Revised 8 May 2022 UCINET 6.747 or later

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.

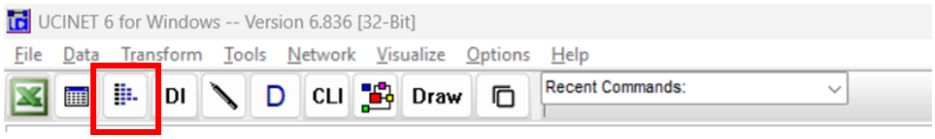
Files

The data are contained in an Excel file called 'Data for Learning UCINET.xlsx', available in Google drive and 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

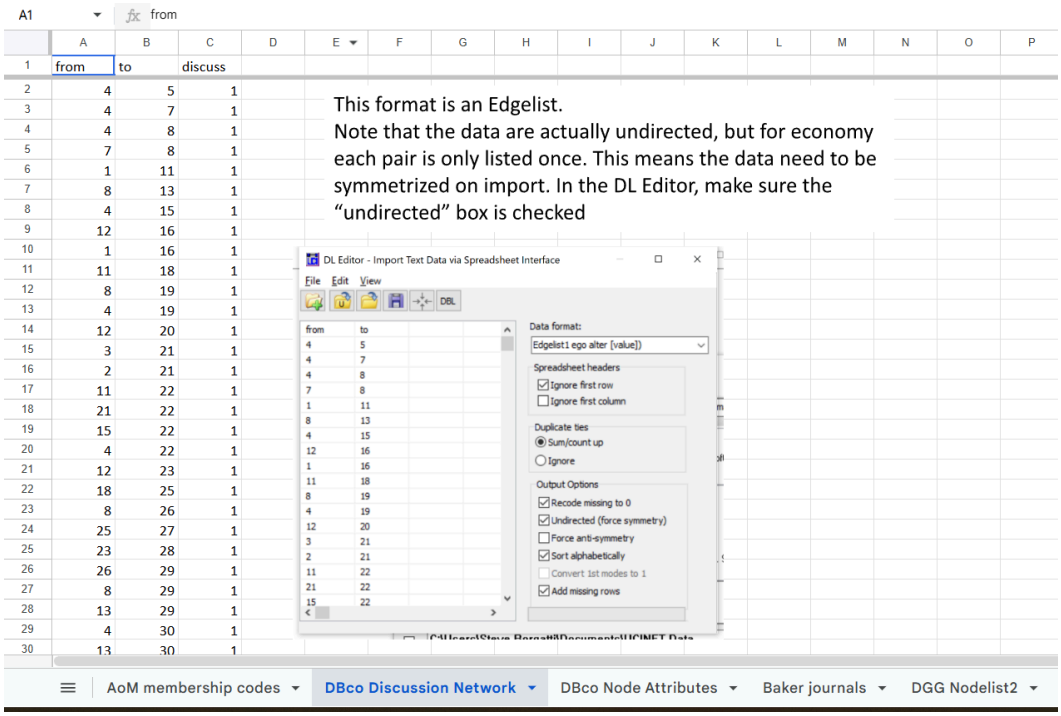
In the 'Data for Learning UCINET' file, the 'dbco - discussion network' tab contains data on who discusses work matters with whom at an organization that we refer to as DBCO. The format is a binary (non-valued) undirected edgelist. To import it into UCINET, we will use UCINET's DL editor. It is the 3rd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

