Sample Comprehensive Exam Questions for Methods/Statistics

1. You have collected data from the Fortune 500 companies regarding their top 5 highest paid employees (such as CEOs, president, etc.) You have the following information on these 2,500 workers: demographics (gender, age, and education), time in months at the company, and salary. Your research question is whether gender makes a difference in salary. In detail, explain what descriptive and inferential statistics you would use to answer this question. Also specify the type of variables that you are using in the analysis. You may provide an outline of tables or graphs that you would use in your analysis. Also, provide a discussion of the limitations and strengths of the research design.

2. A researcher has conducted a study examining the effects of witnessing violence on externalizing behavior in 5th and 6th grade children. She administers the conflict tactics scale to the parent or parent substitute to assess the level of violence in the home. This measure produces two scales, one assessing whether or not the child has heard “long, loud arguments” and a second assessing whether or not the child has witnessed “acts of hitting, slapping or punching.” She administers the teacher version of the child behavior checklist to the children’s teachers to assess externalizing behavior. Since other variables may also impact a child’s behavior in school, she also administers the neighborhood report form to assess the level of violence in the neighborhood. Suppose the researcher is not very well versed in statistics and comes to you for advice. If all variables can be considered normally distributed, what statistics would you recommend that the researcher use to examine the research question above? Your recommendations must be clear and justify your choice of statistical technique. Be sure to discuss how you would examine both the statistical significance and effect size of any relationships suggested by the above research protocol.

3. Let us assume a graduate student is interested in the phenomena of youth “tagging.” The graduate student proposes to do fifteen (15) interviews with a group of youngsters who have each been part of tagging crews. Let us assume that the IRB has approved the interview guide and let us imagine the graduate student recruits 15 youth who meet the criteria. The research question this hypothetical graduate student seeks to address is: “Why do youth engage in tagging?” What epistemological issues do you see? Assess the “fit” between the research question and the proposed method. What advice would you give the graduate student?

Bibliography for Methods/Statistics


**Other Intermediate/Advanced Texts and Readings**


