has been sufficiently studied so that there are numerous research studies available on the topic. As this type of project involves advanced statistical knowledge, the student would work closely with a mentor who has knowledge of meta-analysis techniques. Completion of the project would include, but would not be limited to, a thorough literature review to identify appropriate studies for inclusion and exclusion from the analyses, preparation of a literature review that culminates in an explanation of the reasoning behind the reanalysis, presentation of the statistical methods used and results found, and a discussion of the results that places the findings in context with the relevant literature.

The student conducting a meta-analysis for a thesis project will have a thesis committee of three faculty members (the advisor and two others) and the procedures for approval will be the same as those described above for the empirical thesis project. A written proposal (including the articles that will be included in the meta-analysis) will be prepared and approved through a committee meeting before the actual analyses will be conducted. A second committee meeting will take place upon completion of the final manuscript. The final written meta-analysis will follow guidelines set forth by APA that specifically pertain to this type of project. (see Meta-Analysis Reporting Standards; APA Manual, Appendix).

#### (4) Literature Review

In lieu of a traditional research-based project, a student may conduct a literature review for their thesis project. A literature review entails conducting a thorough search of the existing literature on a particular topic and then synthesizing and presenting a summary of the information available about this area of knowledge. All research-based thesis projects involve conducting a literature review that is included in the introduction section of the thesis proposal and final document, however, the type of literature review that can be considered as a standalone project is far more extensive and far more refined than one contained in an introduction section. In order for a literature review alone to be acceptable as a thesis project it must be done on an area of study that has either not previously been synthesized in the literature (i.e.,

no prior literature reviews on the topic have been published) or it must present a novel approach or angle from which to view the analysis. Should such a project be identified, the student will work closely with the mentor to identify the parameters of the review in order to determine the best approaches to incorporating the literature into an appropriate format. The review is expected to not only summarize a body of literature, but to also move this area of study forward in some way and to be of publishable quality. Examples of articles of this nature can be found in the journals *Psychological Bulletin* or *Clinical Psychology Review*.

Because the requirements for a stand-alone literature review project are very particular, it is unlikely that this type of project will be done frequently; however, when this type of project is done the student will follow the general procedures for completion of the thesis project as described above. Specifically, the student will have a committee of three faculty members (the mentor & two others) and will be expected to prepare a proposal document that must be approved by the committee prior to completion of the final project. Because there are no statistical analyses involved in this type of project, the proposal document will include an introduction to the topic to be reviewed (essentially a smaller review than that which will be done in the final project), an explanation for why this review is necessary (not previously done or presenting a new analysis), and a list of the articles to be reviewed for the final document. Once the proposed literature review project has been approved by the committee, the student will proceed to conducting the review and will prepare the final document that must also be approved by the committee upon completion.

#### (5) Clinical Case study

A more clinically-based approach to the thesis project is the completion of a clinical case study. Should this option be selected, the student will identify a clinical case on which he or she has previously worked as the therapist. This experience can come from clinical placements completed during clinical training that was part of the MS program or from other clinical work experiences provided the student was the primary therapist for the case. There are no restrictions as to the type of case one might select, but it must be a case where a diagnosis is available, a treatment plan was created, and the treatment was continued long enough to achieve some sort of clinical outcomes. The specifics of the case would be discussed and agreed upon by the student and mentor in order to determine the adequacy of the case for this type of project. A clinical case study project will not consist simply of a narrative description of the case. Instead, this type of project will be a presentation of the case alongside a review of the empirical evidence available supporting the use of the techniques involved. Specifically, a completed clinical case study thesis project will entail a review of the literature describing and supporting the therapeutic approach(es) used in the case, a presentation of the case that includes: background information for the individual, DSM-based diagnosis of the disorder(s) involved, case conceptualization (treatment planning), a summary of the therapeutic process (what happened during treatment), and presentation of therapeutic outcomes (pre- and postassessments, test results, or other evidence-based summaries of the outcomes resulting from the interventions) and a critical analysis of the outcomes of the case and the techniques used.

