

Importing dbconet and dbcoattr from a spreadsheet

Overview

Dbconet contains a 'who discusses work matters with whom' network and dbcoattr contains attributes of the nodes. The attributes include compensation (zcomp) and performance (zeval), as well things like rank, office location, gender, etc.

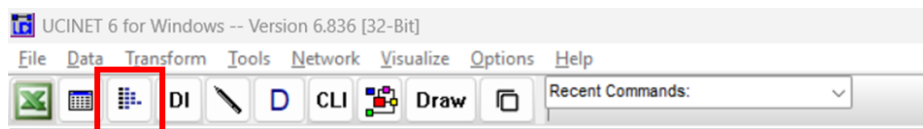
Files

The data are contained in an Excel file called '[Data for Learning UCINET.xlsx](#)', available in your "C:\users\...\documents\ucinet data" folder.

- The file is also available online via Google Docs: [Data for Learning UCINET](#). The file contains a tab called 'dbco - discussion network', and another called dbco - node attributes. These are the ones we will work with.
- There is also Google spreadsheet that just has the dbco data [dbco.xlsx](#) (<https://tinyurl.com/dbcodata>)
- Finally these data can also be found -- already imported into UCINET form -- in [this Google folder](#). You will have to unzip them to your "...documents\ucinet data" folder

DBCOnet - the network data

In the '[Data for Learning UCINET](#)' file, the 'dbco - discussion network' tab contains data on who discusses work matters with whom at an organization that we refer to as DBCO. The format is a binary (non-valued) undirected edgelist. To import it into UCINET, we will use UCINET's DL editor. It is the 3rd button from the left on the UCINET toolbar.



Once the DL editor is open, it is good practice to press the Clear/New button at the far left of the editor's toolbar:



Now we open the '[data for learning ucinet](#)' workbook, and go to the 'dbco - discussion network' tab. Highlight the first two columns of data, and copy them to the clipboard:

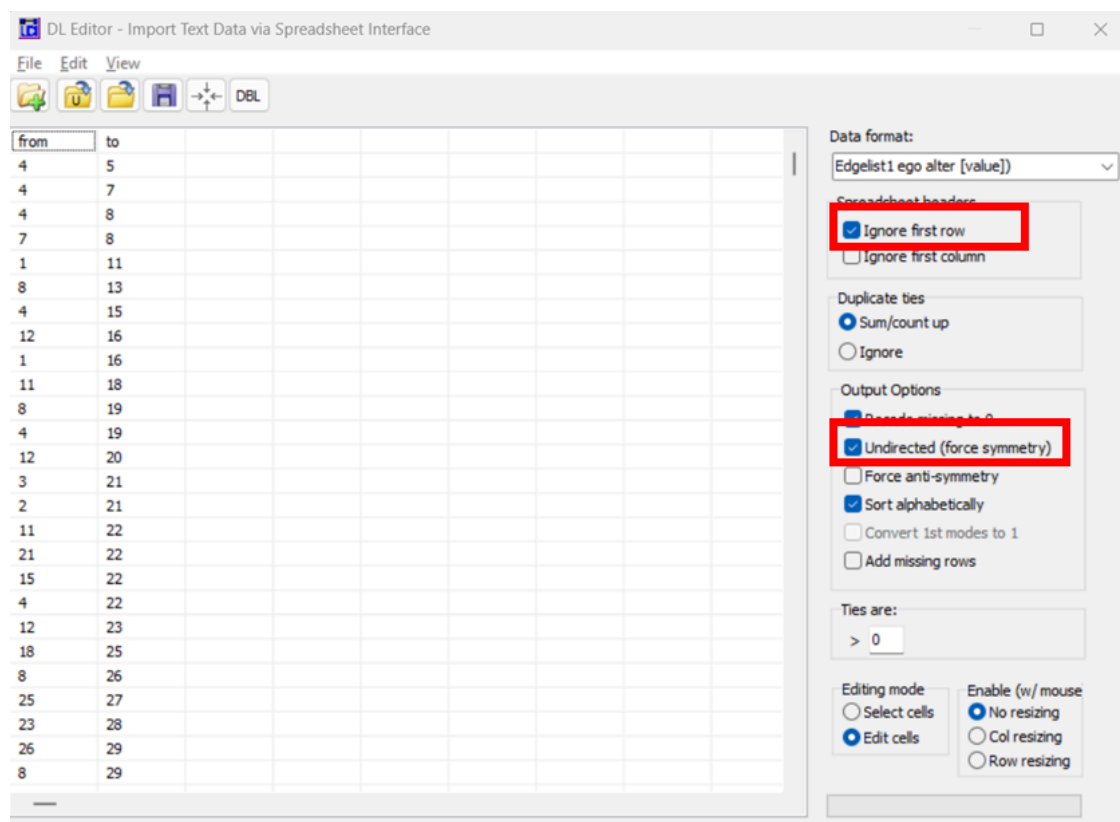
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	from	to	discuss													
2	4	5	1													
3	4	7	1													
4	4	8	1													
5	7	8	1													
6	1	11	1													
7	8	13	1													
8	4	15	1													
9	12	16	1													
10	1	16	1													
11	11	18	1													
12	8	19	1													
13	4	19	1													
14	12	20	1													
15	3	21	1													
16	2	21	1													
17	11	22	1													
18	21	22	1													
19	15	22	1													
20	4	22	1													
21	12	23	1													
22	18	25	1													
23	8	26	1													
24	25	27	1													
25	23	28	1													
26	26	29	1													
27	8	29	1													
28	13	29	1													
29	4	30	1													
30	13	30	1													

