Handout #1, Data Analysis Project
Investigating the Effect of Race and Gender on Earnings in the US[1]

For the past couple weeks, we have been discussing inequality in America. Often, we think of power – and inequality - in terms of money. Who has more money, and thus, in general, more access to opportunities and resources? Who makes the most money, and who makes the least? Does income differ for men and women, and for whites and people of color? In this exercise, we will examine earnings data for all full-time workers in the US. The data come from the 2012 American Community Survey (ACS). You will be able to examine data for the nation as a whole, for Kentucky, and for a state of your choosing.

LEARNING GOALS:
A. *Substantive: Students will be able to:*
1. Discuss and write about the influence of race and gender on earnings, by examining 2012 American Community Survey data. You will be able to use data to explain whether men make more than women and whether whites earn more than people of color.
2. Use data to make national, regional and state comparisons in terms of earnings.   You will be able to compare Kentucky to the nation as a whole, in terms of income inequality, as well as comparing Kentucky to another state of their choosing. The data shown in the tables for this worksheet come from **http://ssdan.net/webchip/webchip4/** which access acs12_1yr data collection in the earn12 dataset.

B. *Methodological/Quantitative Skills: Students will acquire the following skills, related to data analysis*:
1. Interpretation: Students will be able to:
   * Read and report basic frequencies from a large data set
   * Describe bivariate tables, both orally and in writing
2. Representation: Students will be able to:
   * Take raw data in tabular form and create properly formatted and labeled tables
3. Application/Analysis: Students will be able to:
      Manipulate variables in a large data set using a basic statistical package
   * Identify independent and dependent variables
   * Form hypotheses about the relationship between two variables
   * Analyze relationship between two variables as presented in bivariate table.
4. Communication: Students will be able to:
   * Present hypotheses and findings for relationship between two variables in informal presentation and in a paper that tells a story about the effects of race and gender on income, using numbers as evidence
5. Confidence: Students will feel more comfortable
   * reading and discussing data from a table
   * writing about and using percentages to make an argument

VARIABLES: For this exercise, we will be examining the following variables: earnings, race, gender, and age. Although there are many ways in which each could be conceptualized, the following ways are those used by the U.S. Census Bureau and the Bureau of Labor Statistics:
EARNINGS: Money a person makes from working, as wages, salary, or a form of self-employment, expressed as an annual amount

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[1] This exercise is based on a module originally developed by Tim Thornton, SUNY-Brockport.

SEX (Gender) - individual's self-identification as either male or female.
AGE: - age divided into the following categories: 16-24, 25-34, 35-44, 45-54, 55-64, 65+
RACE (RaceLat) – individual's self-identification as:

- **Non-Latino White (NLwhite)** – all persons who indicated their race as white and not of Hispanic origin.
- **Black** – all persons who indicated their race as black.
- **Asian (or Pacific Islander)** – includes all persons who indicated their race or ethnicity as Chinese, Filipino, Japanese, Asian Indian, Korean, Vietnamese, Cambodian, Hmong, Laotian, Thai, or other Asian as well as Hawaiian, Samoan, Guamanian or other Pacific Islander.
- **Latino**– persons of white or "other" races who identified themselves as Mexican, Puerto Rican, Cuban, or Other Spanish/Hispanic. This category can refer to ancestry, nationality group, lineage, or country of birth of the person's parents or ancestors before their arrival in the U.S.
- **American Indian (AmIndian)** – all persons who classified themselves as American Indian, Eskimo or Aleut.
- **Non-Latino Multiracial (NHMulti)** – any Non-Hispanic persons who identified as more than 1 race
- **Non**-**Latino Other (NHOther)** – any Non-Hispanic persons of a single race that was not white, black, American Indian/Alaskan Native (AIAN), Asian or Pacific Islander

FREQUENCIES: A frequency table gives an overall sense of the distribution of a particular variable or set of variables. Here are the frequencies for the variable RaceEth (race) for the ACS sample of **full-time, year-round workers in 2012.**

RaceEth

NLwhite	Black	Asian	Latino	AmIndian	NLOther	NLMulti
66.64%	10.99%	5.66%	14.58%	0.65%	0.18%	1.3%
66,373,488	10,941,577	5,634,626	14,520,086	651,281	181,575	1,291,286

Note that the first row of data gives percentages, and the second row gives the total number. Thus, in the U.S., 66,373,488 fulltime, year-round workers in 2012 were Non-Latino white, which represents 66.6% of fulltime workers. Generally, for comparison purposes, we talk about percentages, rather than raw numbers. We see that about two-thirds of US full-time workers in 2012 were White, about 11% of all workers were Black, about 5.6% Asian, about 14.6% Latino, less than 1% were American Indian, less than 1% were of an unlisted race, and 1% were multiracial.

