

65. Data Analysis Project 1: Crammed Versus Distributed Study

Use the description below of this study and the data set indicated to answer the research questions listed. You will need to use both descriptive and inferential statistics to complete this project. You can download the SPSS data file *Analysis_project_1.sav* from http://psychology.illinoisstate.edu/jccutti/StatsDataFiles/Analysis_project_1.sav for the analyses. Write an APA-style results section based on the analyses you conducted.

Research Project Description

The data for your project is the result of an organizational study of the effectiveness of a communication skills training program. Thirty management employees from the XYZ Corporation were interested in improving their group communication skills. These employees signed up for a 12-week “Group Communication and You” training course. An additional 30 management employees who were not interested in completing the training course served as a control/comparison group.

All employees were observed as they interacted in group settings prior to the training period. Observers recorded scores of employees’ communication skills on a scale that ranged from 0 to 50 (with higher scores indicating better communication skills). After the 12-week training period (or, for the untrained group, after 12 weeks had passed), all employees were observed again and their communication effectiveness was rated using the same scale.

The researchers also measured employees’ extraversion. *Extraversion* is defined as the extent to which individuals are outgoing, assertive, and sociable (high extraversion) versus reserved, timid, and quiet (low extraversion). This measure was given to all employees prior to the 12-week training period because the researchers suspected that extraversion may be related to one’s communication effectiveness.

The researchers (pretend that’s you) are interested in several things:

- Is there a difference in communication skills at Time 2 between the trained and untrained groups?
- Did the trained group improve their communication skills after the training (Time 1 versus Time 2)?
- Is extraversion related to communication skills?

Data Set Details

- **subject:** This refers to the subject number assigned to each subject. Each row corresponds to one subject’s data.
- **traingp:** This variable refers to whether the employee is in the trained or untrained group (0 = untrained, 1 = trained).
- **extrav:** This variable refers to the extraversion score of each subject.
- **time1:** This variable refers to the subjects’ communication effectiveness scores prior to the 12-week period.
- **time2:** This variable refers to the subjects’ communication effectiveness scores after the 12-week training period