**CONSPEND2CS - Exercise Using SPSS to Explore Spending Priorities**

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**Note to the Instructor:**The data set used in this exercise is gss14\_subset\_for\_classes\_CONFIDENCE\_SPENDING.sav which is a subset of the 2014 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.  The data have been weighted according to the instructions from the National Opinion Research Center.  This exercise uses FREQUENCIES in SPSS to explore the areas or problems that respondents think we ought to be spending more or less on.  We will also consider the way in which question wording might affect what respondents tell us.   A good reference on using SPSS is *SPSS for Windows Version 23.0 A Basic Tutorial* by Linda Fiddler, John Korey, Edward Nelson (Editor), and Elizabeth Nelson.  The online version of the book is on the [**Social Science Research and Instructional Center's Website**](http://ssric.org/node/582).  You have permission to use this exercise and to revise it to fit your needs.  Please send a copy of any revision to the author. Included with this exercise (as separate files) are more detailed notes to the instructors, the SPSS syntax necessary to carry out the exercise (SPSS syntax file), and the SPSS output for the exercise (SPSS output file). Pleas contact the author for additional information.

I’m attaching the following files.

* [**Data subset**](http://ssric.org/files/gss14_subset_for_classes_CONFIDENCE_SPENDING.sav) (.sav format).
* [**Extended notes for instructors**](http://ssric.org/files/Extended_Notes_for_Instructors_for_CONSPEND2CS.docx) (MS Word;.docx format).
* [**SPSS syntax file**](http://ssric.org/files/SPSS_Syntax_for_CONSPEND2CS.sps) (.sps format).
* [**SPSS output file**](http://ssric.org/files/SPSS_Output_for_CONSPEND2CS.spv) (.spv format).
* [**This page**](http://ssric.org/files/CONSPEND2CS.docx) (MS Word;.docx format).

**Goals of Exercise**

The goal of this exercise is to determine which areas or problems people think we ought to be spending more money on and which we ought to be spending less on.  We will also consider the way in which question wording affects what people tell us.  The exercise also gives you practice in using FREQUENCIES in SPSS.

**Part I—Getting the Frequency Distributions**

We’re going to use the General Social Survey (GSS) for this exercise.  The GSS is a national probability sample of adults in the United States conducted by the National Opinion Research Center (NORC).  The GSS started in 1972 and has been an annual or biannual survey ever since. For this exercise we’re going to use a subset of the 2014 GSS. Your instructor will tell you how to access this data set which is called gss14\_subset\_for\_classes\_CONFIDENCE\_SPENDING.sav.

The GSS is an example of a social survey.  The investigators selected a sample from the population of all adults in the United States.  This particular survey was conducted in 2014 and is a relatively large sample of approximately 2,500 adults.  In a survey we ask respondents questions and use their answers as data for our analysis.  The answers to these questions are used as measures of various concepts.  In the language of survey research these measures are typically referred to as variables.  Often we want to describe respondents in terms of social characteristics such as marital status, education, and age.  Other times we want to describe respondents in terms of opinions about social issues such as abortion and gun control.  In this exercise we want to look at the areas or problems for which respondents think we ought to be spending more or less.  These are all variables in the GSS.

There are a number of different areas or problems on which government spends money.  Some people think we should be spending more on some of these problems or areas while others think we should be spending less or about the same.  The GSS uses the following question to measure spending priorities – “First I would like to talk with you about some things people think about today. We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.”  For this exercise we picked five areas or problems – foreign aid (NAT1\_NATAID), halting the rising crime rate (NAT8\_NATCRIME), dealing with drug addiction (NAT10\_NATDRUG), welfare (NAT17\_NATFARE), and improving the conditions of blacks (NAT23\_NATRACE).  The names in all caps following the areas or problems are the variable names.

