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Week 3 Quiz

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

Surveys consist of questionnaires and interviews. Interviews elicit a very direct and clear response as it does not allow for any ambiguity. Questionnaires provide a more neutral line of questioning which can sometimes create confusion amongst those taking it. It is most effective when looking to do research on a larger group of individuals.

Observations are obtained by the researcher being present and observing the reactions and responses in real-time. This can be time-consuming as it does not provide a simple and straightforward method for collecting and coding data.

Archival data is collected from preexisting studies. These can be a bit difficult to sort through and to ensure it relates to your study.

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?

The difference between probability and nonprobability sampling is that probability sampling is a random selection while nonprobability is not. In a perfect world, probability sampling would be the ideal choice as it will ensure a non bias approach is met.

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?

The measures of central tendency are nominal, ordinal, normally distributed ratio and skewed ratio. Mode can be used to describe central tendency when using a nominal measurement scale. Ordinal and skewed ratio can be used to describe the median while normally distributed ration can be used to describe the mean.

Variability can be observed at a minimum/maximum range using an ordinal measurement scale and a skewed interval ration. If using the normally distributed ratio scale, variability can be described by the standard deviation and observation of the minimal/maximum of data.

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

I wouldn't necessarily say I learned this concept here, but it was interesting to see it come up again. I completed my Undergraduate degree in 2022 as an accounting major. Chapter 5 brought back much of the terminology I vaguely remembered from Statistics. It was one of those things where you thought

you would never have to remember it and yet here it is again. That being said I do remember standard deviation, range, variance etc. being a major focus in statistics and now that I am able to view it in a different light, I completely understand the importance.