

SENIOR THESIS HANDBOOK

A Guide to the Senior Thesis Process

**PSYCHOLOGY DEPARTMENT
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**LeeAnn Bartolini, Ph.D.
Matthew S. Davis, Ph.D.
Afshin Gharib, Ph.D.
Ian Madfes, Ph.D.
Gail Matthews, Ph.D.
William Phillips, Ph.D.**

SENIOR THESIS: OVERVIEW

The senior thesis acts as the "culminating experience" of your academic career as a Psychology student at Dominican. The thesis is a scholarly research paper, i. e. a paper based on your own empirical research. A thesis involves conducting a review and critique of the theoretical and research contributions of other scholars, designing your own research study and obtaining approval from Dominican's "ethics committee" or Institutional Review Board (IRB), carrying out your study, analyzing and summarizing the results, and relating your findings to prior literature on your topic. In addition to the thesis manuscript, you will also present your findings in both oral and poster formats.

The purpose of the thesis is to integrate your knowledge of psychology and psychological research skills with a topic of interest to you. It also enables you to explore a topic in considerable detail. If you choose a topic in conjunction with your field placement, the thesis can provide you with a unique opportunity to enhance your knowledge, skills and practical experience in the same content area, a major advantage in applying for jobs or graduate school.

Course Requirements Related to the Thesis

Directed Research I and Directed Research II (Psy 4997 and Psy 4998) make up a two-semester sequence designed to assist you in planning your study, conducting your thesis research, and writing the thesis manuscript. Psy 4997 is typically taken during the fall semester of your senior year, followed by Psy 4998 in the spring.

Statistics for the Health & Behavioral Sciences (Psy 3187), and Research Methods (Psy 3191) are junior year, prerequisite courses designed to prepare you for the Directed Research sequence. **Warning: If you have not taken these courses, if you have not received a passing grade in these courses, or if you have outstanding incompletes in these courses, you will not be allowed to register for Directed Research I (Psy 4997) until these are completed.**

Since your thesis is considered the main focus of your senior year, you should budget a significant amount of time to this endeavor. While you receive 3 units of course credit each semester for Directed Research, most students find that they must allocate more time to the thesis than they would for a typical 3-unit course. Your grade in Psy 4997 is based on the quality of the first chapter of the thesis manuscript (the review of the research literature or "Introduction" section), as well as a complete list of your references. You will also develop a proposed methodology for your thesis study and will submit an ethics proposal to the IRB by the deadline provided by your Directed Research instructor. Your grade in Psy 4998 is based on all remaining work on your thesis: conducting your research study and collecting data, analyzing the data, writing the three final chapters of the thesis (the "Method", "Results" and "Discussion" sections), and doing both a poster and an oral presentation of your thesis. You must also turn in two hard copies of your final thesis manuscript to the Psychology Department: one should be prepared for a 3 ring

loose-leaf binder which will then be stored on the shelves of the Psychology Department Resource Room. Use a three hole punch on the left side of the pages of this copy. You should submit a second hard copy for your instructor, on which he/she can provide feedback. Finally, you must submit an electronic copy of your entire thesis on a CD.

You should also submit one complete copy of the text of your IRB proposal AND a copy of the e-mail you will receive from the head of the IRB committee once the project is approved. These should be included in the bound, departmental copy.

Please Note: In order to proceed from Psy 4997 to Psy 4998, you must receive a passing grade in Psy 4997. Furthermore, **NO INCOMPLETE GRADES** are given in the Directed Research courses. Failure to complete the class assignments before the end of the semester will result in you having to repeat the course the following semester, potentially delaying your graduation.

Choosing Your Thesis Topic

It is likely that most students starting Psy 4997 will already have some ideas about potential thesis topics; however, a major goal of Psy 4997 is to help you select and refine your topic, and to ensure that your topic can be both practically and ethically studied. When selecting your thesis topic, keep in mind the following suggestions regarding your choice for a topic:

- Consider choosing a topic that is of great personal interest to you and/or one that may reflect your personal career goals. Doing a thesis is a long, difficult process; being genuinely interested in your topic will make this process much more rewarding.
- While personal interest in your topic is vital, strong personal or emotional involvement in your topic may not be a good idea. Such involvement can make it difficult for you to maintain the level of objectivity that is required in scientific research. It may also stir up painful memories or issues for you that you had not anticipated.
- Keep in mind that this is an undergraduate thesis project; do not select topics that are too ambitious. Avoid topics that are likely to be difficult to study due to practical or ethical issues. (Consider where and how you might obtain research participants and remember that research involving the use of underage children **is not allowed** and that the use of special populations such as psychotherapy patients will require special attention and more time to obtain ethics approval, consent of subjects, etc.). Some students choose not to study a topic directly related to their future career goals and instead prefer to study a lighter or more "fun" topic that they are interested in and would like to know more about.
- Choose a topic that has been of interest to other scholars (If you pick a topic about which little or no prior research exists, you will need to review and apply relevant research from other, related areas of study).
- Consider selecting a topic that can be integrated with your field placement or internship. This may make it easier for you to obtain research subjects and provide you with a significant career advantage.

Important Details Related to Completing Your Thesis

Libraries. Although the Dominican library has made great strides in providing access to materials via online data bases and through its Interlibrary Loan program. Our library can order books or articles that are not in our own collection, but keep in mind that it may take a week or two to get those materials. Start early! Plan ahead!

Working in Teams. Some students in the past have opted to work in pairs on their senior thesis projects. Such collaboration have involved sharing references and data collection, but having distinctly different research questions. Each student must ultimately produce his/her own complete thesis manuscript. Any students who intend to work on a thesis project together should **immediately consult with their Psy 4997 instructor** to discuss how work on the project will be shared.

If you choose to work with another student, **carefully assess your ability to work with this person for an entire year!** Can you count on this person to carry his or her share of the workload? Is this person liable to bail out on you part way through the semester and how will you deal with such a situation? Will having a partner reduce your workload, but increase your stress level? Discuss with your partner the potential problems that might arise from working together and try to come up with ways to solve or avoid these problems.

Peer Support. Whether working individually or in a team, peer support is vital to making the thesis process more manageable. It is a good idea to work on your thesis with another student or a small group of students. It can be helpful to bounce ideas off someone and discuss your research project with others who are going through the same process. Past students have reported that they found it extremely valuable to exchange drafts of thesis chapters with someone else so that they could help one another in spotting unclear writing, as well as grammar and spelling errors. The social support that can be gained through working with your classmates in these ways should not be underestimated!

Early in the semester, your Psy 4997 instructor should be able to provide you with a list of students enrolled in other sections of Directed Research, containing a list of their thesis topics. Look over this list and contact other students who are working on similar topics; they might have valuable ideas or journal articles that you might find useful.

Organizing & Protecting Resources. Never throw anything away! Save notes, references and copies of articles, even if you feel that they are not directly relevant to your topic. Some ideas will be discarded as your research question and hypotheses take different directions; however, you may find a need for those seemingly irrelevant materials later on. A **separate binder** for storing all your notes and ideas regarding your thesis is a valuable tool for keeping all your thesis materials in one place. Using a word processor to type drafts of your thesis is vital, but please remember: **you can never have enough "back-up" copies of your thesis materials.** Save your files onto several CDs or memory sticks in case of computer problems!! E-mail yourself a copy of the

manuscript or your data. Every semester there is at least one incident in which a student loses valuable files or information stored on a computer: don't let this happen to you!!

Expenses. Finally, be aware that your thesis will require some personal expenses. You may need to make long distance phone calls to request permission to use certain psychological tests and measures or to recruit participants. Published and copyrighted testing materials may not be photocopied and must often be purchased from a testing company; the cost for such tests may range from .25 to \$10 per subject. There will also be costs for photocopying your materials, mailing out surveys, return postage for surveys, producing your thesis poster, etc. There are no Dominican University of California funds available to defer these expenses. Many students present their thesis at the Western Psychological Association (WPA) conference or other professional conferences, which can result in additional travel expenses.

Guidelines and Format for the Thesis

The thesis format must follow the guidelines of the American Psychological Association as outlined in *The Publication Manual of the American Psychological Association* (2009) and *Ethical Principles of Psychologists and Code of Conduct* (2003). The latter is available at <http://www.apa.org/ethics/code2002.html> . If you have not already done so you should purchase the latest edition of the Publication Manual at the start of your senior year. *Mastering APA Style: Student's Workbook and Training Guide* is a self directed tool to assist you in learning APA format and is recommended. In addition, APA offers two free tutorials at <http://apastyle.apa.org/learn/tutorials/index.aspx#false>. Correct grammar, spelling, and APA style are essential.

