

## ANCOVA

Stalking is a very disruptive and upsetting experience in which someone (the stalker) constantly harasses or obsesses about another person. Stalking can take many forms, from sending intensely disturbing letters to literally following you around in the places where you live and socialize. A psychologist decides to try two different therapies on people who reported a history of stalking and reported currently exhibiting stalking behaviors (25 stalkers in each group; this is the Group variable in the data set Stalker.sav). With those in group one, the psychologist used a cognitive-behavioral approach. With those in the second group, she used a psychodynamic approach. At the end of 3 months, the psychologist asked the clients to report on the number of hours each week they engaged in stalking-type behaviors (this variable is called Stalk2 in the data set). The psychologist understands about covariance and believes that success of the therapy will likely depend on how bad the behavior was to begin with, so she asked the clients to report at their first session the number of hours that the client engaged in stalking-type behaviors (this variable is called Stalk1 in the data set).

Following below requirements, analyze the effect of the therapies on stalking-type behaviors after therapy ended while controlling for initial number of hours of stalking-type behaviors.

1. State the underlying assumptions for the statistical test.
2. State whether the assumptions have been met. If the assumptions were not met (either in actuality or hypothetically), state what alternatives you have available to you.
3. State the null and alternative (research) hypotheses.
4. Copy your syntax file and paste it into your MS Word Document.
5. For your output file: Select all → Copy all objects → Paste into your MS word document. This will ensure that your output is in a form that your instructor can read.
6. Create a results table consistent with requirements from the APA style manual.
7. Report the results using correct APA format.
  - a. For ANOVA, ANCOVA, and Repeated Measures ANOVA models, ensure that you provide interpretations for the main effects and interactions as well as any post-hoc tests.
  - b. For Multiple and Logistic Regression models, ensure that you include appropriate measures of model fit as well as the specific procedure used (e.g., Hierarchical, Enter, Stepwise, Forward, Backward).
8. Describe how you would compute the sample size to achieve 80% power,  $\alpha = .05$ , and the appropriate effect size.