**Descriptive and Inferential Statistics**

Order 1634397

Description

Descriptive and inferential statistics are a very important part of research.  Descriptive statistics organize numerical data that was obtained from a sample.  Any time a sample is used to estimate a population, there is a chance the estimate or sample would not be representative of the population.  Inferential statistics determine the likelihood that the sample chosen is representative of the given population.   Upon successful completion of this discussion, you will be able to: Discuss the differences between descriptive and inferential statistics.   Discuss measures of central tendency.   Discuss how probability relates to inferential statistics.   Discuss correlation and distinguish between a negative and a positive correlation. Resources Textbook: Foundations of Nursing Research by Rose Marie Nieswiadomy Article: Sample size in quantitative research  PPT File: Chapter 15 PPT File: Chapter 16 Background Information The purpose of statistics is to generate meaning from the data so that researchers can draw conclusions and make recommendations for nursing practice. There are two classifications of statistics; they are descriptive and inferential statistics. Descriptive statistics describes and organizes data whereas inferential statistics makes inferences about a population.  Instructions Review the rubric to make sure you understand the criteria for earning your grade. Read Chapters 15 and 16 in your textbook: Foundations of Nursing Research.   Review the article, Sample size in quantitative research: Sample size will affect the significance of your research. View the Chapter 15 and Chapter 16 PowerPoint files. Prepare to discuss the following Discussion Prompts: Describe the differences between descriptive and inferential statistics.    Describe how probability (random) sampling and sample size relate to inferential statistics and the ability to generalize the findings to a larger population.    Discuss what a p-value indicates about the results?  Why is this important to evidence-based practice?     Describe the difference between causation and correlation. How does a correlational measurement demonstrate the strength of the relationship between variables? Provide examples of both a negative and a positive correlation, using patient satisfaction scores as one of the variables. Find at least two or three current scholarly sources (2015-2020) to support your explanations and insights.  Wikipedia is not permitted, as it is not a peer-reviewed, scholarly source. Whether written or spoken, interactions are expected to: clearly and thoroughly address the prompt with meaningful information that shows critical thinking.