Note: Bound copies of theses by former students, without comments or grades, are available in the Psychology Department Resource Room for your review. It would be helpful to look over a sample of these manuscripts to get an idea of what the completed project should look like; **however, remember that the theses you look at may have received a grade ranging anywhere from "A" to "D"**. You might ask your Psy 4997 instructor to recommend some particularly good past theses for you to look at. **Under NO CIRCUMSTANCES should thesis manuscripts belonging to past students be removed from the Psychology Department at any time, for any reason!!**

PARTS OF THE THESIS

The body of the thesis involves 4 major sections or chapters: the **Introduction** or **Literature Review**, the **Method**, the **Results**, and the **Discussion**. In addition to these sections of text, there is a **Title Page**, an **Abstract**, a **References** list, and several **Appendices**. Each section is briefly summarized and listed below in the order in which they appear in the final paper. The 4 major sections (Introduction, Method, Results, Discussion) are discussed in detail on the following pages. Note that formatting of ALL sections of the manuscript should be consistent with APA style guidelines.

Title Page. Contains your thesis title, your name, the month and year that your thesis is

submitted, Psychology Department, Dominican University of California.

Abstract. The abstract is a summary of your entire thesis, typically containing one sentence describing each of the major sections of your thesis (i. e. Introduction, Method, Results, Discussion). It is always on its own page before the Introduction.

Introduction. This is the formal name for your review of the research literature. This section should end with a statement of the purpose of your study, your hypotheses and a brief mention of the method that will be used to test your hypotheses.

Method. This section provides the details of your methodology and as discussed in the APA Manual, is divided into three distinct subsections: **Participants, Materials** and **Procedure**.

Results. This section provides the summary of your statistical analysis and any tables and figures that help to present those results. (Actual statistical computations and "raw data" are turned in separately to your instructor.)

Discussion. This section provides a discussion of the implications of your research findings and links your findings to the past research on your topic that was discussed in your Introduction.

References. This section is a complete listing of all references that were cited throughout the body of the thesis. They should be arranged in alphabetical order by the primary author's last name.

Appendices. These optional sections provide details of the research, which, due to their length or complexity, would distract the reader if presented in the body of the thesis (e. g. detailed instructions to participants, copies of your questionnaires or tests, etc.). Your approved Ethics Proposal should be included in your thesis as an appendix.

Introduction

The title "Introduction" is not used; instead, the complete title of your thesis is centered at the top of the first page of the introduction.

The Introduction section illustrates the first essential test of doing a thesis: to "become an expert on your topic." Initially, this means that you need to review what other authors have had to say about your topic and the methods they have used. You need to critically evaluate these formulations, gradually leading the reader to an understanding of the purpose of your own study. A good literature review should present the important theoretical and methodological issues, which have been raised, explicitly or implicitly, in your area of research and provide the foundation for understanding the goals and hypotheses of your study.

Please note that the Introduction section of a thesis is considerably longer than that of most APA journal articles, which are abbreviated to save production costs. Thus this section of the thesis differs in scope from the description of an introduction section described in the APA Publication Manual. **The typical length of the thesis literature**

review is 14 - 20 pages, and should probably contain about 15 - 20 references. Your instructor may have more specific guidelines In this regard.

Helpful Tips for Writing the Introduction

Examine the theoretical issues surrounding your thesis topic. For example, you may present the major theoretical position or competing theoretical opinions, point out a theoretical bias guiding this research, or juxtapose and evaluate contrasting theories. What questions have been raised and debated in this body of work? What methods have researchers used to try and answer these questions? What are the methodological problems or limitations in this work? Evaluate contrasting methods for solving these problems. Are there gaps in the literature? Are there unanswered questions in the research literature that your study might help to answer? Again, the introduction should "set the stage" for your research question and methodology by providing the reader with an adequate background on what has been done on this topic in the past.

Resources for Locating Research Articles

The library staff at Dominican are very willing to help you locate research materials and are a valuable resource for students trying to locate various research articles. Try getting to know them personally. In addition, publications such as Annual Review of Psychology and Psychological Bulletin are excellent sources of reviews of research articles.

To help gather the necessary background information for your literature review, you will want to use the Dominican University of California library's on-line databases. At Alemany Library, journal citations and abstracts in psychology are available through PsycInfo and Science Direct databases. These can be accessed on-line by going to the Dominican library homepage. These databases provide access to PsycInfo, which contains journal literature back to 1967, as well as books or chapters in books back to 1987. Other on-line databases for more medically oriented research (Medline) or educational research (ERIC) may also be useful. More general, full-text articles may be available through the EbscoHost and Wilson Select. The library also has the "Psychological Abstracts" print index and a thesaurus of psychological index terms. A reference librarian would be glad to assist you in learning how to use the periodicals indexes effectively.

Books and journal articles not available at the Dominican University of California Library may be obtained using Inter-Library Loan. If you intend to use Inter-Library Loan, **plan ahead!!** Your request may take from 10 days to two weeks to process. There is a \$3.00 charge for journal articles, and your article will not be released until you have paid this fee. There is no charge for obtaining books through Inter-Library Loan.

Citations

While books or book chapters may be used as references in the literature review, the overwhelming majority of the references you cite in your thesis introduction should be empirical research articles from journals, and a significant number of these should be rather recent articles (the last 10 - 15 years or so) to ensure that you have the most up-to-date information about your topic. Follow APA guidelines for how to cite research articles within the text of the thesis, as well as how to properly format these citations in the References list at the end of the thesis manuscript.

Nature of the Data

In addition, you should always clearly state whether any ideas or concepts you are discussing represent an author's interpretations of his or her own research findings versus "armchair speculation," based on personal opinion, clinical observations, theoretical hypotheses, etc. It is important for you to specify "**the nature of the data**" to which you are referring and to clearly distinguish between:

- theoretical speculations of authors who provide no empirical findings
- research findings clearly supported by empirical data
- someone's interpretations of someone else's research findings
- your own, personal opinions and ideas

Empirical Paragraphs

When citing the articles you have gleaned from your review of the empirical research literature please use the following format: first give the author(s), then the year of the publication, then a summary of their methods, then the results and then the discussion. For example:

Smith (1999) conducted an extensive survey of 500 college students regarding their experience of road rage. He found that males reported significantly more incidents of road rage and higher anger scores on the Berkowitz aggression scale than female students. The author interpreted these findings as being consistent with laboratory experiments in which males showed higher levels of aggression than females in the Milgram situation. He also suggested that future researchers employ in-depth interviews as well as field experiments to determine whether males experience higher levels of frustration than females.

- To construct "empirical paragraphs" such as the example above, read the article and summarize the research in your own words.
- Use of direct quotes should be used sparingly and limited to only a few highly significant quotations from authors that make an important point or eloquently capture a particular idea.
- The abstract is a good place to begin looking for the information you need to include in your empirical paragraphs, but it may not provide the necessary detail about how the

independent and dependent variables were measured or the necessary detail about the participants or results, e. g. the abstract may state that gender influenced attitudes toward war, but it may not say that it was actually the females who showed lower scores on the attitude toward war scale.

Organization of the Literature Review

A good Introduction or literature review is **not** merely a description of all of the background research you located on your topic. Think of this review as a logical argument that leads the reader through a discussion of the background theory and research related to your topic, and to an understanding of the purposes and hypotheses of your own study. Use a "**funnel**" approach in organizing your literature review; start with the broader issues or theoretical formulations and then, as you proceed, present articles, which address issues more closely related to the focus of your study. **Finally, the Introduction should culminate with a clear statement of the purpose of your research, your hypotheses and expected results**, e. g. "This research is designed to test the hypothesis that gender influences attitudes towards domestic violence. More specifically it is predicted that students who read a vignette in which a woman batters a man will be more lenient in their attitudes toward domestic violence than those who read a vignette in which a man batters a woman."

To be sure that your Introduction is clear and well organized, **it is strongly recommended that you develop a detailed outline of this part of the thesis**. Consider the order in which you will discuss various pieces of research, as well as the relative importance of each research citation. Some studies may warrant only a brief mention, while other studies that are more closely related to your own work may need to be discussed in considerable detail.

Method

Participants

This subsection of the Method should include a description of who participated in the study, giving demographic characteristics of your sample. These might include such variables as the participants' gender, age, race or ethnicity, educational level and the geographical area from which they come. The number of participants who were involved in the study, the number of participants assigned to various experimental conditions, and the number of participants who were selected to participate but who did not complete the study are also important facts to include here. In addition, the way in which participants were selected or recruited should be described fully in this section.

