

SPSS Homework 4

Use the dataset entitled spss4.data.1 found on the website to complete the following questions.

Fifty college applicants either took part in standard study methods (standard) for the SATs (e.g., using self-help books like Barron's or the Princeton Review), or they took part in a special 16 hour SAT workshop in addition to their normal studying (advanced). The data consist of their condition (standard vs. advanced), their GPA in high school, their gender, their SAT verbal scores, their confidence that they will perform well in college prior to studying for the SATs, and their confidence that they will perform well in college after studying for the SATs, as well as whether they ended up being accepted into a 4 year college.

1. Conduct a related samples t-test to determine if there is a significant difference in confidence levels before studying for the SAT and confidence levels after studying for the SAT. Report your findings in an APA formatted summary paragraph.
2. Conduct a point biserial correlation to see if SAT verbal scores and college acceptance are significantly related. Report your findings in an APA formatted summary paragraph.
3. Conduct an independent samples t-test to determine if there is a significant difference between gender and SAT verbal scores. Report your findings in an APA formatted summary paragraph.
4. Conduct a Pearson's correlation to determine whether there is a significant relationship between GPA and SAT verbal scores. Report your findings in an APA formatted summary paragraph.
5. Conduct an independent samples t-test to determine if there is a significant difference between the study methods on SAT verbal scores. Report your findings in an APA formatted summary paragraph.
6. Conduct a simple regression analysis and find the regression equation where GPA is the predictor variable and SAT verbal score is the criterion variable. Does the slope significantly differ from zero? Using the regression equation, what SAT verbal score would you predict for an individual with a 3.0 GPA.