Name: $\qquad$
SETUPS Exercise 2
Due: February 5

Submit electronic copy to D2L dropbox by 3:15 on February 5 to receive credit. Bring printed copy to class on February 5.

The main web address for the SETUPS website at http://www.icpsr.umich.edu/SETUPS/
Use your University of Arizona e-mail address and the password you used in Exercise 1 to $\log \mathrm{in}$.

Click on "Analysis Exercises" then
Click on "Exercise 1"
Click on "Create Table 1A"
At this point you will be asked to check off an agreement form. Do so.

Your screen should be the "main menu screen"

## Open Extra Codebook Window

## Study: SETUPS: Voting Behavior: The 2004 Election

## Select an action:

```
    Browse variable list and codebook
Cun frequency or crosstabulation (with
                Recode variables
Compute a new variable
charts)
    Comparison of means
    Correlation matrix
    Comparison of correlations
    Multiple regression
    Logit/Probit (see Note)
    List values of individual cases
Start
```

Select "Run frequency or crosstabulation (with charts)" and click "Start."

You will see the following screen, which we will call the "command menu screen."


This time we will create a table between two variables. The row variable is the variable that we wish to explain. It is called the dependent variable. The column variable is the variable that we will used to explain the dependent variable. The variable that is the explanation is the independent variable.

For example, let's say that we want to explain why different people have different political ideologies. One possible explanation is a gender gap - that men and women have different ideological tendencies. In this hypothesis, ideology is what we are trying to explain so it is the dependent variable and will be listed as the row variable. Gender is the explanatory variable, or the independent variable, and it will be listed as the column variable.

Use the ideology recode variable from the last assignment. Type this variable name into the row space. The codebook tells you that the variable number for gender is v143. Type this in the column space. Make sure that the table option is asking for percentages based on column. Change the decimal(s) value from 1 to 0 . Click "Run the Table."

You should get the following:

| Frequency Distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cells contain: <br> -Column percent <br> - N of cases |  | V143 |  |  |
|  |  | 1 <br> Male | $\begin{gathered} 2 \\ \text { Female } \end{gathered}$ | $\begin{gathered} \text { ROW } \\ \text { TOTAL } \end{gathered}$ |
| X435-IDEO | 1: liberal | $\begin{aligned} & 21 \\ & 88 \end{aligned}$ | $\begin{array}{r} 28 \\ 110 \end{array}$ | $\begin{array}{r} 24 \\ 198 \end{array}$ |
|  | 2: moderate | $\begin{array}{r} 33 \\ 137 \end{array}$ | $\begin{array}{r} 33 \\ 131 \end{array}$ | $\begin{array}{r} 33 \\ 268 \end{array}$ |
|  | 3: conserv | $\begin{array}{r} 46 \\ 193 \end{array}$ | $\begin{array}{r} 39 \\ 152 \end{array}$ | $\begin{array}{r} 43 \\ 345 \end{array}$ |
|  | COL TOTAL | $\begin{aligned} & 100 \\ & 419 \end{aligned}$ | $\begin{aligned} & 100 \\ & 393 \end{aligned}$ | $\begin{aligned} & 100 \\ & 811 \end{aligned}$ |
| Means |  | 2.25 | 2.11 | 2.18 |
| Std Devs |  | . 78 | . 81 | . 80 |
| Unweighted N |  | 411 | 413 | 824 |

The upper left-hand cell tells you the meaning of the numbers in the table. The first number listed is the percent of cases in the cell. The second number is the raw number of cases.

Looking at the cell for Male \& liberal, the table indicates that 88 respondents to the survey had both of these traits. There were 411 men in the survey who answered the ideology question. Dividing 88 by 411 produces a figure of 21 percent.

This table indicates that 21 percent of men versus 28 percent of women called themselves liberals. In contrast, 46 percent of men versus 39 percent of women called themselves conservatives. This indicates a slight difference in the ideological identities of men versus women. Men are slightly more likely than women to call themselves conservative. Thus, there is a relationship between gender and ideology and the hypothesis is supported. A plurality of both men and women call themselves conservatives (that is the greatest number of men and women fall in the conservative category), but men are slightly more likely than women to do so.

One way to interpret a table is to subtract the numbers across a ROW.
Percent of men who call themselves conservative $=\quad 46 \%$
Percent of women who call themselves conservatives $=39 \%$

$$
\text { Difference }=7 \text { percentage points difference }
$$

In general, this difference needs to be at least 5 percentage points or more to exceed the randomness that is associated with sampling.

One rule of thumb for interpreting the relationships in tables:

| Size of difference | Size of relationship |
| :--- | :--- |
| Less than 5 percentage points | No relationship |
| 5 to 10 percentage point difference | Small relationship |
| 10 to 20 percentage point difference | Moderate relationship |
| More than 20 percentage point difference | Large relationship |

Because there was a 7 percentage point difference between men's and women's identities as conservatives, the relationship between gender and ideology is a small one.

Let's hypothesize that how religious a person is will shape there political identities. In this hypothesis, the independent variable is religiosity. The dependent variable remains ideology. Thus, religiosity (v144) will be the column variable, ideology will be the row variable, and we will examine the column percents across a row to tell the strength of the relationship. Run the table and fill in the following chart:

|  | Religiosity |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Ideology | Every week | Several times a <br> month | A few times a <br> year | Never |
| Liberal | $14 \%$ | $20 \%$ | $34 \%$ | $31 \%$ |
| Moderate |  |  |  |  |
| Conservative |  |  |  | $100 \%$ |
| Column <br> Percents | $100 \%$ | $100 \%$ | $100 \%$ | 280 |
| Column <br> Numbers | 191 | 215 | 121 | 100 |

Let's compare the column percentages across the conservative row to judge the size of the relationship between religiosity and ideology.

Percent of those who attend services every week who are conservative $\qquad$ Percent of those who never attend services who are conservative Difference $\qquad$ percentage points

This relationship is: small medium large

The relationship between religiosity and ideology is smaller/larger/about the same as the relationship between gender and ideology.

Now let's examine the relationship between age and ideology. The age variable is v146, but it has 6 different categories. Let's collapse that into three categories: young (18-24 \& 25-34), middle age ( $35-44 \& 45-54$ ), old ( $55-64 \& 65$ and older). To do this go back to the main menu page (see page 1 of this assignment) and select "recode variables." Follow the pattern you used in the first assignment to collapse age into the three
categories given. Write down the name of this new variable in your codebook so you can use it in future assignments.

Now go to the command menu screen and run the table with your recoded age variable as the column variable, the ideology variable as the row variable, and select the number of decimal places for the column percents to be 0 . Run the table and fill in the following chart.

|  | Age |  |  |
| :--- | :---: | :---: | :---: |
| Ideology | Young | Middle Age | Old |
| Liberal | $35 \%$ | $20 \%$ | $19 \%$ |
| Moderate |  |  |  |
| Conservative |  |  |  |
| Column Percents |  |  | 250 |
| Column Numbers | 239 | 323 |  |

Percent of the elderly who are conservative Percent of the young who are conservative Difference
$\qquad$ $\%$
$\%$ percentage points This relationship is: small medium large

Now make up your own hypothesis about the causes of ideology. Select one of the other demographic variables from the codebook (v143 to v160).

Ideology will be the row variable. The demographic variable will be the column variable. Run the data and make a chart to resemble those made for gender, religiosity and age.

Draw the table here:

Measure the strength of the relationship by comparing the percent of respondents who are conservative in two of the columns.

Percent of the $\qquad$ who are conservative Percent of the $\qquad$ who are conservative Difference


This relationship is: small medium large

That's all. Close out the program.

