

ROOSEVELT UNIVERSITY

---

**DEPARTMENT OF PSYCHOLOGY**

**PSYD DOCTORAL PROJECT MANUAL**

**Fall 2008**

## Table of Contents

Introduction	3
Sequence of tasks and suggested timeline	4
Details of the process of completing the doctoral project	5
Relationship of the doctoral project to internship	5
Complete Psyc 630 Advanced Research Methods	5
Identify a topic	5
Identify the type of doctoral project	6
Identify a doctoral project committee Chair	6
Identify a doctoral project committee	7
Complete the Doctoral Project Approval form	7
Complete Psyc 789 Doctoral Project Seminar	8
Complete Psyc 643 Psychotherapy Research & Practice	8
Write the doctoral project proposal	9
The doctoral project proposal defense meeting	9
Institutional Review Board (IRB) approval	10
Psyc 790 Doctoral Project	11
Psyc 790Y Doctoral Project Continuation	11
Completing the Doctoral Project	11
The oral defense meeting	12
Submitting the doctoral project after the defense meeting and approval of the Chair and committee	13
Submitting the doctoral project to UMI ProQuest	13
Changes in the library's policy re binding of theses and doctoral projects	14
Guidelines for specific types of doctoral projects	
The empirical study	15
The critical literature review	19
The extended case study	24
Other projects	27
Theses	28
References	31

## Introduction

The doctoral project is a crucial educational and evaluative component of the practitioner-scholar model followed by Roosevelt's PsyD Program. It provides an opportunity for students to demonstrate their scholarship by addressing a question or questions pertinent to the practice of clinical psychology. The scholarship skills of critical inquiry and synthesis will be integral to maintaining competency throughout one's career as a professional psychologist. Scholarship is thus an essential component of effective practice. As Rodgers noted, practitioners (as opposed to technicians) are those who can "minimize harm and maximize gain in areas of ignorance while still making available the benefits of whatever knowledge exists and stimulating rapid growth toward increasing degrees of certainty of effective solutions" (1986, p. 151-152). It is important for students to develop the knowledge and skills necessary to be not only critical consumers but potential producers of professional knowledge and to have an appreciation of the relevance of that knowledge and those skills to their clinical activities.

The doctoral project is an important component toward meeting the goals, objective, and competencies deemed critical by the Roosevelt University PsyD Program. The doctoral project advances the goal of graduates having the requisite general knowledge and skills necessary for the practice of professional psychology that is based on the science of psychology, and advances the objective of providing students with a foundation of knowledge of normal and abnormal behavior across the lifespan, including the influence on behavior of individual (e.g., biological, personality influences), social, and environmental factors and their interaction. In reviewing literature relevant to their doctoral project, students demonstrate competency in utilizing the breadth of the historical and scientific bases of psychology to conceptualize basic and applied issues relevant to clinical practice.

The doctoral project also demonstrates the extent to which students have the knowledge and skills necessary to critically evaluate existing knowledge and to discover, create, and disseminate knowledge of clinical practice issues. In preparation for the doctoral project via coursework and faculty guidance, students develop the knowledge and skills of disciplined investigations in both the nomothetic and idiographic traditions. Using the nomothetic approach, students are trained to examine psychological phenomena across individuals. Following the idiographic approach, students systematically investigate the uniqueness of the individual. Depending on the specific type of doctoral project, students demonstrate the use of theory and research to formulate hypotheses, gather data, and use deductive thinking to understand, treat, or predict behavior.

Depending upon the specific type of doctoral project, students demonstrate their ability to design, critique, and potentially implement quantitative research; select, apply, and critique appropriate statistical techniques to analyze quantitative data; develop skills in case conceptualization and hypothesis testing at the case level.

Given that the mission of the University includes the goals of educating socially conscious citizens for active and dedicated lives as leaders in their professions and their communities via the development of practical scholarship and the application of principles of social justice, the doctoral project should demonstrate respect for and appreciation of individual and cultural diversity. Students are encouraged to create projects that contribute to the clinical knowledge and skills necessary to serve the needs of a diverse community. As appropriate to the topic of the project, it should demonstrate knowledge of social factors on individual behavior, including the influence of client diversity on problem presentations.

Finally, the doctoral project provides students the opportunity to demonstrate their ability to communicate their knowledge via presenting clinical and research findings orally and in writing in an organized, articulate, and professional manner.

## Sequence of tasks and suggested timeline

### Years 1 to 2

\_\_\_ Identify areas of interest and possible topics and Chair for doctoral project

### Year 2

\_\_\_ Complete PsyD 530 Advanced Research Methods

### Year 3 or earlier

\_\_\_ Identify a topic and type of doctoral project (typically done in collaboration with Chair)

\_\_\_ Select a committee Chair

\_\_\_ Select committee members

\_\_\_ Complete the Doctoral Project Approval Form

### Year 3

\_\_\_ Complete Psyc 789 Doctoral Project Seminar

\_\_\_ Complete Psyc 643 Psychotherapy Research and Practice

\_\_\_ Write a doctoral project proposal (the goal of Psyc 789; final drafts done in collaboration with Chair and committee)

### Year 4

\_\_\_ Register for Psyc 790 Doctoral Project, using the Individualized Section Registration form and the

\_\_\_ Course Selection Worksheet (cannot be done on line), with the Chair as instructor

\_\_\_ Obtain approval of proposal from Chair (forward proposal to committee only *after* Chair's approval)

\_\_\_ Obtain approval of proposal from committee members

\_\_\_ Defend proposal by October 31 in order to be eligible to apply for internship in that academic year

\_\_\_ Complete proposal defense form

\_\_\_ Obtain IRB approval of study (if human participants are involved, including use of archival data)

\_\_\_ Complete doctoral project (including data collection and analyses, for empirical research projects)

\_\_\_ Obtain approval of final project draft from Chair (forward to committee only *after* Chair's approval)

\_\_\_ Obtain approval of final project draft from committee members

\_\_\_ Defend doctoral project

\_\_\_ Complete doctoral project defense paperwork (see below)

\_\_\_ Make changes arising from defense meeting; Chair reviews changes

\_\_\_ Submit paperwork and draft to Department secretary for forwarding to Graduate Dean's Office

\_\_\_ Make any changes required by Graduate Dean's Office; Chair checks changes

\_\_\_ Resubmit to Department secretary, who forwards previous draft and corrected draft, with paperwork, to Graduate Dean's Office

\_\_\_ Graduate Dean's Office makes final grade changes once doctoral project is approved

## Details of the process of completing the doctoral project

The information below is presented in approximately the order in which each task should be completed. For most sections, space is provided to record completion dates for the tasks involved.

### Relationship of the doctoral project to internship

*Students must have successfully defended their doctoral project proposal by October 31 in order to apply to internship sites that fall.*

Students can begin thinking about a doctoral project topic upon entry into the Program and should begin more intense and consistent work at the latest by the beginning of their third year in the Program. Students must have successfully defended their doctoral project proposal in order to apply to internship sites. Note that completing or nearly completing doctoral projects may significantly improve students' chances of obtaining a quality internship. Because students apply for internships a year before their start, it is to their advantage to begin work on the doctoral project as soon as possible, so that they can inform internship sites of progress on the internship application, at interviews, and before match day (in early February). One of the goals of internships, like doctoral programs, is to show that they are providing training to students who will become clinical psychologists; that is, students who will successfully complete all requirements and graduate from their home programs in a timely manner.

Projected semester for application to internship sites:

Projected date for defense of proposal (must be *before* October 31 of semester above):

### Complete Psyc 530 Advanced Research Methods

The Advanced Research Methods course provides students with skills necessary to understand, critique, and design empirical research. These critical skills are necessary for all types of doctoral projects, not just empirical studies. For examples, students writing a literature review must have the knowledge to critique the research they are reviewing in order to determine which are essential studies and which issues are still in the early stages of understanding. Students writing an extended case study must be able to identify the strengths and limitations of evidence for the theory and techniques they are employing with their client.