Now examine the frequencies for age, gender, and earnings below:

Sex:

Male	Female
57.01%	42.99%
56,777,424	42,816,495

Earnings

<25K	25-34K	35-49K	50-69K	70-99K	100K+
21.25%	16.72%	20.34%	17.74%	12.32%	11.62%
21,164,805	16,656,906	20,252,549	17,670,738	12,273,126	11,575,795

Age

16-24	25-34	35-44	45-54	55-64	65+
6.46%	22.65%	24.27%	25.94%	17.3%	3.38%
6,438,489	22,554,567	24,175,482	25,833,255	17,226,983	3,365,143

Answer the following:
- What percentage of all full-time workers are men? _____
- What percentage of all full-time workers make less than $25,000? _____
  Less than $34,000: _____ $50,000 or more? _____
- What percentage of all full-time workers are 16-24? _____ older than 65? _____

Now describe these frequencies in easily understood English. In other words, how would you describe all full-time workers in the year 2012?

Now you get to be the sociologists. You can see that about 21% of all full-time workers make less than $25,000. Who are they? About 24% of all full-time workers make more than $70,000. Who are they? Are they men or women? Are they Whites, African Americans, Latinos, Asians? Which age group makes the most? The least? Begin by making hypotheses about what you expect to find:

HYPOTHESES:
1) SEX: _____ will have higher incomes than _____.
2) RACE: _____ will have the highest incomes, and _____ will have the lowest.
3) AGE: People in the age group _____ will earn the most money, and people in the _____ age group will earn the least.

In order to investigate your hypotheses, you will need to do cross-tabulations, also called bivariate tables. In a cross-tabulation, you are simply exploring the association between two variables. Before running these, think about what you really want to know. It makes sense to say that a person's sex affects his or her earnings. It does not make sense to say that earnings affect a person's sex.

The following two definitions are important:
INDEPENDENT VARIABLE (X) the variable that influences or affects another variable
DEPENDENT VARIABLE (Y) the variable that is influenced by, or depends upon, another variable

You can write the relationship between the two as X → Y . In this case, we are interested in how sex influences earnings. Sex would be the independent variable (X), and earnings would be the dependent variable (Y). In other words, earnings to some extent, depend on sex:

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 Independent     Dependent
  Variable     →     variable
         X → Y
    Sex → Earnings
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Below is a bivariate table (cross-tabulation) of sex and earnings:

Table 1: 2012 Earnings by Sex for U.S. Full-time Civilian Workers, ACS

Earnings	Male	Female	Total
<25K	18%	25.5%	21.3%
25-34K	14.7%	19.4%	16.7%
35-49K	19.2%	21.8%	20.3%
50-69K	18.6%	16.6%	17.7%
70-99K	14.1%	9.9%	12.3%
100K+	15.4%	6.7%	11.6%
Total	100% = 56,777,424	100%= 42,816,495	100%= 99,593,919

source: 2012 wgtd ACS12, Frey/U-Mich for SSDAN

Do incomes differ for men and women in KY, and if so, how? Who actually makes more?   Below, try to write a description of this table:

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Here's my description: From Table 1, we see that female full-time workers typically make less than male full-time workers. For example, 45% of women make $34,000 or less, compared to only 33% of men. By contrast, 29.5% of full-time male workers make $70,000 or more, compared to only 15.6% of women.

Note how I have described the data. I started with a broad, generalized statement: "female full-time workers typically make less than male full-time workers." Then I used specific statistics from the table to make my case. Note that since I **percentaged down the rows**, and I **compared across the columns**. In other words, I compared percentages **across men and women**.