Materials

This subsection describes any equipment, materials, questionnaires, psychological tests or measures, which were used in the research. You should describe any questionnaires or psychological measures in detail. For example, describe the number of items the measure contains, give examples of the types of questions that are asked, and describe the way in which a participant must respond to a question (e.g., multiple choice, fill in, true/false).

Do not include the entire measure(s) in the Materials section; attach actual, complete copies of all materials in an Appendix and refer the reader to this copy within your Materials section.

Procedure

This subsection describes **sequentially** what participants experience during each step in the research process, from their initial contact with the researcher to their post–research debriefing. Letters of introduction describing the research to the participants, consent forms, verbatim instructions, debriefing statements, etc., should be mentioned here. (Such information should already have been described in the Materials section, and actual copies of these items should only be included in the Appendix of your thesis.)

Final notes:

- (1) Keep in mind that the purpose of the Method section is to provide a precise description of the methodology employed in your study, in sufficient detail to permit someone unfamiliar with your study or your area of research to replicate exactly what you did. The most common problem with this section is not providing the reader enough information about the methodology.
- (2) The Method section does not include the IRB Proposal.

Results

Although the Results section is typically the shortest chapter of the thesis, many students find it very difficult to write. Following the guidelines presented below should make the writing of this section a bit easier.

The purpose of the Results section is to present the results of your research relevant to your hypotheses, and to describe any other interesting findings from your research. All data in the Results section are presented only in summary form: descriptive statistics on your variables and the results of any inferential statistical tests you have done. Tables or graphs, if they aid in making the presentation of your results clearer, should also be included in the Results section. Do not put any of your "raw data" or computer printouts in the thesis. Turn these materials in separately to your instructor. Any interpretation of the results or any discussion of their implications should be saved for the Discussion section.

Organizing the Results

1. Begin the Results section with a restatement of each hypothesis, and present all data relevant to **one hypothesis** before proceeding to the next one.
2. Next describe the **data** that were used to test each hypothesis. This means describing how a particular psychological test was scored, the possible range of scores on that measure, what a high or low score indicates, etc. Unless you include this type of information about your data, it will be impossible for the reader to understand your descriptive statistics and the results of your statistical analyses, since any numbers reported will be meaningless.

3. Report important descriptive statistics about these data (for example, the means and standard deviations of the test scores for each of your experimental groups). According to APA guidelines, measures of central tendency (means, medians) should not be reported without also reporting measures of variability (range or standard deviation).
4. Describe which inferential statistical analysis was done: t tests, ANOVA, correlation, etc.
5. Present the results of the statistical analysis **in appropriate APA style**.

After following this outline and discussing each of your hypotheses in this way, you may then include information regarding other interesting findings or patterns in the data that were unusual, unexpected or noteworthy, but which were not part of your formal hypotheses for the study. However, these should only be mentioned **after** you have completely addressed the statistical findings relevant to your hypotheses.

On the following page, an example has been presented to demonstrate how your results should be worded. Note that each of the points outlined above is included in the discussion of results for each hypothesis.

Example of Part of a Results Section

The first hypothesis was that there would be a positive correlation between the length of time that someone had resided in California and the number of measures he or she had taken to prepare for earthquakes. To test this hypothesis, the length of time in years that participants had resided in California was correlated with the number of preparedness measures that they reported having taken. Overall for the sample, the length of residence in California ranged from 1 month to 36 years, with a mean of 10.2 years and a standard deviation of 5.7. With regard to preparedness, the number of measures the participants reported having taken ranged from 0 to 11, with a mean of 4 and a standard deviation of 1.8. A Pearson correlation coefficient was calculated between these two variables, and the results showed that, as predicted, there was a significant, positive correlation between these variables, $r(34) = .57, p < .01$. In other words, the longer someone had lived in California, the more preparedness measures they were likely to have taken.

The second hypothesis was that participants with a stronger internal locus of control would rate their chances of surviving a major earthquake as better than those participants who displayed a strong external locus of control. To test this hypothesis, participants were assigned to one of two groups on the basis of their Locus of Control Scale scores; those subjects scoring a 15 or below on the scale were considered "internals", while those with scores higher than 15 were "externals". These two groups were then compared using the ratings they made concerning how strongly they felt they could survive a major earthquake as a dependent variable. These ratings were made on a 1 to 7 Likert Scale, with higher ratings indicating that the participant felt he or she was **more** likely to survive a major quake.

The mean survivability rating for the Internal participants was 5.24, with a standard deviation of .90. The mean rating for the External group was 4.13, with a standard deviation of 1.43. These means were then compared using a t test for independent groups, and this analysis revealed that the difference was significant, $t(34) = -2.97, p < .05$. Therefore, those participants with a strong Internal locus of control rated their chances of surviving a major quake as significantly higher than those with a strong External locus of control.

NOTE: In the sample Results section provided above, the statistical results related to two separate hypotheses have been fully described in approximately one page of text. The Results section can be very brief, as long as you have included the important information.

Discussion

The Discussion section addresses the question of what the results of your study mean and what the implications of these findings are. A good Discussion should include the following points, addressed in the following order:

1. Were your hypotheses confirmed? Were your findings consistent with findings from past studies described in the introduction? Did your results support or fail to support existing theories? If your results did NOT support your hypotheses, why might this be the case? Could your initial hypotheses be incorrect? Might the background theory upon which you based your hypotheses be incorrect or not applicable to this particular situation? Are there alternative explanations or confounding factors that might be responsible for your findings? In the Discussion you are free to cite new references not already cited in the introduction that might help to explain the results you obtained.
2. Were there problems or limitations of your study? This section should be a critique of your study that brings up potential methodological problems, limitations such as a biased sample or a poor measure of some variable, etc. If anything went wrong during the course of the study or if there were uncontrolled confounding factors, this is where you'd want to describe what happened and speculate as to how it might have influenced the results. The purpose of your critique is not to simply criticize your study or your abilities as a researcher -- it is to anticipate what questions or objections the reader might have and to address those criticisms. Let the reader know that you have given careful thought to your methods and results and that you are aware of potential problems or limitations of your study.
3. What are the implications of your research? How might they relate to practical issues such as solving a particular social problem or how might they be used in clinical practice? What are your suggestions for future research on this topic? In other words, what questions remain unanswered and where should we go from here in this particular field of research? This may include specific suggestions for how you might remedy the problems you brought up in your critique of your own study, as well as presenting other research questions in your topic area that need to be addressed by researchers in the future.

Oral Presentation of the Thesis

All students are required to participate in an oral presentation of their thesis project. Oral presentations will normally be done during class time in Directed Research (Psy 4998). They are open to all interested faculty and students. **Presentations should be approximately 10 minutes in length, allowing an additional 5 minutes for questions and discussion.**

Think of the presentation as an opportunity to share with your peers and colleagues the work that you have been involved in for the past year. In your presentation, you should briefly discuss the background research or theory that led to your research question, clearly state your question and your hypothesis(es), describe the participants and methodology you used, summarize how the results of the study turned out and discuss implications of these findings or any potential problems with your methodology. Think of this as an "oral abstract" that will give your audience enough information so that they can clearly understand your research project.

In addition, certain exceptional students may be nominated as Academic Scholars, and some of those nominated students will be selected for this honor by a University-wide committee. Academic Scholars will do a 15 minute long presentation open to the university community at large. These presentations occur during lunchtime forums during Dominican's Academic Showcase, which occurs in April. They will also be asked to attend a dinner at which their work will be honored and will receive a special cord that they can wear at graduation, signifying their status as an Academic Scholar.

Poster Presentation

In addition to the oral presentation of your thesis, students are required to do a poster presentation of their thesis project. Posters are a common way of presenting research findings at professional meetings such as APA or Western Psychological Association (WPA) conventions. The poster is a visual presentation of information. Rely sparingly on verbal text, rely more heavily on bullet points, graphs, charts, tables and pictures to communicate information. The verbal text you do use should focus on the main points of your research question and hypotheses, design, rationale, results and implications. Save descriptions of complex analyses, etc. for your complete manuscript.

Dominican University also holds a campus-wide Poster Session involving many different academic majors during the Academic Showcase in April. Posters are judged by a committee of faculty and staff who give award ribbons for the best posters. Students whose posters are determined to be the best of the year are also awarded the coveted "Academic Scholar" designation.