Completed:

***Note:** The next steps—identifying a topic and type of doctoral project, selecting a committee Chair, selecting committee members, and completing the Doctoral Project Approval form—should ideally be completed before beginning Psyc 789, the Doctoral Project Seminar. Although they are presented as discrete steps, identifying a topic and type of project and selecting a Chair are intertwined. Chairs will help with the development of a project and will ensure that it is both adequate in content and manageable in terms of a student's ability to complete the project in a timely manner.*

### Identify a topic

There are two basic approaches to identifying a topic for a doctoral project: Several faculty members have ongoing, programmatic research and welcome students who would like to participate. Students then, in collaboration with the faculty member, identify an area of particular interest within that program. Alternatively, students can develop their own area of interest and scholarly project, then identify a faculty member with expertise in that area who can act as chair. Students are encouraged to discuss possible topics with several faculty members throughout their early years in the Program. Examples of doctoral projects particularly appropriate for a practitioner-scholar model program can be found in Peterson, Peterson, Abrams, and Stricker (1997).

Suggestions for topic selection:

- The topic should be within the domain of clinical psychology.
- Given the Program's practitioner-scholar model, topics relevant to clinical practice should be considered.
- Students might begin considering areas they found particularly interesting in coursework or, what is more common, issues arising from clinical training experiences about which they wish to learn more.
- Students should consider the extent to which such issues and questions have already been addressed by others' scholarship and what contribution their work might make to the topic.
- In the initial stages, students are encouraged to develop a list of several potential projects, then discuss these with faculty members. Thus...
- Students should consider the faculty's expertise, interests, and availability in selecting a topic.
- Students are encouraged to read examples of doctoral projects (and to consult with faculty about which projects are good models for each type of project). Full text doctoral projects are available online through the Roosevelt University library.

Topic identified:

### **Identify the type of doctoral project**

The doctoral project may be one of several types: an empirical study, a review of the literature on a selected topic, an extended case study, a program review, or a grant proposal.

- An *empirical study* involves collection of data (or use of archival data) to test one or more hypotheses.
- A *review of the literature* involves the identification of critical issues and the synthesis and integration of empirical research and theory on a topic.
- An *extended case study* involves presentation of a psychotherapy case, including presenting problems, case conceptualization, treatment plan, treatment execution, and outcomes; the case presentation must be integrated with the appropriate literature bearing on the case (literature on the client's problems, the theoretical orientation used in the case conceptualization and treatment, the means of assessment, etc.).
- A *program review* involves a description of a program; a detailed description of the population it serves, the problems it addresses, and the treatments it provides; and collection and interpretation of data on the outcome of its services.
- A *grant proposal* must include a literature review on the topic addressed by the proposal and a detailed plan for implementing the services proposed, also rooted in the empirical literature on the topic.

The type of project may influence the choice of Chair, as some faculty may wish to work on only one or two types of projects.

See later sections for specific information and criteria for each type of project.

Completed:

### **Identify a doctoral project committee Chair**

Committee Chairs must be full- or half-time faculty members with either particular expertise in the area of interest or a willingness to assist the student in exploring that area. Students are encouraged to discuss possible projects with a range of faculty members during the process of developing a topic and selecting a Chair. Once a Chair has been selected, students should work in collaboration with him or her from the earliest stages of the project in order to avoid spending time on work that may not be appropriate or acceptable.

*The doctoral project Chair has several responsibilities:*

- assisting the student in developing a topic into a well designed piece of scholarship that can be completed within a realistic period of time;

- ensuring that the student has the necessary knowledge and skill base to complete the project;
- ensuring that the review of the literature and other material on which the project is based is current and as comprehensive as befits the project;
- ensuring that the project meets standards of general composition, APA style, and Roosevelt University requirements;
- advising the student on selection of committee members;
- acting as liaison between the student, the committee, the Department of Psychology, and the Graduate Dean's Office;
- providing the PsyD Program with feedback on the student's progress toward completion of the doctoral project and any problems associated with it.

In order to address those responsibilities, Chairs may require students to remediate deficiencies by taking (or retaking) particular courses, reading books or articles (not just specific to the project but, for example, on research design, statistics, composition, theories of psychotherapy), consulting with others, and so forth.

Students may wish to notify their Chair that guidelines for committee Chair's, including links to forms, can be found at <http://www.roosevelt.edu/gradstudents/GuidelinesForChair.htm>.

Chair name:

Date of agreement to participate:

### **Identify a doctoral project committee**

Doctoral project committee members act as consulting experts in the development and evaluation of the project. Committee members should be selected in consultation with the Chair. Their responsibilities overlap with those of the Chair and include all those issues noted above re maintaining the quality of the content and form of the project. Committees may include a maximum of one member from outside the University community. Students must demonstrate to the Chair the appropriateness of this member (e.g., a psychologist from the site where data will be or were collected for the project, someone with particular expertise in the area, someone with particular methodological expertise). Students should consult with potential committee members about their availability during summer months; not all faculty have contracts for or are willing to work on doctoral projects during the summer.

Committee member 1 identified and agrees to participate (name and date):

Committee member 2 identified and agrees to participate (name and date):

### **Complete the Doctoral Project Approval form**

Students must submit the Doctoral Project Approval form before or shortly after the beginning of Psyc 789 Doctoral Project Seminar. This form includes information about the topic, type of project, chair, committee members, and an anticipated timeline for completion (see below). It must be completed *in collaboration with the student's committee* and may take several iterations before all involved agree on its content. In essence, it is an agreement between the student and committee about the time that will be needed to complete each component of the project. The information on this form is also used by the Department and the University to plan for graduation ceremonies.

The form is available through the following link:

<http://www.roosevelt.edu/cas/sp/psydforms.htm>.

Students forward the completed, signed form to the Director of the PsyD Program. If the information is complete and reasonable, the data are entered and copies of the form are forwarded to the student and

committee chair.

*Estimating a timeline for completion of the doctoral project.* The timeline agreed to on the Doctoral Project Approval form is not a set of requirements, but meeting the anticipated dates should be the goal of students and committee members. A rule of thumb for estimating the time involved for each component, based on considerable faculty experience, is to make a generous initial estimate, then multiple it by three. Students should keep several points in mind when making estimates: *Multiple* drafts of a proposal and final project are typically required before a chair will approve it for forwarding to the committee members. It typically takes several weeks for faculty to review such drafts. In addition, the committee typically requires several drafts of proposals and final products before they agree to proposal and final defense meetings. This “second round” of reviews is not a simple or brief process and will typically take weeks, often months. Faculty members are busier and may take longer to review drafts during particularly busy times of the academic year, such as near the end of semesters.

The Graduate Dean’s Office sets deadlines for when doctoral projects must be submitted in order to qualify for graduation. The deadlines are typically 4 to 6 weeks before the end of the semester in question. Students should consult the University website for specifics, at <http://www.roosevelt.edu/gradstudents/theses.htm>.

Doctoral Project Approval form completed, with dates and signatures of committee members:

Submitted to the Director of the PsyD Program:

Approved by the Director of the PsyD Program:

### **Complete Psyc 789 Doctoral Project Seminar** (spring semester, year 3)

The Doctoral Project Seminar is taught by faculty members who may not be the Chair or committee member of the student’s doctoral project; however, the instructor, in collaboration with the student’s Chair, assists students in completing at least a preliminary draft of a proposal. A proposal provides a committee with enough information about a project on which to make a judgment about its feasibility and comprehensiveness (see below for details on the **doctoral project proposal and proposal meeting**). In order to be as productive as possible during this course, students should enter it knowing what topic they wish to address, what type of project they intend to complete, and who will chair their committee.

Students register for this course as they do for other courses, either online or in person.

Registration completed:

Course completed:

### **Complete Psyc 643 Psychotherapy Research and Practice**

Most students will take this course concurrently with Psyc 789 Doctoral Project Seminar. In this course, students will learn how to evaluate research on psychotherapy. This course provides a review of current issues in research methodology and psychotherapy theory and practice, information that will be helpful in designing empirical research projects and evaluating literature for literature review and case study projects.