Now let's examine the influence of race on earnings:

Table 2: 2012 Earnings by Race for U.S. Full-time Civilian Workers, ACS

	NLwhite	Black	Asian	Latino	AmIndian	NLOther	NLMulti	Total
<25K	16.5%	27.6%	19.3%	37.9%	33.4%	25.8%	23.3%	21.3%
25-34K	15.5%	20.9%	12.7%	20.8%	19.4%	16.8%	17.2%	16.7%
35-49K	20.8%	21.8%	16.3%	18.4%	21.3%	22%	20.8%	20.3%
50-69K	19.4%	15.7%	16.9%	12.1%	13.4%	15.3%	16.7%	17.7%
70-99K	13.9%	9.2%	16.1%	6.4%	8.3%	11.3%	11.8%	12.3%
100K+	13.8%	4.8%	18.7%	4.3%	4.2%	8.8%	10.3%	11.6%
Total	100%	100%	100%	100%	100%	100%	100%	100%
	66,373,488	10,941,577	5,634,626	14,520,086	651,281	181,575	1,291,286	99,593,919

Source: Source: wgtd ACS12, Frey/U-Mich for SSDAN

When interpreting this table, you are going to want to compare ACROSS the categories (e.g. compare Whites to Blacks), not down the categories. To make comparisons easier, you might want to combine some categories. Which categories make the most sense to combine? How would you do this? Below, write a brief description of race differences in earnings. This will likely take you several drafts. I'll take this up Monday and give you feedback.

Handout #2- Data Analysis
Investigating the Effect of Race and Gender on Earnings in the US[1]

Now that we have walked through the national level data in class, you are going to replicate these analyses yourself and then examine data for Kentucky and another state of your choosing. To do so, you are asked to work in pairs.

Please choose the state you would like to examine: _____

GETTING STARTED:

1) To get started, go to the website:
   http://ssdan.net/webchip/webchip4/

2) On the left, you will see the title Choose Dataset. Underneath, in the upper left box that says Select Collection, hit the down arrow and choose the dataset "geo2012." In the box below that says Dataset, click on the down arrow and you will see a list of datasets, each containing **state level data sets**, with the suffix indicating the state. For example, Earn_KY contains the data for Kentucky. Click on the data set you want to analyze. All of you will be analyzing KY data, and then pairs of you will each examine a different state. Start by choosing the Earn_KY. (Please note, to find **national data**, under "Select Collection" go to acs12_1yr, then for Dataset, choose Earn.)

A) FREQUENCIES: A frequency table gives an overall sense of the distribution of a particular variable or set of variables. **To examine the frequencies of each variable:**
   1) **Click on "Compute Marginals"**

You will see a table for each variable. For example, for the racial composition of the fulltime, year-round workforce in Kentucky, you will see the following table:

RaceEth

NHWhite	Black	Asian	Hispanic	AmIndian	NHOther	NHMulti
88.22%	6.98%	1.35%	2.6%	0.16%	0.05%	0.62%
1,148,624	90,865	17,594	33,908	2,143	706	8,123

Note that the first row of data gives percentages, and the second column gives the total number. Thus, in Kentucky, 1,148,624 fulltime workers are white, which represents 88% of fulltime workers. Generally, for comparison purposes, we talk about percentages, rather than raw numbers.

B) After examining the frequency tables for age, gender and income, answer the following questions for **KENTUCKY**:
   - What percentage of all full-time workers are men? _____
   - What percentage of all full-time workers make less than $25,000? _____
     Less than $35,000: _____ More than $69,000? _____
   - What percentage of all full-time workers are 16-24? _____; older than 65? _____

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[1] This exercise is adapted from a module originally developed by Tim Thornton, SUNY-Brockport.

3) Now describe these frequencies in easily understood English. In other words, how would you describe all full-time workers for the state you chose in the year 2012?

4) Once again, please make hypotheses about what you expect to find about differences in earnings in the state of Kentucky and another state of your choosing:

HYPOTHESES FOR KY:
      1) GENDER: _____ will have higher incomes than _____.
      2) RACE _____ will have the highest incomes and _____ will have the lowest.
      3) AGE: People in the age group _____ will earn the most money, and people in the
         _____ age group will earn the least.

HYPOTHESES FOR State _____
      1) GENDER: _____ will have higher incomes than _____.
      2) RACE _____ will have the highest incomes and _____ will have the lowest.
      3) AGE: People in the age group _____ will earn the most money, and people in the
         _____ age group will earn the least.