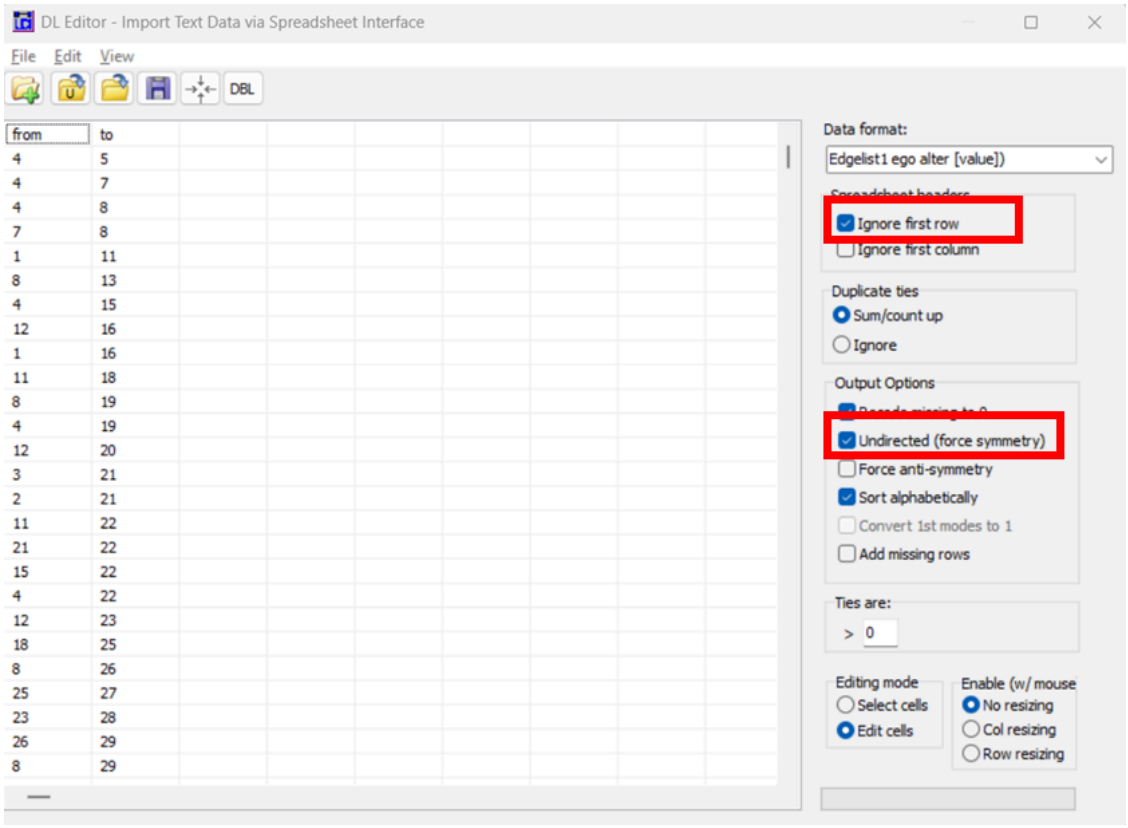


Now we open the '[data for learning ucinet]' workbook, and go to the 'dbco - discussion network' tab. Highlight the first two columns of data, and copy them to the clipboard:



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.

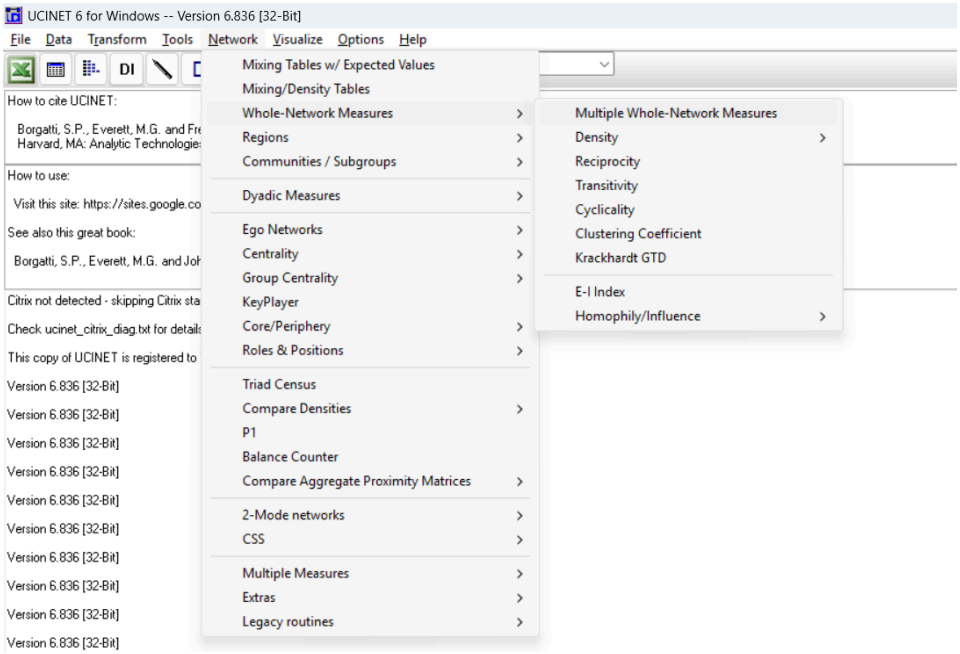
Check the figure below to make sure you have checked and unchecked all the same boxes.



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:

Revised 8 May 2022 UCINET 6.747 or later



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.