Registration completed:

Course completed:

**Write the doctoral project proposal**

As noted above, the doctoral project proposal provides the committee with enough information about a project on which to make a judgment about its feasibility and comprehensiveness. *See later sections for specific information and criteria for proposals for each type of doctoral project.*

Students should begin work on a proposal by consulting with their Chair about what content areas to address and what specific literature to explore. This should be done concurrently with taking **Psyc 789 Doctoral Project Seminar**. Students should expect to complete several drafts of a proposal before the Chair agrees that it is ready to forward to the committee. Likewise, students should expect to complete several drafts before the committee agrees that the proposal is ready for a **proposal defense meeting**.

*APA style.* The proposal and final project must conform to the conventions of APA style according to the most recent edition of the *Publication Manual*. Students should have mastered APA style during their coursework prior to beginning the doctoral project. Various condensed versions of APA style are available online and from faculty members, but the full text of the *Publication Manual* is the ultimate resource. It is within the rights of the Chair or other committee members to return a doctoral project proposal draft or complete project for revision without additional comment should they identify multiple style problems within the first few pages of the document. The Dean of the Graduate School or the Associate Dean for Graduate Studies and Research reviews doctoral projects and also will return documents, without further review, that are not well edited, which may delay students' graduation plans. The University also has specific stylistic requirements, but these may be focused on later in the project; however, the Chair may require students to follow these requirements at the proposal stage. See the "completing the doctoral project section" for a link to these requirements.

*Grading.* Doctoral projects are now graded from A to F rather than Pass/Fail. Grades will be based on the extent to which the student has demonstrated an ability to work independently and shown initiative, the quality of the design of the project, the quality of the writing, the responsiveness to feedback in the development of the project, and the extent to which the student has demonstrated mastery of the material at the oral defense meeting.

Proposal draft reviewed for conformity to APA style:

Approval of proposal draft by Chair:

Approval of proposal draft by member 1:

Approval of proposal draft by member 2:

**The doctoral project proposal defense meeting**

The proposal defense meeting provides an opportunity for a final review of the plan for the doctoral project plan. This is not just a formality but a means of insuring that there will be no problems with the project later in the process. It also provides an opportunity for students to develop the skill of presenting scholarly information to others, one of the goals of the practitioner-scholar model on which the Program is based.

The content of the proposal defense meeting will be determined by the Chair and the committee, but it typically includes a concise review of the project (10-15 min), followed by questions from the committee. In order to increase the likelihood of a positive proposal experience, students should prepare and rehearse a summary of their project in advance. Using notes during the summary presentation is acceptable. Providing the committee with a visual presentation may also help with communication and provides an opportunity for the student to develop additional presentation skills.

The doctoral project committee may decide any of the following at the proposal defense: a) the student may proceed to literature collection with no changes or additions to the proposal—the proposal is therefore approved; b) the proposal reflects readiness to proceed to literature collection with minor changes or additions to the proposal—the proposal is therefore approved with modifications; or c) the proposal requires substantive changes or additions and is therefore not approved.

When the doctoral project proposal is approved, with or without changes, the final proposal then becomes a contract between the candidate and the doctoral project committee regarding the work that has been agreed upon to meet the doctoral project requirement. The committee cannot require substantive additions or changes to the doctoral project after approval of the doctoral project proposal. Therefore, the committee members should not sign the proposal approval unless it includes all the important and requisite elements with only relatively minor changes or additions that may be added later.

*Doctoral Project Proposal Defense form.* Once a student has received permission from his or her committee to proceed to the proposal defense meeting, he or she should complete the upper portion (“Readiness to proceed to the Doctoral Project Proposal defense meeting”) of the Doctoral Project Proposal form in collaboration with the committee. The student should then contact the Psychology Department’s secretary, who will assist with scheduling the meeting. Note that the same form is used to document successful completion of the doctoral project proposal defense meeting (“Completion of the Doctoral Project Proposal defense meeting” portion).

Completed form verifying readiness for the proposal defense meeting (“Readiness to proceed to the Doctoral Project Proposal defense meeting”):

Proposal defense meeting scheduled:

Proposal defense meeting and “Completion of the Doctoral Project Proposal defense meeting” portion of form completed:

Changes made in the proposal as recommended during the proposal meeting:

### **Institutional Review Board (IRB) approval**

The role of the IRB is to protect research participants. If the doctoral project is an empirical study or otherwise involves human participants, once the proposal is accepted, and in collaboration with the Chair, students must complete the Roosevelt University Institutional Review Board form, available at <http://www.roosevelt.edu/irb/default.htm>. Note that some faculty members may have IRB approval for their programmatic research; in such cases an additional IRB approval may not be necessary. Consult with the committee Chair on this issue. Students should apply for IRB approval only *after* the proposal meeting because of the possibility of changes in methodology that may arise at the meeting. Submit the IRB information to the Department’s secretary, who will monitor the progress of the proposal through the IRB Committee.

*Students may not begin data collection until they have passed a proposal meeting and received IRB approval.* Research involving human participants that has been conducted without prior IRB approval will not be approved by the Office of Graduate Studies. Students engaging in such behavior will be recommended for review of their status in and ability to continue with the Program; dismissal from the Program may be recommended. When collecting data from a site outside the University, students may also need to submit an IRB request to that site’s administration.

IRB form completed and submitted to the Department secretary:

IRB approval obtained:

**Psyc 790 Doctoral Project** (fall semester, year 4)

Psyc 790 Doctoral Project is not a “class” per se but addresses the time spent on the collaboration between the student and his or her doctoral project committee (primarily the Chair). Students register for the Doctoral Project the fall semester after completion of Psyc 789 Doctoral Project Seminar.

Students register for this course using the **Individualized Section Registration form** and the **Course Selection Worksheet**. The committee Chair is the instructor (for the Individualized Section Registration form); the Director of the PsyD Program is the advisor (for the Course Selection Worksheet). Once the appropriate paperwork is received by the Director of the PsyD Program, it will be forwarded to Registration.

The specific tasks involved in and criteria for the doctoral project vary according to the type of project. See the sections below that address each project type for guidelines.

Individualized Section Registration form completed and submitted...

to Chair for signature:

to Director PsyD Program for signature:

Course Selection Worksheet completed and submitted to Director PsyD Program for signature:

Registration appears on transcript (check with RU Access):

**Psyc 790Y Doctoral Project Continuation** (spring semester, year 4, and on)

It typically takes several semesters to complete a doctoral project. During this time, students must maintain continuous registration (790Y) for the Doctoral Project during every fall and spring semester after 790 until they have successfully defended their doctoral project. Students do not need to register for 790Y during the summer semester. Students must maintain registration throughout their internship year (fall and spring semesters) if they have not completed the project.

Students register for this course using the Course Selection Worksheet. The Director of the PsyD Program is the advisor. Note that the Chair’s signature is not required, nor is the Individualized Section Registration form.

As noted above, after submitting forms students should check periodically to ensure that the registration is noted on their transcript.

Registration completed for 790Y year 4 spring:

Registration completed for 790Y year 5 fall:

Registration completed for 790Y year 5 spring:

Additional 790Y registrations:

**Complete the doctoral project**

See sections on specific types of projects for more details. As with the doctoral project proposal, students should expect to write *multiple* drafts of the final project before the Chair grants approval to forward the draft to the other committee members. *Students may not forward a final draft to committee members without the permission of the Chair.*

Students should also expect to write several drafts before the committee as a whole grants approval to schedule the final oral defense of the doctoral project. Faculty will typically take weeks, not days, to return drafts. Expect longer delays during busy times of the academic year (e.g., during midterms and final exams).

*Roosevelt University style, format, and components.* The University's "Dissertation and Doctoral Project Transmittal Process" information, is available at <http://www.roosevelt.edu/gradstudents/documents/dissertationinfoedited2.pdf>. It includes formatting requirements regarding paper type, margins, spacing, fonts, and components (title page, approval page, acknowledgments, etc.). Note, in particular, that tables should be placed *within* the text and that the Reference section should be double spaced.

