Raquel Shaffer
April 8, 2023
Week 3 Quiz

Question 1: Describe the following three methods used on collecting data: surveys, observations, and archives/archival data.

Surveys: You can do interviews or questionnaires. As stated in our discussion this week, questionnaires are more convenient than interviews because you can get information quickly.

Observations:
Covert observation: participants don't know they are being observed.
Overt observation: Observers reveal themselves to participants.
Naturalistic observations: when you watch the subject in their natural habitat.
Contrived observation: the study is controlled and set up for research purposes.
Nonparticipation observation: the researcher is not directly involved in the situation.
Participation observation: active involvement in the researcher under observation.

Archival:
Archival research: Analysis of existing data or records.
Secondary data: data was collected by someone else for research, and you get access to it.

Question 2: Explain the difference between probability and nonprobability sampling. In a perfect world, which of the two would researchers prefer to use and why?

Answer#2
Probability is random sampling, where everyone has the probability of getting chosen for the study, and no probability is not random. Here is the list.
Probability Sampling:
- Simple random sampling
- Stratified random sampling
- Cluster sampling
Non-Probability Sampling:
- Convenience sampling
- Quota Sampling
- Maximum Variation Sampling
- Snowball sampling
In a perfect world, researchers would use simple random sampling because it has the potential to give the most accurate results. Technically I think if researchers could get information from everyone and not need a sample, they would most likely choose that.

Question 3: Chapter 5 talked about measures of central tendency and measures of variability. Compare and contrast each. How can each one be used to describe a sample of respondents to a survey?

Answer#3
The central tendency is the number that summarizes the score. Other scores are found close to it.

The Mode was chosen most often. The median is the score you get when you cut the sample in half so that 50% are on one end and 50% are on the other. The Mean is the average.

Measures of variability describe how scores vary in a sample. You can use minimum and maximum scores to measure variability. You can also use the range, the distance from the minimum to the maximum, and a standard deviation, which simply looks at the scores that differ from the mean.

Either central tendency or measures of variability can be used to sort your data. I think that you need to use different scales to determine skewness.

Question 4: Discuss one thing you learned in chapter 4 or 5 not covered in the questions above.

Answer#4
I learned that there are a lot of moving parts that go into the statistical analysis required to do a thesis. The section in the chapter on skewed distribution was interesting. I don't know what my data will look like, but I'm curious to see if the distribution will be positively or negatively skewed. And if it is, I wonder in what area of my research this would occur.