PSYCHOLOGY 752 - ACTION RESEARCH METHODS
SPRING, 2009
Tuesday 6:00 - 8:50; Poe 724
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Course Purpose
This course is designed to accomplish several goals. The first goal is to provide you with a working knowledge of research methodology as it applies to field research efforts including issues of philosophy of science, approaches to research design, measurement, data collection methods, and ethics and social responsibility. A second goal is to have every student apply these sometimes rather "esoteric" or "ivory tower" issues to the research topic of particular interest to you. As will be pointed out throughout the course, we will continually struggle with the language and context within which most of these research issues are couched in the literature. Namely, they are often written about by authors in the field who are not directly or even indirectly involved in field or action research. Thus, it is important to constantly search for the applicability of these issues to your own area of interest. In order to achieve these goals and give you some "hands on" experience, you will be asked to discuss sample articles, critique a published study and prepare and present a research proposal.

Classes
Class will meet once per-week, Tuesday from 6 to 8:50 p.m. Both lecture and discussion modalities will be used. Typically, the first two hours of class time will be devoted to a lecture and/or discussion of the assigned readings; The remainder of class time will be used to discuss sample articles, go over application exercises or explore the material’s relevance to each student’s interest area. Students will be regularly assigned to summarize and discuss specific readings or to complete exercises. Participation in class discussions, assignments and a weekly comment via Vista/WebCT (http://vista.ncsu.edu) on the readings is expected and will contribute to your final grade.

Assignments
Exams: A brief midterm and final exam will be given. They will include definitions, essay questions and/or questions that ask you to apply course materials to sample research situations. The final exam will only cover material covered after the mid-term. Students must take both the midterm and final but can drop their midterm grade in favor of their final exam grade. (Take home portion of your mid-term is presented as Appendix E).

Research critique paper: One of the best ways to learn how to design your own research is to be able to identify the flaws present in the work of others. The major focus of this paper will be a detailed critique of a published research article (to be assigned) and your suggestions for redesign. It is important that you identify the critical flaws in the study, i.e., to what extent the conclusions reached are justified given the data and methodology. You should examine carefully the areas of sample, measurement, design, setting, etc., in doing your critique. Equally important is your proposal for redesigning the study and solving various methodological problems. THIS AND ALL PAPERS SHOULD BE TYPED IN APA FORMAT (see Leong and Austin (2006) Chapter 23). The class will critique (as a group) a
published article to gain some experience with this task. (See Appendix A (pg. 9) for instructions used for past assignments).

**Research proposal:** The major project for the course is to be a functional research proposal. You are encouraged to use this assignment as a proposal for some project you actually plan to carry out (e.g., Master’s thesis, doctoral dissertation, etc.). The final proposal should include a complete literature review* which provides the theoretical and empirical justification for the proposed project and a detailed methods section which includes research questions/hypotheses, a description of the subjects, setting, intervention, measurement procedures (including sample questions or instruments), anticipated analyses, etc. (See Appendix B and C (pgs. 10-15) for a sample proposal outline and related material; please also refer to Leong & Austin (2006) chapters 1, 2,3, 24). **Research proposals are due the Friday after the last class: page limit of 25 double-spaced pages; at least 40% of coverage should cover methodology.**

In order to facilitate timely progress on this assignment and avoid unnecessary false starts, you will be asked to meet the following milestones: your choice of topic by week 4; a 1-page outline (headings, subheadings and a few bullets for key points) by week 7. These assignments are intended to provide you with feedback and will not contribute to your grade.

**Readings**

**Course pack and reserve**

Readings will come from one of several books or selected journal articles. Students will have access to all journal articles electronically. Students can make a personal copy of all required readings for themselves. Since we only spend one week on most topics, optional readings are provided for major design topics. Students using a particular design in their proposal (e.g., experimental) are strongly encouraged to read the optional material for that design.