The student who elects to do a clinical case study thesis project will have a committee of three faculty members (the mentor & two others) and will have a traditional proposal meeting along with a final thesis presentation. For the proposal meeting, the student will prepare a document that includes the plans for the project: an introduction (presenting the literature review of the clinical techniques used), a brief review of the case, and plans for presenting case outcomes. This meeting will ensure the plan for the project and the information related to the case is substantial and thorough enough to support the writing of a final thesis project. For the final project, the document will include the literature review, the case presentation, the outcome data and analyses, and a discussion of the results in the context of the therapeutic techniques used (how well did they work, what else could have been done, were there alternative to those used that might have worked, etc.). The final document will be reviewed and approved by the committee. Then, in lieu of the typical final thesis meeting, the student will present their thesis in the form of a workshop or in-service to which students and faculty will be invited to attend.

# (6) Empirical Analysis of a Treatment Approach

Another clinically-based alternative to the traditional thesis project is conducting an empirical analysis of a specific treatment approach. This type of project is similar to the literature review described above but focuses specifically on reviewing the knowledge about and effectiveness of a particular therapeutic treatment. For this type of project the student and his or her mentor would identify a therapeutic method that they wish to evaluate, and like the literature review project, this topic must not have previously been reviewed in the literature or the approach taken in the present project must take a critical look at the technique that has not previously been analyzed. Because these are very particular requirements, this type of project is not likely to be a frequent undertaking.

Students taking this approach will follow the general procedures for completion of the thesis project as described above, including the selection of a three person committee (the mentor & two others) and holding both proposal and final defense meetings. For the proposal document to be approved by the committee it must include an introduction to the topic to be reviewed (a description of the therapeutic technique to be analyzed and a review of existing literature available on the topic), an explanation for why this critical analysis is necessary (not previously been done or a new analysis), and a list of the sources to be included and analyzed in the final document. Once the proposed project has been approved by the committee, the student will proceed to conducting the analysis and preparing the final document. As with the clinical case study, the second committee meeting will be in the form of a workshop or in-service, with the focus being to disseminate the knowledge derived from this analysis to practitioners.

## (7) Program Evaluation

Students may elect to conduct a program evaluation as their thesis project. A program evaluation generally entails collecting data to determine the effectiveness of a particular program, policy or project. For this type of thesis project, the student must have access to such

a program and must either be able to carry out the data collection necessary for such an evaluation or must be privy to already existing data that can be used to evaluate a program. An example of such a project would be an evaluation of an existing psycho-educational program designed to reduce bullying among 5<sup>th</sup> graders. To conduct a program evaluation, one must be able to conduct some sort of pre- and post-evaluation of the participants in the program. In this case, data might be collected on the knowledge level of participants before and after the program as well as the number of bullying incidents taking place for the some set time period prior to the initiation of the program and then again for that period of time after the completion of the program in order to determine the effectiveness of the intervention. This is but one example. An acceptable thesis project taking this approach can be of any type of relevant program, provided there is access to the participants before and after, or there is access to existing pre/post data that could be analyzed to determine program effectiveness.

The procedures for this type of thesis project would be identical to that of a traditional empirical thesis if new data will be collected or to that of an analysis of archival data if the data to be analyzed already exists. Regardless of whether new or existing data will be analyzed, the student will form a three person committee (mentor & two others) and will prepare a proposal document that includes: a literature review that describes the intent and empirical support behind the program to be evaluated, a detailed description of the program itself, a description of the methods to be used when collecting and/or analyzing the data to be obtained, and a description of the statistical analyses that will be conducted to determine the program's effectiveness. A meeting will be held to ensure the proposal and plans for the program evaluation are adequate. IRB approval will be necessary prior to the collection or analysis of any data. A final thesis document will include the same sections and formatting as are used in the traditional thesis project and must be approved via a formal thesis committee meeting that is held after the formal document has been completed.