Writing the Results section

This short module is going to be about writing the results section of the report.

Slide 2: What is the purpose of the results section?

The first thing, to begin with, is, of course, what's the purpose of the results section. Well, it's where you're going to briefly describe your experiment, each of the experiments, if you carried out several experiments, your survey, the sets of interviews, etc. How it is you collected your set of results. You're going to present the key results, but you're not going to interpret them - that's the purpose of the discussion section. Instead, you want to present the selected data, and you're generally going to select the data that you present because it's the most representative. Typically, most common data or they are the best examples of what it is that you found. Or you presented it because it's unexpected. So these are the three main types of reasons why you're going to select the particular that you present in your results section.

Slide 3: Components of the results section [write in past tense]

Now, the results section is written in the past tense because it's work that's already taken place. And as I mentioned just a moment ago. The key is that it is **without** interpretation. If you have additional results, you can, of course, put them in an appendix or as supporting material. Don't feel that everything has to be crammed into the results section. It's where you're presenting your key results. Now. What order should you present them to your reader? Well, typically, you're going to present them - the most important first. What are my most important results? Or perhaps you have a whole series of ever more complex results, and then you might present the simplest first.

Or, in some cases, it might make the most sense to present them in chronological order. I measured this on this date. I measured this on the following day. And I measured this on a subsequent date because there might be an importance to the chronology - the time flow of all of them.

Or I may put them in the same order to match the methods in my method section of the report because I might have different methods that I'm going to apply. And so I would now present the results in the matching order. But no matter which of these you choose, you should be systematic. So, for example, if you have a system, it might be sensible to say, "Aha! I start with my inputs - I look at those inputs coming into the system. I look at them in the first stage of processing, the second stage of processing, etc. all the way through to my outputs." And now, I can very nicely describe how did I go from input to the output. Be sure to summarize your results. Every table needs a cross-reference from your text. Every FIgure needs a cross-reference from your text. If you put in source code snippets, again, you should refer to them and then add

the details of each of them as needed. But a key feature is you're identifying the importance of each of the different results. Why is this result presented? Why is it important? And, of course, if you have statistical values - you should include the p-values - so that your reader can understand are these results statistically significant or not.

Slide 4: Add appropriate tables, graphics, pictures, ...

Now. As we mentioned, a picture is worth a thousand words, (Right!) So the result is we want to figure out as we present our results: What's the best way of presenting it? Is as a figure? Is it a table? Perhaps it's a picture. But the key is you want to show your results. It is also important to remember that whether it's a figure, table, or picture, it needs a caption. And the caption should be sufficient that somebody can understand what is in that table, figure, or picture - even if they can't actually see it. And that is particularly difficult to do. But think of the user who's listening to it being read by a speech synthesis system because they're blind or visually impaired. Will they be able to understand what is in your figure or table themselves - just by hearing what's in your caption? Now ideally, your caption should be able to stand alone, independent of the actual figure or table, itself. This is a very hard thing to do, but it's worth learning how to do it well.

Slide 5: Avoiding common mistakes

Some common mistakes to avoid are: As we mentioned, don't interpret your data. This is the results section _not_ the discussion [section]. You don't want to report inaccurate and inconsistent data. Right! You need to make sure that what you report is actually what you observed. That means you mustn't have typos. You mustn't say, "Oops. I forgot that I didn't do this, scale it, converted it to a consistent set of units, ... ". No, when you present your results - that should be something that someone can believe is a true and accurate representation of what it is that you observed. So be very, very accurate and be very consistent; otherwise, if someone finds something where they say, "That's obviously a mistake, now - where the non-obvious mistakes in your data". And then they begin to question your whole report. Now. Include your figures, tables, etc. as you like - but make sure to reference. If you just put the table in, don't assume that your reader is going to know why it's there - unless you explicitly reference it from your text. If you don't reference it - deleted it - because it wasn't important to your presentation. And again, if you don't have a suitable caption for your table, code snippet, or whatever - then again delete it - because it wasn't essential to your presentation of your results.

Slide 6: References

You can read lots more references about this from many sources. I wish you good success in presenting your results section.