

**SSRIC Teaching Resources Depository**  
**Public Opinion on Social Issues -- 1975-2010**  
**Elizabeth N. Nelson and Edward E. Nelson, California State**  
**University, Fresno**

**Chapter 4**  
**Exercises Using the General Social Survey to Explore**  
**Relationships Among Variables**

*© The Authors, 2011; Last Modified 25 June 2011*

Note to the instructor: The data set used in this exercise is gss\_10.por which consists of a subset of the 2010 General Social Survey. (Some of the variables in the GSS have been recoded to make them easier to use and some new variables have been created.) This exercise uses RECODE and CROSSTABS in SPSS to explore the relationships among variables. In CROSSTABS, students are asked to use percentages, chi square, and an appropriate measure of association. A good reference on using IBM SPSS is *IBM SPSS for Windows Version 19: A Basic Tutorial* by Linda Fiddler, Laura Hecht, Edward Nelson, Elizabeth Nelson, and Jim Ross. To order this book, call McGraw-Hill at 1-800-338-3987. The ISBN is 0-07-804018-3. You have permission to use this exercise and to revise it to fit your needs. Please send a copy of any revision to the authors.

**Authors:**

Ed Nelson and Elizabeth Nelson  
Department of Sociology  
California State University, Fresno  
Fresno, CA 93740

**Phone:** 209-278-2275 (Ed)

**Email:** [ednelson@csufresno.edu](mailto:ednelson@csufresno.edu) and/or [elizn@csufresno.edu](mailto:elizn@csufresno.edu)

Please contact the authors for additional information.

There are many social issues that you can explore using the General Social Survey. In these exercises, we are going to focus on abortion, confidence in institutions, tolerance for people holding unpopular ideas, and the types of social problems that people are willing to spend money on.

1. Seven variables focus on people's feelings about abortion: ABANY, ABDEFECT, ABHLTH, ABNOMORE, ABPOOR, ABRAPE, ABSINGLE. Each question asks respondents if

they think a woman ought to be able to obtain a legal abortion under varying circumstances. Choose one of these variables and use it as your dependent variable. Now choose one of the following variables as your independent variable: gender (SEX), class (CLASS), political party (PARTYID), and religion (RELIG or RELITEN or ATTEND or PRAY). If you want to use age or education, then use one of the variables that have already been recoded (AGE1, AGE2, EDUC1). Get the crosstabulation of these two variables along with the appropriate percentages and chi square and an appropriate measure of association (Gamma or Cramer's V). Write a short paragraph interpreting the relationship using the percentages and the other statistics to help you.

2. Several variables measure the amount of confidence the respondent has in the major institutions of our society. These include the military, big business, organized religion, education, the Executive Branch of the Federal Government, Congress, the press, and others. These variables all start with CON and there are thirteen of them.
  - a. Run a frequency distribution to see which institutions respondents have the most confidence in and which they have the least confidence in. Be sure to use the appropriate percentages to make these comparisons. (Do you want the percents or the valid percents? Why?) Write a brief paragraph summarizing your results.
  - b. Some people have more confidence in these institutions than others. Let's use political party preference (PARTYID) to divide respondents into Democrats, independents, and Republicans. You will have to recode PARTYID into three groups to do this. Combine strong and not strong Democrats into one group, combine strong and not strong Republicans into a second group and combine independents (near Democrat, near Republican, and independents) into a third group. Since there aren't many in the other category, let's recode "other" as a missing value so it will be removed from the table. If you recode it as a system-missing value, it will automatically be defined as a missing value.
  - c. Now choose one of the social institutions that you think Democrats, Republicans and independents will have different levels of confidence in. Decide which is the independent and dependent variable

and get the crosstabulation. Be sure to ask for the appropriate percents, chi square, and measure of association. Write a paragraph indicating which group has the most confidence in this institution and which group has the least confidence. Use the percents, chi square, and measure of association to help you explain the relationship of these two variables.

3. Three sets of questions ask respondents whether they are tolerant of people who hold unpopular viewpoints. One set of questions asks respondents if they would allow five different types of people to teach in a college or university (COLATH, COLCOM, COLHOMO, COLMIL, COLRAC). Another set asks respondents if a book written by these five different types of people should be allowed in the public library (LIBATH, LIBCOM, LIBHOMO, LIBMIL, LIBRAC). Still another set asks respondents if they should be allowed to make a public speech in their community (SPKATH, SPKCOM, SPKHOMO, SPKMIL, SPKRAC). The five groups of people are those who are against churches and religion, communists, homosexuals, people who advocate doing away with elections and letting the military run the country, and those who claim Blacks are inferior.

These variables have been combined into five other variables that measure tolerance for atheists, communists, homosexuals, militarists, and racists. Each variable is the sum of the three variables from the larger set of variables. For example, tolerance for racists is the sum of COLRAC, LIBRAC, and SPKRAC. Since each variable is coded 1 and 2, where 1 is the tolerant response and 2 is the intolerant response, the new variable (called TOLRAC) will vary from 3 to 6. The value 3 means that the respondent would be tolerant of racists in all three scenarios, while the value 6 means that the respondent would not be tolerant of racists in any of the three scenarios. The values 4 and 5 would be intermediate values.

Get the frequency distributions for TOLATH, TOLCOM, TOLHOMO, TOLMIL, and TOLRAC to see if there is more tolerance for some of the groups than for others. Write a short paragraph explaining the results using the appropriate percents. (Be careful to decide whether you want the percents or the valid percents.)

