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

Due in Turnitin (Blackboard) on Friday, March 24 at 9:30 AM. 5 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.

1. The table below demonstrates several factors that could impact the dependent variable, whether there were transnational terrorist attacks.

Case	Counterterrorism Strategies	Region	Afghanistan and Iraq invasions	Transnational terrorism
UK	Moderate	Europe	Military support	Attacks
Italy	Strong	Europe	Military support	No attacks

   a. Which of Mill's methods does the above table illustrate?

   b. What might we conclude about the cause of transnational terrorist attacks, according to this table? Why?

   c. What might be the problem with drawing any strong conclusions from this table?

2. We hypothesize that in a comparison of individuals, older people want to spend less money on education.

   a. First, we survey 10 people and record their age as well as what percentage of the government budget they want to spend on education (higher percentage=more spending). The table on the next page lists those two variables for the 10 respondents. Using one of the many websites that help you do this (or using Excel), calculate the Pearson's correlation coefficient between age and spending preference and interpret what the correlation tells us. Does it support our hypothesis?

Age	Preferred education spending percentage
43	1.3
65	2.2
19	4.3
22	2.5
56	3.9
75	1.9
42	3.0
44	1.1
25	4.9
85	2.0

b. Second, we conduct a larger survey, but decide to use simpler variables. For age, we simply record whether a respondent is older than 50 or younger than 50. For education spending preferences, we ask whether they want to increase education spending or decrease it. We observe 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 our hypothesis?