## Tables exercise using WebCHIP

## The assignment

In this exercise you will explore trends in marriage from 1950-2000. The purpose of this assignment is to give you some familiarity with how sociologists use datasets to both describe and analyze the social world. Your task is to use data from the 2000 Census to present trends in marriage behavior in both tabular and graphical form. ${ }^{1}$ You will access that data through an online data analysis program called WebCHIP. In class I will demonstrate exactly what you have to do. Your complete exercise is due Friday April 1, and it is worth $7.5 \%$ of your final course grade. You can help one another with the computing part, but you are honor-bound to fill in the sheet on your own.

## About census data

The U.S. government is constitutionally mandated to conduct a complete count of the population every 10 years in order to properly distribute congressional representatives. The first census was conducted in 1790 and the most recent in 2000. While counting the number of people in each community, the Census Bureau also collects a lot of other information that is very important for planners and researchers. In addition to summaries by state, county, and other geographic areas, the Census Bureau makes available a smaller randomly selected set of respondents for researchers, called the Public Use Microdata Sample (PUMS). With PUMS data researchers can compare the characteristics of different social groups without disturbing anyone's privacy. The Social Science Data Analysis Network has made some of those data available to sociology students through the online WebCHIP program.

## Learning Objectives:

Skill

- Using software to access and analyze census data
- Identifying independent and dependent variables
- Employing control variables
- Learning how to construct, read, and interpret bivariate tables displaying frequencies and percentages
- Creating visual tools representing quantitative data in the form of charts or graphs
- Identifying population trends over time
- Using real world data to enhance and support key course concepts


## Substance

- To discuss trends of marriage

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## Using WebCHIP

Here are the steps to follow to access the data you need to complete the assignment:

1. Go to http://www.ssdan.net/datacounts
2. Click on the "Data" in the menu bar
3. From there, click "Browse" on the left sidebar. Find "centrend" in the drop-down box and select it.
4. Scroll down through the list of data sets until you find "marr502k.dat" Highlight and click "submit."
5. You can also click here to launch the dataset in WebCHIP.
6. Now you've launched WebCHIP! For this data set, they include:

Year, meaning, the census year for each case.
Race, here denoted as Black or Nonblack.
Gender, an individual's self-identification as male or female.
Age, one's age in years grouped into 9-10 year intervals, starting at age 15 .
Marital, divided into currently married (curmrrd), widowed, divorced, separated, and never married (nevmrrd).
2. Look at your data and fill in these blanks. What percent of cases in the sample are:
a. Female?
b. b. 65 and older?
c. c. Never married? $\qquad$
3. Now let's look at how marital status varies by age group (a bivariate analysis). Calculate a crosstabulation of marital status by age. Fill in the following table with the percentages from the results:

Table 1. Marital status by age group (percentages)

|  | $15-24$ | $25-34$ | $35-44$ | $45-54$ | $55-64$ | $65+$ | All |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Currently married |  |  |  |  |  |  |  |
| Widowed |  |  |  |  |  |  |  |
| Divorced |  |  |  |  |  |  |  |
| Separated |  |  |  |  |  |  |  |
| Never married |  |  |  |  |  |  |  |
| Total <br> (write in the <br> number of cases) | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

4. Now answer these questions:
a. What percent of $15-24$ year-olds are currently married? $\qquad$
b. What percent of people 65 and over are widowed? $\qquad$
c. What percent of people are separated in the whole sample? $\qquad$
d. Which age group is most likely to be divorced? $\qquad$
e. Which three age groups are more likely to be separated than the group as a whole?
$\qquad$
$\qquad$ and $\qquad$
5. Answer this question in two or three complete sentences: Is age a meaningful predictor of marital status for people in this data set? In what ways?
6. Now lets look at how the marital status of $25-34$ year-olds has changed over time. Make sure marital status is the row (outcome) variable and age is the column (predictor) variable. Then, select "year" as the control variable. WebCHIP will give you a different table for every census year (six tables). Look only at the columns for 25-34 year-olds to fill in the percentages in Table 2.

Table 2. Marital status of $\mathbf{2 5 - 3 4}$ year-olds, $\mathbf{1 9 5 0}$ to 2000

|  | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Currently married |  |  |  |  |  |  |
| Widowed |  |  |  |  |  |  |
| Divorced |  |  |  |  |  |  |
| Separated |  |  |  |  |  |  |
| Never married |  |  |  |  |  |  |
| Total <br> (write in the <br> number of cases) | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ | $100 \%$ |

7. To make the comparisons easier to see, draw a line graph to show the trends. Draw three lines in different colors: one for the percentage of 25-34 year-olds currently married, one for the percentage divorced, and one for the percentage never married. Put a data point on the line for each year, and then connect the dots.

8. Two more fill-in-the-blank questions:
a. Which census year saw the highest percentage of 25-34 year-olds currently married?
b. Which census year saw the highest percentage of 25-34 year-olds divorced? $\qquad$
9. Write two or three complete sentences that summarize the results shown in the table and graph. What have been the trends in marital status among $25-34$ year-olds in the past 50 years?
10. Again, in two or three complete sentences: based on lecture this week how would you explain these shifts?

[^0]:    ${ }^{1}$ Source: Frey, W.H. 2004. Investigating Change in American Society. New York: Wadsworth

