**GOAL of ASSIGNMENT**: Write a to-do list of steps that will allow you to go from your data in its current form to SPSS output that reveals information about whether your hypotheses are supported. You might also plan additional analyses that speak to “exploratory” research questions you have (those not central to your hypotheses).

Please cover the steps below in the data preparation and analysis plan you submit. You do not have to actually DO these steps at this point. Simply tell me what you *will* do on Wednesday when you come to class, so that I can correct any big misunderstandings you have, and so that you have a concrete plan for this big task!

1. Run frequencies and/or descriptive statistics (means, standard deviations) on the numeric variables in your file, to look for unexpected surprises, errors, skewed variables, or general “weirdness”. ☺ You’ll know “weirdness” when you see it. For example, from this step you might learn that there is a ceiling effect for one of your variables, that 90% of your Ps chose the same exact response for another variable, that 75% of your sample is composed of females. You’ll check the values associated with each response option for any surprises (i.e., errors). All of this information (and more) is helpful to learn *prior to* running any of your important analyses. In your data preparation & analysis plan, for this first step just explain which variables in your file you will run frequencies and descriptive statistics on, and *how* you will run these in SPSS (Hint: see *SPSS Cheat Sheet - basics*, on Moodle).

2. Decide with your group and describe what criteria (if any) you will use to exclude participants from your key analyses. E.g., did you use any manipulation check questions? Are there ways to check whether participants were paying attention or following instructions? Can you look at participants’ open-ended responses to see if these indicate a reason the participant should be excluded? For this step, make a list of all the possible criteria on which you’d *consider* excluding participants. If you will need to systematically code open-ended responses, explain what criteria you would code these responses on. (In the end, we will probably exclude the fewest number of participants as possible, so as to not lose power.)

3. Describe what you will need to do to the variables in your data file related to your predictor and outcome variables, in order to make them ready for analysis. E.g., Do you need to label or recode your “condition” variable? Do you need to recode any scale items that are worded in the opposite way from other items in that scale? Do you need to check whether items in a scale are statistically reliable (*Cronbach’s alpha)*? Do you need to add, average, or count variables or responses? Do you know where to find information on how to execute these various tasks using SPSS? (You will not do *any* of this stuff by hand (too error-prone), so please reference the document *SPSS Cheat Sheet-basics*, on Moodle*.*)

For any new variables you need to create (e.g., the average of a five-item scale), write down what you’ll *name* this new variable when you create it in your SPSS file. Use a name that is relevant to the variable (e.g., use *MN\_forgiveness* for a variable that captures each Ps’ mean for their forgiveness scale items).

4. List your hypothesis(es) one by one and, under each, the specific type(s) of statistical analysis(es) that must be done to test it/them. Note which variables – both currently in your SPSS file and variables you need to create (see #3) – will be involved in each SPSS analysis. (Please reference the *SPSS Cheat Sheet - data analysis*, on Moodle*.*)

5. How might you graph your data from the analyses in #4? Include the graph with hypothetical data from Outline V3, including any updates to the graph that I might have suggested. Create the graph in Excel as best you can.

6. Finally, what one or two exploratory analyses could you do on the data you collected? These analyses would be ones that you do not have strong hypotheses about. Since you and participants have spent so much time collecting data, it only makes sense to see what else you can find, particularly if your data do not support your hypotheses. A researcher would typically follow up on any interesting findings from exploratory analyses in future studies. You may or may not include any exploratory findings in your papers or presentations, but you should run at least one exploratory analysis. For this question, indicate what research question you could answer with your exploratory analysis, and indicate what type of statistical test you would need to analyze those data.

***Some notes of caution for when you actually begin working with your data:***

1. Save the raw data file (SPSS file) in a safe place, and then re-save that file with a different name (I often replace the words “raw data” with “working file”). Only make changes to the working file. This way, if you make any mistakes, you can easily reference the raw data file or start from scratch with the raw data file.
2. Do not delete ANY participants or participants’ data from your working file. There are ways to filter out participants from analyses that do not involve deleting data. Deleting data creates room for error so just avoid it.
3. Similarly, do not delete ANY variables from your working file. There are ways to create new variables from existing variables that do not involve deleting data. Deleting data creates room for error so just avoid it.