

FALL 2005
JS 202 Section 1
Mon 5:30-8:15 pm

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9-10am, 2-5:30pm
(except for faculty meetings
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AJ202

Seminar in Justice Research & Evaluation.

Course Description:

An examination of research methods applied to solving problems and resolving issues in criminal justice; focus will be on the application of scientific methods to problem-solving.

Learning Objectives:

Graduate students will develop:

1. Capacity to constructively criticize and evaluate research and to be a discerning consumer of research findings
2. Competency in using SPSS (Statistical Package for the Social Sciences) to undertake basic and applied research.
3. Professional and intellectual skill in formulating research questions, choosing variables as indicators, managing and analyzing data, and presenting findings

This course is in preparation for AJ203 where the emphasis will be more upon designing an evaluation research plan, choosing methods of data collection, and developing policy implications from the findings.

Pre-Requisites: Stat 95 and AJ105 or equivalents.

Required Texts:

George Dowdall, Kim Logio, Earl Babbie & Fred Halley (2004). *Adventures in Criminal Justice Research*. 3rd. Ed. Thousand Oaks, Ca, Pine Forge.

Recommended Reference for Statistical Procedures:

Fox, J.A., & Levin, J. (2005). *Elementary statistics in criminal justice research: The essentials*. Boston, MA, Pearson. (Other basic statistical texts can be substituted)

Course Requirements and Grading:

Weekly assignments involve research planning exercises and data management and analysis using the computer. A mid-term exam will involve an analysis and critique of a published piece of research. A written paper, documenting the student's own research project, is due at the end of the semester. (See separate handout for instructions on the paper). Students are expected to give oral presentations illustrated by graphics on their final paper at this time.

Grades will be made up of 15% for the weekly assignments, 35% for the mid-term exam, and 50% for the final paper. Completion of extra advanced computer assignments (to be provided) and above average oral presentations will provide an opportunity for students to raise their grade by one half a level.

Teaching Philosophy:

This seminar is an interactive learning experience. After a review of the components of the research process, each class session will involve hands-on interaction with data on the computer. Students have the choice of working in small groups of 2 or 3 or working alone on the research project. However, all final written reports must be individually produced.

In accord with departmental policy, make-up exams and acceptance of late reports after the due date will be provided only in extreme cases and only where appropriate documentation is provided. However, every encouragement is given to students who wish to learn from their mistakes and earn high grades. Make-up or re-takes of the mid-term exam can be done at the time of the final exam. The final paper, due November 28th may be re-written and re-submitted on or before Monday, December 12th.

CLASS SCHEDULE AND ASSIGNED READINGS

- Aug 29 *Class:* Introduction and review of course: basic, applied & evaluation research; ethical principles in dealing with human subjects.
Lab: Introduction to SPSS, coding, entering and accessing data:
Dowdall et al. Chpt 1, 2 & 3.
Fox & Levin, Chpt 1.
- Sep 12 *Class:* Theory, conceptual propositions & definitions, hypothesis & variables.
Lab: Exploring data sets using descriptive statistics. Recoding & modifying variables.
Dowdall et al. Chpt 4 & 5.
Fox & Levin, Chpt 2, 3 & 4.
- Sep 19 *Class:* Research design, sampling & attrition.
Lab: Univariate analysis: Creating composite measures & indexes.
Dowdall et al. Chpt 6.

- Fox & Levin, Chpt 5 & 6.
- Sep 26 *Class:* The logic of measurement: validity, reliability, multiple indicators, levels of measurement & units of analysis.
Lab: Bivariate analysis: Validating measures and indexes.
 Crosstabulation, epsilon, lambda, gamma
 Dowdall et al. Chpts 7 & 8.
- Oct 3 *Class:* Methods of collecting and coding data.
Lab: Bivariate analysis.
 Measures of association: Chi-Square, correlations, t-tests
 Dowdall et al. Chpts 9.
 Fox & Levin, Chpt 7, 9 & 10.
- Oct 10 *Class:* Presentation of data and critiquing research.
Lab: Multivariate analysis (cont).
 Regression & ANOVA.
 Dowdall et al. Chpts 10 & 11.
 Fox & Levin, Chpts 8 & 11.
- Oct 17 *Class:* Practice mid-term exam
Lab: Multivariate analysis.
 Odds ratios & logistic regression.
 Dowdall et al. Chpts 11 & 12.
- Oct 24 ***MID-TERM EXAM.***
- Oct 31 *Class:* Introduction to theoretical modeling.
Lab: Using data to test theoretical models.
 Fox & Levin, Chpt 13.
- Nov 7 *Class:* Preparing research reports and proposals
Lab: Identifying variables & developing measures
 for final research project
- Nov 14 *Lab:* Preliminary analysis for final research project,
 develop univariate, bivariate & multivariate
 tables, & interpret results.
- Nov 21 Preparation of research project (with assistance of TA).
 Undertake final analysis and prepare final tables.
- Nov 28 ***FINAL PAPER DUE***
 Class presentations of individual research projects

