

Issues with Missing Data in SPSS:

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In this document, I briefly overview how to handle missing data correctly in SPSS.

As Strayhorn (2009) notes, many different national databases label missing data differently. For most NCES datasets, they will label missing data as either -1 or -4 or -9. These usually mean either the respondent did not answer the question, it's a legitimate skip (the question asks something like, are you a teacher who teaches math? If not skip to the next set of questions), or there was some problem with the data entry. Other datasets may have missing data as 999, 9999, NA, N/A, ".", or just blank " ".

You need to be very careful and purposeful with these types of data when doing analysis. Note that if you do nothing, and your missing data is 999, then all of your averages will be wrong. The same is true of -1, -4, or -9.

Thus, it is important to tell SPSS about these numbers, otherwise your range will go from -9 to the max for your data, which is not real. This also throws off all of your statistics. But, you don't want to just recode them all as system missing, because you should always keep the information on why these are missing, in case you need the information later. For example, you may want to infer something about the missing data, but if the respondent could never have responded, because it's a legitimate skip let's say, then you need to take that into account.

Luckily, SPSS has a very nice way of handling these types of numbers.

Please watch this youtube video all the way through (don't stop in the middle as the best parts are near the end) on "Code and define missing values in SPSS"

<https://youtu.be/gxIqw8D5Xbg>

This should help you code your missing values correctly. Also, when you're working on your midterm and final, please make sure to include as Table 1, your descriptives, which includes the min and the max for every variable, as well as mean and standard deviation. The min/max reporting will show you if you have negative numbers that you were not expecting.