Guidelines for creating a poster and a rubric used to judge the posters at the Academic Showcase may be found on the Dominican website are presented on the following pages:



DOMINICAN ACADEMIC SHOWCASE **POSTER PRESENTATION GUIDELINES**

The following are guidelines for the poster presentations at the Dominican Academic Showcase. Please use these guidelines to assure a successful presentation for you and your audience. These guidelines will prepare you to present posters at national professional conferences, since many of the ground rules are the same regardless of discipline. These guidelines will be used by the Academic Scholar Selection Committee in judging the posters for Dominican Academic Scholar awards. Posters will represent student work in research, scholarship or creative activity. Both in-progress and completed projects can be submitted; however, preference in awards will be given to completed projects.

What is a Poster?

A poster is a visual presentation that combines design, color, and message to communicate significant ideas between the presenter and the people reading the poster.

A Poster Tells a Story

A typical reader may spend only a few minutes looking at your poster, so there should be a minimum of clutter and a maximum of pithy, informative statements and attractive, enlightening graphics. A poster should tell a story...your story. Keep in mind that the poster will be one of many in the exhibition area: You need to make sure that it will capture and hold the reader's attention so that your story is communicated.

Anatomy of a Poster

The text may be presented in bullet format or narrative; however, the font size should not be smaller than 20. One should be able to read the poster from 4 feet away. Remember: less is better; you will be there to fill in if people have questions. They should have questions. You may provide a more detailed handout if you like.

Just as with an oral presentation there is a standard format for a poster. Normally, there should be:

- a. A **title** area, with title, name(s) of researchers, and department in which work was performed. Font size should be at least 20.

- b. An **introduction** that provides clear statements regarding the problem (hypothesis if appropriate) you are working on, what you are trying to prove or investigate, and the purpose and significance of the research, scholarship, or creative activity.
- c. A **methods, argument, or interpretive approach** section should describe the methods, procedures, or steps that you used in arriving at your results, the interpretive approach that you employed, or the arguments you marshaled in establishing your point.
- d. A **results** section where you demonstrate the main results of your research, scholarship, or creative activity.
- e. A **conclusion**, indicating the major findings or contributions of your research, scholarship, or creative activity.

This is a lot of material, so it is important that you spend time planning how you will include this material on a very limited space. Not enough thought at the beginning of poster preparation will result in a poster where poor planning will be on exhibit for everyone to see. In addition, the quality of your poster conveys respect for your audience.

Poster Preparation

- A. **Poster Material:** You may use three-sectioned (that is double-folded) foam board measuring approximately 44 inches wide and available at the Dominican University of California Bookstore, Office Depot, or Staples. Alternatively, consult the following site to find out about on-campus poster printing resources. Be aware that on-campus resources are not guaranteed; application for on-campus printing resources must be done well in advance:

<http://www.dominican.edu/academics/resources/technology/printing/largeformat.html>
- B. **Plan Design:** Sketch out your layout to ensure that the progression of information is clear. A mix of words and visuals makes for an eye-catching poster.
- C. **Keep the Material Simple:** Make full use of space, but do not pack things too closely together. Be concise and present only results that illustrate your main findings.
- D. **Title:** Center the title at the top. Use all capital letters in the title and do not use more than 8 words in the title.
- E. **Headings:** Decide how you will use headings. Be sure you keep your format consistent throughout. Headings should be no more than three or four words and a larger font than for the text of the poster. Maintain a consistent style throughout the sections of your poster.
- F. **Fonts:** Do not use more than 2 font types. Too many fonts are distracting. Never use two fonts in the same sentence. Use character-specific fonts. Two of the

most commonly used fonts are Times-Roman and Arial. **All print must be in black ink.**

- G. **Case:** Use sentence case lettering. The title is the only section of your poster where all upper-case type is appropriate. Text in all upper-case lettering is difficult to read.
- H. **Text:** Do not type large amounts of information. Sheets of text will deter people from stopping to look at your poster. Format your text in short sentences or bullet important ideas.
- I. **Graphs:** Graphs should be large enough to be read from several feet away. Contrasting colors are helpful. Line graphs should have no more than 4-6 lines.
- J. **Tables:** If using tables, make sure you align all of the decimal points.
- K. **Diagrams/Drawings:** Label diagrams and drawings in a font large enough to be seen from a distance.
- L. **Clip Art:** Use only if it is pertinent to the presentation of your subject matter.

Spelling and Grammar

Nothing indicates lack of attention to detail more than spelling mistakes. Since your poster will be on public display, check and re-check your spelling. Have a friend proofread your text, since it is easy to miss your own typographical and grammatical errors.

Use of Color

Color attracts attention and is aesthetically pleasing, provided it is tasteful. One color plus black or tan provides the greatest contrast. One color should dominate 70% of the poster. Avoid bright or day-glow colors. For example, you may use a black poster board with a border of tan around your papers or a white poster board with a black and small yellow border. Minimize the brighter colors. The color should also be appropriate to your topic, i.e., if you are studying forestry, you may want to use a forest green border around the pages.

Protection of Human Subjects

If your research has required Institutional Review Board for the Protection of Human Subjects approval, be sure to indicate this on your poster by simply noting on the lower right hand corner of the poster, "IRBPHS approval # XXXX, date obtained."

You may not show photographs of people on your poster if the photographs allow subject recognition, unless you have written permission from the subjects to exhibit their pictures. Completed permission forms must be available at the poster session should anyone ask to see them.

Present Yourself Professionally

Because you will be standing next to your poster during the presentation, you are also on display, so please dress as you would for a job interview.. If you have any

questions about what is appropriate, please ask. You should also act in a professional manner: do not “hang out” at nearby posters, and do not block the view of your work. Be prepared to talk with people who stop to look at your poster, and to answer their questions.

Most importantly, have fun!

Award Winner Hall of Fame:

If your poster is selected as an Academic Scholar winner, you will be asked to display it on one of the Academic Scholar bulletin boards in Bertrand Hall. The Scholar posters stay on exhibit throughout the summer and the following academic year to advertise our undergraduate research program and the wonderful work Dominican students are doing.

Adapted from:

1. Ganley, B. (2002, September). *Poster Presentations*. San Rafael, CA: Dominican University of California.
2. “Poster & Podium Presentation.” (n.d.). *NUR390: Lesson5-2*. Retrieved February 9, 2005 from the Northern Arizona University Web site: <http://jan.nau.edu/~mezza/nur390/Mod5/poster/lesson.html>
3. *Poster Presentation of Research Work*. (31 October 2001). Retrieved February 9, 2005 from the University of Newcastle upon Tyne, Chemical Engineering and Advanced Materials Web site: <http://lorien/ncl.ac.uk/Dept/Tips/present/posters.html>
4. 2005 from the Psi Chi Web site: <http://www.psichi.org/conventions>



Scoring Guide for Academic Posters

Student Name _____

Poster # _____

Either a one or a zero will be awarded in each of the eleven categories below.

A score of 3, 2, or 1, (3 is the highest, most positive score) will be awarded in the four categories below

___	Clear title	
___	Name of Student	
___	Summary or Abstract	
___	Introduction, Clear Statement of thesis or hypothesis What is hoped to be proved or discovered?	
___	Methodology, Procedures, Demonstration of Research Quality of question and/or research	
___	Results	_____
___	Conclusion	
___	Graphic Visuals, graphs, tables, diagrams, drawings, clip art	
___	Textual/Print Presentation, case font, text	
___	Appropriate Materials & Layout	_____
___	Correct Language Usage, syntax, grammar, spelling	
Total	___	Total _____

Shukraft Award for Excellence in the Senior Thesis

The Bob Shukraft Award for Excellence in the Senior Thesis is named for the founder of the Psychology Department at Dominican. Each year, the Psychology Department presents an award to a student who has demonstrated excellence in the senior thesis project. A committee of several Psychology Department faculty members determines the winner. A cash award and a plaque are presented to the winner of the Shukraft Award; nominees for the award, as well as the recipient of this award are announced in May.

Instructors in Psy 4998 may nominate one or two students from their classes who have done a particularly outstanding job of designing and conducting their thesis research and writing the thesis manuscript. Psychology professors who are not involved in teaching the thesis classes then review the finalists. Criteria for the Award are as follows: (1) Mastery of the topic, (2) Quality of writing (spelling, grammar, organization, appropriate APA style, etc.), (3) Appropriateness of the method, design and statistical analysis to the research question, (4) Interpretation of results and suggestions for further research, (5) Importance of the study for the field of psychology or for promoting the well-being of people or animals.

THE ETHICS REVIEW PROCESS

An important step in the thesis process involves obtaining approval of your research methodology with regard to ethical considerations. The American Psychological Association has a comprehensive resource entitled Ethical Principles of Psychologists and Code of Conduct, which you may access at the APA web site (www.apa.org).

