POLS/GEOG 418: Quantitative Analysis
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Problem Set #6:
Crosstabulation and Means Comparisons

In this problem set you will apply the techniques of crosstabulation and means comparisons to test some basic hypotheses. Below you will find four hypotheses. For the first two hypotheses, we will use the GSS93 subset.sav dataset in the SPSS library. For hypotheses #3 and #4, we will use the NES2000.sav dataset available on the CD-ROM that accompanies Pollock’s An SPSS Companion to Political Analysis reader. Your problem set will be due at the beginning of class on Tuesday, March 15, 2005.

For each hypothesis I will grade you on your use of the appropriate tabular hypothesis test; the correct usage of graphical techniques; the proper labeling of tables and graphs; and your associated written analysis of the hypothesis and data. That is to say, for each hypothesis I expect you to draw a substantive conclusion about the hypothesis from the data using crosstab or means comparisons and an associated graph. I expect all your output to be labeled properly.

For each, please provide each of the following:

I. Use the correct tabular analytic technique: crosstabulation or means comparisons. Include your table with appropriate titles, labels and other relevant details.

II. Produce a bar chart or line graph, as appropriate to the hypothesis and data.

III. Label all tables, charts and graphs appropriately, so that an unfamiliar reader can interpret you variables and quantities or percentages you report in tabular and graphical form.

IV. Make a conclusion about the hypothesis. Does your analysis support the hypothesis? Does it refute it? Or is it inconclusive?

Hypothesis 1:

“In comparing individuals, those who hold an advanced educational degree are more likely to believe in the theory of evolution than those who only a high school degree or never graduated from high school.”

(Hint: use the “degree” and “scitest4” variables)

Hypothesis 2:

“In comparing individuals, those who are Catholics are less likely to agree that teenagers ages 14 to 16 should use birth control than are those who are Protestants.”

(Hint: use the “relig” and “pilkok” variables)

GO TO NEXT PAGE.
Hypothesis 3:

“In comparing individuals, those who have high levels of political trust will view the federal government more favorably than those with low levels of political trust.”

(Hint: use the “poltrust” and “fedgov” variables. The “fedgov” variable is a respondent “thermometer” that varies from 0 to 100, with higher scores indicating a more favorable rating of the federal government. Do not use the fedgov3 variable.)

Hypothesis 4:

“In comparing individuals, those who are Democrats will engage in more ‘campaign acts’ than will those who are Republicans.”

(Hint: use the “campacts” and “partyid7” variables. Do not use the “partvid3” variable.)