LAB 2 – Data Entry & Management

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MGT 780 – Social Network Analysis

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Exercise

- We are going to show you: data management and entry by using an example from getting a survey ready, collecting data, formatting data, importing to Ucinet, transforming data, and finally running a simple centrality measure, to then correlate to a node's attribute.
- Question to investigate: Are individuals who are central in the friendship network more likely to perform well?
- **Step 1:** Prepare instrument to collect data. Here we need a question to assess friendship network, we also need to assess each respondent's performance (for example rated by their supervisors) and let's say demographics information (in case we want to rule out alternative explanations).



Exercise (cont.)

- **Step 2:** Collect the data (let's say via a paper survey). Now you have to enter your data so you can import it in Ucinet. You should always think about how to import your data before you start entering your data in any given format/source.
- **Step 3:** Before to start that process, one good idea is to organize your main folder with various subfolders: Project X: Data Analysis Folder create a Excel, SPSS and UCINET subfolder. In excel usually will go your raw data and formatted data before to import in Ucinet, from there you will also easily add any node level analysis (i,e, centrality will be ran on Ucinet, then can be opened in spreadsheet Ucinet and then copy/paste back into excel). Finally, you can easily open excel file into SPSS for any node level analysis (though Ucinet can provide some basic analysis too at that level). However any dyadic hypotheses will be tested in Ucinet directly. You will see all that later during this semester.



Exercise (cont.)

- Step 4: Open the excel file CompanyX_Lab2. This is once data are entered.
- Step 5:. Now, we are going to upload both attribute and network using vna file (as well we'll show u a very easy way to import attribute via Ucinet spreadsheet).
- Step 6: Display, Verify, & Transform (diagonal as zero & symmetrize).
- Step 7: Run degree centrality [Network/Centrality/Degree], open output in Ucinet Spreadsheet, copy and paste first 2 columns of output into excel attribute worksheet. BE SURE to first sort byID from Ucinet match ID from excel!!! You can then remove ID column from Ucinet output. Open Ucinet attribute file and copy that last column (centrality) from excel to Ucinet.
- **Step 8:** Now run correlation between centrality score and performance [Tool/Testing Hypo/Node Level/Regression].



Q&A on Exercises (To do before lab!)

Go to <u>http://www.analytictech.com/mgt780/topics/data.htm</u> and try to complete exercise.



Thank You!

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