Learning to Read Tables
"Predictors of Family Structure"

This assignment will require you to locate three tables on-line (detailed directions are provided), print them out, interpret the data in the tables, and answer several questions on what you have learned from the tables.

Learning Objectives

Skill
This assignment will help you learn how to:
- Test hypotheses using quantitative data
- Produce a bivariate table (bivariate means having two variables)
- Evaluate the implied hypothesis (is the hypothesis supported by the data?)
- Provide bivariate tables with a control variable
- Evaluate the hypothesis under the conditions of the control variable

We will be analyzing 1990 census data using WebCHIP software provided by the Social Science Data Analysis Network. You can access WebCHIP through the DataCounts! website. Use these instructions:
1. http://www.ssdan.net/datacounts/data/
2. From there, click "Browse" on the left sidebar. Find "**centrend**" in the drop-down box and select it.
3. Scroll down through the list of data sets until you find "**fmin5090.dat**" Highlight and click "submit." This will bring up the data set in the WebCHIP program and it is ready for analysis.
4. You can also click here to open the dataset in WebCHIP.
5. We will be using three variables from these data sets: family type ("FamType"), race ("RaceLat"), and family income ("FmIncome").

Conceptualizing the variables: Definitions used by the Census Bureau

Family Income ("FamIncome") is the combined earnings of adults in the household expressed as an annual amount.

- <15K- less than $15,000/year
- 15-25K- between $15,000 and $25,000/year
- 25-35K- between $25,000 and $35,000/year
- 35-50K- between $35,000 and $50,000/year
- 50K+ more than $50,000/year

Family Type ("FamType") indicates the type of household defined by gender and marital status.
- MrrdCpl- married couple household
- MaleFam- male headed household, no wife/mother present (i.e. single parent family)

- FemlFam- female headed household, no husband/father present

Race (Race) individual's self-identification as:

- Black- all persons who indicated their race as black
- NonBlack- all persons who indicated their race is not black

Family Type by Race

1. You will create a Percent down Crosstab. This means you will read down the columns on your tables. Notice how if you add up all the percentages in each column, you will get 100%. (Helpful hint: Columns are vertical, rows are horizontal)

2. You want your independent variable as your column variable and your dependent variable as your row variable. Race is your independent variable and family type is your dependent variable (remember, variables such as race, age, and biological sex will not be dependent variables).

Now that you have your data, answer the following questions:

1. What percent of NonBlacks live in the family type, married couple (MrrdCpl)?

2. What percent of Blacks live in the family type, married couple?

3. In what family type are NonBlacks <u>most</u> likely to live?

4. In what family type are Blacks <u>least</u> likely to live?

5. In what family type are Blacks <u>most</u> likely to live?

6. What family type is most rare for both NonBlacks and Blacks?

7. Does race predict family type? That is, does the data support the hypothesis: Race → Family Type

Family Type by Race, Controlling for Family Income

What is a control variable? A control variable is a conditional variable. It allows us to look at the relationship between two variables under different conditions.

Example:
We could look at the relationship between gender and income controlling for marital status. In this case, we could look at the effect of gender on income for married people in one table and non-married people in another table. We would be able to see if gender had the same effect on income for married and non-married people. Marital status, then, is the condition under which we are the testing the relationship between gender and income.

How to create a table with a control variable:

- Select your row and column variables (same as before).
- Sincewant to control by family income, select "FmIncome" as the control variable.
- Create a Percent Down Crosstab to look at your findings.

Present your findings for the poorest family type (<15K) in a table.

Present your findings for the richest family type (50K+) in a table.

Using this data, answer the following questions:

8. When family income is 15K or less, what percent of NonBlacks live in the family type, married couple (MrrdCpl)?

9. When family income is 15K or less, what percent of Black live in the family type, married couple?

10. What percent of Blacks live in the family type, married couple, when family income is 50K or more?

11. What percent of NonBlacks live in the family type, married couple, when family income is 50K or more?

12. Evaluate the following hypothesis. Does your conclusion hold for the poorest group and the richest group?
Race → Family Type

13. Answer the following questions (length should be about a page):

    a. Other than the fact that many groups are lumped together under "Black" and "NonBlack", what is your best explanation for these results?

    b. What other questions do these results raise? (While these results definitely raise value questions, e.g. is this "right" or "wrong", try to formulate sociologically testable questions).

    c. What other hypotheses might you test to answer those questions?