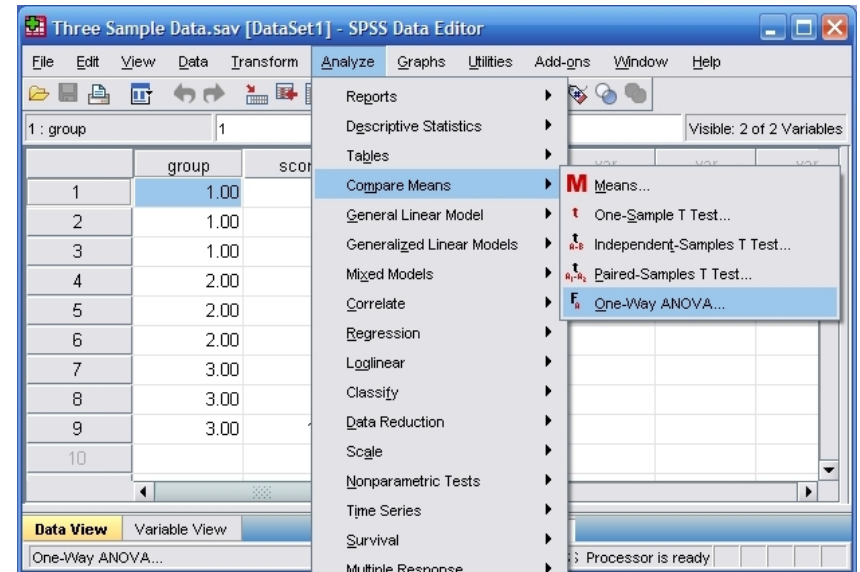


# SPSS LESSON: ONE-WAY ANALYSIS OF VARIANCE

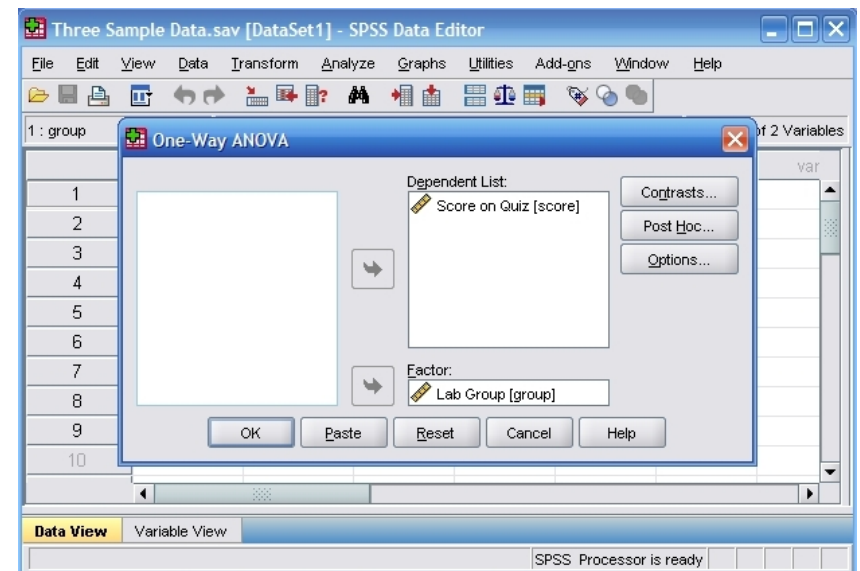
## Steps for Obtaining Two-Sample Inferential Statistics

1. First, enter the data. This is done in the same manner as entering two sample data (described elsewhere) but with additional groups.
2. After the data is entered, select the “Analyze → Compare Means → One-Way ANOVA” option from the main menu.