Your PSY 4997 instructor and a committee of Psychology Department faculty (Departmental Review Board) will assess whether your proposal meets acceptable ethical standards. In addition, your proposal will be forwarded to the Institutional Review Board (IRB) of Dominican University of California. For particularly sensitive research questions or questionable methodologies, (using special populations, asking participants to answer very personal questions on sensitive topics, etc.) your proposal will also need to be reviewed by the full Institutional Review Board (IRB) of Dominican University of California.

NOTE: You may not recruit any participants or gather any data from them until your study has been approved by the Psychology Department and the IRB!!! You may access the IRB Handbook online on Dominican's website.

The ethics review process typically occurs late in the semester in which you take PSY 4997 and involves submitting a draft of your proposal to your PSY 4997 instructor. Once he or she approves and signs off on it, two clean and complete copies must be submitted to the Psychology Department's Ethics Review Committee.

Your PSY 4997 instructor will provide due dates for when the final draft of your IRB is due to him or her. Your final proposal must reach the IRB Committee no later than the following deadlines:

- **For May Graduation:** by noon on the first Monday of the preceding December. Any proposals not submitted by this deadline **may not be evaluated until Spring Semester!**
- **For December Graduation:** by noon on the first Monday of the preceding April. (However, due to year-to-year changes in the dates for Spring Vacation, these deadlines could vary. Consult your instructor to verify this deadline date.)

Detailed instructions and materials to assist you in formulating your ethics proposal are provided in the IRB Handbook.

Process for Submitting Ethics Proposals

1. If you have particular ethical questions or concerns regarding your project, talk to your PSY 4997 instructor early in the semester and try to work out an ethically acceptable methodology.
2. Complete a draft of your proposal and once it has been submitted to and approved by your PSY 4997 instructor, obtain his or her initials and signature on the **IRB Initial Application**. A sample copy of this form is available in the Appendix of this handbook and in the IRB Handbook.
3. After your research proposal has been approved and your cover sheet has been initialed and signed by your instructor, submit **2 copies** of the entire proposal (typed and double-spaced) to the Psychology Department's Ethics Review Board.
4. After the Department's Review Board meets, your proposal will be forwarded to the IRB Director for EXEMPT, EXPEDITED OR FULL REVIEW. The IRB Director will indicate her approval or disapproval of your project in a letter to your Directed Research instructor specifying one of the following 3 options:
 - **Approved (with minor changes only).** This means that once you make the indicated changes, you are free to begin data collection for your project.
 - **Approved (with major changes).** In this case, you must make the recommended changes. **You must then obtain your instructor's approval of these changes and his/her signature on your proposal cover sheet before you may begin data collection.**
 - **Not Approved.** In this case, you must make the necessary changes in your proposal, obtain your instructor's signed approval of those changes and then **resubmit a summary of the changes that you have made on the renewal application. You may not begin any data collection until you receive final approval from the IRB.**

Recruiting Research Participants

The easiest, fastest way to obtain research participants (and to provide them with feedback about the results of your study) is to use Dominican University of California

students; to recruit participants from classrooms, you must have written permission from the instructor(s) whose classes you intend to visit. However, because so many seniors use this option, students in classrooms here at Dominican can begin to feel overloaded by requests to participate in research projects and may be less likely to volunteer. Also, the use of college students often calls into question the external validity or generalizability of your study. For these reasons, you should also consider alternative sources for participants. Clients at your field placement site and your field placement supervisors are often enthusiastic and available research participants.

The use of self-addressed, stamped envelopes can be helpful in increasing the response rate of any survey studies, as is having easily accessible and anonymous return locations. Some research designs, e. g. consumer behavior studies, may allow participants to fill out their questionnaires or answer questions "on the spot", a tactic which also enhances return rate.

If you are considering the use of off-campus participants, keep in mind that you will need to submit a letter of permission from the director or supervisor of that agency with your ethics proposal and may have to submit a separate ethics proposal to that agency as well. Additional approvals must be obtained if you are using vulnerable populations, such as children or hospitalized patients.

Use of Psychological Tests and Measures

Some students elect to develop their own measurement instruments. While this is sometimes acceptable, you are cautioned that this process can be very time-consuming, and that any measure you design yourself will not be very high in validity and reliability.

Your instructor in PSY 4997 will provide information about a variety of sources in which you can find existing measures for many of the variables we typically study in psychology.

Except in some rare cases where a psychological test questionnaire is presented in its entirety in a book or a journal of the American Psychological Association **and** the instructions for scoring and administering it are also provided in the book or journal article, **you typically must obtain written permission from the test author/publisher** to use such an instrument in your research. A sample letter requesting permission to use a psychological measure is included in the Appendix of this Handbook. **Be aware that you may need to pay for some published tests.**

Some test publishers have their own standardized permission forms. A catalog of published psychological tests is available in the Psychology Department. In addition, our library has several sources for locating psychological tests and measures, such as **Test Critiques** by Keyser, **Sex and Gender Issues: A Handbook of Tests and Measures** by Beere, **Mental Measurements Yearbook**, etc. Other similar resources are in the reference section of most academic libraries. Some tests will require that a licensed psychologist order the materials; your PSY 4997 instructor may be able to assist you in

facilitating this publisher's requirement. **However, be aware that some tests may not be administered by undergraduate students (i. e. WAIS, WISC, Rorschach, etc.).**

Obtaining the appropriate measures and permission to use them often takes significantly longer than most students anticipate! It may involve making many phone calls and waiting up to several weeks for responses by mail. (If you are able to locate the university affiliation and email address for the test author e-mailing is typically a faster way to secure such permissions.) Therefore, we recommend that you begin looking for appropriate measures and sending out your permission request letters **as early in the semester as possible. Remember, you will need to include copies of all measures and all letters of permission with your ethics proposal: the ethics committee WILL NOT ACCEPT proposals that are submitted without these materials!**

Writing the Ethics Proposal

Examples of completed ethics proposals should be found at the back of all theses completed after 1995. These are available for you to look at in the Psychology Department. **However, there have been a few minor changes in the ethics proposal requirements and procedures over the years, so use the information in the current IRB Handbook as your guide.**

Your written proposal to the Committee must address all of the following topic areas in the proper order. Each of these sections of the proposal is discussed in greater detail in the following pages.

- I. DESCRIPTION OF THE RESEARCH
 - A. Statement of Problem
 1. Method
 2. Participants
 3. Materials
 - B. Procedure
 - C. References
- II. CONFIDENTIALITY OR ANONYMITY
- III. RESEARCH WITH VULNERABLE POPULATIONS
- IV. DEBRIEFING AND FEEDBACK
- V. RISKS
- VI. BENEFITS
- VII. APPENDICES

Parts of the Ethics Proposal

I. Description of the Research

A. Statement of the Problem Provide a brief synopsis of the research question. **This synopsis should not be longer than one page.** Do NOT turn in your thesis literature review. This section should include some **citations of recent empirical research** studies and **should end with a clear statement of your hypotheses.**

B. Method Provide an overview of your proposed methodology. The Committee is most interested in how your contact affects your subjects. Be certain to address all of the following topics and concerns:

(1) Participants. Who will your subjects be? How many will you need? How and from where will you recruit them?

Remember that if you intend to gather participants from some off-campus agency or institution, you must include a letter of permission from the person in charge of that organization with your ethics proposal.

If you are recruiting subjects from Dominican University of California classrooms, you must include copies of your permission letter(s) signed by instructors whose classes will be visited. These letters should acknowledge that the signer is aware of your research question, methodology, and procedures.

(2) Materials. Exactly what data do you want to gather from your subjects? What assessment instruments, psychological tests or measures are you planning to use? **You must provide a copy of all the materials that potential participants will see.** This includes any letters of introduction, consent forms, debriefing statements, or scripts of any verbal communication you will have with your subjects.

If you are doing a study, which could pose significant psychological risk or stress to your participants (i. e. , experimental studies involving deception, surveys dealing with highly personal issues), you must have participants read and sign a consent form, stating that they are aware of any potential risks that could result from their participation. Consent forms are not required for most anonymous questionnaires. Also, verbal consent may be appropriate in certain situations, e. g. when signed consent is intrusive, inconvenient, or if the subject is competent (not a child or a member of a vulnerable population) and can refuse to participate. An example of a project employing verbal consent is a marketing research study in which subjects are approached at a shopping center. If a consent form is not used, you must still provide **(1) an introductory letter to research participants OR (2) a script of your oral introductory remarks to participants**, and each of these should contain information similar to that found in a formal consent form. A sample of both an introductory letter to participants and a consent form for a higher risk study are provided in the Appendix of this handbook and can be adapted for your own specific study.