**Available at Campus Bookstore**


**Grading:** A B C D (with +/-) U; student can elect to replace the midterm grade with the final exam grade.

- Midterm 20%  **February 24**  
- Research critique 20%  **due April 14**  
- Research proposal 30%  **due April 21**  
- Final 20%  **April 28**  
- Class participation 10%  (electronic and in-class)

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* Although a new literature review should be prepared for this assignment, students can build on a past literature review (e.g. extend previous work). Please see me if you want clarification on this issue.
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Class Readings: (# = methodology example; * = optional reading)

Week 2: Philosophy of Science


Week 3: Validity of Research Designs


Week 4: Experimental Designs; Proposal Topic due


Week 5: Quasi-Experimental Designs I; with and without a pretest and/or a control group


Week 6: Quasi-Experimental Designs II; time series and regression discontinuity designs


Week 7: Midterm Exam
Proposal Outline Due

Week 8: Spring Break

Week 9: Multivariate Methods: Multiple Regression and Prediction


Week 10: Multivariate Methods: Moderators, Mediators, and Factor Analysis


**Week 11: Qualitative Methods**


**Week 12: Reliability and Validity**


**Week 13: Scale Construction; Research Critique Assigned**


**Week 14: Data Collection Methods; Research Critique Due**

Oleson, K.C. & Arkin, R.M. Reviewing and evaluating a research article (pp. 59-74); Goddard, R.D. & Villanova, P. Designing surveys and questionnaires for research (pp.114-124); McCready, W.C. Applying sampling procedures (pp.147-160); Vaux, A.& Briggs, C.S. Conducting mail and internet surveys (pp.186-209); Chen P.Y. & Huang, Y. Conducting telephone surveys (pp. 2210-226); Zaccaro, S.J., Cracraft, M. & Marks, M. Collecting data from groups (pp. 227-238). Zaitzow, B.H. & Fields, C.B. Archival data sets: Revisiting issues and considerations (pp. 326-342). In T.L. Leong, & J.T. Austin (2006). *The psychology research handbook: A guide for graduate students and research assistants*. Thousand Oaks, CA: Sage Publications.
**Week 15: Other Research Methods and Issues; Proposals Due by Friday**


**Week 16: Exam**
Appendix A

PSY752
Sample Article Critique Assignment

I. Review the article by xxxx. Prepare a written (typed) critical review the article of no more than 8 double-spaced pages.
   • Include errors of omission as well commission.
   • Include problems you suspect but can't confirm because of a lack of information.
   • Include what's good, as well as what's bad;
   • When you note problems/deficiencies, it is absolutely essential that describe the implications of that problem (e.g., how could that problem bias and/or limit the results or affect our ability to draw accurate inferences).
   • Comment on at least the following aspects of the article (e.g., include other problems if you see them):

      a. The adequacy and appropriateness of the problem statement, the theoretical/conceptual justification for the research and the review of the literature. Do you have any concerns about the ethical and/or value issues related to the research?

      b. The adequacy and appropriateness of the hypotheses and/or the questions posed in the study. The adequacy of the description and definition of the major variables.

      c. The adequacy and appropriateness of the sample selected including the size of the sample, representativeness, etc.

      d. The adequacy of the design used. (Be sure to indicate what design is being used). Does it permit one to answer the question(s) that one would like to answer? The extent to which extraneous factors and contaminating influences are controlled and generalizable inferences possible.

      e. The adequacy of the justification for and description of the levels of the independent variable(s) (treatments).

      f. The adequacy and appropriateness of the instruments and data collection procedures used to measure the key variables. Given the study's objectives, to what extent have the researchers included appropriate types of variables?

      g. The adequacy of other research procedures (e.g., training of interviewers, etc.).

      h. The adequacy and appropriateness of the data handling and analyses.

      i. The adequacy and the defensibility of the interpretation of the data and the inferences and conclusions made.

II. How would you improve this study? Comment on changes you would make in any of these areas. (35% of grade). Need to specify a separate section or improvements done in italics.
Appendix B

PSYCHOLOGY 752: ACTION RESEARCH METHODS
GUIDELINES FOR WRITING THE RESEARCH PROPOSAL

GENERAL COMMENTS:

It is often helpful to use one of the outlines found in various "How to write a research proposal" books or someone else's thesis or research report as a model for your proposal. However, there is no perfect formula or outline for a research proposal -- there are many acceptable outlines which generally resemble the research article outline used in APA journal articles. Use the format that makes sense for you and remember that studies vary and some will need certain sections and others may not. Most importantly your proposal should logically and clearly present your arguments for conducting the research, your research objectives/questions/hypotheses and provide sufficient details on how you will carry out your research objectives.

