Assignment 1

Due Date: Wednesday, Sept. 21

1. Identify the research design type used in the following studies (either survey, aggregate data, lab experiment, field experiment, survey experiment, or natural experiment). If an experiment, identify the treatment group and the control group.

(a) A researcher is studying corruption in Mexico. The researcher instructs his research assistants to drive over the speed limit. When stopped by police officers, the researcher randomly assigns half the assistants to offer a bribe to the officer. The researcher records the number of tickets issued to the individuals who attempted to bribe the police officers and the number of tickets issued to individuals who did not attempt to bribe the police officers.

(b) A researcher correlates voter turnout rates across countries with whether those countries require voters to register in order to vote.

(c) A researcher recruits 30 undergraduate students to participate in a study. Half of the participants are randomly assigned to a group that is told to discuss the upcoming congressional election with one other participant in the study. The other half are told to discuss the latest episode of Game of Thrones with one other participant in the study. The researcher is interested in testing whether discussion of politics leads people to be more likely to turn out.

(d) A random sample of 1000 American adults is asked report whether or not they watch Fox news regularly. They are also asked a series of questions measuring their political knowledge (e.g. true or false: President Obama won the electoral vote while losing the popular vote in the last election). Based on the results, a researcher claims that Fox News makes its' viewers less knowledgeable about politics.

(e) A sample of 1000 American adults is asked to rate how much they enjoyed each of the five movies nominated for a best picture Oscar. They are also asked whether they plan to watch the Oscar ceremonies when it is televised. A random

half of the sample is asked this question at the beginning of the survey and the other half is asked at the end of the survey. A research compares the responses of these two groups.

2. Suppose that a researcher would like to test whether recent cold weather makes Americans less likely to support policies aimed at mitigating the effects of global warming (e.g. cap and trade). For each of the following research designs, determine how the research design could be used to answer the research question, or comment on why it would be very difficult to apply that research design to that particular research question.

(a) Survey

(b) Aggregate data

(c) Field experiment

(d) Laboratory experiment

(e) Survey experiment

3. Identify each of the following as either qualitative or quantitative and either discrete or continuous. If the variable is quantitative, does it have an interval or ordinal scale?

(a) Number of pets in family

(b) County of residence

(c) Distance (in miles) commute to work

(d) Choice of diet (vegetarian, non-vegetarian)

(e) Number of people you have known with aids (0, 1, 2, 3, 4 or more)

(f) Attitude toward legalization of marijuana (favor, neutral, oppose)

(g) Political party affiliation (Democrat, Republican, Independent)

(h) Religious affiliation (Roman Catholic, Baptist, Methodist, ...)

(i) Political philosophy (very liberal, somewhat liberal, moderate, somewhat conservative, very conservative)

4. Consider the SPSS data file 'wp04.sav' available on the course web page, which contains a survey conducted by Washington Post and ABC News in the run up to the 2004 presidential election.

(a) Which religious group is most common in the sample? Use the variable 'Q911' in your analysis. Include SPSS output justifying your conclusion.

(b) Which racial group is most likely to approve of President Bush? What racial group is least likely to approve of President Bush? Use the variables 'Q5NET' and 'Q918' in your analysis. Include SPSS output justifying your conclusions.

(c) Does it make sense to talk about the mean racial group in the sample? What about the median racial group? Explain.