5) **CROSS-TABS** (Bivariate Analysis): To run cross-tabs, you will need to tell the program which variable is your dependent variable, which is your independent, and how to percentage your tables (across or down). Remember the following:
INDEPENDENT VARIABLE (X) - the variable that influences or affects another variable
DEPENDENT VARIABLE (Y) the variable that is influenced by, or depends upon, another variable
Do the following:
      A) Scroll down the side menu to the section labeled "Choose Variables" on the left.
      B) Click the down arrow next to the box labeled "Row" and select a variable. For the purposes of this assignment, always **put your dependent variable in the rows**. So, for this example, choose earnings for your row variable by highlighting "Earn".
      C) Now you will need to choose your **column variable**. For this assignment, always **put your independent variables in the columns**. So, choose gender as your independent variable by highlighting "Gender" as the column variable.
      D) Now scroll down to the section labeled "Generate Table" and click **"percentage down."**
      E) This should bring up your bivariate, cross-tab table.
      F) To look at the effect of race on earnings, follow the steps above, this time choosing "RaceEth" as the column variable
Making a chart:
Scroll down further on the left, and you'll see "Generate Chart" with four options. Play around with the four options to find what makes most sense for graphically depicting your data. (Hint, not all of these charts will make sense.)
Once you have examined the frequencies and cross-tabs and graphs for Kentucky, click on the data set for the state of your choosing, and repeat the steps above. You will also need to go back to the data set for the nation as a whole and repeat the steps above. To examine national data you need to look under **acs2012_1yr** data collection, and then click on the data set Earn.

Overall, you need the following information for (a) the nation as a whole (under **acs2012_1yr**, Earn), (b) Kentucky (in geo2012, earn_KY) and (c) a state of your own choosing:
1) frequencies (marginals) of age, gender, race, and income distributions
2) the cross-tab of earnings by gender
3) the cross-tab of earnings by race

After you have analyzed these data, please write a 4-6 page essay that compares your state to either the U.S. as a whole or to Kentucky. The essay is described below.

DATA ANALYSIS PAPER

For this assignment, you are asked to write a paper which analyzes the effects of gender and race on income. You are asked to do this for a state of your own choosing and to compare the findings to the US as a whole or to Kentucky (or another state). Your paper should follow the outline of a general research paper:

Introduction: You should start with a general introduction that lays out the main questions you will explore. Please do NOT start by saying "This paper is a data analysis about….".

Brief Literature review: You should refer briefly to studies, helping us understand the issue. What have you learned about race and gender differences in income from readings for this class and other sources? You can refer to studies referenced in our book or other sources. (Wright and Rogers are especially good sources for this.) Make sure that you properly cite your sources – ask me if you do not know how to do this properly. I know that you are not an expert on these issues, so I fully expect that you will summarizing and paraphrasing (and therefore citing) others who are.

Data: For this section, you need to describe the full-time working populations of your state, as well as either Kentucky or the U.S. To do this, describe the MARGINAL FREQUENCIES (not the cross-tabs). What I'm looking for is a description of the racial composition, gender composition, and earnings distribution for your chosen state and either KY or the U.S. (you don't need to do the age distribution). YOUR DATA SECTION SHOULD LOOK VERY SIMILAR TO YOUR ANSWER TO QUESTION 3 ON PAGE 2 OF THIS HANDOUT. Please **do not** include every single statistic (you'll put me to sleep). Instead, try to succinctly summarize the information that you think is most important. This will take you a few tries. Try reading it aloud to a friend and having them tell you what they think you mean. The point of this part of the exercise is to become comfortable using and discussing **basic** statistics. This part should be comprehensible and easily understood. Do not just list statistics; try to keep the reader engaged.

Results: This is the heart of your paper, where you are describing your bivariate tables (cross-tabs). Start by giving your hypotheses: which groups did you expect to make the most and least? Then you need to describe how earnings differ by race and gender, both in your state and either in KY or the US. Do men or women make more money? How does your state compare to the nation as a whole or to Kentucky? Where do you see the greatest evidence of a wage gap in earnings? Speculate why this might be the case. You also need to describe racial differences in earnings. Which racial groups have the highest and lowest earnings? Again, report specific findings both for your state and either Kentucky or the nation. Where do you see the largest wage gap in terms of race? Make sure you include the appropriate tables with your paper.

