<h1 style="text-align: center;">Results: video script</h1>

Hi, and welcome to the fourth teaching video about writing your dissertation. This time, I'll be talking to you about your results and analysis chapter.

During this video, you should develop your understanding of what you need to cover in your results and analysis chapter, and how to write about qualitative and quantitative data. As always, I'm happy to meet people individually to give you feedback on your writing – please use the link to book an appointment, and you can email me a draft before coming if you like – if you do send me something, please make sure it's at least one full working day in advance of your appointment. Otherwise, print out your draft and bring it along with you.

Let's start by thinking about what your reader wants to see in this chapter. In this part of your dissertation, they want to learn about what you actually found out in your research. You need to provide them with a summary of the data you collected – perhaps the answers to your survey or interview questions. But it's no good just stating what you discovered. It's also essential to provide some discussion about why the results are significant – why should your reader be interested in them? Make sure you explain how your results relate to the existing research that you discussed in your literature chapter – have your findings reinforced previous knowledge, or does what you discovered provide a contradiction, or illuminate alternative aspects that ought to be considered?

In order to explain the implications of the data you've collected, you need to be able to provide a clear summary of the most important things you've found out. Often when you do research, you end up with a huge amount of data, so working out the overall significance can be hard. Let's practice this now with a quick writing task. I'd like you to write a few sentences about your main findings, and how these relate to existing research. Pause the video for a couple of minutes or so whilst you do this.

There are two main types of data that you might have collected: qualitative and quantitative. We're going to look at each of these in turn, beginning with qualitative data, which is information collected from a participant, which describes their experiences, opinions or feelings.

Because qualitative data is frequently amassed from interviews or focus groups, there is often a huge volume of data to deal with. If you've recorded interviews with your participants, first you will need to transcribe these into a written form to allow you to make sense of the data. Then you'll have to find some way of discovering the themes that have come across from your participants. One way of reducing the amount of data to deal with is to make sure you are focusing on information that allows you to answer your research question – it's easy for interviews or discussions to go off track and address other subjects. Then you need to use a system to determine the patterns in the data, so that you can describe and analyse these for your data. This is often done through the process of coding the data, or noting where certain themes appear. You may

use memos, written either during the data collection period, or during analysis, which are like little messages to yourself about how you have processed the data, or perhaps making a note of connections or topics that occur to you as you interview a participant.

Coding can seem a bit complicated if you're not used to it, so let's go through an example to see how a simple version of coding works. Imagine that you are doing some research into student experiences of group work. You have the following quotes from five of your participants, who are all talking about how another member of their group acted during the group work. All five students are saying different things, but can you come up with a phrase or code that would cover all of them? Pause the video while you think about your answer, and when you have your phrase, use the link to share it on the padlet wall.

When you posted on the padlet wall, you'll have seen other people's responses, which might have varied from yours in the wording used, or perhaps in the type of theme. This is to be expected, and isn't something to worry about – as long as you have a system you are using for analysis, it doesn't matter if another student might have analysed the data in a different way. Let's imagine that the code we created for the previous examples was 'contribution levels'. When we've analysed all of the data, we will end up with lots of codes like this. It's then often useful to see if we can combine some of these codes to create a new umbrella code that can cover them all. So, how might we arrange the following codes which all relate to our research on student experiences of group work? The codes are: contribution levels, attitudes to time, participation in meetings. Pause the video whilst you think about what kind of second-level code you might use. As you can see, the one I chose was 'differences in expectations', as I thought that all of these things related to the ways that students might assume other group members would act. Again, it doesn't matter if you got something slightly different, as long as it's something that encapsulates the three codes I gave you. This process of creating wider categories for the themes that emerge from the data is a way of managing a large volume of words to create an overview of your findings, which is what you will need to go about structuring and writing your results and analysis chapter. When you're writing, you can use these bigger categories for subheadings, and illustrate them with some of the raw data, or actual quotes from your participants. Using quotations will make your analysis come alive for your reader, and will also show that you have evidence for the points that you're making. Don't put huge quotes in though – think about which words are most significant or interesting and try to only include these.

Now we'll consider quantitative data. This is usually related to something that's been observed or measured in a numerical way. Just as with qualitative information, you need to find ways of making sense of the raw data, but this will be done in a very different way, often through tables, charts and statistical analysis.

Quantitative data is often about looking at the effect of variables, which are things that change. For example, if you are looking at how student marks differ for a fashion marketing masters degree, your variable would be the assessment scores that the

students get. What a quantitative research project often aims to discover is some kind of cause and effect that will prove or disprove a theory. So, you might have a hypothesis that female students will get higher marks than male students. Your independent variable would be whether students are male or female, and the dependent variable would be the mark. But, you need to account for confounding variables which might effect the result; perhaps all the female students have studied fashion marketing at undergraduate level, and none of the male students have, and it is this previous experience that's causing the difference in results, rather than their gender. Let's think about this some more with another example. In the USA, people who talk slowly have a higher rate of skin cancer. Why do you think this is? Is their sluggish rate of conversing causing melanomas? Or could there be a confounding variable at play? Pause the video whilst you think about this. So, what if I show you a map of the USA, with the states with the slowest talkers coloured in pink. Does this help you? Pause the video whilst you think about a possible confounding variable. Well, as you might have noticed, the slowest talkers in the USA mostly live in the southern states – these states are hotter, and have more sunshine, so this is the confounding variable that contributes to their increased rate of cancer. In your own project, make sure you carefully consider the potential confounding variables!

When you're presenting your quantitative data, it's beneficial to use charts and tables to visually represent the information to help your reader to understand it. However, beware of a few common issues with producing charts. First of all, take a look at this 3D bar chart. It looks pretty nice, but is it actually useful for your reader? I don't think so – I can't actually tell easily what numbers each cone represents. Is the first a five or a six? The second a one, or a two, or a 1.5? Humans generally aren't good at interpreting 3D information so please don't use 3D charts in your dissertation!

Now, consider this pie chart. Pause the video whilst you think about what might be the issue with it. Again, I don't think this is a useful way of representing the information – there's just too much data, and so I can't easily work out if wedges that aren't next to each other are the equal or different sizes – is the same amount of time spent eating and making food or not? This can be a common issue with line graphs as well – if there's a lot of information, a simple table is often more effective.

So what kinds of charts do you want? Well, anything that helps your reader to process the information, or to show a pattern in the data. They shouldn't be there just to fill up space, or make your page a bit more colourful. Also be careful with your axis – if you don't start from zero, make it clear to your reader so that you're not misleading them about the size of an effect. If you are considering putting in a chart, make sure that it has a clear purpose, is easier to understand than a table or written information, and that it helps to answer a specific part of your research question.

If you do use a chart or table within your writing, make sure it's clearly numbered and labelled, by adding 'figure 1' or table 1' or similar underneath. If you're using a chart or

picture from elsewhere, make sure this is clear to your reader by including a citation. And don't think that the picture can do all the talking. You need to introduce the chart in your writing, and then respond to it – explain what it shows, and why that's important or significant.

To summarise what we've thought about in this video, I'd like to emphasise that the most crucial aspect of this chapter is to explore the meanings of your data and make sure your reader understands the implications of your findings, and how these relate to existing research – there should be clear connections between this chapter and your literature review. If it suits your data, charts and tables can be immensely helpful to communicate information to your reader – but ensure that each has a clear purpose, which is explained within your writing. As usual, in the face-to-face session we'll be looking at the ways in which previous students have tackled this chapter, to see what kinds of writing are effective when discussing the results of your research.