

Lab 7 – SPSS supplement

For this lab you will be considering one dependent variable and two independent variables. To begin, you should start the program as always.

Entering Data:

Since there are two independent variable (diet and activity time) you will need to define a total of three variables.

Variable one: Can be the variable that is defined for the dependent measure (average amount of sleep). This variable will represent whole numbers so that when you define it the type will be numeric with 1 decimal place.

Variable Two: This will identify the levels of one of the independent variables. If you define this as the diet variable you will need to identify a numeric variable with no decimals. You can enter code numbers for the diets in the same way that you did for geographical areas in lab six. (e.g., 1 = herbivore, 2 = omnivore etc.) If you do this you may want to use the **label** command to help keep the groups straight.

Variable Three: This variable will identify the other independent variable (activity time). You will need to have a numeric variable with no decimals and with labels for which gender goes with each of the two activity times.

Once the variables are defined you can enter all of the data. Remember that all of the average sleep values go in one column.

Analyzing Data:

To compute a simple factorial design you want to go to **analyze**. From the pull down menu choose **General Linear Model**. From the side menu select the top choice, **univariate**. This will produce a dialogue box. Place the dependent measure (average sleep) in the **dependent** box. Then the two independent variables (diet and activity time) go in the **Factors** box. Then click on the **options** button. (It is in the vertical line of buttons to the right.) Place the variables for diet, activity time and diet*activity time in the box to the right. This will provide means for these factors. Click on **continue**. You will be returned to the main univariate dialogue box. Now click on the **post hoc** button. (Also on the vertical row of buttons.) Place the variable for diet in the right hand box of the new dialogue box, click on one of the post hoc tests and click on the **continue** button and then the **OK** on the main dialogue box.

Lab Due: Fri. Dec. 4th . Please include the printouts and lab questions.