### RESEARCH METHODS I

Conflict 811 Fall, 2005

Tues: 7.20-10.00, room 555; Truland building

Faculty: Karina Korostelina

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#### Assessment:

Students participating in the full course will be graded based on the following:

- 1. Active participation in the class activities is worth 20 % of the final grade.
- 2. Students are required to design:

A. survey due 10/18 25%

- B. experiment due 11/22 25%
- 3. Students are required to prepare data analysis paper due 12/6. The paper should be 10 pages in length (double-spaced, 12) and is worth 30% of the final grade.

## SOURCES FOR READING:

Druckman, D. (2005). Doing research. Sage publications Fowler, F.J. (1995). Improving survey questions. Sage publications

Weekly Schedule

August 30: Introduction to Course

September 6: Scientific foundation of

social research. Designing research projects

Reading: Druckman 3-52

September 13: Designing research projects (II) Reading: Druckman 57-59; 90

September 20: Surveys and Sampling Reading: Druckman 123-129; 140-158

Fowler:104-135

September 27: Designing Survey

Reading: Druckman 129-140; 158-162

Fowler: 8-102;138-148

October 4: Basic statistics

Reading: Druckman 84-86

- 1) http://www.statsoft.com/textbook/stbasic.html (descriptive statistics)
- 2)http://www.sapdesignguild.org/resources/diagram\_guidelines/charts\_bk.html

October 11: Break

October 18: Analyzing survey data(I)

Reading: Druckman 86-93

http://www.statsoft.com/textbook/stbasic.html (correlations and T-test)

October 25: Analyzing survey data (II)

1) http://dss.princeton.edu/online\_help/analysis/regression\_intro.htm

2) <a href="http://www.tufts.edu/~gdallal/LHSP.HTM">http://www.tufts.edu/~gdallal/LHSP.HTM</a> (Introduction to Simple Linear Regression; How to Read the Output From Simple Linear Regression Analyses; Introduction to Multiple Linear Regression; How to Read the Output From Multiple Linear Regression Analyses

November 1: Analyzing survey data (III)

- 1) http://comp9.psych.cornell.edu/Darlington/factor.htm
- 2) http://www.statsoft.com/textbook/stcluan.html

November 8: Experimental design (I)

Reading: Druckman 55-69

Dean Pruitt (article will be distributed)

November 15: Experimental design (II)

Reading: Druckman 69-81

November 22: Analyzing data of experiments

Reading: Druckman 93-120

November 29: Evaluation and results

interpretation

Reading: Druckman 328-348

December 7: Course review. Discussing research papers

#### Papers requirements

What you should include in **Questionnaire design paper**:

- 1. Problem, purpose, and research question (if you provide full research design- it will be a part of design).
- 2. Short description of scale (variable, construct) and number of questions that included in scale.
- 3. Your questions and examples of answers.

The assessment will be based on:

- 1. The fit between problem, purpose, research question and your questions.
- 2. The fit between construct and your questions.
- 3. The content and variety of questions.

Frequently asked questions:

- 1. Do I need to write the full design? No, your design is welcome, but not required.
- 2. Do I need to write problem, purpose, and research question if I provide design? No, they are already included in full design.
- 3. When you tell "scale", does it mean numerical construct? No, scale here is your construct, your variable which consists of several question.
- 4. How many scales do I need? From 3 to 5.
- 5. How many questions have to be included in scale? At least 3, but you can have even 10.
- 6. Do I need to write introduction for respondents? Yes.

# The experiment design paper

The main components of the paper:

- Introduction: articulate Problem, Purpose and Research question.
- Hypothesis: present your variables, hypothesis, and type of experiment.
- Groups: introduce the control group and the treatment group (if you use RCT) or groups that present conditions of study.
- Random assignment: describe how you would assign subjects into the control group and the treatment group (if you use RCT) or into groups that present conditions of study.
- Experimenter manipulation: describe how you would manipulate variables to test cause-and-effect relationships.
- Experimenter control: show how you would control all other extraneous variables or conditions that might have an impact on the dependent variables.
- 1. Do I have to conduct experiment? No, you just have to write a paper on experiment design.
- 2. Which type of experiment can I use in my paper? Any types, including true experiment and quasi experiment.
- 3. Can I use my previous problem, purpose and research question? Yes, if they can be used as an appropriate basis for your experimental design.

## Final research paper

In your final paper you have to demonstrate skills and knowledge you received during CONF 811, including writing research design, conducting statistical analyses, interpretation of the results. Your research design has to include analyses of interrelations between dependent and independent variables, possibly moderators and mediators. Together with descriptive statistics, your analysis has to examine direct and interactions effects of variables. Each statistical method has to answer specific proposition, based on your model.

# Components of the paper:

- 1. Research design model, including problem, purpose, research question, theoretical analysis, hypothesis, variables, model and propositions. In theoretical analysis you have to introduce main tendencies in scholarly research connected with your topic, provide main references and show the place of your research (near 1 page).
- 2. Data description: source, sampling, variables.
- 3. Statistical analysis: explain the choice of method and present results of your analysis.
- 4. Discussion: show how results confirm/differ from your hypotheses, discuss future implication for research