

# Importing dbconet and dbcoattr from a spreadsheet

## Overview

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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

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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

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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 4th 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:

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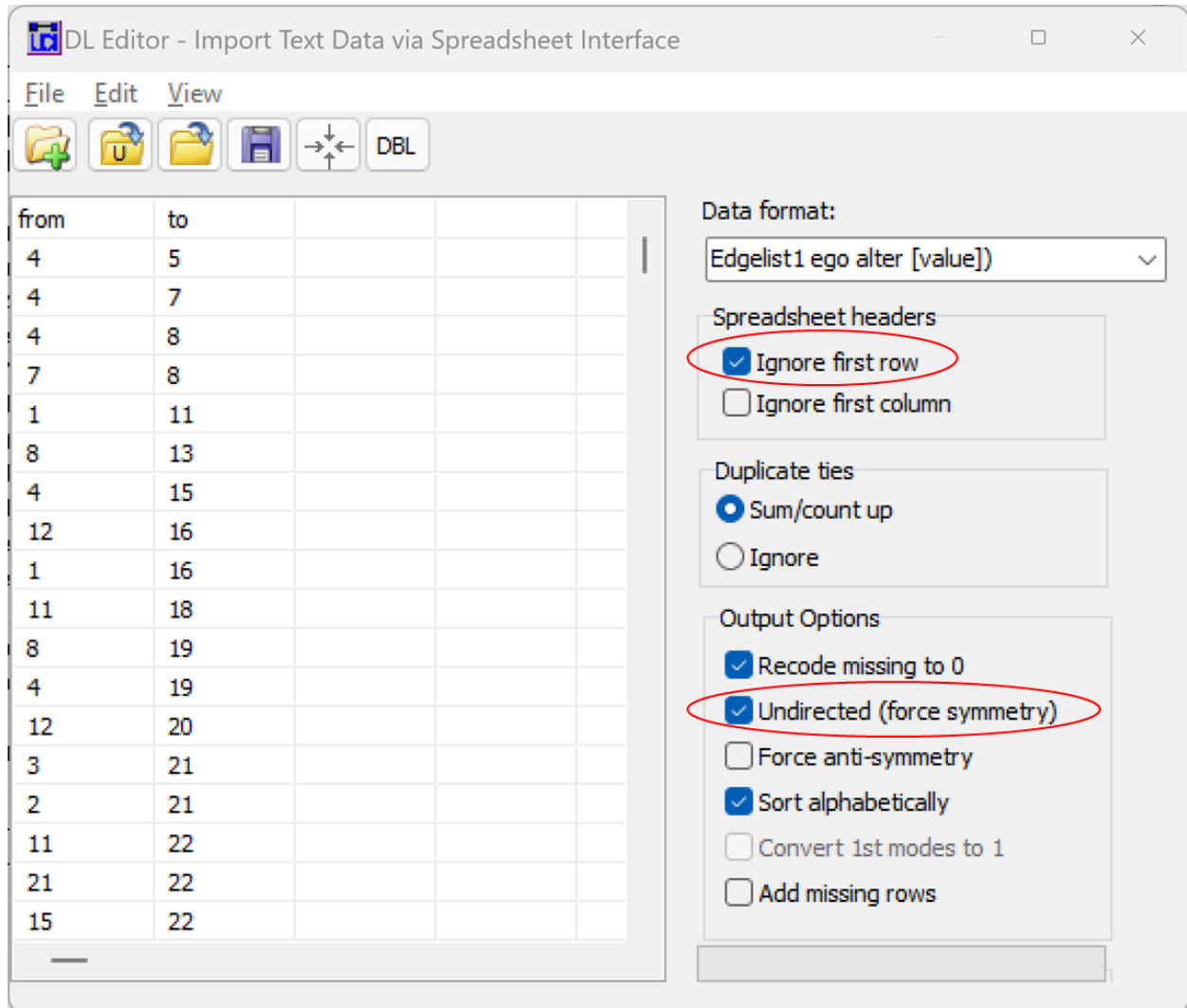


Now we open the [‘data for learning ucinet’](#) workbook, and go to the ‘dbco - discussion network’ tab. Highlight the first two columns of data, and copy them to the clipboard:

	from	to	discuss
1	4	5	1
2	4	7	1
3	4	8	1
4	7	8	1
5	1	11	1
6	8	13	1
7	4	15	1
8	12	16	1
9	1	16	1
10	11	18	1
11	8	19	1
12	4	19	1
13	12	20	1
14	3	21	1
15	2	21	1
16	11	22	1
17	21	22	1
18	15	22	1
19	4	22	1
20	12	23	1
21	18	25	1
22	8	26	1
23	25	27	1
24	23	28	1
25	26	29	1

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.



