**Interpreting percentages from a Cross tab table in SPSS**

In this video, we are going to look at interpreting the percentages that we get from a cross tabulation table. So let’s go back to analyse, descriptive statistics and cross tabs. I’m going to put gender as the row and I’m going to put productivity as my column. I’m not going to choose any statistics, but I am going to go to the cells tab because I want to show all three percentages. The row, the column and the total, and we’re going to look at how we interpret all three because we interpret them differently. Go ahead and click ‘continue’, and we’re not going to do any bar charts. Go ahead and click ‘okay’. Here’s my cross tabs table. I have three percentages, a percentage within gender which is my row percentage. A percentage within productivity which is my column percentage, and the percentage of total, which is my total percentage. Now because I wanted you to be able to follow along with me a little bit better, I created a table earlier, I highlighted some of the cells, so you can tell what the totals are that we’re using. So if I show you that one instead. So here I’ve got my totals, for my columns that are highlighted in green, I have my row totals for gender highlighted in yellow, and I have my overall sample total which is highlighted in purple. So let’s have a look at interpreting our percentages. Like I said, there’s three of them and we interpret all three differently. So I’ve written out three examples so we can see the difference. So my percentage within gender, I’m going to look at males and average productivity and I have three percentages. The first one should say 19.4% so let’s change that. So 19.4% of males have average productivity. So we get the 19.4% by taking 6 and dividing it by the male total which is 31, so 19.4%. My second one here says 37.5% which is here. 37.5% of participants with average productivity are male. Now this time I’ve taken the 6 and we divide it by the column total for average which is 16. So 6 people out of the 16 who have average productivity are male. So we get 37.5%. Now my last percentage is with respect to my overall total. So this is my overall total number of participants: 69, so 6 participants out of 69 is 8.7% and we interpret that as 8.7% of participants are male, and have average productivity. Do you see the difference between the three? One of them is with respect to males, one of them is with respect to average productivity and one of them is with respect to the overall total. It’s really important that you get the interpretation of your percentages right, and you use the one that you’re intending to use.

Okay, let’s try one more and see if you can have a go at it. So we’re going to use females and we’re going to look at very good productivity,. So I want you to pause and just have a go at interpreting all three of these percentages and then we’re going to interpret them together. Okay have you had a go? Let’s see if you got your interpretations correct. So we said female and very good and we have three percentages. So the first one is with respect to gender so 18.4% of females have very good productivity. The second is with respect to productivity so we say 58.3% of participants with very good productivity are female and the third one is with respect to the total, so 10.1% of participants are female and have very good productivity.

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