WRITING STYLE: COMMON PROBLEMS

A well written proposal is smooth and easy to read; it helps the reader move through the material by explaining why you are moving from one point to another and periodically interprets and summarizes what a collection of research (particularly if it is large and unwieldy) seem to mean (this is your responsibility not the readers). In this vein, probably the two most common stylistic problems I encounter when reviewing a student's research proposal involve a failure to write appropriate transition sentences or paragraphs when moving from one major point to another and a failure to periodically sum up the essence of a major section. One can often help prevent their proposal from being overly complicated and/or cluttered by careful use of subheadings to break up a large section and tables to summarize information. Be careful to pay attention to all these issues when editing your proposal.

OUTLINES: As indicated above there is no perfect outline. The outline attached is from Guidelines for preparing the research proposal by John H. Behling, Ph.D. and seems like a reasonable model to use. There are some points of emphasis that I will add below and on the outline that may be helpful as you prepare your own proposal.

1. INTRODUCTION

This section amounts to an executive summary of your study and should give the reader a preview of the major points you are about to make in your literature review. It probably should include a brief description of the problem and/or area of concern, a general statement of the purpose of the research and briefly summarize your major objectives. Since the introduction is a summary, it almost certainly should be written last.

2. LITERATURE REVIEW

a. Problem Statement or Area of Concern:

Provide a statement of the broad overarching problem, concern, or question which provides a basis for the study. It is very helpful if you can provide data and/or vignettes which help establish the significance, prevalence and/or importance of the problem. In other words you want to help the reader answer the question: "Why should I care about this topic?"

The importance of this type of section depends on the kind of research one is doing. This section is essential for problem-driven research; it is much less relevant for basic and/or theory-driven research.

b. Purpose of Research:

This section (or paragraph or two) should provide the initial direction to your proposal. Provide a rationale and statement of the general purpose of the proposed research. The purpose statement probably shouldn't be too specific ("...to learn more about..."); 

"...to help clarify the needs of..."); 

"...to find a better intervention for..."). You will need to develop the arguments for your specific objectives and questions via your literature review.
Action Research

c. **Historical Background:**
A section which provides an historical perspective can be instructive but is certainly not mandatory.

d. **Literature Review:**
This is probably the hardest section to write. Typically, a review of the literature could lead in any one of a number of directions. However, you want to summarize the relevant literature so that you take the reader on a journey which leads to a specific conclusion: that a specific set of research questions needs to be addressed. In order to do this you will need to: provide some rationale for how you are tackling the literature; and periodically narrow the focus of the issues you want to examine; and try to build your arguments for doing a specific study. In summarizing the relevant literature, it is sometimes useful to summarize the non-empirical and empirical literature separately.

1. **Knowledge Base and/or Theory Relevant to the Problem, Issue or Concern:** Psychology has many different subdisciplinary and/or theoretical bodies of knowledge. It is usually helpful to begin your narrowing process by describing the broad knowledge and/or theoretical domain which is relevant to the issue and/or concern you raised earlier. In more complicated areas you may want to draw upon several disciplines and or theories. Obviously, this section should help you focus on the principles, constructs, etc. within that knowledge domain that you think are relevant to your problem.

2. **Non-empirical:** If necessary this would be an appropriate place to provide an extended summary of relevant theoretical writings. One could also describe expert opinions (practitioners, policy makers, client populations, etc.), the findings of case studies, etc. While this information can be very valuable don’t forget that you want to differentiate between what people think or believe is the case (e.g., theory and opinion) and what they have demonstrated via defensible research.

3. **Empirical literature:** This is the most important part of your proposal! It is different from the typical literature review you have done in the past where you simply summarize what other people have said. Instead, you should summarize what other people think and/or have found and interpret what you think this means (this can often be done for a collection of studies rather than for each individual study), evaluate the quality of the research they have done, and draw attention not only to what is known but also to what is not known. It is essential that you realize that in the course of reviewing what is known you pinpoint where the gaps are and pinpoint an area/issue/question which needs further investigation. This section should include fairly detailed reviews of 4-6 articles. You may finish up with a more focused statement of objectives. Sometimes a table summarizing the studies you have reviewed can be very helpful.

e. **Research Questions/Hypotheses:**
Your summary of the literature should help propel you toward a set of research questions and/or hypotheses that you would like to address in your study. These should also help to identify the constructs and/or variables you will focus your attention on.