A sample title page can be found at [http://www.roosevelt.edu/gradstudents/documents/SampleTitlePage\\_003.doc](http://www.roosevelt.edu/gradstudents/documents/SampleTitlePage_003.doc).

Final draft approved by chair:

Final draft approved by committee member 1:

Final draft approved by committee member 2:

### **The oral defense meeting**

Once all committee members have approved the complete doctoral project, it is defended at a meeting of the student and all committee members. This meeting is announced via posting on one of the Department's bulletin boards so that other interested parties may attend as well. As at the proposal meeting, the Chair may have a more specific agenda, but typically students present a summary of the project, with more emphasis at this meeting on the results of the project (if an empirical study) and the conclusions and specific implications (for all types of doctoral projects; see the sections on each type project for more details). Students are strongly encouraged to plan and rehearse this summary presentation, which is consistent with one of the objectives of the practitioner-scholar model, that students develop the skills to communicate their knowledge via presenting clinical and research findings orally and in writing in an organized, articulate, and professional manner. Visual presentations can be helpful or may be required by one's Chair.

The summary presentation is typically followed by questions from the committee. Commonly, after questions the Chair will ask the student (and any other non-committee attendees) to leave the room to allow the committee to reach a consensus on the outcome of the oral defense (see below). Students should consult with their Chair for more specific expectations of the final oral defense meeting.

There are several possible outcomes of the defense meeting. The project may be approved as is and be ready for forwarding to the Graduate Dean's office (this is a relatively rare occurrence). The project may be approved but with changes, based on the discussion during the defense. In this case, changes must be forwarded to and approved by the Chair (and possibly the committee as a whole) before the project is forwarded to the Graduate Dean. Finally, the project may not be approved and will need additional work before another defense meeting is scheduled.

The Department's secretary will assist in scheduling the oral defense meeting and gathering the paperwork to be completed to verify the outcome of the meeting. This includes the doctoral student oral defense form, found at

[http://www.roosevelt.edu/gradstudents/documents/OralDefenseform\\_001.doc](http://www.roosevelt.edu/gradstudents/documents/OralDefenseform_001.doc)

and the doctoral project student transmittal form:

[http://www.roosevelt.edu/gradstudents/documents/DoctoraltransmittalEdit4\\_000.doc](http://www.roosevelt.edu/gradstudents/documents/DoctoraltransmittalEdit4_000.doc)

The approval of dissertation committee form duplicates information in other forms but is still required:  
[http://www.roosevelt.edu/gradstudents/documents/ApprovalofDissertationCommitteeform\\_000.doc](http://www.roosevelt.edu/gradstudents/documents/ApprovalofDissertationCommitteeform_000.doc)

Oral defense scheduled:

Oral defense and paperwork completed:

**Submit the doctoral project after the defense meeting and approval of the Chair and committee**

The Graduate Dean's Office will review the doctoral project and return it to the Chair for any additional corrections. Both student and Chair must ensure that any requested changes are made or that disputed changes have been resolved. Once changes have been made, submit one copy to the Department's secretary for the final submission to the Graduate Dean's Office. That office makes the final grade change on the doctoral project. As noted above, there are deadlines for submission of the doctoral project in order to qualify for graduation in any particular semester.

The link below provides information on the steps necessary to submit the doctoral project for the review and approval of the Graduate Dean's Office. This site also includes links to the forms required.  
<http://www.roosevelt.edu/gradstudents/GuidelineforDoctoralstudents.htm>

Students must complete the doctoral student Survey of Earned Doctorates:  
[http://www.roosevelt.edu/gradstudents/pdf/sed07\\_08.pdf](http://www.roosevelt.edu/gradstudents/pdf/sed07_08.pdf)

The inclusion in commencement program form provides the information required for including students' information in the program distributed at graduation ceremonies. Students should complete and submit this information whether or not they wish to participate in the ceremony.  
[http://www.roosevelt.edu/gradstudents/documents/InclusioninCommencementform\\_000.doc](http://www.roosevelt.edu/gradstudents/documents/InclusioninCommencementform_000.doc)

Completed and submitted Survey of Earned Doctorates:

Completed and submitted Inclusion in Commencement form:

**Submit the doctoral project to UMI ProQuest**

From the Graduate Student website: Students are required to submit their theses and dissertations electronically on the Roosevelt University UMI/ProQuest website after all changes have been made and approved by the Office of Graduate Studies. The UMI/ProQuest Agreement Form is completed online as part of the submission process, and UMI/ProQuest fees are paid directly to UMI/ProQuest via the website.

The deadline for successful submission to UMI/ProQuest is five days prior to the official date for graduation. Grades will not be submitted until the final revisions have been approved, the Office of Graduate Studies has received all information including the IRB Proposal Termination form, and the thesis or dissertation has been submitted to UMI/ProQuest.

The Roosevelt University Library provides access to theses and dissertation through the UMI/ProQuest database; they will not longer shelve bound copies of theses. After final approval of theses and dissertations by the Office of Graduate Studies, students will be provided with information about submitting their documents to UMI/ProQuest electronically. Once theses and dissertations have been submitted, students will be able to purchase bound copies of their papers directly from UMI/ProQuest. The University Archives, however, will hold one copy of each thesis and dissertation completed at Roosevelt. Students are expected to submit one hard copy (paper copy) of their thesis and dissertation to the Office of Graduate Studies for the University Archives.

There is a fee involved in this submission.

<http://www.roosevelt.edu/gradstudents/UMIPROQUEST.htm>

Doctoral project submitted to UMI/ProQuest:

**Changes in the library's policy re binding of theses and doctoral projects**

The library will no longer manage the binding process for personal copies of theses and dissertations. Students who wish to obtain bound copies of their projects may consult the following sources: The library's commercial bindery is The HF Group (which has facilities throughout the U.S). They have a customer service division for handling personal binding: The HF Group, 800-334-3628, [www.thehfgroup.com](http://www.thehfgroup.com), <http://www.thesisondemand.com/>. Check telephone directories under "Book Binding." Check the binding services that companies such as Kinko's provide.

## The empirical study

The empirical study provides an opportunity for students to answer a question through formulating hypotheses, developing a research design appropriate to test those hypotheses, collecting data, analyzing data, concluding whether and to what extent the initial hypotheses have been supported by the data, and integrating those results with previous research.

The empirical study includes a review of the literature relevant to the question (including background literature on the topic in general, as needed to provide an adequate context for the project); hypotheses whose relationship to the literature reviewed is clear; a method section describing the population, design, procedures, and analyses; a results section; and a discussion section, where the results are reviewed in the context of the literature and where the implications of the study are discussed. These sections are discussed in greater detail below.

Important issues to keep in mind when preparing an empirical study:

- The study must address a question that is broad enough to have relevance to the field, yet narrowly defined enough to be manageable (e.g., longitudinal studies are generally too ambitious for a doctoral project).
- Development of a topic and particular hypotheses is an *iterative* process. That is, as one gains more knowledge of an area, the particular focus or research design is likely to evolve, which may entail changes in the literature reviewed for the proposal.

### Components of the empirical study

These are reviewed in greater detail below.

Introduction

*General topic*

*Specific issue and its importance*

*Argument and plan*

*Review of literature*

*Hypotheses*

Method

*Sample*

*Procedures*

*Measures*

*Analyses*

Results

*Presented in the same order as hypotheses*

Discussion

*Overall review of study*

*Integration of results with literature*

*Implications*

*Recommendations for future research*

References

### Development of the empirical study proposal

The empirical study proposal includes the Introduction, Method, and the References sections.

## Introduction

The first paragraph (or first few paragraphs) should (a) describe the general topic being addressed, (b) provide evidence of the topic's importance, and (c) narrow the focus to the specific question that the research will address (the “funnel” approach).

The next paragraphs should describe the “**argument**”; that is, they should provide a concise statement of the rationale for the study.

This should be followed by a paragraph describing the **plan** of the following literature review; that is, listing the topics that will be reviewed, in the order they will be reviewed. Topics should be presented in a manner that makes their relevance to the project and to one another clear. The plan paragraph enables readers to anticipate the transitions throughout the review of literature section of the project.

