PAQI How-to-do-it Annex

Description

Tweet

This is a technical annex to http://mande.co.uk/special-issues/participatory-aggregation-of-qualitative-information-paqi/

Data processing steps

<u>The network diagrams</u> were produced using <u>UCINET & NetDraw</u> (a package). Very briefly, this involved producing the following files:

- For relationships between sorted items:
 - o Create a .txt file in a specific DI file format, known as PARTITION, as shown in this example
 - This shows five sets of sort results, seperated by a # marker. With each set, each row shows a set of items put into one group, by the participant
 - Convert this to the first Ucinet file, using these commands: Data>Inputs text file>Input text file in DL format:
 - Aggregate the five sets of data into one items x items matrix, by using these commands: Transform>Matrix Operations>Within Dataset>Aggregations>Input dataset: [the new file you created], Sum, Break-out resultsby: rows and columns
 - Then view the saved file in Netdraw. View with link strength >1, because you want to see the connections created by multiple participants, not one.
- For relationships between categories used
 - Take the original .txt file in PARTITION format and re-structure it as a .txt file in another DI file format known as EDGELIST2, as shown in this example.
 - N=66 because there are 24 items and 42 categories. A1-4 are categories used by the first respondent, B1-6, by the second etc. Each row lists items put in that category
 - Convert this to the second Ucinet file, using these commands: Data>Inputs text file>Input text file in DL format:
 - This shows a categories x items matrix
 - This needs to be converted to a one mode matrix, of categories x categories. Use these commands: Data>Affiliations (2-mode to 1-mode)>Input data set:
 - Then view the saved file in Netdraw. View with link strength >1, because all categories will have at least one shared item with others.
 - PS: You can also use Netdraw to visualise the two-mode categories x items matrix (See Necheles reference below)
- For relationships between the respondents
 - Use these commands: Tools>Similarities (e.g.correlations,)> Input Datset: name of first Ucinet file above, Measure of profile similarity: Correlation, Compute similarities amongsts: Columns.
 - You then have a matrix of correlation values, ranging from 0 to 1. To make these easier to discriminate, when using NetDraw, it is best to multiple them by 100. Use these commands: Transform>Matrix Operations>Within Dataset>Cellwise Transformations>Multiply by

constant

 Then view the saved file in Netdraw. Focus on relationships with above average strength (because all participants will have some similarities in their classifications)

PS:Â I have set up a seperate posting on the merits of <u>different kinds of social network analysis</u> software, including UCINET and NetDraw.

Adding qualitative "flesh" to the quantitative "bones"

The network diagrams are the structure. They are the results of all the sorting activities by all the participants. But in the process of sorting the items each participants also added qualitative information, in the form of descriptions of the categories they created. In the Indonesian example 33 category descriptions were provided by the 5 participants. This next section will describe how that qualitative information can be made accessable, as people explore the individual nodes and links in the network diagrams. This information will be in the form of node and link attributes.

With the Indonesian data I listed the members of each grouping of items in a row, and then in an adjacent column I entered the text description of that group given by the participant. When all the groupings of one respondent were entered I started with the next respondent's groupings on the rows below

The challenge is to then collate all text descriptions that apply to a given item and to do that for all items, in a way that is not manually time consuming. To do this I set up a list of items (in rows), and in adjacent columns I set up a logic function that in effect searched for relevant text. A copy of the Excel sheet will be attached here.

This data then needs to be put into an attribute.txt format (example here) and then imported into Netdraw as an attribute file, when already viewing the item x item network (File>Open>VNA text file>Attributes). Then any node can be double right clicked to view its attributes, including all the descriptions given to it by the participants (See example). Bear in mind these are descriptions of the categories it belongs to, not that specific item.

Category

1. Uncategorized

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