

### **Course Group Project**

You are required to conduct an empirical research project for this class and write an APA-style research paper describing it. You must work in a small group of other students (*groups must range in size between 2 and 4 individuals*). I reserve the right to assign different grades to group members, depending upon the distribution of the work performed by each group member (and more specifically, if agreed upon distribution of work was NOT lived up to by all group members).

Your group will be fully responsible for the conduct of this study from the beginning to the end, including: study design, review of relevant literature, study feasibility, ascertainment of ethical considerations and human subjects approval, collection of data, analysis of data, and interpretation of results.

**Types of Projects:** The possible types of projects that can be conducted are:

- (1) Test construction, validation --- development of a paper and pencil test designed to measure one or more attributes or traits (e.g., quantitative ability, values, anxiety, attitude toward school, war, etc.). The instrument would be given to a sample of subjects and appropriate reliability and validity issues investigated.
- (2) Critique an instrument or methodology --- review and critique the literature on the research or methodology associated with some instrument. You would be expected to propose improvements to the instrument. An empirical study for this type of project would demonstrate that your proposed changes to the instrument or methodology are better or more appropriate than the existing one.

If you propose to perform this sort of project, I must see the original items, as well as explicit modifications to the instrument.

### **Initial Project Proposal (5 project points):**

An initial proposal outlining the rationale and methodology of your project is due *February 4*. Proposals should include:

- (1) An outline of the rationale and methodology of your project.
- (2) Specification of the attribute, trait, or stimulus domain you want to measure or study. I also want to know if you will construct your own test (option 1 from the previous page) or if you will critique an instrument (option 2 from the previous page).
- (3) Brief review of other research on the attribute or domain (include references).

### **Final Project Proposal (10 project points):**

The final project proposal is due *March 3*. You should have finalized your plans for your course project by this point. Besides items 1-3 from your initial proposal, your final proposal should include any revisions to your initial proposal and

- (4) As much detail as possible on the instrument --- instruction, item format(s), length, etc. Use the guidelines in item construction, as discussed in the McDonald text.
- (5) The details of your study, including hypotheses, the number and type(s) of subjects to be measured, sampling plan, procedures, etc. I would also like to see a power analysis that accompanies your planned analysis. Your group must make an appointment to see me, as I have the necessary software to perform the required power analysis (you are also encouraged to visit Kris Preacher's website at [www.quantpsy.org](http://www.quantpsy.org)).
- (6) Human participant concerns --- address any possible threats to human welfare and well-being your subjects may experience as a function of participating in your study. If subject anonymity is critical to your design, you should discuss how this anonymity will be preserved.

NOTE: Approval to initiate data collection from the UTEP Office of Research and Sponsored Projects (ORSP) must be attained by March 26. If you do not have ORSP approval by this date, you will lose points for this component of the project. Please note, that as instructor of this class, I will be considered the supervising professor of this project.

This means you should send your protocol to me by February 25. This also means you should be able to send your protocol to IRB by March 3 to have a realistic chance of attaining approval by the 25<sup>th</sup> of March.

- (7) A brief discussion of how reliability and validity will be assessed (if relevant) and data analyses that will be performed.

**Final Paper :**

The final paper is due by *1 p.m. May 6 (Dead Day)*. The final paper will be graded on a 75 point scale. Fifteen (15) points will be deducted from the final project grade a group receives for each day the project is late. You should turn in *two copies, type-written and formatted in APA publication style* (see Publication Manual of the American Psychological Association). They should include the following sections:

- (a) ABSTRACT (5 points). Please do not forget to include an abstract, it will cost you points.
- (b) INTRODUCTION --- indicating the nature and scope of the problem investigated and citing other pertinent research; statement of hypotheses, if any. (15 points)
- (c) METHOD --- descriptions of (a) subject sample; (b) instrument, scales, etc.; (c) administration procedures. Also include an Analysis subsection describing statistical measures used, specification of item analysis, how reliability and validity were assessed. (20 points)
- (d) RESULTS / DISCUSSION (may be combined) --- presentation of the results of the study; use tables and figures where possible. The discussion section should go into the meaning and significance of major results and relate these to pertinent work; discussion of implications.

Where appropriate, effect size estimates and/or confidence intervals should be reported and interpreted. Failure to report confidence intervals or effect size estimates will result in the loss of project points. In addition, the artificial dichotomization of data will be frowned upon and will be subsequently penalized (25 points)

- (e) REFERENCES / APPENDICES. (10 points)

*Again, if other members in the group indicate that your effort to the project has not been sufficient (or if I sense that you have not been doing your fair share of the work), I reserve the right to deduct points from your class project.*

## **Final Paper Homework**

One day in class (tentatively April 28) *may* be set aside for the group presentations. Attendance is mandatory on this day. Treat these presentations as if you were presenting at a professional conference. You will be given 10-15 minutes to present your project. There will be, at most, 5 minutes for questions and answers after each presentation.

These presentations are not only designed to give you experience presenting research results to a group of people, but are also designed to allow you the opportunity to professionally critique research. As such, one of your homework assignments will be based on the quality of your group presentation and the quality of your critique of the other presentation.

A sample scoring template appears on the following page.

Group Members: \_\_\_\_\_  
Group Topic:

## Scoring Structure for Psych 6323 Class Presentations

### I. Introduction (4.5 points total)

- \_\_\_\_\_ (1 point) Provide an outline/roadmap of what you will talk about
- \_\_\_\_\_ (1 points) Provide general background into research area
- \_\_\_\_\_ (2.5 points) Description of the past research area and how it relates to your hypothesis. State your hypotheses

### II. Methods (4 points total)

- \_\_\_\_\_ (1 point) Who were the subjects and how many participants? Describe the participants
- \_\_\_\_\_ (0.5 points) How did you determine how many participants that you needed?
- \_\_\_\_\_ (1.5 points) Why did you choose the measures that you used in the study (i.e., were the other measures reliable and valid)?
- \_\_\_\_\_ (1 point) How did you carry out the study. You are describing how you went about testing your hypothesis (obtaining consent, ordering of measures, debriefing)

### III. Results (4 points)

- \_\_\_\_\_ (1 point) In CFA, what generally constitutes good model fit? What did you find in your CFA? If you decided to modify your CFA, what did you do?
- \_\_\_\_\_ (1 point) How reliable was your measure (McDonald's omega, Cronbach alpha)? If you decided to improve reliability, what did you do?
- \_\_\_\_\_ (1 point) How did you establish the validity of your measure? What did you find?
- \_\_\_\_\_ (1 point) Were the reported analyses presented logically or did you analyze everything you could think of? If you need to do other analyses to test your hypothesis, did you do them?

### IV. Discussion (2.5 points)

- \_\_\_\_\_ (1 point) How do your findings relate to prior research
- \_\_\_\_\_ (1 point) What are the limitations/future directions for this type of research
- \_\_\_\_\_ (0.5 points) What is the take-home point of your class project

### V. Attendance Points/Participation Points (5 points)

- \_\_\_\_\_ (1 point) Were you in class during your classmates' talk?
- \_\_\_\_\_ (1 point) Did you ask a question?
- \_\_\_\_\_ (3 points) Did you ask at least one meaningful question

Total: \_\_\_\_\_ points / 20 points

Comments by TA and Ozzie:

Questions by the other group