The plan paragraph is followed by the **literature review** itself. However, even though the reader has been provided with a plan paragraph, **transitional or introductory sentences** should still be used when moving from one topic to another. Headings can help organize information, but are not substitutes for adequate transitions.

The introduction section should conclude with a clear statement of the **hypotheses** of the study, each clearly linked to the literature reviewed. It should be clear to the reader that the study proposed is a logical next step in the progression of knowledge on the topic. An option is to follow the narrative introduction with a **numbered list of hypotheses**, if there are several, for easier reference in the Method and Results sections of the final paper.

## Method

The Method section includes a description of the sample used in the study, the tests and measures used, and the procedures for data collection. This should be in the *future tense* in the proposal (and the *past tense* in the final project), as this is a proposal of what is intended to be done, not what has been done.

### *Sample*

The **sample description** should include where the data will be collected and from whom. The sample must be described in such a manner that another could replicate the study with either a similar or a different sample from the same population. The population demographic description should include, at a minimum, **gender and ethnicity distribution, education (mean and standard deviation), and age (mean and standard deviation)**.

Note that every report of a *central tendency*—for example, the average age of the participants—must be accompanied by a description of its *variability*—for example, the standard deviation of the sample’s age. Other variables may be appropriate, depending on the specific topic and sample.

### *Instruments or measures*

The section describing the **tests and measures** used should describe each instrument in detail. In this section the student must demonstrate that these are the most appropriate measures for answering the question addressed by the study. In order to do so, this information should include details of the measure itself. Is the measure...

- self-report or clinician-administered?
- true/false or multiple choice?
- What are the number of items?
- the scales and subscales?

Most importantly, information on the **reliability** and **validity** of each measure must be provided. Providing this information demonstrates that the student has made the best choice of instruments for the study in question. Reliability and validity information, wherever possible, should not be solely that supplied by the test developer. Note that *there are several types of reliability and validity*. The type of

reliability that is most critical or appropriate will vary by type of test.

**Reliability** may include...

- test-retest,
- inter-rater,
- internal consistency.

**Validity** is not a simple concept and includes...

- content,
- predictive,
- concurrent, and
- statistical validity (among others)...

all of which are included under the more general...

- construct validity (i.e., establishing that the test does indeed measure what it proposes to measure).

### *Procedures*

The **procedures** (what tests were given in what order, during what time period, by whom, etc.) should be described in such detail that another researcher would be able to replicate the study.

### **References**

References should be in APA style. All references cited in the proposal should be in the Reference section; all references in the References section should be cited in the paper.

### **Proposal requirements**

Length: minimum 15 pp. plus references

References: minimum 30 references, primarily primary sources

## **Completing the empirical study**

### **Consultation for data analysis and editing**

Students *may* obtain consultation outside the University or their committee for data analysis and copy editing *with approval of the committee Chair*. However, the Chair has the option of *not allowing* such consultation (in the interest of developing student competency). If students use consultants for data analysis, they must *at a minimum* be able to demonstrate their understanding of the statistical procedures used (e.g., at their oral defense meeting) and must write their own Results section. Students should thus consult with their Chairs regarding the use or responsibilities of consultants prior to beginning their work on the doctoral project.

Planned use of consultants:

Date of discussion and approval from Chair:

### **Data collection and entry**

Once the proposal meeting has been passed and **IRB** approved obtained, data collection may begin. Students are encouraged to keep their committee Chair apprised of the progress of data collection throughout the process.

*Data entry.* Students are strongly encouraged to develop a **data entry plan** using the appropriate statistical package before beginning data collection (i.e., prepare the data entry spreadsheet with the appropriate fields labeled).

**Data analysis**

Some faculty members are available to assist students with data analysis. Students have also obtained statistical consultations from other sources. As noted above, data analysis will be easier if a plan has been developed as part of the initial proposal.

**Method**

Once data have been collected and analyzed and work begun on the final draft, the Method section should be put into the past tense (i.e., “participants *were* recruited from...”). The demographic information on the population (gender and ethnic distribution, age, etc.) should be presented in this section (although some Chairs may prefer that this information be presented in the Results section). Descriptive information about the final sample may be presented in table or narrative form, but not both. The point of including a table is to present information in a more concise manner than is possible in a narrative.

**Results**

The Results section includes results of the data analyses *organized in the order of the hypotheses they were designed to test*, one hypothesis per paragraph, at the most. It is advisable to begin each paragraph with a description of that particular result using the vocabulary used in the review of literature (e.g., “depression”). This can then be followed by a more detailed description of the result using the test or test variable names (e.g., the BDI) and with statistical results. The constructs are what are important; tests are the means used to assess those constructs.

For example, “Consistent with hypothesis 1, results indicated that the children who were raised without fathers were more depressed than those raised with fathers after an episode of neighborhood violence.” This might be followed by “The mean BDI score of the first group was 18.5 ( $SD = 4.2$ ); that of the comparison group was 12.3 ( $SD = 3.1$ ),  $t(43) = 5.34$ ,  $p < .05$ .”

*Reporting statistics.* Note in the previous example that standard deviations are provided. For every measure of central tendency, a measure of variability must be provided. As far as format, consult the APA *Publication Manual*, but note that the abbreviation for standard deviation ( $SD$ ) is italicized, as are  $t$  and  $p$ , and that there is a space before and after equal signs.

**Discussion**

Begin the Discussion section with a *general statement of the extent to which the hypotheses were supported or not*, expressed in the vocabulary of the literature review (i.e., constructs, not particular tests). Note that this should be a *brief* summary and not a repetition of information provided in the Results section. Following this, the results of the study are integrated with the literature reviewed provided in the Introduction; that is, students note where their results are consistent with the literature and where not and, if not, possible reasons why.

The Discussion section typically follows with a review of the *strengths and weaknesses* of the study. The point of this component of the Discussion is for students to demonstrate that they can critique their own research as well as they have the research included in the review of literature. However, students typically err on the side of excessive criticism of their studies. Every study has inherent limitations, and not finding significance or support for one’s hypotheses is not a failure, but still advances knowledge by ruling out some possibilities.

The Discussion section includes a discussion of the *implications* of the study, including directions it suggests for *future research*. Future research recommendations should be described in detail and it should be clear how they follow from the current study. Recommendations for future research such as “More research clearly needs to be done on depression in at risk children” are far too vague.

**Final doctoral project requirements**

Length: minimum 50 pages plus references

References: minimum 30

## The critical literature review

According to the *Publication Manual of the American Psychological Association* (American Psychological Association, 2001):

Review articles...are critical evaluations of material that has already been published. By organizing, integrating, and evaluating previously published material, the author of a review article considers the progress of current research toward clarifying a problem. In a sense, a review article is tutorial in that the author

- defines and clarifies the problem;
- summarizes previous investigations in order to inform the reader of the state of current research;
- identifies relations, contradictions, gaps, and inconsistencies in the literature; and
- suggests the next step or steps in solving the problem. (p. 7)

Thus writing a literature review involves two tasks: 1) **describing** work done on a specific area of research, and 2) **evaluating** this work. Both the descriptive and evaluative elements are important parts of the review. Do not simply describe past work without evaluating it, and do not just discuss recent theories in an area without both describing the work done to test those theories and discussing each theory's advantages and inadequacies. Review articles are valuable information sources not only because they cite every important piece of research in the area surveyed, but also because they compare and evaluate all the key theories in a particular area of research.

See the journal *Psychological Bulletin* for examples of review articles, and see Bem's (1995) instructive and humorous article about writing review articles for this journal.

There are two general approaches to a literature review:

- Choose an area of research, read all the relevant and most important studies, and devise a meaningful way to organize the studies. One example of an organizing theme is a conflict or controversy in an area; in this case, publications presenting all sides of the controversy should be reviewed.
- Trace the development of a particular concept over time, concluding with a critical analysis of the present state of the question and suggestions for further research.

