Further Guidance on Assignment 2

Introduction

Make sure you have read the Guidance on Assignment 2 document first.

A good point to start at is the datafile. Make sure you **understand** the data in the datafile.

The kind of calculations you can do will depend on the kind of data you have. As an example, is it quantitative or qualitative data?

Section A

Take Question 1 as an example; the question which was asked is:

Q1. Is your organisation planning to recruit employees in the next THREE months?

The first thing to note is that the question is asked of an ORGANISATION (or lots of organisations).

What possible answers do you think an individual organisation may have given? I think the possibilities are:

Yes, No, and Don't know

So, is this data qualitative or quantitative?

I hope you will agree that is qualitative.

Next, let's look at some of the figures we are given. The table below is the data for Question 1. What does the figure of 532 highlighted in yellow tell you?

THE ADECCO GROUP		Sector			Private sector organisation size	
		Private sector	Public sector	Third/voluntary sector	Private sector SME (2-249)	Private sector large (250+)
		A	B	C	J	K
Unweighted base	2053	1433	427	193	781	652
Base	2053	1560	349	144	708	852
Yes	813	532	217	63	150	382
No	1032	869	94	70	498	371
Don't know	208	159	38	11	60	99

Would you agree that 532 organisations in the Private sector said "Yes" their organisation is planning to recruit employees in the next 3 months?

Next, what calculations can you do on this data?

Again, I hope you would agree that there is not much you can do in terms of calculations as the data is qualitative. So, what can you actually do with this data?

Before you proceed, make sure you do some simple calculations to make sure you really understand the data.

If you consider the Public sector labelled B (and highlighted in green), the numbers 217, 94, and 38 represent all the organisations in the Public sector which responded to the survey. How many organisations is this in total? I think it is (217 + 94 +38 = 349). This is the "Base" value. I am not sure what the Unweighted Base values are, and I would therefore not include them in my calculations.

Next let us look at the figures highlighted in blue. They represent "Private sector SME (2-249)" and "Private sector large (250+)". The Base counts for Private sector SME and Private Sector Large are 708 and 852 respectively. So, what is the total number of organisations in the Private sector which responded? I think it is (708 + 852 = 1560). Would you agree? This is the figure which is highlighted in orange (as you would expect I hope).

Given that the actual data is "Yes", "No" and "I don't know", and the figures in the table are counts, one thing we could do is calculate proportions (or percentages) to make comparisons easier.

As an example, what percentage of the Private sector, responded "Yes" to this question?

The calculation should be (532/1560 = 34%). Similar calculations can be done with other data in the table. You would be expected to set out these calculations in Excel with appropriate headings, etc. and using relative and absolute addressing wherever possible.

Once appropriate calculations have been set up, you can display the results in the form of charts – bar charts, pie charts, etc.

Section B

Let us look at another question now. Question 3a is:

Q3a. To what extent will these redundancies affect your overall headcount over the next three months?

The results are given in the table below:

	Total	Sector			Private sector organisation size	
THE ADECCO GROUP		**Private sector**	**Public sector**	**Third/voluntary sector**	**Private sector SME (2-249)**	**Private sector large (250+)**
		A	**B**	**C**	**J**	**K**
Unweighted base	431	327	75	29	127	200
Base	446	362	60	24	110	252
It will affect 0.01% to 10%	164	118	32	14	24	95
It will affect 10.01% to 20%	80	64	11	5	19	45
It will affect 20.01% to 30%	60	53	5	3	21	32
It will affect 30.01% to 40%	27	22	4	1	12	10
It will affect by 40.01% to 50%	27	23	2	1	13	10
It will affect 50.01% to 60%	14	14	1	-	6	8
It will affect 60.01% to 70%	4	3	1	-	1	2
It will affect 70.01% to 80%	8	8	-	-	4	4
It will affect 80.01% to 90%	3	3	-	-	1	2
It will affect 90.01% to 100%	8	7	1	-	4	3
Don't know	51	45	6	-	4	41

As an example, let us consider the figure of 53 highlighted in gold. What does this figure tell us?

Would you agree that 53 organisations in the Private sector said these redundancies would affect their overall headcount over the next 3 months by between 20.01% to 30%?

So what can we do with the information in this table? Well, this will depend on whether the data is qualitative or quantitative. Which one do you think a response of "between 20.01% to 30%" is? I would argue this is quantitative data. So, we can work out things like the mean, median, mode, standard deviation.

Next, just do the checks as we did in Section A by adding the counts in the different columns and rows. You may find that the totals do not necessarily agree exactly with the ones given in the table. If that is the case, simply decide which totals you want to use (if you need to).

Now, as an example, you can work out the average extent of these redundancies on the headcount in the Private sector.

To work this out, you would have to lay out the formula for the mean of grouped data as there is no function (that I know of) in Excel that gives the mean of grouped data.

To work out the mean, you need "x" values and "frequency" values.

The frequency values are given by the counts in the table. An example, an x value is "between 20.01% to 30%". However, we cannot work with a whole range between 20.01% and 30%, so, we need to estimate a value of x. If you look at the work we did in the Measures of Location workshop, you will recall that we take the mid-point between 20.01% and 30%. Once you have the mid-point, you have the x value and the frequency is given by the count. You need to do the same for all the rows in the table and use the formula to calculate the mean.

Finally

The 2 sections above, together with the previous guidance should enable you to make a very good start on the assignment.

Only by starting to do some work on the data, will you get a feel for what you need to do.

You will end up doing a lot of work which you will not necessarily include in your final submission; this is partly because you will be learning as you go along.

Remember, to lay your work out nicely in the spreadsheet.

Any results and diagrams in your report MUST be from your spreadsheet. Without evidence from the spreadsheet, there is no way of verifying the results you have obtained.

Enjoy working on this assignment! It is meant to be a learning vehicle as well as a fun activity!