This format is an Edgelist.
Note that the data are actually undirected, but for economy each pair is only listed once. This means the data need to be symmetrized on import. In the DL Editor, make sure the "undirected" box is checked

And paste them into the DL editor as shown below. Be sure to set the data format to 'Edgelist 1' and then **make sure that 'undirected' is checked**. The order in which you do things makes a difference here because changing the data format resets the various checkbox options. Also, if you copied the first row ("From", "To", "Discuss"), you should also **check "Ignore first row"** because these are headers and not node names.

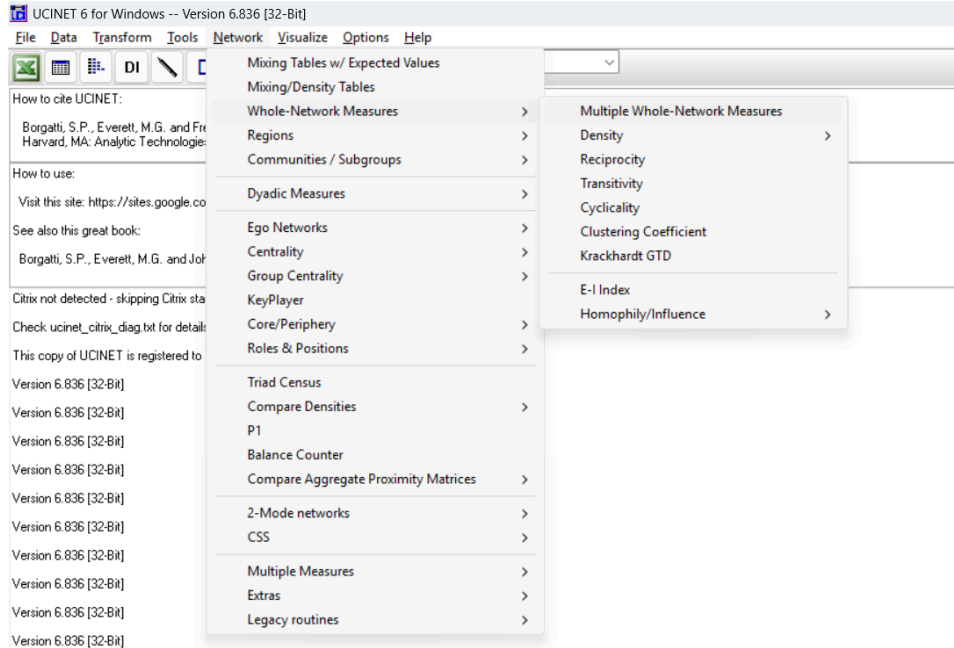
Check the figure below to make sure you have checked and unchecked all the same boxes.