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:

dbconet		
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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	Component Ratio	0
14	Connectedness	1
15	Fragmentation	0
16	Closure	0.364
17	Avg Distance	4.132
18	Prop within 3	0.284
19	# w/in 3	31036
20	SD Distance	1.199
21	Diameter	8
22	Wiener Index	451306
23	Dependency Sum	342076
24	Breadth	0.726
25	Compactness	0.274
26	Small Worldness	15.601
27	Mutuals	0.019
28	Asymmetrics	0
29	Nulls	0.981
30	Arc Reciprocity	1
31	Dyad Reciprocity	1

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.

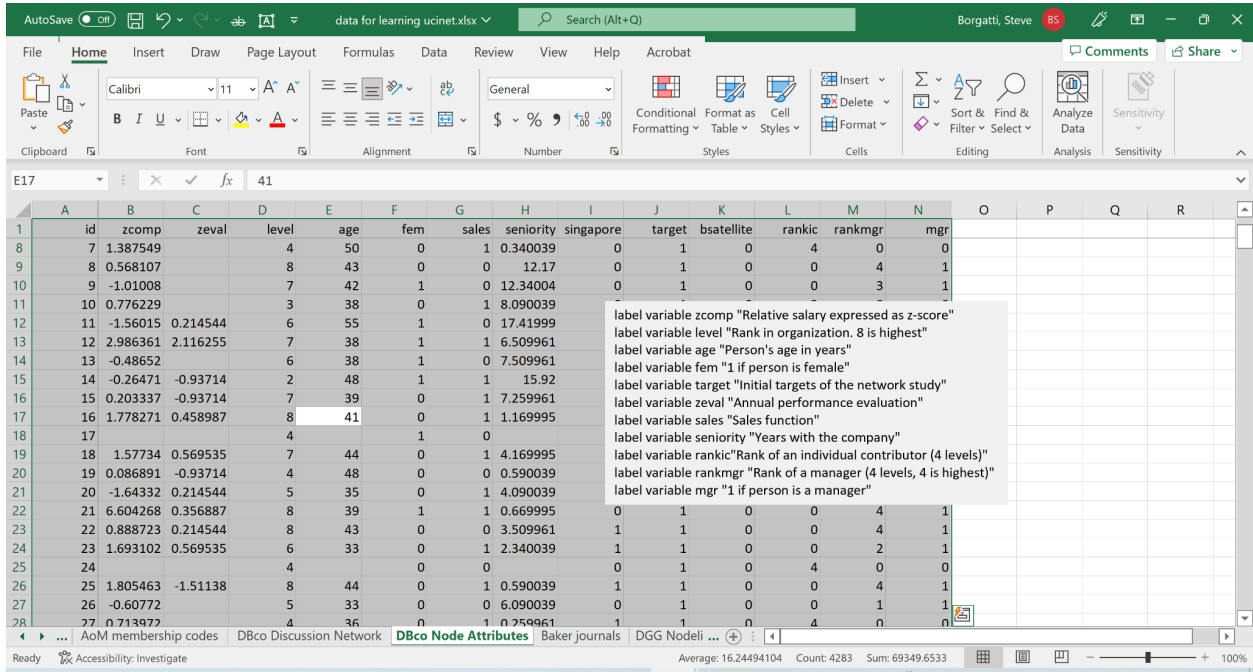
### **DBCAttr -- node attributes**

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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:

DL Editor - Import Text Data via Spreadsheet Interface

File Edit View

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

id	zcomp	zeval	level	age	fem	sales	seniority	singapore
1	0.25984281	0.4589873	6	34	0	1	4.6699948	0
2	1.510588	0.35688749	7	46	0	1	2.590039	0
3	-0.5354595	0.35688749	6	34	0	0	10.50996	0
4	2.9486549	-0.9371417	8	57	0	1	4.0099611	0
5	-0.4478322	0.69188279	6	53	1	0	12.17	0
6	1.817162	0.56953532	7	47	0	1	8.9199953	1
7	1.387549		4	50	0	1	0.3400391	0
8	0.56810719		8	43	0	0	12.17	0
9	-1.010076		7	42	1	0	12.34004	0
10	0.7762292		3	38	0	1	8.0900393	0
11	-1.560151	0.2145437	6	55	1	0	17.419991	0
12	2.986361	2.116255	7	38	1	1	6.5099611	0
13	-0.4865208		6	38	1	0	7.5099611	0
14	-0.2647143	-0.9371417	2	48	1	1	15.92	0
15	0.20333689	-0.9371417	7	39	0	1	7.2599611	0
16	1.778271	0.4589873	8	41	0	1	1.169995	0
17			4		1	0		0
18	1.57734	0.56953532	7	44	0	1	4.1699948	0
19	0.0868911	-0.9371417	4	48	0	0	0.59003907	0
20	-1.64332	0.2145437	5	35	0	1	4.0900388	0
21	6.6042681	0.35688749	8	39	1	1	0.66999513	0
22	0.88872272	0.2145437	8	43	0	0	3.5099609	1
23	1.693102	0.56953532	6	33	0	1	2.340039	1
24			4		0	0		0
25	1.805463	-1.511377	8	44	0	1	0.59003907	1
26	-0.6077216		5	33	0	0	6.0900388	0