(3) Procedure. Explain in sufficient detail exactly what each subject will experience from the time they are recruited until they have completed their participation in your study. What will they be asked to do and approximately how long will this take? What procedural safeguards will be taken to ensure voluntary participation and informed consent in all parts of your data collection?

C. References. Provide a list of **any references that were cited in your Statement of the Problem AND in the Method section** above, in proper APA format. Include any citations for the tests you are planning to use. **Do not submit the entire References section from your thesis.**

II. Anonymity OR Confidentiality

You first must decide whether your study is anonymous OR confidential.

A. Anonymous Studies. These are studies where knowledge of participants' identity is unknown to you or others. Such studies are typically less problematic with regard to ethical issues. If your study is anonymous your proposal must include a discussion of how you will ensure participants' anonymity.

B. Confidential Studies. These are studies where knowledge of participants' identity is possible, usually through demographic information, personal history or direct contact, but the researcher agrees not to divulge any information gathered about individual participants to anyone else.

If you plan to do a study that involves confidentiality, you must address the following points in your proposal:

1. How do you plan to protect your subjects' confidential participation in your study? What coding procedures will you use with your data to protect confidentiality?
2. Describe any potential breaches of confidentiality and how you plan to prevent them.
3. What is the nature of your data, i. e. , how will they be recorded and used? How long will you keep your data once the study is finished? How will you keep data secured? What is your plan for disposal of part or all of your data following completion of the research? Be specific as to what you plan to do.
4. If anyone is helping you with collection and/or coding of data, how will you train or prepare these people to maintain confidentiality?

III. Research With Vulnerable Populations

Research with children or compromised or vulnerable adults (for example the sick or hospitalized) creates special problems of consent and confidentiality. For this reason, the Psychology Department does not allow undergraduate students to conduct research with

minor children. For compromised or vulnerable adults special consideration must be paid to consent procedures. Before submitting a proposal involving vulnerable adults, be sure to carefully discuss the details of your methodology with your instructor and remember that your proposal will need to be forwarded to the University's full IRB committee for final approval.

IV. Debriefing and Feedback

Debriefing should occur after you collect data from each subject. Debriefing can be done for an entire group or individually with each subject, depending on the particular methodology of your research project. How will you debrief your subjects? If you have used deception, be very specific as to how you will deal with this during the debriefing. (Note "Risks," below.)

All subjects should be offered the opportunity for feedback, which is defined as a summary of the results of the study. Except in unusual cases, feedback should be in the form of group and not individual data. Some subjects may have little interest in feedback; others will be extremely interested. You must insure that ALL subjects have easy access to feedback. Often a good way to provide feedback is to send subjects a letter summarizing your findings without psychological jargon or statistical information. An easy way to keep track of which participants would like feedback is to include a place on the consent form where the participant may indicate that he or she is interested in receiving results of the study once it has been completed. Since consent forms are collected **separately** from other materials, this keeps survey responses or psychological test results anonymous.

If your participants are recruited from Dominican University of California classrooms, or from some agency or organization, another way to provide feedback about the study is to post a brief synopsis of the results in a public place, and to inform participants that the results will be posted on or after a given date. **Note: if you tell participants that you will post results in this way, you have an ethical responsibility to follow up on this!** By not keeping such a promise to your participants, you jeopardize the ability of future researchers to obtain and gain the trust of their participants.

V. Risks

You must describe to the committee any potential risks that you anticipate to the subjects due to their participation in your study. Sometimes seemingly innocuous questions or questionnaires can create negative consequences for subjects that must be anticipated by the researcher. Because these negative consequences would never have occurred were it not for your study, you are responsible to some degree for any unwanted psychological side effects experienced by any of your subjects. When writing this part of the proposal, do not simply say, "There is no risk." Put yourself "in your participants' shoes" and consider what the experience of being in your study would feel like.

The greater the perceived psychological or physical risk, the more important it will be for you to explain to the ethics committee the precautions you are taking to protect your

participants. You should be available for consultation to all of your subjects during and following data collection. In the rare case when your personal consultation is insufficient or in the case of high-risk studies, you may refer subjects to a consultant (who must be contacted and must agree to be a consultant before data collection can begin). This situation is quite rare and is generally avoided with carefully thought-out informed consent procedures, debriefing and timely feedback.

If your study involves deception of participants, you must convincingly demonstrate to the committee why deception is necessary, and describe in detail how you will debrief your participants. (See "Debriefing" above.)

VI. Benefits

Describe to the committee any potential benefits that your subjects might experience from participating in your study. These might include increased personal knowledge, professional development, and enhancement of available information in their field of interest. There may be other benefits of participation, depending on the topic area, and these should be described in detail for the committee. This section need not be particularly long, but it is important. The ethics review committee must evaluate the subjects' potential risks against their potential gains as a result of participating in your research.

VII. Appendices to the Proposal

In addition to the written sections of the proposal described above, several important Appendices should be attached to your proposal. **Unless all of these materials are included, the Committee will not review your proposal!** Materials that should be appended to your proposal include:

1. Copies of any letters of introduction to participants, and/or consent forms that will be given to the participants.
2. Signed letters of permission from Dominican faculty members whose classes you want to visit to recruit subjects **or** from supervisors or directors of any agency from which you hope to recruit subjects. If signatures have not yet been obtained, the letter you sent to these individuals must be included in the proposal, and you should be aware that the committee will **not** give its final approval on your project until these letters have been signed and returned to you.
3. Complete copies of **ALL** measures to be used in your project (psychological tests, surveys, etc.).
4. Signed permission letter(s) from test authors or publishers giving you permission to use any standardized tests or measures. Again, if you have not yet obtained such permission when you submit your proposal, you must at least include a copy of the request for permission that you sent out. The ethics committee will withhold final approval of your project until you have obtained the signed permission letters.

5. Scripts of any introductory comments or instructions that will be given to your participants, and copies of the debriefing information that you will provide following their participation.

A final note regarding introductory letters to participants and consent forms: **none of the materials that are to be given to participants should contain your home phone number or address, but you may use an e-mail address.** For a mailing address, use your name, along with Psychology Student Research Box, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901.

APPENDICES

In the following Appendices you will find a number of examples of the types of materials that you will need to submit along with your Ethics proposal. **Please note: these are only examples, and are to be used as GUIDELINES for designing your own materials; do not copy them verbatim!** Remember, examples of completed proposals can be found at the back of senior theses, which are available for you to look at in the Psychology Department's Resource Room.

Appendix A -- Sample Letter of Introduction to Participants (typically included with anonymous surveys or in low-risk studies) Note that if participants are not Dominican students, you must adapt this letter accordingly.

Appendix B -- Sample Consent Form for Participants (typically used with confidential surveys or in higher risk studies)

Appendix C -- Sample Letter of Permission to Dominican University of California Faculty Members (for use when wanting to recruit participants from Dominican University of California classrooms)

Appendix D -- Sample Letter of Permission to Directors or Supervisors of an Agency (for use when recruiting participants from agencies or organizations)

Appendix E -- Sample Letter Requesting Permission to Use a Published Psychological Test or Measure

Appendix F -- Blank Copy of IRB Proposal Initial Application

Appendix G -- Example of The Body Of An Ethics Proposal (Without cover sheet, permission letters, etc.)

APPENDIX A
SAMPLE LETTER OF INTRODUCTION TO PARTICIPANTS

Dear Study Participant,

My name is Steve Student and I am an undergraduate Psychology major at Dominican University of California. I am conducting a research project as part of my senior thesis requirements, and this work is being supervised by Matthew S. Davis, Ph.D., Professor of Psychology at Dominican University of California. I am requesting your voluntary participation in my study, which concerns people's television viewing habits and their attitudes regarding the content of popular TV programs.

Participation in this study involves keeping a record of the television shows you watch in the course of a one week period, and then filling out a five page questionnaire containing items on your opinions of television programming today, as well as some demographic questions to be used for statistical purposes. Please note that your participation is **completely voluntary and you are free to withdraw your participation at any time**. Likewise, your participation or non-participation **will not affect your class grade**. In addition your survey responses will be **completely anonymous**. Aside from keeping the television viewing record, filling out the survey is likely to take approximately 15 minutes of your time.