Tables: Tables should always be numbered, titled, and clearly labeled (and please number your tables in the order in which you refer to them). **You should have the totals at the bottom**. I usually put 100% = [total #]. In order to get **the totals** for your cross-tabs tables, first follow the directions for generating a cross-table; then after you have clicked on "percent down" to get the table with percentages, click on "frequency" to get the actual numbers. You'll find the total number there. You also need to have the source at the bottom of your tables. An example of a properly formatted table follows:

Table 1: 2012 Earnings by Sex for U.S. Full-time Civilian Workers, ACS

Earnings	Male	Female	Total
<25K	18%	25.5%	21.3%
25-34K	14.7%	19.4%	16.7%
35-49K	19.2%	21.8%	20.3%
50-69K	18.6%	16.6%	17.7%
70-99K	14.1%	9.9%	12.3%
100K+	15.4%	6.7%	11.6%
Total	100% = 56,777,424	100%= 42,816,495	100%= 99,593,919

source: wgtd 2008-12 ACS, SSDAN/U-Mich 2012

Conclusion: Sum up your main findings, and discuss reasons you think we find these differences. Why do we find the patterns we see? One reason is probably discrimination, but there are many, many other reasons for these differences. You should NOT conclude that the differences you see are simply due to discrimination (though this is indeed a part) – there are many other forces at work. Again, consult our text and other sources to help guide you here.

Bibliography: Make sure to include the full citation for any of the literature you refer to in you brief literature review. To cite the data sets, you can cite each state using the following:

Frey, William H. "2010 Full-time, year-round workers, age 16+, [*name of state*], wgtd 2008-12 ACS, SSDAN/University of Michigan. 2012. < http://ssdan.net/datacounts/webchip> [date you got your information from the website].

If you decide to compare your state to the national statistics, then cite the national stats as follows:

Frey, William H. "2010 Full-time, year-round workers, age 16+, Kentucky, wgtd 2008-12 ACS, SSDAN/ University of Michigan. 2012. < http://ssdan.net/datacounts/webchip > [date you got your information from the website].

Context Statement: This project was designed to introduce you to and give you practice with the following skills: read and report basic frequencies in a table, interpret numbers in a bivariate table, convert raw data into formatted tables, identify independent and dependent variables, analyze the relationship between two variables, tell a story using numbers.

For your paper, please also include a "Context Statement." In a couple paragraphs, please describe your experience writing a paper based on data analysis. What did you learn from this experience? What did you find most challenging? Has this helped you feel more confident about working with numbers? In what ways would you like more help or practice? You may comment directly on the skills listed above or discuss any other issues relevant to this assignment.

FORMAT: Make sure to **double-space your paper**, use a heading for each section (Introduction, Literature Review, etc.), number your pages, do not use "you," and do not split tables across pages. If you choose, you may write this paper with a partner. Make sure to use headings for each section.

DUE DATES: Fri 10/7: draft lit review and one table with full description (and practice presenting in class); **Wed, 10/12: Peer Review:** Bring **typed draft** to class – this counts for 10% of the grade of the paper. **Bring a printed copy** so that a classmate can work directly on your paper (I will check all of these in class.); **Final Draft due Mon, 10/17 (I will not accept emailed copies).**

Rubric for Data Analysis Papers

	Grade	Strengths – what to focus on	Areas to improve:/typical problems
Peer Review 10			
Intro 5		Clear, lays out main points	Needs to be broader
Literature review 10		Relevant to paper, discusses gender and race income inequality; brings in outside sources; properly cites sources	Info not relevant Didn't bring in sources Didn't cite properly (if improper citing or plagiarism, **paper fails**)
Results section:			
Data (describe areas) 15		Clearly describes frequencies (marginals) of own state and other state or U.S.	Didn't adequately describe frequencies
Income by gender 15		Uses language properly Tells a story	
Income by race 15		Uses language properly Tells a story	
Tables 15		Properly numbered, labeled, titled have totals and source at bottom, etc.	
Conclusion 5 Sums up findings, refers back to relevant lit, offers some reasons why we see patterns			
Works Cited 5			If improper citing/plagiarism – **paper fails**
Context Statement 5			

Soc 110 – reading and writing about statistics: TELL A STORY WITH NUMBERS.