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Once the options are set, press the 'Save' button (4th from the left on the toolbar) and choose 'dbconet' as the filename.

Once this is done and we have exited the dl editor, we need to check that the data are correct. We can do this by going to 'Network|Whole Network|Multiple measures' in UCINET main menu. Enter 'dbconet' as the network dataset. The results should be:



Whole network measures

		1
		dbco_d
		iscuss
		ion

1	# of nodes	331
2	# of ties	2068
3	Avg Degree	6.248
4	Indeg H-Index	15
5	K-core index	8
6	Deg Centralization	0.066
7	Out-Centralization	0.066
8	In-Centralization	0.066
9	Indeg Corr	0.033
10	Outdeg Corr	0.033
11	Density	0.019
12	Components	1
13	Largest Component	331
14	Component Ratio	0
15	Connectedness	1
16	Fragmentation	0
17	Transitivity/Closure	0.364
18	Transitivity Index	0.352
19	Avg Distance	4.132
20	Prop within 3	0.284
21	SD Distance	1.199
22	Diameter	8
23	Wiener Index	451306
24	Dependency Sum	342076
25	Breadth	0.726
26	Compactness	0.274
27	Small Worldness	15.601

```
28           Mutuals  0.019
29           Asymmetrics  0
30           Nulls  0.981
31           Arc Reciprocity  1
32           Dyad Reciprocity  1
33           Reciprocity Index  1

33 rows, 1 columns, 1 levels.

Notes
  K-core index is always calculated on the underlying graph (i.e., direction of
  ties ignored)
  When the graph is disconnected, avg dist is based on connected pairs only.
  Small world index is not calculated when the graph is disconnected.

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Running time: 00:00:01 seconds.
Output generated: 10 May 26 23:35:28
UCINET 6.836 Copyright (c) 2002-2026 Analytic Technologies
```

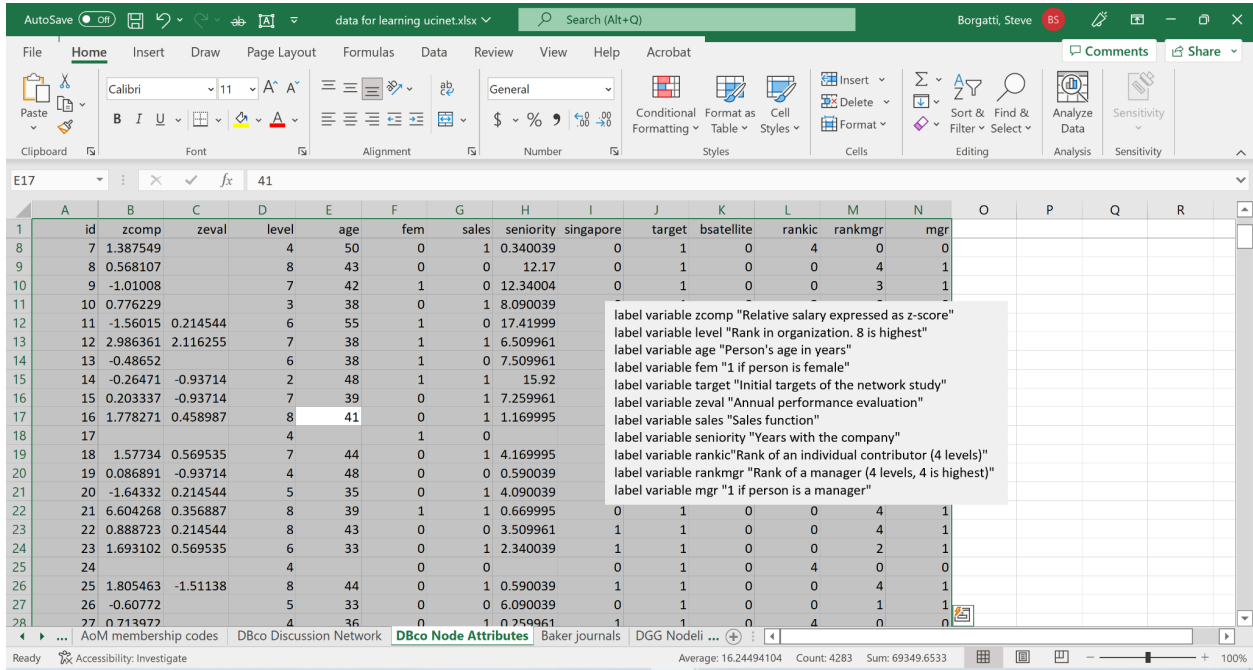
If these results do not match yours, you need to start again. Especially, make sure you have checked 'Undirected' in the DL Editor. That's usually the problem. Also, make sure that "ignore first row" is checked if you have 'from' and 'to' at the top of your columns. That's also a common problem.

