

Unit 3 – MS Excel for Epidemiology Homework

Due: Wednesday September 16, 2020

Submission date for credit with -10 points: Friday September 18, 2020
Last date for submission for credit (-20 points): Wednesday September 23, 2020

Before you begin

Launch MS Word, create a new document and name it using the convention *lastname_unit03.docx*. You will be doing some EDIT > COPY in MS EXCEL followed by some EDIT > PASTE in MS WORD. Do not exit MS WORD. Instead “minimize” so that you can come back to it.

1. **This exercise gives you practice in creating and documenting a spreadsheet.** Consider the survey data that you collected last week. By any means you like, create a spreadsheet of these data. Specifically, create an excel workbook file that contains two spreadsheets, one containing the **raw data** and the second containing your accompanying **data dictionary/coding manual**.

Dear class,

If you are already knowledgeable in REDCap, by all means go ahead and use REDCap. Alternatively, if you have a version of MS Excel that is older than 2016, you might have fun googling “how to create a data entry form in Excel and going that route. I’d hoped that this utility would be available in my 2019 version of Excel but, sadly (boo hoo) it is no longer offered) - cb

1a) Show me the first 10 rows of your 1st spreadsheet: **raw data**.

- rename this spreadsheet *rawdata*
- Use your cursor and shift key to highlight the first 10 rows
- Now click **EDIT > COPY**
- Return to MS Word
- In your MS Word document, create a table with 1 row and 1 column
- Now click **EDIT > PASTE** into your *lastname_unit03.docx*.

1b) Show me your 2nd spreadsheet: **coding manual**.

- rename this spreadsheet *coding manual*
- Use your cursor and shift key to highlight all the rows of your coding manual
- Now click **EDIT > COPY**
- Return to MS Word
- In your MS Word document, create a table with 1 row and 1 column
- Now click **EDIT > PASTE** into your *lastname_unit03.docx*.

2. **This exercise gives you practice in preparing Excel for loading into Stata or R Studio.**

In Excel, format the columns of your spreadsheet as either TEXT or as NUMERIC, as appropriate, depending on the variable type. Save.

Why am I recommending this? As a matter of convenience (and it really is), it's a good idea to get into the habit of formatting your excel file data as either **text** or **numeric**. If this is not the case, then later you may error messages in Stata or R Studio. And then the fix is a hassle. The exception to his recommendation is in the handling of dates. We'll get to that later. *There is nothing to show me here.* I'll take your word for it that you're successful!

3. **This exercise gives you practice in importing excel data into Stata or R Studio.**

By any means you like: (1) **import** your saved excel data into your Stata or R Studio session; and then (2) **save** your imported data as a new Stata data set (".dta") or R dataset (".Rdata"). Similarly, *there is nothing to show me here.* I'll take your word for it that you're successful!

4. **Choose one variable in your dataset that is qualitative/categorical.**

4a) Produce any **numerical summary** you like. Paste it into your *lastname_unit03.docx*.

4b) Produce any **graphical summary** you like. Paste it into your *lastname_unit03.docx*.

4c) In 1-2 sentences, what conclusions do you draw?

Dear class,

I understand that we have not gone into detail as of yet in the actual analysis of data. This exercise is meant to encourage you to play with the software, borrow from previous illustrations, or perhaps revisit some of the internet resources I have provided. If you find you are really stuck, just let me know and I will help you! - cb

5. **Choose one variable in your dataset that is quantitative/continuous.**

5a) Produce any **numerical summary** you like. Paste it into your *lastname_unit03.docx*.

5b) Produce any **graphical summary** you like. Paste it into your *lastname_unit03.docx*.

5c) In 1-2 sentences, what conclusions do you draw?

How to submit your homework

Please submit a SINGLE PDF Only