Rules:
- start with general statement without numbers (e.g. "Men make more than women.")
- back up claim with stats – and follow same direction of statement. For example, if you say "Men make more than women" then show how more men fall into the high-income categories, not how more women fall into the low-income categories. If you say "Women make less than men," then show how more women fall into the low-income categories.)
- when using stats, always say ___% of ___ (e.g. "10% of Hispanics"). Do NOT say "Hispanics are 10%."
- when showing similarities across groups, use 'and'
- when showing differences, use "compared to" "while only" etc.
- have a summary statement at the end.
- Write as if you care about what you found – these numbers mean something!

Useful phrases:
- A higher proportion of … fall into the (lower income/higher income) category
- a disproportionately high/low number of … fall into the …
- … are overrepresented/underrepresented among low-income/high-income groups…

Bouma's attempt at describing race differences in income for the US (ACS 2008)

When examining race differences in earnings in 2008 for the U.S., we see that Non-Hispanic Whites and Asians have the highest earnings, and African Americans, Native Americans and Hispanics have the lowest. For example, we see that more than one-quarter of all Asians and one-fifth of whites earn above $70,000.   This compares to only about one in ten African Americans or Native Americans, and less than one in twelve Hispanics earning this much. When we examine the low-income categories, we now see that Blacks, Native Americans, and especially Hispanics are over-represented. Over 30% of both African Americans and Native Americans earn less than $25,000 every year, and a full 43% of Hispanics earn this little. This means that about two out of every five Hispanics earned less than $25,000 in 2008. This compares to just 19% of Whites and 21% of Asians. Overall, then, we see that Asians and Whites fall disproportionately into the high-income categories, and Blacks, Native Americans, and especially Hispanics are fall disproportionately into the low-income categories. [*Do not use this description in your paper; I'm sure you can write a better one*.]

2008 Earnings by Race for U.S. Full-time Civilian Workers, ACS

	NHWhite	Black	Asian	Hispanic	AmIndian	NHOther	NHMulti	TOTAL
<15K	5.5%	9.5%	6.2%	13.5%	11.6%	10.1%	7.5%	7.1%
15-24K	13.5%	21.8%	14.8%	29.4%	24.2%	20.9%	17.3%	16.8%
25-34K	17.5%	22.6%	15.2%	21.0%	21.5%	21.0%	20.0%	18.4%
35-49K	21.8%	22.1%	18.4%	17.7%	20.1%	18.8%	21.9%	21.1%
50-69K	18.5%	13.9%	16.9%	10.3%	12.6%	13.4%	16.4%	16.7%
70-99K	12.1%	6.8%	14.7%	5.0%	6.3%	9.2%	9.7%	10.6%
100K+	11.2%	3.3%	13.8%	3.1%	3.6%	6.6%	7.1%	9.3%
TOTAL	100% 66,678,276	100% 10,610,592	100% 4,694,340	100% 13,309,425	100% 611,753	100% 216,348	100% 962,917	97,083,651

Source: wgtd 2006-08 ACS, SSDAN/U-Michigan

2000 Full time, year round civilian workers in New Mexico, N = 535,639

Race of fulltime workers in NM, 2000

NHwhite	Black	Hispanic	Asian	AmIndian
53.1%	1.0%	34.0%	0.7%	11.2%

Gender of Fulltime Workers in NM, 2000

Male	Female
58.4%	41.6%

Earnings of Fulltime Workers in NM, 2000

<15K	15-25k	25-35K	35-50K	50-75K	75K+
18.2%	30.1%	16.1%	19.9%	11.1%	4.6%

Age of Fulltime Workers in NM, 2000

16-24	25-34	35-44	45-54	55-64	65+
8.7%	21.5%	31.1%	25.8%	10.1%	2.8%

Table 1: Earnings by Gender for Full-time Year-round Civilian Workers in New Mexico, 2000

Earnings	Male	Female	Total
<15K	13.5%	24.9%	18.2%
15-25k	26.2%	35.7%	30.1%
25-35K	17.1%	14.7%	16.1%
35-50K	21.4%	17.9%	19.9%
50-75K	16.0%	4.3%	11.1%
75K+	6.0%	2.6%	4.6%
All	312,703	222,936	N = 535,639