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

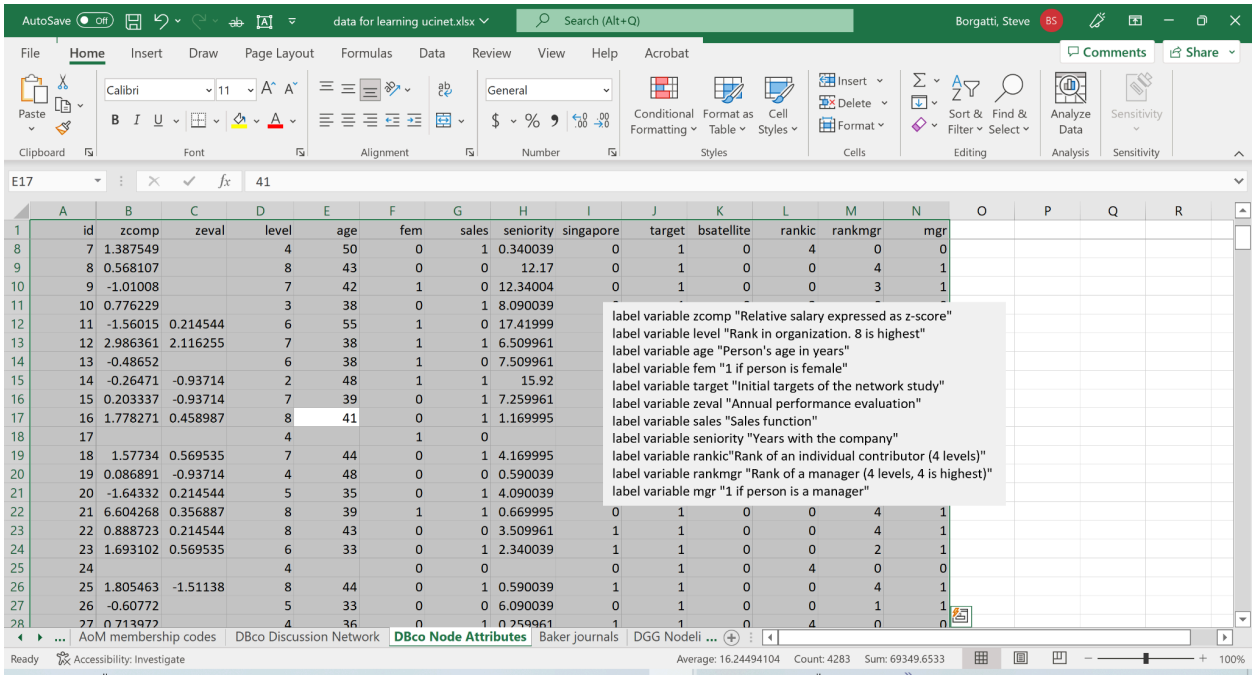
If these results do not match yours, you need to start again. Especially, make sure you have checked ‘Undirected’ in the DL Editor. That’s usually the problem. Also, make sure that “ignore first row’ is checked if you have ‘from’ and ‘to’ at the top of your columns. That’s also a common problem.

DBCOattr -- 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.)

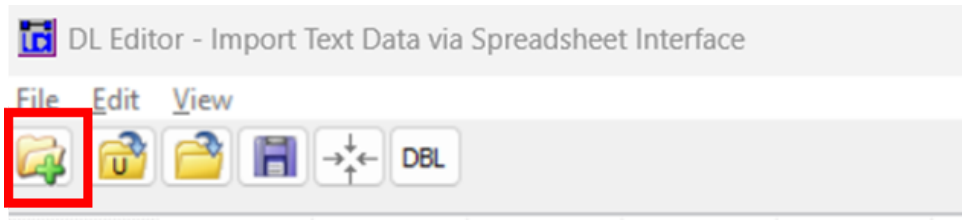
Going back to our Excel file, find the ‘dbco - node attributes’ tab. Highlight everything, as shown below, and copy to the Windows Clipboard (Ctrl-C).