If you choose to participate in this study, please fill out the attached materials as honestly and completely as possible. You may then return them to me at your earliest convenience in the envelope provided via the Psychology Student research drop-box, located in the basement of Bertrand Hall. Remember, this survey is completely anonymous; do not put your name or any other identifying information on your survey form. If you choose not to participate, please return your unused survey materials to me in the envelope provided.

If you have questions about the research you may contact me at (student inserts Dominican e-mail address here). If you have further questions you may contact my research supervisor, (insert faculty research supervisor's name and phone # here) or the Dominican University of California Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with protection of volunteers in research projects. You may reach the IRBPHS Office by calling (415) 482-3547 and leaving a voicemail message, by FAX at (415) 257-0165, or by writing to IRBPHS, Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 95901.

If you would like to know the results of this study once it has been completed, a summary of the results will be presented at Dominican University of California's Academic Showcase in April, 2010.

Thank you in advance for your participation.

Sincerely,

Steve S. Student
Psychology Student Research Box
Dominican University of California
50 Acacia Avenue

San Rafael, CA 94901

APPENDIX B
SAMPLE CONSENT FORM FOR PARTICIPANTS

DOMINICAN UNIVERSITY OF CALIFORNIA
CONSENT FORM TO ACT AS A RESEARCH PARTICIPANT

1. I understand that I am being asked to participate as a subject in a research study designed to assess certain personal attitudes related to death and dying. This research is part of Sarah Student's Senior Thesis research project at Dominican University of California, California. This research project is being supervised by Afshin Gharib, Ph.D., Associate Professor of Psychology , Dominican University of California.
2. I understand that participation in this research will involve taking part in a one-hour phone interview, which will include a personal life history, as well as thoughts and feelings on the topic of death and dying.
3. I understand that my participation in this study is completely voluntary and I am free to withdraw my participation at any time.
4. I have been made aware that the interviews will be recorded. All personal references and identifying information will be eliminated when these recordings are transcribed, and all subjects will be identified by numerical code only; the master list for these codes will be kept by Sarah Student in a locked file, separate from the transcripts. Coded transcripts will be seen only by the researcher and her faculty advisors. One year after the completion of the research, all written and recorded materials will be destroyed.
5. I am aware that all study participants will be furnished with a written summary of the relevant findings and conclusions of this project. Such results will not be available until May 1, 2010.
6. I understand that I will be discussing topics of a personal nature and that I may refuse to answer any question that causes me distress or seems an invasion of my privacy. I may elect to stop the interview at any time.
7. I understand that my participation involves no physical risk, but may involve some psychological discomfort, given the nature of the topic being addressed in the interview. If I experience any problems or serious distress due to my participation, Sarah Student will provide, at no cost to me, a one-time consultation with a licensed therapist. Ms. Student may be contacted at [\(insert student's Dominican e-mail address here\)](#).
8. I understand that if I have any further questions about the study, I may contact Ms. Student at [\(insert student's Dominican e-mail address here\)](#) or her research supervisor, Afshin Gharib, Ph.D., Associate Professor of Psychology, Dominican University of California at 415-xxx-xxx. If I have further questions or comments about participation in this study, I may contact the Dominican University of California Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with the protection of volunteers in research projects. I may reach the IRBPHS Office by calling (415) 482-3547 and leaving a voicemail message, by FAX at (415) 257-0165 or by writing to the IRBPHS, Office of the Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901.
9. All procedures related to this research project have been satisfactorily explained to me prior to

my voluntary election to participate.

I HAVE READ AND UNDERSTAND ALL OF THE ABOVE EXPLANATION REGARDING THIS STUDY. I VOLUNTARILY GIVE MY CONSENT TO PARTICIPATE. A COPY OF THIS FORM HAS BEEN GIVEN TO ME FOR MY FUTURE REFERENCE.

Signature

Date

APPENDIX C
SAMPLE LETTER OF PERMISSION TO DOMINICAN FACULTY

Lee Ann Bartolini, Ph. D.
Psychology Department
Dominican University of California

RE: PRESENTATION OF RESEARCH PROJECT

Dear Dr. Bartolini:

November 10, 2009

This letter confirms that you have read a brief description of my research project that examines student attitudes about the food served at the Student Cafeteria and that I have your permission to recruit participants for my project from your Psychology of Food course at a date and time convenient for you.

This project is an important part of my undergraduate research requirements as a Psychology major and it is being supervised by Gail Matthews, Ph.D., Professor of Psychology, Dominican University of California.

Shortly after completion of my study, I will send you a brief summary of relevant findings and conclusions.

If my request to contact the students in your class meets with your approval, please sign this letter on the line provided below, date, and return this letter to me as soon as possible. I have enclosed a stamped self-addressed envelope for your convenience. I will then contact you to arrange a convenient time for visiting your class.

Thanks for your assistance.

Sincerely,

Sharon A. Senior
50 Acacia Avenue
Psychology Student Research Box
Dominican University of California
San Rafael, CA 94901
(415) 457-5533 x669

I agree with the above request.

Signature of Instructor

Date

APPENDIX D
SAMPLE LETTER OF PERMISSION TO AGENCY DIRECTORS

Mr. Surfer B. Dude
Manager, Vanna White Health & Fitness Center
123 Playa Del Sol, Suite C
Marina Del Rey, CA 90111

Dear Mr. Dude,

October 21, 2009

This letter confirms that you have been provided with a brief description of my senior thesis research project, which concerns factors related to successful weight loss, and that you give your consent for me to visit your facility to interview a random sample of your clients. This project is an important part of my undergraduate requirements as a Psychology major, and is being supervised by Ian Madfes, Ph.D., Department of Psychology at Dominican University of California.

As we discussed in our phone conversation, I will make every effort to ensure that my data collection does not interfere with your regularly scheduled classes and workshops, and that your clients are treated with the utmost discretion and sensitivity.

After my research project has been completed in May, 2010, I will be glad to send you a summary of my research findings and conclusions.

If my request to visit your establishment and to interview your clients meets with your approval, please sign and date this letter on the line provided below, and return it to me in the enclosed self-addressed, stamped envelope as soon as possible. Please feel free to contact me at the number provided below if you have any further questions about this project.

Thank you very much for your time and cooperation.

Sincerely,

Bruce T. Undergrad
43 Thesis Terrace
San Rafael, CA 94903
(student may use his/her own phone number for communication with agency directors)

I agree with the above request

Signature

Date

APPENDIX E
SAMPLE LETTER REQUESTING PERMISSION
TO USE A PSYCHOLOGICAL TEST

October 11, 2007

Princeton University Press
41 Williams Street
Princeton, NJ 08540

RE: Davis Couch Potato Inventory

Dear Madame or Sir:

I am writing to request **written permission** to use the **Davis Couch Potato Inventory** (Davis, 2003) in my undergraduate research project relating stress levels to the amount of time adolescents spend watching television. This project is part of an undergraduate senior thesis research requirement in psychology at Dominican University of California.

I would also appreciate receiving copies of (1) the test questionnaire (2) the standard instructions for administering the test and (3) scoring procedures.

My research is being supervised by my instructor, William Phillips, Ph.D., Associate Professor of Psychology, Dominican University of California.

If this request meets with your approval, please sign, date and return this letter to me in the enclosed self-addressed, stamped envelope. I am also enclosing an additional copy for your records.

Thank you for your help and prompt attention to my request.

Sincerely,

Samantha J. Student
2001 Graduation Gardens
San Rafael, CA 94903

I agree to the above request.

Signature

Date

APPENDIX F

IRBPHS INITIAL APPLICATION

DOMINICAN UNIVERSITY OF CALIFORNIA

**INSTITUTIONAL REVIEW BOARD FOR
THE PROTECTION OF HUMAN SUBJECTS**

INITIAL APPLICATION

All information must be typed. Handwritten applications will be returned to researcher.

Applicant Information:

Name: _____

School: _____

Department: _____

Campus or Local Address: _____

Home Address: _____

If different from campus/local address please provide home address for contact during periods when you may not be living on campus or locally.

Local Phone: _____

Work Phone: _____

E-mail Address: _____

Note: All communication regarding your application will be conducted by email so be sure you include a functional email address.

Name(s) of Co- Investigator(s): _____

Faculty Advisor Information:

Name: _____

Campus Phone: _____

E-mail Address: _____

Note: All communication regarding a student's application will be conducted by email. Advisors will be copied on all correspondence so be sure to provide a functional email address.

Project Information:

Exact Title of Project: _____

Duration of Project (cannot exceed 1 year): _____

Review Prior to Submission to IRBPHS:

Department Chair Signature: _____

Department Committee Signature of Committee Chair: _____

Dean of School Signature: _____

Note: Review by Dean is required for faculty researchers but not for student investigators unless this is a procedure of the School within which the student is majoring.