Table 2: Earnings by Race for Full-time Year-round Civilian Workers in New Mexico, 2000

	Non-Hispanic White	Black	Hispanic	Asian	American Indian	ALL
<15K	12.8% (36,503)	12.4% (668)	21.4% (39,007)	23.4% (895)	34.3% (20,587)	18.2%
15-25k	27.1% (76,974)	34.3% (1,843)	34.0% (61,987)	23.4% (895)	32.8% (19,671)	30.1%
25-35K	15.0% (42,777)	0.0% (0)	18.4% (33,474)	10.6% (404)	15.7% (9,438)	16.1%
35-50K	23.0% (65,353)	34.4% (1,848)	17.8% (32,387)	0.0% (0)	11.8% (7,090)	19.9%
50-75K	14.6% (41,402)	18.9% (1,017)	6.9% (12,654)	42.6% (1,628)	4.6% (2,752)	11.1%
75K+	7.5% (21,228)	0.0% (0)	1.5% (2,730)	0.0% (0)	0.7% (427)	4.6%
	100%	100%	100%	100%	100%	100%
All	284,237	5,376	182,239	3,822	59,965	N = 535,639

Read the following statement: *In 2009,, the death rate for Latinos was lower than for Whites in the state of Kentucky.*

1). What is the dependent variable
      in the above statement? [1 pts]
A. death rate
B. whites
C. race/ethnicity
D. Kentucky

2) What is the independent variable
      in the above statement? [1 pts]
A. death rate
B. whites
C. race/ethnicity
D. Kentucky

For the following questions, please refer to the handout. Examine carefully the tables which present information on fulltime, year-round workers in New Mexico in 2000. Please answer the following: (1 pts each)

3) How many fulltime workers are included in this sample? _____

4) What percent of the fulltime labor force in New Mexico is Hispanic? _____

5) What percentage of workers earn less than $25,000? _____

True or False: (1 point each)

6) _____ 23.4% of Asians make less than $15,000.

7) _____ 25.2% Whites and Blacks make less than $15,000.

8) _____ 38% of Whites make between $25,000 and $50,000.

9) _____ 4.6% of those making between $50,000 and $75,000 are American Indian.

Multiple Choice: (2 pts each)

10) Which of the following is correct: (2 pts)
A. 12.8% of those making less than $15,000 are Non-Hispanic White.
B. 12.8% of Non-Hispanic whites make less than $15,000.
C. both A and B.
D. none of the above.

11) Which of the following is correct:
A) 41.6% of women work.
B) 41.6% of the work force is female
C) 41.6% of the US population is female.

12) Compared to the population of the US workforce as a whole, the workforce of New Mexico:
A) overrepresents Blacks and Asians.
B) is disproportionately Hispanic and American Indian
C) has a larger proportion of Whites
D) has a larger proportion of Blacks

13) Please describe the racial composition of fulltime, year-round workers in New Mexico: (4 pts)

14) Please describe the effect of gender on earnings in New Mexico (6 pts)

15. Please describe your comfort level when working with numbers:
A. I often work with numbers and enjoy it.
B. I have little experience working with numbers but am generally comfortable when I do.
C. I have little experience working with numbers and am not comfortable when I do.
D. Numbers scare the stew out of me, and I do my best to avoid them.

16. Please indicate how confident you feel about doing the following tasks. Mark the response that most accurately describes your confidence level for each item.

	Don't know what you're talking about	**Not at all Confident**	**Not Very Confident**	**Somewhat Confident**	**Very Confident**
Read and report basic frequencies in a table	Don't know	Not at all	Not very	Somewhat	Confident
Interpret numbers in a bivariate table	Don't know	Not at all	Not very	Somewhat	Confident
Convert raw data into formatted tables	Don't know	Not at all	Not very	Somewhat	Confident
Identify independent and dependent variables	Don't know	Not at all	Not very	Somewhat	Confident
Analyze the relationship between two variables	Don't know	Not at all	Not very	Somewhat	Confident
Tell a story using numbers	Don't know	Not at all	Not very	Somewhat	Confident

17. For part of this class, I will be teaching you how to read and construct tables, analyze data, and tell a story using numbers. Is there anything you would like me to know about your skills or interest when working with numbers?