

**Political Science 202**  
**Introduction to Political Analysis**  
**Fall 2023: Problem Set #6**

**Due on Blackboard on Friday, November 3 at 6:00 PM. 3 points in total. Late submissions are penalized with 1 point per 24 hours.**

**MAKE SURE THAT YOU RECEIVE AN UPLOAD CONFIRMATION and SAVE THE CONFIRMATION (submission date and confirmation number). If you have trouble uploading to Blackboard, email as an attachment to your TA before the deadline. If you don't get a reply confirming that you handed it in, send it again.**

**You can discuss the problem set with others, but you need to submit your own answers. If you discussed the problem set with others, note their names on your submission.**

1. A researcher wants to use Mill's methods to investigate the reason behind whether people run for Congress (yes/no). She considers the following potential explanations: whether they have previous political experience (yes/no), whether they have above-average wealth (yes/no), and whether they have a college degree (yes/no).
  - a. How could she do so using the method of difference (also known as the most-similar method)? Explicitly describe which comparison she would set up, and how she could use the method of difference to isolate the variable that leads to people deciding to run for Congress. Provide an example of how she could use the method of difference to successfully identify what causes people to run for Congress (to do so, you are welcome to make up cases).
  - b. Do the same as in a. but using the method of agreement (also known as the most-different method)
  - c. Why might Mill's methods of difference and agreement not be able to identify which factor causes people to run for office?
2. A researcher hypothesizes that in a comparison of individuals, older people want to spend less money on education. He conducts a survey that records whether a respondent is older than 50 or younger than 50; and whether they want to increase education spending or decrease it. He observes the following: 187 people are younger than 50 and want to decrease education spending. 502 people are younger than 50 and want to increase education spending. 235 people are older than 50 and want to decrease education spending. Finally, 98 people are older than 50 and want to increase education spending. Create a cross-tabulation. What is the zero-order effect of age on preferences for education spending? Does the data support the hypothesis?