Thus the review topic must be narrow and focused enough that all the important research on the topic can be addressed within the limits of the project, but broad enough that there will be enough research to warrant such a review.

### *Critical literature review vs. literature review of an empirical study*

The literature review doctoral project differs from the review of literature component of an empirical study. In the latter, the goal of the review is to provide a clear rationale for the current study. By the end of the review it should be clear to the reader why the particular study is being done and how it is the next logical step in that line of investigation. The literature review doctoral project, on the other hand, should conclude with a review of *multiple* areas of inquiry:

- areas of relative consensus,
- areas of continuing debate, and
- issues needing further research (note the plurals).

Important issues to keep in mind when preparing a critical literature review:

- In order to identify the literature that is most relevant to their topic, students will have to read a *great deal more* than is eventually included in the final project.
- The development of a literature review is usually an *iterative* process. That is, the specific details of the project, or even its major direction, may change as the student accumulates more knowledge on the topic.

- Thus it is critically important for students to be in *regular contact with their Chairs* to discuss the evolution of the project and to avoid any blind alleys or projects that are either too extensive or insufficient.

### Components of the critical literature review

Introduction

*General topic*

*Specific issue and its importance*

*Argument and plan*

Review of literature

Discussion

*Conclusions*

*Implications*

*Recommendations for future research*

References

### The critical literature review proposal

The preparation of a doctoral project **proposal** is the focus of **Psyc 789, the Doctoral Project Seminar**. The instructor helps students develop the project in collaboration with the doctoral project chair and committee members. These faculty members assist the student in

- identifying a topic that is appropriate in content and scope,
- determining the literature that needs to be reviewed, and
- developing a detailed work plan.

#### Guidelines for proposal components

The **introduction** provides a rationale for the proposed doctoral project, including a description of the context and the importance of the topic (e.g., in terms of how widespread a problem is, the costs of a problem, discrepancies in theories and research findings about a particular issue). This introduction will also be the first component of the final literature review. It is helpful to adopt a “funnel” approach, where the general area of research is introduced, then that area is narrowed to the specific topic of the review. This section may be one paragraph to a few pages. For example, a recent review was of substance abuse treatment programs for offenders. The introduction made reference to the prevalence of substance abuse in the general population and in prisons and jails, the relationship between substance use and abuse and crime, and the consequent need for effective treatment programs.

In the next section one presents the “**argument**,” the main point or points that will be made by the review as a whole. For example, continuing with the same literature review, the argument was that although there has been an increase in substance abuse treatment programs in prisons and jails, the long-term impact on recovery and related crime has not been as large as it could be because of the lack of transition programs that would be available to offenders once they are released into the community.

The next section, or “**plan paragraph**,” includes a description of the scope of the work, including the several issues that will be addressed in the order that they will be presented, and the methods to be used in developing the review. These issues should be explicitly related to the argument through the use of clear and logical links and related to one another by clear and meaningful transitions.

The next section of the proposal includes **summary descriptions** of each major issue to be covered by the review, with salient references for each topic. Multiple examples of the research to be reviewed should be included for each issue, *not* just one sample reference. The proposal itself and the References section of

the proposal should include *the majority* of the references that will be included in the final review. The purpose of the proposal is to insure that the final product will address the topic thoroughly and critically; the committee cannot make a clear judgment about whether or not the proposal review is adequate without a substantial body of references.

The **penultimate section** should include a paragraph or several about **what will be expanded upon in the final paper**. This is to insure that the doctoral project committee understands which references and issues will be elaborated upon, and where more references will be added.

The final section is the **References** section. All references cited in the proposal (and in the final project) must appear in the References section, and all references in the References section must be cited in the paper. Students should take care to review and master APA style for references and citations *before* submitting their proposals. Committee members should be able to focus on the *substance* of the review and not on stylistic details.

#### *Primary vs. secondary sources*

The literature review is a review of *empirical* research (although it may also include theoretical and methodological articles if appropriate to the topic). Thus the focus should be on primary, not secondary sources. Primary sources are *original research* articles, preferably peer-reviewed work; secondary sources are other reviews, books, and so forth where an author summarizes others' (or his or her own) work. Secondary sources may be good initial sources of information, but they should only be used as guides to the original literature.

#### *Headings*

Using headings to identify major topics will not only make the issues to be addressed clear in the proposal, but can be used as the “skeleton” or structure of the final paper; see p. 319 of the *Publication Manual* (American Psychological Association, 2001) for heading formats. However, transitions must be explicit; a heading is a summary statement of the topic to follow, but transitional sentences that demonstrate an understanding of the relationship between topics and the continuity of the narrative or argument of the project are still essential.

#### *Definitions*

The proposal and final review should also include clear definitions of key terms as they are used in the review. For example, *child abuse* would need to be defined to specify whether it includes abuse suffered by adults as children or participants who are currently children; whether it includes physical, verbal, or sexual abuse; which types of sexual events are included and excluded; and so forth. The review should also address the *implications* of various definitions, differences in definitions between authors using the same term, and cases where different terms are used for the same construct.

### **Proposal requirements**

Length: minimum 15 pp. plus references

References: minimum 30 references, primarily primary sources

## **Writing the critical literature review**

### **Selecting and reading the articles**

A good understanding of the literature is essential for a well written literature review, and understanding the literature requires reading, re-reading, and mentally digesting complex ideas. A careful reading will reveal subtle (and sometimes not-so-subtle) differences in theoretical outlook. Thorough reading is followed by digestion and understanding of material, which is followed by critical evaluation of the material.

As students collect primary sources on their topic, they will find some studies repeatedly cited in the introductory sections of research articles. These are likely *critical studies* on the topic and should be included in and central to the review. Articles should be selected on the basis of their *quality* and *influence* (and these criteria surprisingly are not always redundant), not on the basis of expediency or availability. In addition, it is not enough to provide an illustrative example of a study on an issue pertinent to a topic; all the quality literature on that issue must be reviewed. However, each study does not need to be described in detail; the substance of the research is most important, and a critical assertion may be supported by reference to several articles addressing that point.

### Writing the text

The primary criteria for good scientific writing are **accuracy and clarity**. A review tells a straightforward tale with a clear, coherent narrative line. This line should stand out in bold relief, omit needless words, and avoid redundancy. A review is more difficult to organize than an empirical report (for which there is a standardized APA format). The implication, therefore, is that *a coherent review emerges only from a coherent conceptual structuring of the topic itself* (thus the importance of establishing a clear “argument”).

Although no two reviews look exactly the same, they tend to be organized according to the following format, which includes most of the components of the literature review proposal:

1. Introduce the **review topic and context of the topic** (what it is, why it is worth examining). A useful strategy is the “funnel” structure: Start broadly (definition of a general topic) and progressively narrow your topic until you arrive at the specific line of research you are discussing.
2. Present the **argument** of the paper.
3. Present an overview of the paper’s structure and content, the “**plan paragraph.**” In the body of the paper, address the issues in the same order you presented them in the plan paragraph.
4. **Describe the research.** The detail should be enough to highlight the characteristics of the study that are relevant to your review.
5. **Statistical information.** Effect sizes, sample sizes, or measures employed are usually *not* relevant, unless methodological issues such as these are relevant to the purpose of the review.
6. As research is presented, **compare, contrast, and evaluate.** Making comparisons is essential; descriptions alone are not very illuminating. For example, compare...
  - a. variable definitions,
  - b. research assumptions,
  - c. theories tested,
  - d. hypotheses,
  - e. research designs,
  - f. results,
  - g. interpretation of results, or
  - h. researcher speculations about future studies.

Frequently, a table displaying study names and relevant characteristics can be enlightening for both author and reader. If two or more studies have contradictory findings, discuss and evaluate the contradiction.

7. Discuss the **implications** of studies, in terms of what they imply about the topic, relevant theory, and practice. All assertions must be well-supported by evidence.
8. Examine **all the data**, not just data consistent with your presumptions.
9. The literature review should **conclude** with a description of
  - a. what is known with some certainty,
  - b. what is known with less certainty or less comprehensively,
  - c. what is assumed to be known but is not as certain as assumed.
10. The **theoretical and clinical implications** of the review, the questions that remain unanswered, and suggestions for research that would help to answer those questions should be presented.
11. **Recommendations for further research** must be *specific* and linked to discussions and critiques of the literature reviewed in the body of the paper.