Category of Review:

Exempt (exempt category number from page 10) _____

Expedited (expedited category number from page 11) _____

Full Board

Research Project Information:

All requested information must be typed directly on the application form. Refer to pages 17-20 in the IRBPHS Handbook for aid in providing required information. _____

Background and Rationale (no more than 300 words). Describe nature of research problem and purpose of current study.

_____ **STUDENT SHOULD TYPE THIS DIRECTLY INTO THE FORM**

Description of Sample. Indicate by an X whether the following are involved and attach all required documents to this application.

- Patients as subjects
- Non-patient volunteers
- Students as subjects
- Minor subjects (less than 18 years)
- Subjects whose major language is not English (include copies of translated documents)
- Mentally disabled subjects
- Mentally retarded subjects
- Prisoners, parolees, or incarcerated subjects
- Other vulnerable or sensitive populations (gifted children, persons with alcoholism or drug addiction, homosexuals, etc.) Please identify: _____
- Subjects studied at non-Dominican locations
- Filming, video-, or voice-recording of subjects
- Data banks, data archives and/or registration records
- There is a dual relationship between researcher and subject (explain)

APPENDIX G
EXAMPLE OF THE BODY OF AN ETHICS PROPOSAL
(Without cover sheet, permission letters, etc.)

I. DESCRIPTION OF THE RESEARCH A. Statement of Problem

Clinicians have long been interested in "projective tests," which present persons with an ambiguous figure or picture and ask the person to "tell what they see". The basic premise of projective testing is that the persons will reveal important aspects of their personality in the way that they organize and describe these ambiguous stimuli. One of the most commonly used sets of ambiguous figures are the Rorschach stimuli, a set of ten symmetrical "inkblots". Another set of these inkblots (albeit a lesser known set) is the Holtzman set, which consists of 45 items, standardized and used in the same projective manner as the Rorschach blots. Perceptionists have also been interested in projective types of testing, but they discuss it differently, emphasizing that the way people perceive ambiguous stimuli reveals something about the structure and function of their perceptual processes. One of the techniques used in this research has been to present sets of stimuli and ask the participant to "sort them into groups of that appear similar". These data (and data from variations of this task, such as rating the similarity of all pairs of the target stimuli) are often analyzed using multidimensional scaling, a statistical procedure that identifies the attributes of the stimuli that were the basis of the participant's groupings. In an interesting mixture of clinical and perceptual explorations of responses to ambiguous stimuli, Wainer, Hurt and Aiken (1976), used the Rorschach stimuli in a perceptual grouping task that involved participants who were diagnosed as schizophrenic, others diagnosed as depressive, and yet others who had no diagnostic classification (referred to as "normal"). Multidimensional scaling results from these data revealed that there were differences in the ways that these three groups sorted the stimuli - presumably revealing differences in the way these three groups "process" these stimuli. Since that time there have been additional studies of this type (e. g. Dush, 1983), but they have emphasized the interpretative advantages of different numbers of dimensions in the scaling solutions, rather than focusing on the perceptual differences that may exist among the groups.

The present study is an attempt to separate the "perceptual" from the "personality" aspects of processing the Holtzman stimuli. This will be accomplished by having participants provide responses to the Holtzman stimuli under different sets of instructions that emphasize either the "perception of the shapes of the stimuli" or "the meanings of or impressions provided by the stimuli". It is predicted that under perceptual sorting instructions, participants will sort stimuli using dimensions predominantly representing clarity and distinctiveness (Dimension 1) and colorfulness and pleasantness (Dimension 2). These dimensions have been reported in previous research (Wainer, et al. , 1976). Previous studies also reported moderate correlations between dimension structure and the depiction of objects, emotions, and action in the Rorschach inkblots (Rabin, 1959). For this reason, it is believed that given different instructions to sort the stimuli using these attributes, participants will be able to "change" the rule structure used when sorting stimuli.

B. Method

Participants

I plan to recruit 40 participants from the Dominican University of California Psychology Department classes. It is intended that the sample reflect equal numbers of males and females, and will reflect ethnic proportions found at Dominican University of California. Permission to recruit participants from Dominican classes has been obtained from the instructors (see Appendix A). Participants will be given a combined Letter of Introduction and Consent Form (See Appendix B) when they appear for their initial experimental session.

Materials

Holtzman inkblots (Holtzman, 1961), designed for use in research as opposed to clinical settings, will be used in this study to assess perceptual and personality processing of Rorschach-like stimuli (See Appendices C & D for copies of the measure and Permission to use this measure). These inkblots (packaged as the Holtzman Inkblot Technique or HIT) have been purchased from Open Market, Inc. , Copyright 1996-98, and by agreeing to sell these materials to the researcher they are granting their permission to use the inkblots for research purposes. Open Market Inc. is a subsidiary of Harcourt Inc.

Procedure

Participants will be asked to sort the 45 Holtzman cards (Group A) into groups consisting of at least 3 and no more than 8 members. The sorting procedure will be conducted twice, under different sets of instructions. One set of instructions will ask them to sort the stimuli in terms of the shapes and colors (the "perceptual instructions"). Another set of instructions will ask them to sort the stimuli in terms of the meanings, impressions, or representations they receive from the stimuli (the "projective instructions"). One-half of the participants will complete the task under the perceptual instructions and then under the projective instructions, while the other half will complete tasks in the opposite order. This data collection procedure will allow us to examine the difference between the two procedures using both a "between subjects" and a "within subjects" comparison basis. It will also allow us to examine whether participants can meaningfully separate the two types of instruction. A second type of data collected from each participant will ask them to rate each Holtzman stimulus on a series of attributes, such as good-bad, large- small, symmetrical-asymmetrical, etc. To prevent obtaining exactly the same sorts under the two instruction conditions, there will be a one-week interval between sorts. The ratings for each stimulus will be collected after the second sort. Running time of the first session should take about 15 minutes. Participants will then be asked to return 1 week later for the second sort and make ratings of stimuli. The second session should take no longer than 60 minutes

C. References

- Dush, D. M. and Gabriel, R. M. (1983). Scale Properties of the Holtzman Inkblots. *Journal of Personality Assessment*, 47, 350-356.
- Ekehammer, B. (1971). A Psychophysical Approach to the Study of Individuals' Perceptions of Rorschach Cards. *Perceptual and Motor Skills*, 33, 951-965.
- Holtzman, W. H. (1961). *Inkblot Perception and Personality*. Austin: University of Texas Press.
- Rabin, A. J. (1959). A Contribution to the "Meaning" of Rorschach Inkblots Via the Semantic Differential. *Journal of Consulting Psychology*, 23(4), 368-372.
- Wainer, H. , Hurt, S. and Aiken, L. (1976). Rorschach Revisited: A New Look at an Old Test. *Journal of Consulting and Clinical Psychology*, 44(3), 390-399.

II. CONFIDENTIALITY OR ANONYMITY

The confidentiality of each participant will be maintained by the assignment of an individual subject number to each participant at the beginning of their participation. This subject number will be the only form of identification employed for each participant on all data collection sheets and in all storage mediums.

Data collected from the participants will be stored both on the original data collection sheets and in the researcher's computer files on campus for a minimum of three years. The research participation history of individual students is stored separately from all collected data.

III. RESEARCH WITH VULNERABLE POPULATIONS

As the research participants will be adult students recruited from a college setting, they are not considered to be from a vulnerable population.

IV. DEBRIEFING AND FEEDBACK

A standardized debriefing script (Appendix E) will be read to each participant, following the second session of the study.

V. RISKS

There are no known risks to the participants of this procedure. Even though these stimuli are sometimes used by clinical psychologists and psychiatrists, responses will not be analyzed in this way, and participants will not be "evaluated" in any way based on their responses during participation. Should participants experience any unexpected discomfort as a result of their participation in this experiment, they are instructed to contact the researcher. Informed consent will be obtained from each participant prior to the beginning of participation. The consent form (Appendix B) will be read to the participant by the researcher, followed by ample opportunity for the clarification of any questions.

VI. BENEFITS There are no known benefits associated with your participation in this experiment, other than the potential for participants to gain some understanding and insight into the performance of psychological research

VII. APPENDICES

Appendix A: Letter of Permission to Recruit Participants from classrooms; Appendix B: Combined Letter of Introduction and Consent Form; Appendix C: Holtzman Inkblots; Appendix D: Permission to Use the Holtzman Inkblots; E: Debriefing Form