- Dec 5 Class presentations of individual research projects
 Feedback on final paper from instructor
- Dec 12 Class presentations of individual research projects
 (if necessary).
 RE-SUBMISSIONS OF FINAL PAPER DUE
 ON OR BEFORE MONDAY, DECEMBER 12, 5:30PM.

JS202 ASSIGNMENTS

Assignment 1. Due September 12 (worth 1 credit)

In the previous class you will have self-administered the College Alcohol Survey Questionnaire in Dowdall et al. Appendix B. Using the same coding methods as Dowdall et al., you will have coded your questionnaire in preparation for data entry into a SPSS file. You should have completed data entry for all data collected by class members during class.

1. Describe the demographic composition of the sample by producing frequency tables age, gender, current year in school and GPA for this new data set.
2. Compare these frequency tables with data from the "Binge" file using the same variables.
3. Compare the two samples with one other variable of your own choosing.

Assignment 2. Due September 19 (worth 2 credits)

Statement of Research Topic

In about one page, answer the following in outline form, using the headings provided:

In two or three sentences, describe a problem you wish to research and explain why it is important to study. (For example, "The effectiveness of law enforcement in decreasing crime is important to evaluate. It is commonly believed that police presence alone is sufficient to *deter* people from breaking the law. However, a contrary argument is that more crime will be *detected* when there is closer scrutiny by police officers. It is important to provide data to show which of these entirely different effects is more likely).

2. Proposition:

State your main theoretical proposition using general, abstract law-like statements (For example, "Law enforcement surveillance decreases crime".)

3. Definitions:

Define the important terms in your theoretical proposition. (For example, "Law enforcement surveillance is defined as public monitoring by authorities. Crime is defined as behaviors that are violations of law e.g. prostitution, drug dealing).

4. Scope:

Suggest the conditions under which this proposition is more likely to be true and when it is unlikely to be true. (For example, the above proposition is more likely to be valid for crimes committed in public places and less likely for crimes committed in private places (like personal homes.)

5. Hypothesis:

State one specific hypothesis i.e. an instance of your more general proposition. (For example, “police cruise-bys on a random but frequent basis are likely to decrease the extent to which prostitutes solicit in the streets of the Tenderloin District in San Francisco.”)

7. Variables:

Suggest specific ways of measuring the dependent and independent variables. (e.g. For the independent variables, # of police cruise-bys and the time lapse between cruise-bys. For the dependent variable, # of arrests for prostitution and # of solicitations for prostitution by a research stooge would be valid indicators).

SPSS ASSIGNMENT (Dowdall et al.): (worth 1 credit)

Complete Independent Projects A & B, Chapter 4
Complete Independent Project A, Chapter 5

Assignment 3: Due September 26 (worth 1 unit)

SPSS ASSIGNMENT:

Create an index of Second-hand Binge Effects

– See Dowdall et al page 92.

Complete Independent Projects A & B, Chapter 6

Assignment 4: Due October 3 (worth 1.5 credits)

Before proceeding to this assignment, you will need to make corrections to Assignment 2 in response to the instructor’s comments. If you are confused or unsure of how to make these corrections, please make an appointment to see the instructor. *You must attach your first assignment, and your re-written first assignment to the second assignment. Your paper will not be graded without these earlier drafts.* Use diagrams and/or outline form.

Outline a **research design** to test the hypothesis developed in your first assignment. Specifically:

1. How you would obtain your research sample to ensure it is representative of the population you wish to study (i.e. the external validity of your findings)?

2. If you choose an experimental study, describe the research design and what experimental comparison or control groups would be used. (Remember: an experimental design usually includes a no-treatment control group and involves random assignment of subjects to the different groups or conditions, where the independent variables are controlled by the researcher.)
3. If it is not feasible to employ an experimental design, diagram a theoretical model of your hypothesis that you could test, using the natural variation of your independent variable within a large, representative sample.
4. What background variables, independent variables, intervening variables and dependent variables will you attempt to measure?

SPSS ASSIGNMENT (Dowdall et al.) (worth 0.5 credit)

Using the JUSTICE.SAV file, create the FBI Crime Index
– See Dowdall et al page 92.

