

Investigating Earning Differences Based on Gender

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Learning Objectives:

After the completion of this module, the learner should be able to:

Skill

- Demonstrate the ability to state a hypothesis.
- Demonstrate an understanding of both the dependent and independent variable.
- Demonstrate how to create a cross-tabulation using both frequencies and percentages.
- Demonstrate how to create both a bar chart and a pie graph.
- Demonstrate how to control for a variable and interpret a control variable.
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- Examine and use web resources to explore possible policy implications of data findings in this module.

Substance

- Explain how each of the following variables is related to differences income earnings within the United States: Race, Age, Gender, and Education. Explain what is meant by the term gender gap.
- Demonstrate an effective use of the sociological imagination.

Key Concepts

Gender gap

Control Variable

Dependent Variable

Independent Variable

Hypothesis

Operationalization

Learner's name _____

Learner Pre-Assessment

Before beginning this module, take a few minutes to respond to the following questions:

1. What is meant by the term gender gap?
2. Do you think gender plays a role in income earnings?
3. How comfortable are you with numerical information? Please circle which best describes you.
 1. Not Comfortable
 2. Somewhat Comfortable
 3. Comfortable
 4. Very Comfortable
 5. Extremely Comfortable

A BRIEF INTRODUCTION TO THIS TOPIC:

For this assignment, you will be using the following dataset within WebCHIP:

WORK2K-25. Use these instructions to begin:

You can access WebCHIP through the following link:

<http://ssdan.net/datacounts/webchip>

1. In the left sidebar to choose the collection "**census2000**"
2. Next, select the dataset "**work2k-25**"
3. Click "Compute Marginals" to see all the marginals in the dataset

Before we begin, let's take a closer look at the data. Use the Marginals function on WebCHIP to examine the data for each variable presented in (**work2k-25**). This data set holds information on 2000 Full time workers by education, occupation and earnings, age 25-34.

Please complete the following information:

1. What percentage of full time workers are white? _____
2. What percentage of full time workers are male? _____
3. What percentage of full-time workers have a high school degree? _____
4. What percentage of full-time workers earn more than 50k? _____

Investigating Relationship #1 Gender

If you as a researcher used various theories on income differences. What would you hypothesize about income differences between men and women?

STATE HYPOTHESIS 1: _____

(Remember your rules on how to state a hypothesis).

In the above hypothesis:

What would be your independent variable? _____.

Why? _____
_____.

What would be your dependent variable? _____.

Why? _____.

CREATE A CROSS TAB TO EXAMINE YOUR HYPOTHESIS

Hint:

Dependent Variable = Row

Independent Variable = Column

Create a Percent Down Crosstab

Use the Space Below to list the results of your cross tab

CRITICAL THINKING MOMENT 1

In examining the above table, explain the relationship that seems to exist between gender and earnings.

CRITICAL THINKING MOMENT 2

Overall, do you seem to be on the right track with your hypothesis? Why or Why not?

Sometimes researchers have to control for one variable while examining the relationship between two variables. Controlling allows the researcher to examine whether or not a third variable is accounting for the relationship found between two variables. It might be the case that gender is not the main reason why there is a difference in earnings rather it might be that men have a higher education than women and thus, they earn more than women. In order to examine this relationship, you will need to control for education in the above example.

Create a Percent Down Crosstab with education as the control variable and state your hypothesis. **You will now have several tables to scroll down and examine by education. Carefully examine the data and answer the following questions.**

1. Do earnings differ between men and women with less than a high school education?

Explain _____
_____.

2. Do earnings differ between men and women with a high school degree? _____
_____.

3. Do earnings differ between men and women with some college? _____
_____.

4. Do earnings differ between men and women with a college degree? _____
_____.

5. Overall, do educational differences between men and women (ages 25-34) seem to be accounting for gender differences in earnings?

Explain _____

Investigating Relationship #3 Controlling for Occupation

In thinking about gender differences in earnings, we learned in class that often times women choose occupations that pay less. As a researcher you can control for occupation and examine the relationship occupation has to gender differences in earnings. Create a Percent Down Crosstab with occupation as the control variable and state your hypothesis. **You will now have several tables to scroll down and examine by education. Carefully examine the data and answer the following questions.**

1. Do earnings differ between men and women with blue collar occupations? _____
_____.

2. Do earnings differ between men and women with Service occupations? _____
_____.

3. Do earnings differ between men and women with other white collar occupations? _____
_____.

4. Do earnings differ between men and women with Top White Collar occupations? _____
_____.

5. Overall, do Occupational differences between men and women (ages 25-34) seem to be accounting for gender differences in earnings?

Explain _____

_____.

6. What other factors(control variables) do you think might account for the differences in earnings between men and women? Why?

7. How much of gender differences in earnings do you think is due to gender discrimination? Why?

Learner's name _____

LEARNER'S POST ASSESSMENT

Take a few moments to reflect upon what you have learned in this module:

1. What factors seem to be related to the gender gap?
2. What surprised you most about doing this module? Explain
3. How comfortable are you with numerical information? Please circle which best describes you.
 1. Not Comfortable
 2. Somewhat Comfortable
 3. Comfortable
 4. Very Comfortable
 5. Extremely Comfortable