Assignment 3 Instructions

The third assignment will pull together the work you have done in the first two assignments, and result in a complete research brief examining the relationship between public sector analysts' race/ethnicity and salaries. It will be similar in structure to the short research papers we have read this semester.

There are two components of Assignment 3. The first is to complete the multivariate regression analysis, which examines the relationship between race/ethnicity and salary among public sector analysts, controlling for demographic and work factors. You will use the results to complete Table 3.

The second component is to write the rest of the research brief. Below I describe the content that should be in each of the four sections:

- Introduction: Please begin with a 2-3 paragraph introduction. Like the articles we have read, this section should provide:
    - The policy context for the study (what is known about racial and ethnic differences in salary generally and for public sector employees in particular), and
    - A clear statement of the research question.

- Methods: Please detail in 2-3 paragraphs the key aspects of the study's methods, including:
    - Data (the data source, the inclusion criteria, and the sample size),
    - Variables (independent, dependent, and control variables), and
    - Statistical tests (bivariate and multivariate).

- Results: Please revise the write ups to assignments 1 and 2, and add the multivariate results. The first part of the multivariate write up should focus on the results of the key research question, and the second part can highlight any other findings of interest.

- Discussion: Please conclude the research brief with a 2-3 paragraph section that includes:
    - Highlights of the key findings,
    - The policy and management implications of the findings, and
    - Limitations of the research and/or areas for future research.

- Tables: The three tables should be presented after the research brief write up, each on a separate page (unless you are able to integrate them).
    - Please make sure that your numbers are in the middle of the columns, your columns are decimal aligned, and that you use a comma to separate thousands from hundreds.

Time line:
- Before last class, reach out to 1-2 students to develop a peer review plan
- Last class, come with questions
- Submit Assignment 3 before the final exam on Blackboard

Tips on the analysis:
- Remember there is a codebook defining the variables and the value labels included in Assignment 1.
- You will need to determine which variables you need to create dummy variables for, and in each case you will need to select the reference group.
- In Table 3, you will need to indicate which group you choose to be the reference category. A common way to indicate the reference category is to put a dash in the column where the reference category is, since you will not be putting in a regression coefficient.
- If you use syntax, please take a screenshot or copy and paste it into a Word document to submit.

Tips on writing:
- Please use the following subheadings to indicate each section of your research brief: introduction, methods, results, and discussion.
- For the introduction section, **you will <u>need to cite at least three</u> relevant studies**. They can be academic articles or newspaper articles.
- Feel free to use any bibliographic convention you would like, just please be consistent in how you cite sources.
- It is rare in this type of writing to use quotations from the relevant citations.
- For your write up of the multivariate results, it is very helpful at the start of a new paragraph to signal to the reader what analyses you are presenting. Like you did with the bivariate results, you can preface the regression results by saying something like: "In multivariate analyses controlling for analysts' characteristics, we found…."
- I encourage you to make the brief as reader-friendly as possible. Read it out loud to yourself to make sure it sounds clear.
- Please do not put p-values (or null hypotheses) in the write up.

Table 3. Multivariate Regression Model Examining the Relationship between Public Sector Analysts' Race/Ethnicity and Salary, Controlling for Demographic and Work Characteristics

Characteristics	Regression Coefficient
Race/Ethnicity	
White (non-Hispanic)	
Black (non-Hispanic)	
Hispanic/Latino	
Asian	
Other	
Gender	
Female	
Male	
Age (in years)	
18-35	
36-45	
46-55	
56-70	
Education level	
Associate's Degree	
Bachelor's Degree	
Master's Degree or higher	
Type of Analyst	
Management analyst	
Budget analyst	
Financial analyst	
Computer systems analyst	
Operations research analyst	
Level of Government	
Federal	
State	
Local	
Geographic Area	
New England	
Mid-Atlantic	
East North Central	
West North Central	
South Atlantic	
East South Central	
West South Central	
Mountain	
Pacific	

*$p<.05$, **$p<.01$, ***$p<.001$