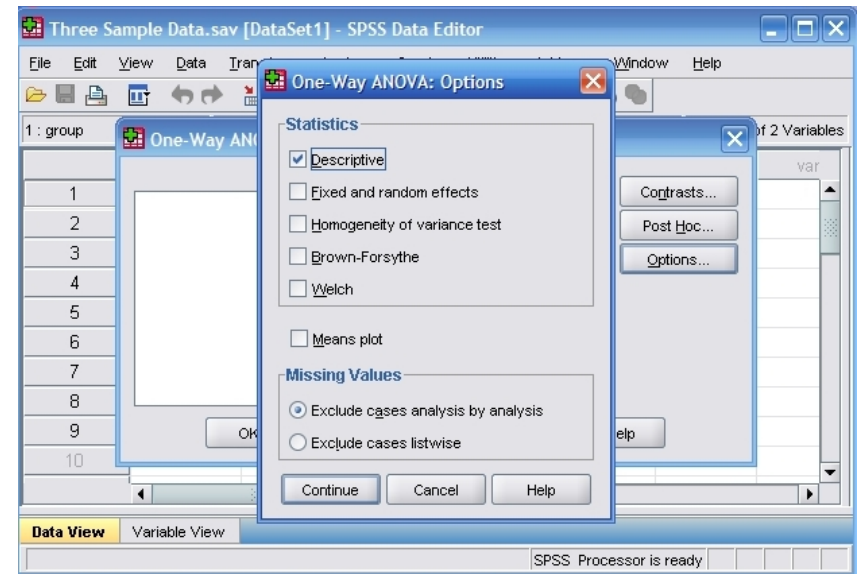
## Steps for Obtaining the Significance Test

3. A dialogue box will then appear for you to choose the variables of interest.
4. Select the outcome variables you wish to analyze by clicking on them and hitting the arrow to move them into the “Dependent List” box.
5. Move the variable that defines the different groups to the “Factor” box. SPSS will not ask you to define the groups you wish to compare; it simply will compare all groups defined by the factor.
6. If all you wish is an ANOVA source table (with no descriptive statistics or post hoc tests), click “OK.” A separate window with the output will appear. You will note that this matches the types of output used in class.



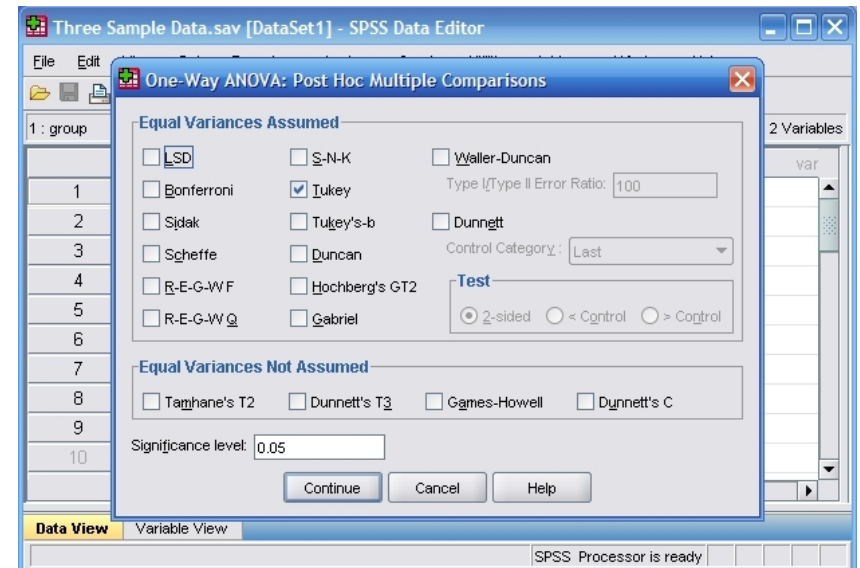
## Steps for Obtaining Descriptive Statistics

7. If you wish to get the means, standard deviations, standard errors, and 95% confidence intervals for each group, select the “Options” button.
8. Another dialogue box will appear where you can choose various statistics. Select “Descriptive.” When you are done, click “Continue.” This will return you to the original dialogue box.
9. If all you wish is an ANOVA with the descriptive statistics (and no post hoc tests), click “OK.” A separate window with the output will appear. You will note that this matches the types of output used in class.



## Steps for Obtaining Post Hoc Tests

10. If you wish to obtain post hoc tests for the purpose of making comparisons between groups, click the “Post Hoc” button.
11. Another dialogue box will appear where you can choose which post hoc tests you wish. Select “Tukey” to get Tukey HSD post hoc tests. When you are done, click “Continue.” This will return you to the original dialogue box.
12. After clicking on “OK” in the original dialogue box, a separate window with the output will appear. You will note that this matches the types of output used in class.



**Your data have now been analyzed!**