

SPSS 3 Practice

A researcher is interested in the effects of music on stress levels, and how stress levels might be related to anxiety and life satisfaction. 36 participants (males and females) were randomly assigned to one of three music conditions (control/rap/classical) and were exposed to the treatment for one hour per day, for one week. Participants indicated their education level and whether they exercise regularly. After one week, participants were asked to report stress levels, anxiety levels, and life satisfaction on a scale of 1 to 10 (1= no stress, no anxiety, not satisfied and 10=high stress, high anxiety, very satisfied, respectively). Please conduct the following analyses on the reported data:

1. Conduct a 2 (gender) x 3(music type) completely between subjects factorial ANOVA on stress ratings. Be sure to include means, standard deviations, and effect sizes.
2. Conduct a Oneway ANOVA on life satisfaction using music conditions as the independent factor. Conduct a Tukey post-hoc test, and show the means and standard deviations.
3. Conduct a Chi-Square Test of Independence on the relationship between gender and whether or not subjects exercise. Be sure to include expected values and measures of effect size. Include a clustered bar graph of this relationship as well.
4. Calculate the correlations between stress, anxiety, and life satisfaction ratings.
5. Calculate a point-biserial correlation between exercise and anxiety ratings.