Final Study Guide

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2022-05-03

1. Know what the difference between a correlation and a regression
2. Know the difference between a correlation coefficient and a regression coefficient
3. Know how categorical predictors are included in a regression
4. Know how a two-way ANOVA and a moderation analysis are different and the same
5. Know the different types of moderation analyses.
6. Know what centering is
7. Know how to interpret values
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9. Know the difference between values and values
10. Know what simple slopes analyses are.
11. Know what the intercept is with various amounts of variation in predictors (e.g., multiple predictors including both continuous and categorical predictors)
12. Know the differences between predicted and actual values/scores
13. Know the difference between a simple linear regression and a multiple linear regression
14. Know what a residual is
15. Know how to assess goodness of fit; including the use of sum of squares values and values
16. Know the assumptions for a linear regression, including but not limited to: linearity, independence of residuals, homoscedasticity, normally distributed errors, non-zero variance, external variables, and multicollinearity
17. Know what test is used for significance testing for both correlation and regression
18. Know how to check for bias in regression models
19. Know which of the residuals is the better option and know which is the worse
20. Know the general rules for using measures of distance to assess influencial cases
21. Know how many participants should be available for each predictor in a regression model
22. Know the difference between a hierarchical regression, a simultaneous regression, and an automated regression
23. Know what a nested model is.
24. Know how to assess whether a finding is statistically significant or not
25. Know the differences between each factorial design
26. Know the difference between a one-way ANOVA and a two-way ANOVA
27. Know what dummy coding is.
28. Know which groups are compared when running a two-way ANOVA with an interaction between two categorical independent variables/predictors
29. Know how many F tests are present when running a two-way ANOVA
30. Know how to interpret F tests
31. Know what *type* of test an F test is
32. Know what the differences is between a main effect and an interaction
33. Know how to report each test (e.g., correlation, two-way ANOVA, and regression)
34. Know the differences between covariance and correlation
35. Know the range of correlation
36. Know what corss-product deviations
37. Know how to calculate the covariance
38. Know what standardization is
39. Know the difference between the correlation coefficients
40. Know the issues that arise from using correlation or regression techniques
41. Know the difference between correlation coefficient and a coefficient of determination
42. Know the difference between point-biserial and biserial correlation coefficients
43. Know what a partial correlation is
44. Know how partial correlations are related to regression models
45. Know the difference between a partial and semi-partial correlation
46. Know the effect sizes for tests
47. Know how to report correlation coefficients