Data format: Matrix (any matrix, incl. attributes, 2-m)

Spreadsheet headers  
 First row is column labels  
 First col is row labels

Duplicate ties  
 Sum/count up  
 Ignore

Output Options  
 Recode missing to 0  
 Undirected (force symmetry)  
 Force anti-symmetry  
 Sort alphabetically  
 Convert 1st modes to 1  
 Add missing rows

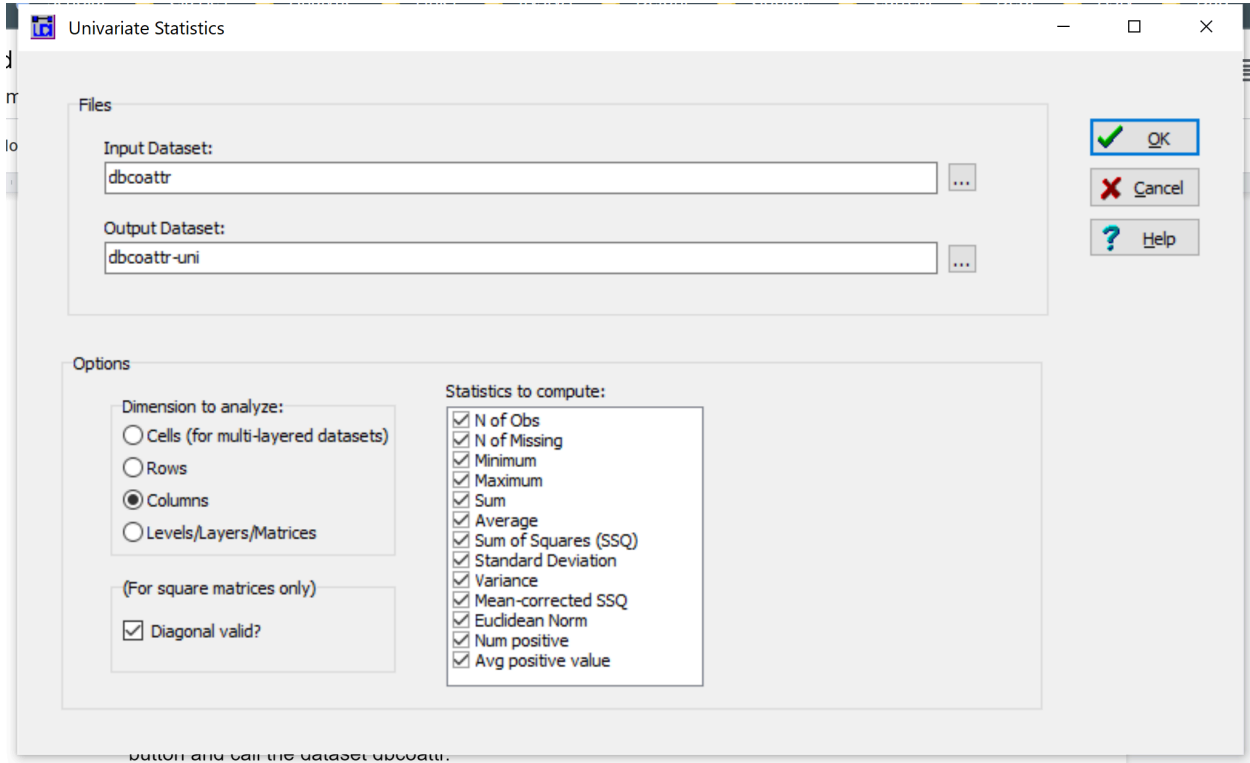
Ties are:  
 > 0

Editing mode  
 Select cells  
 Edit cells

Enable (w/ mouse)  
 No resizing  
 Col resizing  
 Row resizing

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 nobis for zeval should be 182.

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UNIVARIATE STATISTICS
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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"