Assignment 5: Due October 10 (worth 2 credits)

Using GSS96 data:

1. Create an index of racial prejudice using the variables RACDIF4, RACSEG, RACPREZ. (Caution: Some of these variables need to be recoded before you can create the index). Produce a frequency table for the new index.
2. How many subjects have missing data on this new index? Undertake an attrition analysis comparing those who responded to the questions on racial prejudice with those who did not respond to the questions.
3. Write up the results of your attrition analysis, briefly describing in words what you did. Conclude whether there were any statistically significant differences between the subjects who responded and those who did not, and any possible biases in the sample if you were to undertake research on racial prejudice using these data.

FUTHER SPSS ASSIGNMENT (Dowdall et al.): (worth 1 unit)

Complete Independent Projects A, B & C, Chapter 7
Complete Independent Projects A, B & C, Chapter 8

Assignment 6: Due October 17 (worth 2 credits)

Describe the research methods you will use for collecting data to test your hypothesis from Assignments 1 and 3. Summarize these methods in outline form under the following headings:

I. Methodology.

a) Selection of Subjects and obtaining their Informed Consent:

Describe where you plan to obtain your sample. If you have a comparison or control sample, describe how you will try to ensure it is comparable to your research sample. Following the guidelines for protection of human subjects, describe how you will obtain the informed consent of subjects, agencies or communities to provide you with data i.e. what will you tell them or do for them to persuade them to cooperate. How will you ensure a good response rate and minimize subject attrition, especially if you are collecting data from them over a period of time.

b) Procedures: Describe the method of collecting data for each of your background, independent and dependent variables. Data collection methods may involve one or more of the following:

- a) surveys (written, telephone, or in-person interviews);
- b) observation study (non-obtrusive, participatory, or use of confederates);
- c) document analysis (private documents, official statistics or public documents).

II. Measures:

Construct a questionnaire (for a survey study) OR data coding forms (for an observation or document study) to measure your independent and dependent variables. Pre-code your forms by assigning numbers to all possible responses for each variable. Independent variables can be coded on any of the following levels of measurement: categorical, ordinal, interval or ratio. Dependent variables should be coded on the highest level of measurement possible i.e. preferably interval or ratio.

Discuss how you might determine the validity and reliability of the measure of your independent OR your dependent variable.

You must attach your re-written Assignments 2 and 4. This assignment will not be graded without these earlier drafts.

SPSS ASSIGNMENT (worth 1 credit)

Examine the index of racial prejudice that you created in Assignment 5. Validate your index or measure of racial prejudice by two different methods (e.g. face validity, concurrent validity, or predictive validity) and describe how you did this.

October 24: Read article in preparation for mid-term exam.

Assignment 7: Due October 31, (1 credit)

SPSS ASSIGNMENT (Dowdall et al.):

Complete Independent Project D, Chapter 8
Complete Independent Projects A & B, C Chapter 9.

Assignment 8: Due November 7 (1 credit)

SPSS ASSIGNMENT (Dowdall et al.):

Complete Independent Projects A & B Chapter 10
Complete Independent Project A Chapter 12

JS202: PREPARING YOUR FINAL RESEARCH REPORT

The final assignment is to develop a research problem that you would like to investigate, using one of the data sets provided by Dowdall et al., in "Adventures in Criminal Justice Research". (Other data sets of comparable quality can be used with permission of the instructor). Develop several related hypotheses, preferably based on a theoretical proposition or model, and test them using these data.

The emphasis in this assignment is less upon the literature review (3-4 relevant references are sufficient). The focus should be upon management of data, development and validation of appropriate indicators or measures, appropriate choice of statistical analysis and clear presentation and interpretation of the findings.

The paper should be approximately 20 pages in length (including references and tables). It should be double-spaced, 12-point type, and written strictly in APA style. (See http://www.sjlibrary.org/services/literacy/info_comp/citing.)

Format of the Report:

The research report should contain the following sections: Abstract; Introduction; Literature Review; Methodology (with sub-headings for sample, research design, measures and data analysis); Results; Discussion and Conclusions, References. Figures and tables should be placed last, at the back of the paper.

Abstract: is a brief summary of your study (usually 200 words or less) at the beginning of the report - a succinct statement of research topic, brief summary of the methodology, summary of findings and conclusions. (It is easier if you write this last).