**Including a review article or meta-analysis in the doctoral project**

A review article, such as one in *Psychological Bulletin*, although it is a secondary source, may be discussed in a literature review as long as it is critically evaluated and integrated with the rest of the paper. For example, if a review of a topic was published 7 years ago, in addition to describing the scope and conclusions of the review, research on the topic done since that time should be reviewed and the conclusions of the initial review critiqued in light of those subsequent studies. A more recent review may be included, without such elaboration, if it is not central to the project's main topic and is used to provide the reader with access to additional support for a relatively peripheral assertion. Finally, a review may be included if the argument of the doctoral project takes issue with or elaborates upon one or more of the original review's conclusions.

Meta-analyses require similar handling. That is, if a meta-analysis is referenced to support a relatively peripheral assertion, extensive commentary may not be necessary. If it is more central to the argument of the project, the meta-analysis should be critiqued in more detail (re such issues as breadth and quality of studies included, the authors' conclusions, or research published after the meta-analysis).

**A reminder**

One of the most common problems with literature reviews (and introductions to empirical studies) is a *lack of critical commentary and a lack of integration of the research presented*. Often studies are presented one after another, focused only on summaries of methods and results, leaving the reader unsure about the relative strengths and weaknesses of the studies, whether any consensus exists about the issues addressed by the research, what the relationship might be between one study and another and between one section and another, and how each study relates to the argument of the literature review as a whole. The writer may often have made such critical evaluations and integrations in his or her own head and assume that they will be evident to the reader, but they usually are *not* so evident. The project itself is designed to test whether the writer is capable of making such evaluations and integrations, an assessment that cannot be made if the writer's critical thinking is not made explicit in the review.

**Critical Literature Review requirements**

Length: minimum 60 pp. of text plus references

References: minimum of 50 references, primarily primary sources

Note: Some of the information above was adapted or quoted from Azusa Pacific University's doctoral project manual, with the authors' permission.

## The extended case study

The extended case study provides students an opportunity to apply their knowledge and clinical skills to the treatment of a particular client and his or her problems. As Fishman (2005) notes, “the basic unit of psychological practice is the case—be it an individual, a group, an organization, or a community” (p. 1). In the extended case study, students describe their assessment and treatment of a client and his or her problems within the context of one or more theoretical orientations. The case study thus requires a clear exposition of both the client and the theoretical orientation *and* an integration of the orientation with the particular case. This is consistent with the “local clinical scientist” model (Stricker & Trierweiler, 1995), wherein the goal is to investigate the utility of a treatment for a particular client in a particular context.

The case study includes a description of the client and his or her presenting problems, the larger context (e.g., family, educational, work, relationship, and medical histories), the orientation used to conceptualize the case and guide treatment, the case conceptualization, the assessment plans and implementation, the treatment plan and implementation, the outcomes, and a final evaluation of the case.

Important issues to keep in mind when writing the case study:

- The conceptualization and treatment plan is of and for a *client*, not one or more problems, and thus the presentation of the case should be “descriptively thick,” as Fishman (2005) recommends.
- The client exists within a context, and that context may influence or may be inseparable from the client’s problems and resources.
- Consideration of the importance of context is also consistent with the social justice mission of the University.

The rationale for and design of the extended case study is based in part on proposals from the following two articles. Students should review these articles in preparation for writing a case study:

Hersen, M. (2002). Rationale for clinical case studies: An editorial. *Clinical Case Studies*. Available at <http://ccs.sagepub.com/content/vol1/issue1/>

Fishman, D. B. (2005). From single case to database: A new method for enhancing psychotherapy practice. *Pragmatic Case Studies in Psychotherapy*. Available at <http://pcsp.libraries.rutgers.edu/index.php/pcsp/issue/view/47>

See in particular Figure 2 from Fishman (2005), p. 50, for a diagram of the several possible components of a case study and the interactions between them. Note that these are not explicit component requirements for the PsyD Program doctoral project (which are listed below), but provide a general illustration of the relationship among components of a case study.

For examples (on a different scale than that of the doctoral project) of the integration of theory, research, and practice with clinical cases from a primarily cognitive-behavioral perspective, see the various chapters in Barlow’s *Clinical Handbook of Psychological Disorders* (4<sup>th</sup> ed., 2007). For more extended examples of case studies from a variety of theoretical orientations, see *Pragmatic Case Studies in Psychotherapy*, at <http://pcsp.libraries.rutgers.edu>, and *Clinical Case Studies*, at <http://ccs.sagepub.com/>.

### Components of the case study

The components of the case study are similar in name and somewhat parallel in content to those of an empirical study (see below for a detailed description of these components).

#### Introduction

##### *Client and context*

Presenting problems, history

Context: family, community, medical, economic, etc.

*Theory*  
*Research*

Method  
*Setting*  
*Assessment*  
*Case conceptualization*  
*Treatment plan*

Results

*Interventions* (treatment as actually delivered, including modification of treatment in response to monitoring evaluation)  
*Monitoring evaluation*  
*Concluding evaluation*

Discussion

*Overall review of study*  
*Treatment implications*  
*Recommendations for clinicians, researchers*

References

### **Development of the extended case study proposal**

The doctoral project extended case study proposal explains the case and the theoretical orientation(s) used in treatment. The **proposal** thus includes descriptions of

- **the client,**
- **the presenting problems,**
- **the importance and uniqueness of the case,**
- the **orientation or orientations** to be used in conceptualizing the case and developing the treatment plan,
- the **literature on the orientation(s)** that will be reviewed in the final project,
- the **assessment methods** and instruments to be used, and
- the final **reference** section.

There are several steps in developing a good case study proposal:

- identifying the relevance, importance, and uniqueness of the case;
- collecting necessary documentation for the case, including attention to issues of confidentiality;
- conducting a thorough and complete review of the literature on the client's problems and the theoretical orientation used in conceptualization and treatment planning;
- integrating the research with the particulars of the case, including the conceptualization and the treatment plan;
- identifying areas where the particular case may differ from or offer challenges to the evidence-based research;
- providing a list of references that will be used in the final document.

### **Proposal requirements**

Length: minimum 15 pp. plus references

References: minimum 30 references, primarily primary sources

## Writing the extended case study

### Introduction

The introduction is an expansion of basic information provided in the proposal. The introduction provides a detailed description of the **client**, the client's **presenting problems**, and the **context**, including such issues as family of origin, education, relationship, work, medical, and current family histories. **Social factors** should be clearly identified (e.g., the contribution of socioeconomic or neighborhood factors).

This description is then followed by an explication of the **theoretical orientation** or orientations that were used in the conceptualization of the client's case and the treatment plan and a review of the research on that orientation that is relevant to the client's particular problems and context.

**Headings** are helpful for identifying sections such as presenting problems, family history, education, treatment orientation, etc.

### Method

This section is somewhat similar to the method section of an empirical study, in that it includes descriptions of the **setting** within which treatment was delivered and of the **assessment methods and instruments** and literature supporting their use. However, in the extended case study this section also includes a **case conceptualization** and **treatment plan**. Headings also should be used to identify the components of the Method section.

#### *Setting*

The description of the *setting* should include the type of facility (e.g., community mental health center, VA, psychiatric hospital), the program within the facility (e.g., intensive outpatient program), the typical populations served and problems addressed by the site (e.g., severe and chronic mental illness in an economically disadvantaged neighborhood), a general description of the clinical training provided at the site, and the supervision provided during treatment of the particular case.

#### *Assessment methods and instruments*

The description of the *assessment methods and instruments* should include both process- and outcome-oriented assessments (for formative and summative evaluations). This portion of the Method section provides the reader with information on how the client's strengths and weaknesses were identified, how the progress of therapy was monitored throughout the course of treatment, and a final evaluation of the client's status at the conclusion of treatment.

