

Psychology 400: Advanced Research Methods

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Research Project Objectives

The research project in this class is designed to give you hands-on experience with experimental research methods. It is an opportunity for you to apply what you've already learned in research methods and to get a taste of what graduate work in psychology is like. Because of the size of this project and because most psychological research is conducted in groups, you will work in teams of 3, 4 or 5 (depending on how many are officially registered by class start).

This project will allow you to gain a better understanding of how to: critically assess research literature, formulate effective research designs, analyze data using analysis of variance techniques, and practice writing APA style research reports.

Description of Research Project

With your research group, you will design, conduct, analyze, and report the results of an EXPERIMENT. This study should be grounded in past psychological research, be hypothesis-driven, and should ideally examine a plausible *interaction*. This study should contain two, or three, if necessary, independent variables. It is desirable that all of your independent variables are experimental variables; they are *manipulated*. (e.g., a treatment and a control condition.) You are permitted to use one non-manipulated variable if it suits your design (e.g., word frequency, handedness). I encourage you to limit your categorical variables to only 2 levels (although I will permit 3). Your dependent variable must be continuous.

Off limit topics/variables: color (e.g., font, background, etc), gender, music and studying

Your fellow classmates and/or friends will serve as your participants (do not email other classes that you are in), and your experiments will be conducted online. I will help facilitate this. You are not allowed to pay your participants or compensate them in any way (e.g., candy bar, raffle ticket, etc.).

The steps involved in this project are as follows:

1. **Start thinking about topics for research now!**
 - a. Scour old textbooks for interesting studies/areas of study
 - b. Think of things that interest you in your life (e.g., memory, reading comprehension)
 - c. READ – Don't be daunted by the task, most students find that if they read 3 articles in an area ideas begin to pop up. (Use PsycINFO to find current, peer reviewed journals, ie: *Psychological Science*, *Memory & Cognition*, *Psychological Bulletin*, *Personality and Social Psychology Bulletin*)

- d. *Talk with your group about research ideas*
- e. *TALK TO ME DURING OFFICE HOURS! – If you have a general idea, then I may be able to give you a lead on important articles that have been published in the area.*
2. *Choose a research topic/area of research that interests your group (**Topic/Idea list due 05/14**)*
3. *Conduct a literature review of at least 12 sources (These should be taken from credible academic sources such as peer-reviewed journals or book chapters authored by experts in an area; Use PsycInfo as your primary search engine)*
4. *Formulate your research hypothesis*
5. *Plan your research design*
6. *Write your two summary sheets (**due 05/19**)*
7. *Write a summary of your proposed study, including the design, independent and dependent variables and predicted results. (**Proposal sheet due 05/21, and the Full Proposal due 5/28**)*
8. *Further conceptualize your study*
-Ensure that your design is internally valid and that your ideas flow from the existing literature- make revisions if necessary
-Develop your experimenter instructions, manipulations, stimulus materials and debriefing
9. *Start working on your introductions! (**last chance to show me a rough draft is 06/11**)*
10. *Further conceptualize your study*
-Ensure that your design is internally valid and that your ideas flow from the existing literature- make revisions if necessary
-Develop your script, manipulations, stimulus materials and debriefing
11. *Assess the ethical implications and potential risks involved in completing your research project and complete consent forms (**Ethics protocol due 05/30**)*
12. *Rehearse your experimenter instructions and practice the actual study on each other in group*
13. *Collect data (at least 5 participants per cell)*
14. *Analyze Results and write up results (**Methods and results due 06/11**) – **THIS IS NOT A DRAFT. IT SHOULD BE YOUR FINAL VERSION.***
15. *Present research results (**Presentations due on 06/13**)*
16. *Write APA style research report*
17. *Submit final research report (**Final research paper due 06/18**)*