DBCAttr -- node attributes

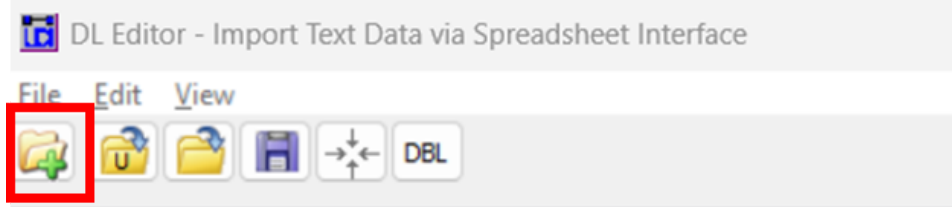
Now we will import the node attributes that go along with dbconet. (For a description of the variables, scroll to the end of this document.)

Going back to our Excel file, find the 'dbco - node attributes' tab. Highlight everything, as shown below, and copy to the Windows Clipboard (Ctrl-C).

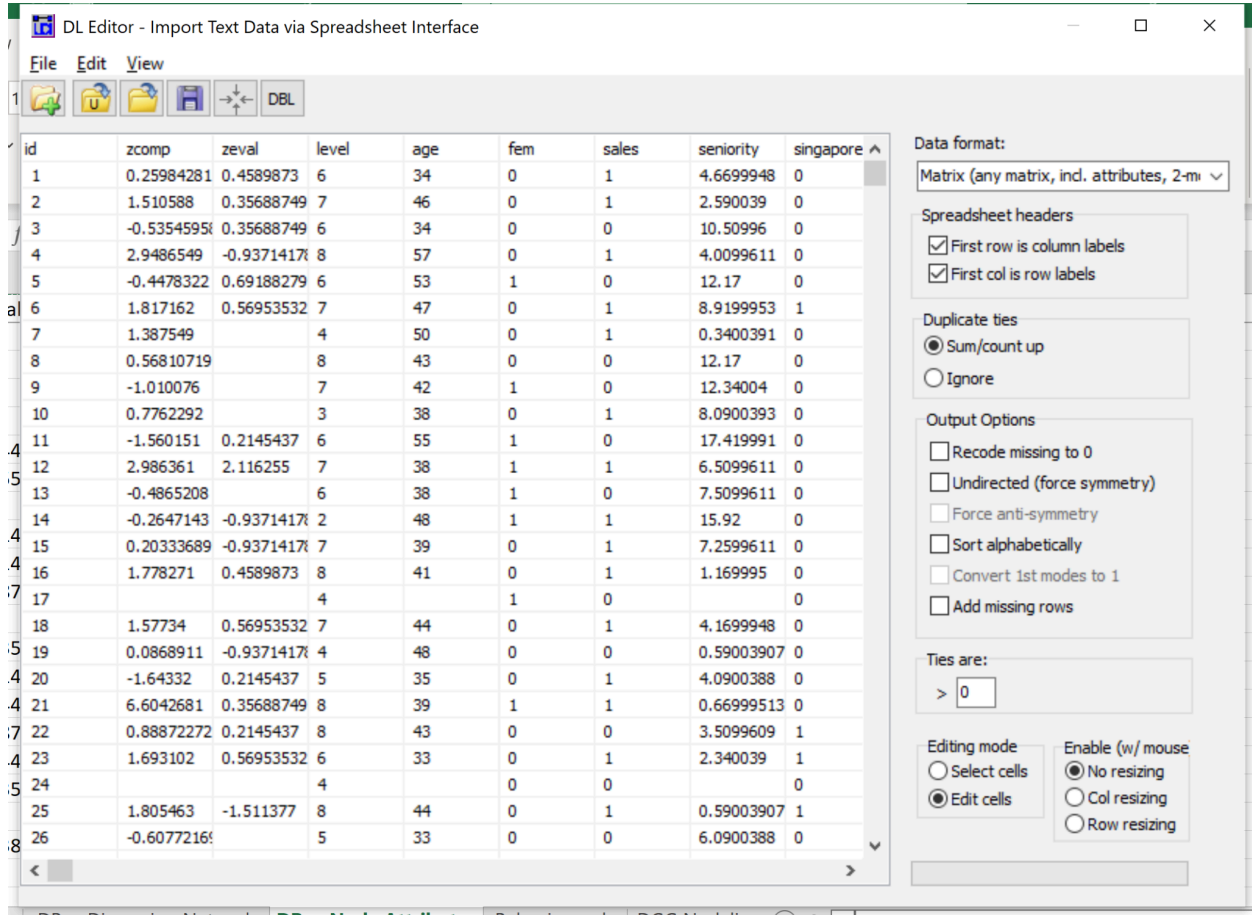
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Now, go to UCINET, open the DL editor as below, and press the New/Clear button to wipe away what was previously there.