Introduction: is a non-technical discussion of the research problem to be studied with some justification as to why it is important to study. This should lead to a statement of your general theoretical proposition and scope conditions

Literature Review:

The literature review provides a survey of previous research studies that have investigated this topic, often presented historically. It should briefly summarize prior researchers' subjects, method and findings, as shown in the following fictitious example.

In an interview study of 300 police officers in the inner city area of Chicago, Rosenbaum and Levy (1993) found that women officers were more likely to use force than men." Another study of 55 police officers in urban precincts found that physically smaller male police officers tended to use more force than larger one (Baker, Ribera and Jones, 1994). A review of other studies, have linked competence in police response, including the judicious use of force to the amount of training they have undertaken (Billings, 1985; Smith & Little, 1986, Zeehan, 1979).

Then you might add a critique as follows:

It is unclear, therefore, whether the use of police force is related to one or more of the following - gender of the officer, size of the officer, or the amount of training the officer has had.

How to deal with large amounts and different types of background literature - what is relevant and what is not? Here let your theoretical proposition and scope conditions guide you. Refer to the literature that addresses what you are studying. Other marginally related bodies of work can be briefly referenced in footnotes if necessary.

The literature review should end with a summary of the current state of knowledge with respect to your research topic (including what has been found in past studies, what are the controversial or null findings, what are the gaps in knowledge, and/or what methodological flaws plague the prior work). All of this can become a natural lead in to your particular study that aims to help clarify ambiguous findings or to fill the gaps, and/or hopefully uses a methodology that is superior to those used in past studies.

Be sure to write a statement explicitly linking the literature section to your study's hypothesis at the end of the literature review.

Methodology:

Sample: Describe the sample chosen for your study, criteria for eligibility to the study, sampling method, and how they were recruited. Subject attrition and missing data should be discussed here together with a statement about possible bias in the sample.

Research Design: In this kind of study, the research design is quasi-experimental. It will involve a naturalistic study of a large number of subjects – hopefully a representative sample that has been drawn from the whole population where statistical controls are used to test the hypothesis. Briefly describe the data set, how and when it was collected, and the kinds of variables it contains. It is sufficient to simply give references when using established, well-documented data sets like the GSS for secondary analysis.

Measures: Describe the measures or indicators for the dependent, independent, and control variables in your hypothesis. List these (using capital letters for each variable name or abbreviated title) and give information on their validity and reliability. This means you need to describe how you developed them, and how you have validated them – face validity (use of experts in the field), concurrent validity (how they relate to established measures of the concept) or predictive validity (capacity to predict other variables in your data set). You also need to add other background variables that are not germane to your hypothesis (age, gender, education, occupation, prior criminal history etc.) to properly describe the sample.

Data Analysis: usually begins with an explicit statement of your hypothesis (in terms of the dependent and independent variables). Briefly describe the sequence of statistical methods used to describe your data and test your hypothesis. If you are investigating a number of different hypotheses, you can introduce each one prior to the data analysis addressing each one.

Results:

Three kinds of data need to be presented:

a) *Descriptive statistics* for the dependent, independent and background variables. i.e. percentages, means, modes, medians, ranges, standard deviations.

(These may be illustrated in tables, pie charts, bar graphs etc.)

b) *Bi-variate analysis*: cross-tabulations and correlations, showing the relationship of each independent and control variable to the dependent variable.

c) *Multi-variate analysis to tests the hypotheses*: using chi-square, t-tests, ANOVA, multiple OLS regression, or logistic regression etc.

Presentation of the data within the text should be completely objective. Do not make any editorial or interpretative comments. State the major findings in the text and refer to the detailed findings within the tables and figures. Be extremely concrete and factual.

Capitalize the names (or abbreviated names) for each of the variables in order to alert your reader to the fact that you are referring to a specific measure. Also refer to actual variable names in the hypothesis, not to their more generalized concepts in the proposition. Result sections can be fairly technically written. Tables and figures (bar graphs, pie charts, histograms etc.) should be fully self-explanatory. This means including a meaningful title, the total N and the sub-n's for each category, label the dependent and independent variables, and provide summary statistical information

Discussion and Conclusions: This includes

a) a non-technical summary of the overall findings

b) interpretations of the findings, with discussion on how they are similar or dissimilar to previous studies, and speculation on how the data can be generalized to wider populations.

c) discussion of the limitations of the research study with cautions about the possible misuse and overgeneralizations of the findings.

d) discussion about the future direction for research

e) possible social policy implications of the findings.

This section of the research report is a non-technical discussion of the principal findings and their implications. Do not use any variable names or statistical jargon in this section.

References: Remember to use APA style!

Figures (one per page)

Tables (one per page)