#### *Case conceptualization*

The *case conceptualization* is a critical component of the extended case study, in that here one integrates the theoretical orientation with the history, presenting problems, and current assessment of the particular case, including identification of those areas where the particulars of the case are similar to *and* differ from those in the literature.

#### *Treatment plan*

The final component of the Method section is the *treatment plan*. As with the case conceptualization, treatment must be clearly integrated with a theoretical orientation or orientations. The treatment plan should specify short- and long-term goals, anticipated process variables (based on the assessment and conceptualization), orientation-related techniques, etc. The treatment plan need not be a session-by-session plan, although some manualized therapies may provide such plans; rather it should focus on the process and goals that are relevant to the particular case. Although a treatment plan may be provided in outline form in an Appendix, it must also be described in narrative form in the body of the project.

### Results

The Results section also parallels that of an empirical study in that it provides information on the outcome of the intervention. However, it also includes a description of the *treatment as it was actually delivered*;

that is, descriptions of modifications that were made to the plan described in the Method section and the reasons for those changes. The Results section also includes descriptions of the *outcomes of evaluations* that were done during therapy (formative evaluations) and at the conclusion of treatment (summative evaluations).

### **Discussion**

The concluding section of the extended case study includes an overall *review of the case, the treatment, and the outcomes*. This is not a repetition of information that was already presented, but a *summative and critical evaluation* of the uniqueness and challenges of the case, the appropriateness of the orientation to the case, the problems and successes in applying the treatment, and any changes that might have been made with the benefit of hindsight.

This is followed by a discussion of *implications of the case for treatment of similar persons and problems* (treatment recommendations) *and for clinical researchers* (areas needing further study, via case or group designs, described in detail).

### **References**

All references should be in APA style. All references cited in the proposal should be in the Reference section; all references in the References section should be cited in the paper.

### **Final doctoral project**

Length: minimum 50 pages plus references

References: minimum 30

## **Other projects**

Other types of doctoral projects are *program evaluations* and *grant proposals*. Criteria for these project are in development and will be provided in the near future.

*Program proposals* have been considered as variants of *critical literature reviews*. That is, in lieu of a summary critique and integration of the literature reviewed, the student provides a proposal for an intervention program that incorporates treatment recommendations or implications of the literature reviewed.

## The thesis

Theses are by definition empirical research projects; thus the information above on empirical doctoral projects is relevant to students' work on theses and should be read thoroughly.

A thesis involves:

- reviewing of the empirical literature relevant to the topic,
- developing hypothesis or hypotheses,
- developing a method for testing the hypothesis,
- collecting and analyzing data,
- reporting and interpreting the results of the research,
- discussing the results in relation to the literature reviewed
- critiquing the study
- discussing the implication of the study for future research, clinical work, etc.

Students may begin to develop ideas for research and find a chair for their committee at any time; however, students are eligible to formally begin the thesis, which includes registering for thesis credits (**Psyc 690 MA Thesis**), only after completing **Psyc 530 Advanced Research Methods**. The research topic must be approved by the thesis committee Chair. The thesis Chair must be a full- or half-time faculty member.

The steps involved in completing the thesis parallel those of the doctoral project, except that a thesis is on a smaller scale, a thesis committee includes only a Chair and a second reader, and submission details at the University level differ. Because most of these issues are reviewed above, the steps to a thesis are only summarized here.

### Complete **Psyc 530 Advanced Research Methods**

Begin development of a thesis topic in consultation with a **thesis committee Chair** (the Chair is chosen by the student and must be a full- or half-time faculty member).

Register for **Psyc 690 MA Thesis** (PsyD students completing a thesis also register for this course). This will require a Course Selection Worksheet *and* an Individualized Section Registration (ISR) form.

If completion of the thesis extends over more than one semester, which is typical, *students must register for **thesis completion, Psyc 690Y**, for zero credits, each subsequent fall and spring semester until the thesis is completed* (registration is not required for summer semesters).

Find a **second reader** for the thesis committee. The second reader may be a full- or half-time faculty member or other participant (e.g., adjunct faculty member, clinician from site where data has been collected). However, the second committee member, if not a faculty member, must have expertise or knowledge relevant to the project and a doctoral degree.

Develop the **thesis proposal** in consultation with the Chair.

A thesis proposal includes an **Introduction** (basically a literature review on the topic, which culminates in a statement of the hypotheses to be tested) and a Method section (including a description of the population, the measures, the procedures, and the statistical analyses that will be used to test the hypotheses).

The thesis proposal and final draft must be written following **APA style** guidelines. See the Roosevelt University Online Graduate Student Center website for details on where RU's submission requirements differ from APA style.

When the Chair indicates that the proposal is ready, forward it to the second reader. Note that this is done *only* after receiving permission from the committee chair and after all the chair's changes have been completed.

When the Chair and second reader indicate that the thesis is ready, schedule a **thesis proposal meeting**. The Department secretary will assist with scheduling this meeting.

Present and defend the proposal at the thesis proposal meeting.

Complete the **form verifying successful completion of the proposal meeting**.

Make changes in the thesis proposal as recommended at the proposal meeting.

Once the thesis proposal is accepted, in collaboration with the thesis chair complete the Roosevelt University **Institutional Review Board** form (available online).

Submit the IRB information to the Department's secretary, who will monitor its progress through the IRB Committee.

After receiving approval from the IRB, and under the direction of the thesis Chair, begin **data collection and analysis**.

Once data has been analyzed, write the **Results and Discussion** sections.

Once all sections are completed to the Chair's satisfaction, provide a copy to the second reader.

See the **thesis and dissertation guidelines** at the **Online Graduate Student Center** for the sections that must be included (title page, acknowledgments, approval page, etc.).

See the **deadlines** at that web page for submission of theses in order to be considered for graduation.

When the chair and second reader agree, schedule the **thesis defense meeting**. The Department secretary will assist with scheduling this meeting.

Present and defend the thesis at the **thesis final defense** meeting. Consult the Chair for what will be expected at this meeting. Most committees prefer a brief (5-10 min) presentation of the hypotheses of the study, the results, and a discussion of the results. This presentation is followed by questions from the committee.

After you have completed the defense meeting, incorporate into the paper any changes recommended by the committee members. The Chair must verify these changes.

With the Chair's approval, submit one copy of the thesis to the secretary in the Psychology main office.

In addition to the thesis itself, students must submit supporting documentation which includes:

- Transmittal form
- UMI ProQuest form, available from the Graduate Dean's office on the 8<sup>th</sup> floor, and receipt for ProQuest fee
- Second page with committee members' names and positions and date of defense
- See the Online Graduate Student Center site for the above forms and information ("Thesis and Dissertation Guidelines" and "Transmittal Form MA").

The **Graduate Dean** will review the thesis and return it to the Department of Psychology for any corrections.

Once these have been made, submit one copy to the secretary for the final submission to the Graduate Dean's Office.

The Graduate Dean's Office makes the **final grade change**.

## References

- American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5<sup>th</sup> ed.). Washington, DC: Author.
- Barlow, D. H. (Ed.). (2007). *Clinical handbook of psychological disorders* (4<sup>th</sup> ed.). New York: Guilford Press.
- Bem, D. J. (1995). Writing a review article for *Psychological Bulletin*. *Psychological Bulletin*, 118, 172-177.
- Fishman, D. B. (2005). From single case to database. *Pragmatic Case Studies in Psychotherapy*, 1, 1-50.
- Hersen, M. (2002). Rationale for clinical case studies: An editorial. *Clinical Case Studies*. Available at <http://ccs.sagepub.com/content/vol1/issue1/>
- Peterson, R. L., Peterson, D.R., Abrams, J. C., & Stricker, G. (1997). The National Council of Schools and Programs of Professional Psychology educational model. *Professional Psychology: Research and Practice*, 28, 373-386.
- Stricker, G., & Trierweiler, S. J. (1995). The local clinical scientist: A bridge between science and practice. *American Psychologist*, 50, 995-1002.