Script for NVivo Framework Matrix Creation

This tutorial will demonstrate how you can make a Framework Matrix using NVivo.

There are several reasons why you might find a Framework Matrix useful. For me, I have found this function helpful in two separate studies. For my systematic review, this function enabled me to create a data extraction table. For my qualitative interview study I found matrices very helpful for organising and visualising participants' different responses enabling within and cross-case analysis. It is this latter use of matrices that I will demonstrate in the tutorial.

I am using the sample data provided by NVivo to demonstrate.

This is quite a broad and varied data-set and I will not use all of it in this tutorial, but you may find it helpful to explore it in your own time for ideas of how to manage and organise your own data.

My question for this tutorial will be:

"What do the interview participants say about their sense of community?"

Here are the interview participants that I am referring to…

And here are the codes…

Is there enough information here, as it is to create a framework matrix?

We can find out by going to 'Create' and 'Framework Matrix'. I am using the latest version of NVivo for this but I have used NVivo12 previously and believe that it is the same sequence in that version, though the icons may look slightly different.

As you can see a dialogue box appears to help you create your matrix. Under general you need to give your matrix a name but you can decide for yourself whether you wish to give it a description or not.

If we move to the rows tab you can see that we need to have cases. If we click on 'select…' we can see what cases are available to us.

The sample dataset that I am using has assigned interview participants to the case 'People'. So I choose to include 'All descendant nodes' and select 'People'. Now as you can see, this automatically changes the selection under dynamic sets. You do not

need to worry about this. I did not use dynamic sets in my own project so this was unaffected.

Now you can see that the 'Selected cases' box is full of 'People'. However, we can see that the case 'People' does not just include interview participants. We also have survey respondents and usernames. This is because this project used multiple different sources. In my project my interview participants were the only 'people' in my study so they were the only people that would appear here. However, it is no problem, you can simply highlight the sort of people that you do not want to include in your matrix (click on the first to be excluded from the list, hold down the fn key and click the last to be excluded) and click 'Remove'.

You will also see in the box on the right that you can choose to sort the rows by a particular attribute. You do not have to do this, so if you have not added attributes to your cases then just ignore this part. However, it can be useful, for instance if I want people from a particular community to be grouped together, then I can sort by the attribute community. Effectively what this does is, say the colours in these diagrams represent a different community. Instead of all being mixed about, ordering by attribute allows you to have them grouped. See our other resources for more details about cases and attributes.

Moving onto the 'Columns' tab BEFORE you click OK.

You can see that codes are our main option for the columns. So in my question, I wanted to tabulate participants' views on their sense of community. I can see that data have been coded to the Node 'Sense of Community ...' which is what I want. In your own version, you would have completed the coding yourself based on codes and terms

that make sense for your research (see our other resources on coding). You can see this little plus icon which shows that there are child codes nested within this parent code. You can decide to include all of the sub codes by checking the 'Automatically select descendant codes' box before clicking on the one that you want. Then click okay.

Click okay again.

You will see that a table comes up.

If it is blank click the tab for the table and then click 'Auto summarize'.

If you want a bigger view of the matrix you can right click on the tab and select undock.

You will now be able to see what each participant has said in connection to the different nodes about 'Sense of Community'.

You can make changes to the text within the table if you wish. You can also move columns if you would prefer them in a different order.

You can save the table within your NVivo project and/or you can export the table to an excel spreadsheet by selecting 'Share', 'Export' and export again.

Looking at the output you can see how you might use this to quickly see what Robert has said about these aspects of 'Sense of Community' without having to trail through the whole transcript, you can also compare what Robert said with how Susan felt about it. Further, you can see who has said little or nothing at all about particular aspects and think about why that might be e.g. are there any patterns.

As I said at the beginning, you might also find this framework useful for a data-extraction table. Imagine that instead of thematic codes you used codes for title, author, year, methods, aim etc. and instead of having people as your cases you took journal articles. You can perhaps see how this tool might be used in that way.

So, that is pretty much it.

As a quick recap, there are some fundamentals that you will need before you can make a framework matrix:

1. Cases e.g. people that will provide the row headers (with attributes as an optional but useful way to organise them)
2. Codes – which you will need to have applied separately and may relate to themes or characteristics of the data

Both of which you can find out more about or refresh your memory on in the other resources provided.

Once you have these, then it is just a case of going to 'Create', 'Framework Matrix' and selecting the data that you want to be included. Remember: Make sure you have completed both column and row tabs before clicking okay.

Finally, do not panic if your table comes up blank initially, click on the table tab and then 'Auto-summarize' you should find that all boxes for which there is data available should be filled in.

Thanks for watching. I hope that this tutorial was useful and all the best for your future projects.