SPSS Assignment 3 Answers

JP

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# Context (20 points)

You are interested in looking at depression levels in a sample of college students. You were originally interested in the relationship between body mass index (BMI) categories and depression levels. Specifically, that there would be differences between normal BMI (< 25.1), overweight (25.1 - 30), and obese (> 30) categories. You then became interested in whether these differences in BMI categories was dependent on if one’s race/ethnicity was Latino or not a Latino. You hypothesize that there would be a significant interaction between BMI categories and race/ethnicity on depression levels. Conduct the test that would be used to answer your hypothesis.

1. What test will you be running? (1 point)
2. Create a depression composite score (2 points)

* include your initials for full credit in the variable name

1. Create caetegories for BMI (2 points)

* Normal = BMI < 25.1
* Overweight = BMI > 25 and BMI < 30.1
* Obese = BMI > 30

1. Create categories for Race/ethnicity (2 points)

* 4 –> 1 (latino group)
* every other category (0, 1, 2, 3, 5, 6) –> 2 (not latino group)

1. Run descriptives statistics (2 points)

* report the mean and SD for the composite score
* run descriptive statistics on all the depression items, bmi (continuous), bmi (categorical), and race/ethnicity (latino and not latino)

1. Get descriptive visual for the composite score (1 point)

* is the skewness acceptable
* is it “normal” enough

1. Conduct the inferential statistic for the test you decided to run (2 points)
2. Report all the F statistics (2 main effects & 1 interaction; 3 points)

* should look like this: F(#, #) = F value, p value

1. Show a visualization of the interaction (3 points)
2. Look at the simple effects and tell me what groups are significantly different from one another (1 points)
3. Write up your findings. (1 point)