Some faculty have strong feelings about students stating specific hypotheses in their proposal. On my part, I think this depends on whether the research provides a basis for making a hypothesis or not. If the latter is true than I think it is appropriate to simply state questions the study will attempt to answer (i.e., Do individuals from different socioeconomic backgrounds differ on the topics they think it if important to cover a pre-retirement training program).

f. **The Current Research**
(not necessary if the previous sections have pulled things together):
A recapitulation of the purpose, objectives and major question/ hypotheses of the study

3. **METHODOLOGY:**
Once again remember that the order in which these topics is covered will vary from study to study

Restatement of Major or General Hypothesis

Research Design and Description of Variables:
Depending on the kind of design you plan to use, the details you provide here will differ considerably. If you are going to perform a descriptive and/or correlational study, you can probably focus on variable descriptions relevant to your goals and objectives. If you are proposing an experimental study you will need to provide a detailed description of the treatments and the specific design you will use.

**Setting:**
Describe the important characteristics of the setting in which the study will take place.

**Population and Subjects and Sampling**
Description of the population from which you will draw your subjects; number and kind of subjects you plan to include in your study; how you will select and or identify your subjects.

**Measurement:**
You will need to describe in some detail how you plan to measure all of your important variables. If you plan to use an existing measure you should provide a detailed description of the types of questions and responses used, give some sample questions, and evidence of reliability and validity of the measures. (If you don't have evidence of reliability and validity, you should try to tell how you can evaluate them.) If you plan to develop a measure for your study, you should provide some information on how you plan to develop that measure, and how you plan to evaluate its reliability and validity.

**Procedures:**
Provide a detailed description of (broken down by major issues) of how you will carry out the study. Include issue like the following: piloting of procedures and pre-testing of instruments; data collection, (who, how, timing, schedule) recruitment of subjects and related matters(e.g., letters, phone calls, permission from cooperating agencies and groups, human subjects), data collection schedule; etc..

**Data Analyses:**
What methods and procedure do you plan to use to combine data, answer research questions and/or test hypotheses.

4. REFERENCES:

APA style listing of references.
Appendix C

PSY 752: ACTION RESEARCH METHODS

Criteria for evaluating student research proposals (order addressing topics is not critical; issues may be addressed in different sections)

General
Well written:
- Is the proposal written in a clear, concise and grammatical fashion?

Development and Flow of Ideas and Arguments:
- Is there an appropriate development of ideas and arguments?
- Is the general flow of proposal between and within major sections logical?
- Does proposal provide appropriate transitions between major sections and ideas?
- Where needed (e.g., a lot of different material and/or studies has been covered), does the proposal provide periodic summaries and conclusions?

Format:
- Does the proposal (including citations, tables and references) conform to APA format?
- Does the proposal provide citations where appropriate?

Synthesis and Integration:
- Does the proposal provide evidence of synthesis and integration of knowledge and information? (definition of synthesis/ integration: combination of parts or elements so as to form a whole; the combining of often diverse conceptions into a coherent whole; deductive reasoning; the dialectic combination of thesis and antithesis into a higher stage of truth; to form or to blend into a whole)

Introduction:
- Does the introduction provide a brief overview of the paper which telescopes the major issues in the literature review and the direction the proposal will take (e.g., questions and/or objectives and/or hypotheses).

Literature Review:

Problem statement; Purpose/Objectives (general):
- Does proposal describe the problem or issue which undergirds the study? Is the importance or significance of the problem articulated? Does it provide a clear and succinct statement of the general purpose or objective for the study? Does the purpose flow from facts and arguments given in the problem statement?

Historical perspective (optional):
- If appropriate, does the proposal provide an historical perspective on the issue topic under consideration? (optional)

Knowledge base:
- Does the proposal provide a review and summary of the theoretical, conceptual and/or logical (including expert opinion) knowledge base(s) upon which research and/or action are based (e.g., social learning theory; social labeling; small group processes)?