

How to do a One-Way Between-Subjects ANOVA with Planned Comparisons on SPSS

1. Open SPSS
2. Click Variable View
3. In the first box of the first row, type the independent variable name—it must be 8 characters or less with no spaces
 - a. If you want a more detailed name enter this in the label box.
 - b. Click on little gray box next to “None” under Values.
 - c. A new screen should appear.
 - d. Enter the Level number (for level of IV) in the Value box.
 - e. Enter the Level name (for level of IV) in the Value Labels box.
 - f. Click add.
 - g. Repeat steps d-f for each level of the IV, then click OK
4. In the first box of the second row, type the dependent variable name—it must be 8 characters or less with no spaces
 - a. If you want a more detailed name enter this in the label box.
5. Go to File, select Save As to save your data—enter the name you want to call the data file and click on Save. Make sure you are saving to Desktop.
6. Click Data View—your variable name should now be at the top of the first column.
7. Enter Data. For each score in the data set, you enter two pieces of information:
 - a. In the first column, you enter the level of the IV the data belongs to.
 - b. In the second column, you enter the actual data score.
8. Go to File, select Save to save your data.
9. Click on Analyze, then click on Compare Means, then click on One-Way ANOVA.
10. Move your independent variable name to the box on the right side labeled “Factor” by making sure that your independent variable is highlighted, then clicking the right arrow (→) next to the Factor box.
11. Move your dependent variable name to the box on the right side labeled “Dependent List” by making sure that your dependent variable is highlighted, then clicking the right arrow (→) next to the Dependent List box.
12. Click on Contrasts (to do planned comparisons).
 - a. Enter coefficient for the first group (including – if negative), then click add.
 - b. Repeat step 11a for each group’s coefficient.
 - c. Click Next to do another comparison and repeat steps a & b or click Continue when done.
13. Click Options
 - a. Make sure there is a check mark next to Descriptive, Homogeneity of Variance, and Means plot, then click Continue.
14. Click OK. Your results should appear on the screen.
15. Choose File, then Print to save your results as a pdf file.
16. Don’t forget to save the output! Follow procedure from step 5.