Run FREQUENCIES in SPSS for all five variables.  (See Frequencies in Chapter 4 of the SPSS online book mentioned on page 1.) There should be four columns of numbers.  Just to the right of the value label you should see the “frequency” column.  This tells you the number of respondents that said too little, about right, and too much.  To the right of that column will be the “percent” column.  This converts the frequencies to percents using all cases (2,538) as the denominator.  Notice that this includes those respondents who gave a valid response and those who have missing information (i.e., said they didn’t know (DK), refused to answer the question (NA), or were not asked the question (IAP)).  To the right of the percent column there is the “valid percent” column.  This converts the frequencies to percents using only those cases with valid information (i.e., replied too little, about right, or too much) in the denominator (i.e., 1,214 for NAT1\_NATAID).  Finally, the far right column is the “cumulative percent” column.  This cumulates the valid percents.  Look at the table for NAT1\_NATAID.  The first entry in the cumulative percents column is 8.4 because 8.4% of the cases responded too little.  The second entry is 36.7 because 36.7% said either too little or about right.  The third entry is 100.0 because all 100% of the cases gave one of these three responses.

It’s important to understand the difference between the percent column and the valid percent column.  Write out the arithmetic for computing both the percent and the valid percent for those who said we were spending too little on foreign aid (i.e., NAT1\_NATAID).

**Part II – Rank Ordering the Spending Priorities in Terms of the Percent Who Said Too Much**

In the chart below write the name of the problem or area and the percent of respondents who thought we were spending too much on this area or problem.  Arrange the areas or problems from rank 1 to rank 5 where 1 is the area or problem on which respondents were most likely to think we were spending too much and 5 is the area or problem on which respondents were least likely to think we were spending too much.

| Percent of Respondents Who Said We Were Spending Too Much | | |
| --- | --- | --- |
| Rank | Area or Problem | Percent Saying We Were Spending Too Much |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |

**Part III – Alternative Ways of Asking the Question**

There is always more than one way to ask a question.  In this case the GSS built an experiment into the survey.  What they did was to vary the way the area or problem was phrased.  Half of the respondents were **randomly** assigned to one version of the question and the other half was **randomly** assigned to the other version.  Here’s the way the questions were asked.

* foreign aid (NAT1\_NATAID) vs. assistance to other countries (NAT2\_NATAIDY)
* halting the rising crime rate (NAT8\_CRIME) vs. law enforcement (NAT9\_NATCRIMY)
* dealing with drug addiction (NAT10\_NATDRUG) vs. drug rehabilitation (NAT11\_NATDRUGY)
* welfare (NAT17\_NATFARE) vs. assistance to the poor (NAT18\_NATFAREY)
* improving the conditions of blacks (NAT23\_NATRACE) vs. assistance to blacks (NAT24\_NATRACEY)

Let’s see if the way the question was worded affected how respondents answered the question.  Run FREQUENCIES in SPSS for all ten variables and enter the percent saying we’re spending too much in the appropriate cell for each variable.  Then compute the difference in the two percents for each area or problem.  In order to standardize our answers, subtract the second of the two variables from the first of the two variables.  The percents for the first pair of variables are filled in to show you what to do.

| Variable | Question | % Saying We’re Spending Too Much | Difference Between the Two Questions |
| --- | --- | --- | --- |
| NAT1\_NATAID | Foreign aid | 63.3% | -10.0 |
| NAT2\_NATAIDY | Assistance to other countries | 74.3% |  |
| NAT8\_NATCRIME | Halting the rising crime rate |  |  |
| NAT9\_NATCRIMY | Law enforcement |  |  |
| NAT10\_DRUG | Drug addiction |  |  |
| NAT11\_DRUGY | Drug rehabilitation |  |  |
| NAT17\_NATFARE | Welfare |  |  |
| NAT18\_NATFAREY | Assistance to the poor |  |  |
| NAT23\_NATRACE | Improving the conditions of blacks |  |  |
| NAT24\_NATRACEY | Assistance to blacks |  |  |

**Part IV – Conclusions**

Which areas or problems were respondents most likely to think we’re spending too much and which were they least likely to think we we’re spending too much?

Did the way the questions were asked affect how respondents answered the questions?  For which of the areas or problems was the difference the greatest? the least?

What do you think this means for the nation’s spending priorities?