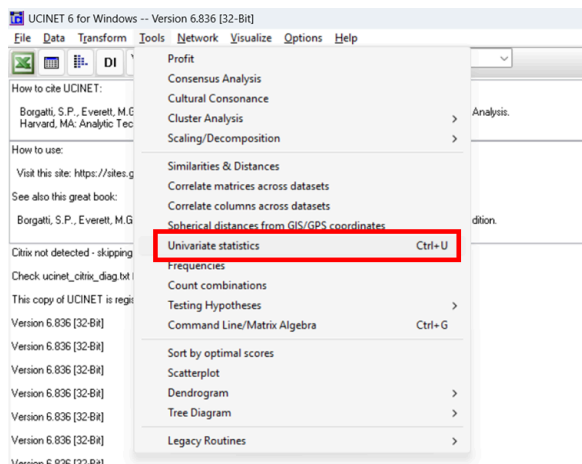


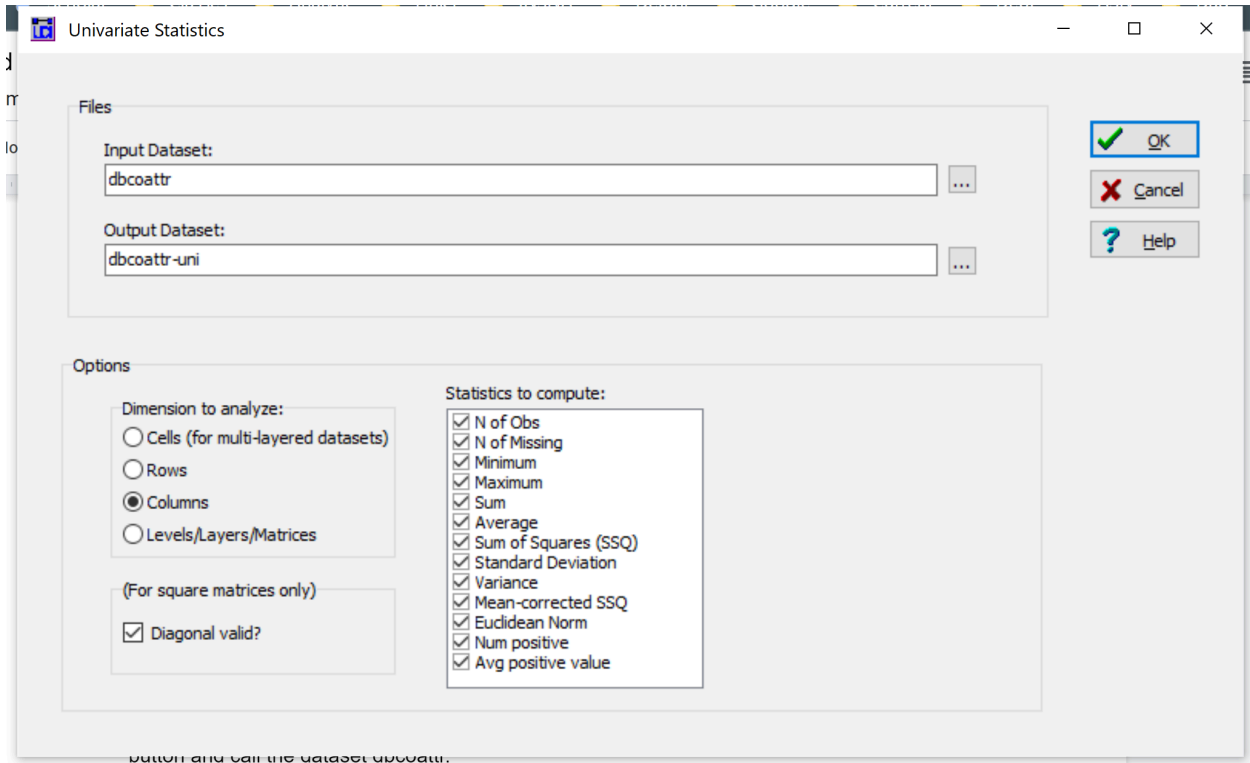
Then paste in the data from Excel. After pasting, set the data format to Matrix and make sure all of the options and checkboxes are set as below:



Important: “recode missing to 0” should be un-checked: we do not want missing data to be converted to zeros. When you’re ready, press the “save” button and call the dataset dbcoattr.

To check that it’s right, go to Tools|Univariate Statistics in the Ucinet menu. Fill out the dialog box as follows (note that “columns” is selected for dimension to analyze):





After pressing Ok, the first two columns of output should look like the below. Note that that number of observations in zcomp should be 257, while the nobs for zeval should be 182.

```

UNIVARIATE STATISTICS
-----
Input dataset:          dbcoattr (C:\Users\Steve Borgatti\Documents\UCINET data\dbcoattr
Output dataset:        dbcoattr-uni (C:\Users\Steve Borgatti\Documents\UCINET data\dbcoattr-uni
Dimension to analyze:  Columns
Diagonal valid:       YES

Matrix:
Statistics

          1          2          SHOWING FIRST TWO COLUMNS ONLY
          zcomp      zeval
-----
1  Observations      257      182
2  Missing            74      149
3  Minimum           -2.142    -1.511
4  Maximum            6.604     2.353
5  Sum                1.142     0.162
6  Average            0.004     0.001
7  SSQ               267.630    183.557
8  Standard Deviation 1.020     1.004
9  Variance           1.041     1.009
10 MCSSQ             267.625    183.557
11 Euclidean Norm    16.359    13.548
12 Positives          90        110
13 Avg Positive Value 1.023     0.726

13 rows, 13 columns, 1 levels.
    
```

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Obviously, if your data don't match the above, something went wrong in the importing, and you will have to do it again.

If all else fails ...

You can get the data already in UCINET form from [this Google folder](#). Be sure to download both the `###h` and `###d` files for each dataset.

Addendum

Description of variables in DBCOATTR.

zcomp "Relative salary expressed as z-score"
level "Rank in organization. Level 8 is highest"
age "Person's age in years"
fem "1 if person is female"
target "Initial targets of the network study"
zeval "Annual performance evaluation"
sales "Sales function"
seniority "Years with the company"
Rankic "Rank of an individual contributor (4 is highest)"
rankmgr "Rank of a manager (4 is highest)"
mgr "1 if person is a manager"