Which groups of people would you expect to be more tolerant of homosexuals: men or women, Democrats or Republicans or independents, those living in the South or the Northeast or the Midwest or the West, working/lower class or middle/upper class? Choose one of these groupings and write a hypothesis that indicates your expectations. Write a short paragraph indicating why you think one group will be more tolerant of homosexuals than another.

Now find the variable in the list of variables that you want to use as the independent variable to test your hypothesis. Your dependent variable will be TOLHOMO. Get the crosstabulation to test your hypothesis. Be sure to get the appropriate percents, chi square, and measure of association. Write a short paragraph using the results to indicate whether the data support your hypothesis.

Chose one other tolerance variable (TOLATH, TOLCOM, TOLMIL, and TOLRAC) and repeat the analysis described above.

4. Americans decide what types of social problems to spend money on. The General Social Survey includes a series of questions that ask respondents whether we are spending too much, too little, or about the right amount of money on a series of problems. These problems include foreign aid, the military, big cities, crime, drugs, education, the environment, welfare, health, mass transportation, parks and recreation, the conditions of African-Americans, highways and bridges, social security, and space exploration.

The General Social Survey includes two versions of most of these questions. All the spending variables start with NAT. The alternative version of each question ends with Y. For example, the questions on welfare are NATFARE and NATFAREY. NATFARE asks whether respondents think we are spending too much, too little, or about the right amount of money on "welfare." NATFAREY substitutes "assistance to the poor" for "welfare" in the question. A few questions have only one version of the question (i.e., no version Y). For this exercise, we will be using the original version of each question (i.e., the one that does not end in Y).

Using the data, find out which problems respondents are the most likely to think we are spending too much money

on and which problems respondents think we are spending too little on. Write a brief paragraph summarizing your findings.

Republicans, Democrats, and independents often differ in terms of the problems they think we should be spending money on. Crosstabulate political party preference (PARTYID) and the spending variables to find out which problems Democrats, Republicans and independents think we should be spending more on. You will need to recode PARTYID into a smaller number of categories. See question 2 above for one way of recoding PARTYID. Use the appropriate percents, chi square, and measure of association to help you in your analysis. Write a short paragraph describing your results.

Class is another variable that often divides people on spending priorities. Use the variable CLASS to see if different classes have different spending priorities. You will have to recode CLASS. Do this by combining lower and working class into one category and middle and upper class into another category. Write a paragraph summarizing your results.

Find one variable where there are significant class and party differences on spending priorities. Which is more important--class or party? Think about how you are going to decide this. You will have to run a three-variable table to see the effect of one of these variables holding the other constant. For example, crosstab one of the NAT variables with class holding party constant. Then crosstab the same NAT variable with party holding class constant. Were there larger differences for class or for party when the other variable was held constant? Or were the differences about the same? Be sure to use the appropriate percents, chi square, and measure of association to help you. Write a paragraph or two describing your findings.

5. We already described the two different versions of the NAT variables. Why do you think the researchers did this? (If you have studied experimental design, then you will recognize this as a form of this type of design.) Different forms of the same questions often produce different results. For example, studies have found that people are more likely to say they would not allow something than they are to say they would forbid the same

activity. The NAT... and the NAT...Y variables allow us to study the effect of question wording on what respondents tell us.

Choose several pairs of NAT variables (e.g., NATFARE and NATFAREY, NATCRIME and NATCRIMY). Do a frequency distribution for both variables in the pair and see if the wording of the question makes any difference in the way respondents answered the questions. Keep looking at pairs of NAT variables until you find one pair where the question wording made more of a difference and one pair where it didn't much of a difference. Write a short paragraph summarizing your results.

It's possible that question wording makes more of a difference for some respondents than for others. Choose the pair of NAT variables where question wording made more of a difference. Check to see if the wording of the questions made more of a difference for respondents with less education than for those with more education. How would you do this? You could choose DEGREE (highest degree) or EDUC (years of school completed) as your measure of education. If you choose EDUC, recode it into three or four categories or use EDUC1 which has already been recoded. Then crosstab the NAT variables with your measure of education. Now compare the way respondents answered the NAT questions for each level of education. Try to construct a graph showing the differences. One way to do this would be to construct two line graphs. Each line graph could show the percent who felt we should be spending less money along the vertical axis and level of education along the horizontal axis. You would need two graphs--one for each of the NAT questions. These two line graphs could be placed on the same graph. Write a brief paragraph summarizing your results.

6. Other variables in the data set focus on women's issues and on issues of race. Most of the variables that begin with FE (FECHLD, FEFAM, FEPOL, FEPRESCH) deal with women's issues and variables that start with RAC (RACLIVE, RACOPEN) focus on race. Decide which of these issues you want to study and then look carefully at the appropriate variables for that issue in the codebook. Choose one variable that you would like to study. This will be your dependent variable. Now choose two independent variables that you think will be related to your dependent variable. For each variable, write a hypothesis that clearly states the relationship you expect to find between your independent

and dependent variable. Indicate why you think this hypothesis will be true. Get the crosstabulation that you need to test this hypothesis. Be sure to ask for the appropriate percents, chi square, and measure of association. Write a short paper that includes the hypothesis, the rationale for the hypothesis, the crosstabulation to test the hypothesis, and your interpretation of the table. Be sure to indicate whether the data support the hypothesis.