Revised 8 May 2022 UCINET 6.747 or later

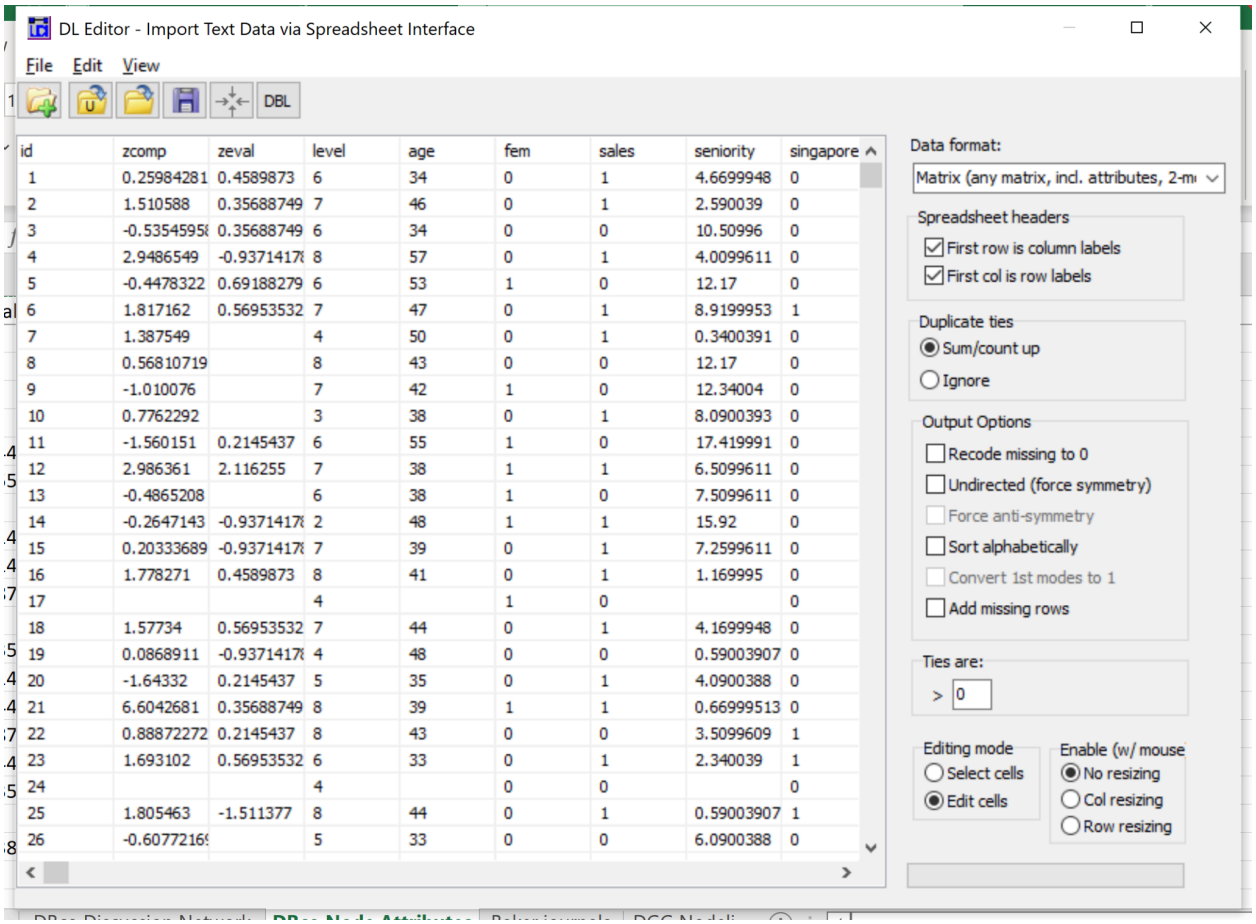


	id	zcomp	zeval	level	age	fem	sales	seniority	singapore	target	bsatellite	rankic	rankmgr	mgr
8	7	1.387549		4	50	0	1	0.340039	0	1	0	4	0	0
9	8	0.568107		8	43	0	0	12.17	0	1	0	0	4	1
10	9	-1.01008		7	42	1	0	12.34004	0	1	0	0	3	1
11	10	0.776229		3	38	0	1	8.090039						
12	11	-1.56015	0.214544	6	55	1	0	17.41999						
13	12	2.986361	2.116255	7	38	1	1	6.509961						
14	13	-0.48652		6	38	1	0	7.509961						
15	14	-0.26471	-0.93714	2	48	1	1	15.92						
16	15	0.203337	-0.93714	7	39	0	1	7.259961						
17	16	1.778271	0.458987	8	41	0	1	1.169995						
18	17			4		1	0							
19	18	1.57734	0.569535	7	44	0	1	4.169995						
20	19	0.086891	-0.93714	4	48	0	0	0.590039						
21	20	-1.64332	0.214544	5	35	0	1	4.090039						
22	21	6.604268	0.356887	8	39	1	1	0.669995	0	1	0	0	4	1
23	22	0.888723	0.214544	8	43	0	0	3.509961	1	1	0	0	4	1
24	23	1.693102	0.569535	6	33	0	1	2.340039	1	1	0	0	2	1
25	24			4		0	0		0	1	0	4	0	0
26	25	1.805463	-1.51138	8	44	0	1	0.590039	1	1	0	0	4	1
27	26	-0.60772		5	33	0	0	6.090039	0	1	0	0	1	1
28	27	0.713972		4	36	0	1	0.259961	1	1	0	4	0	0

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



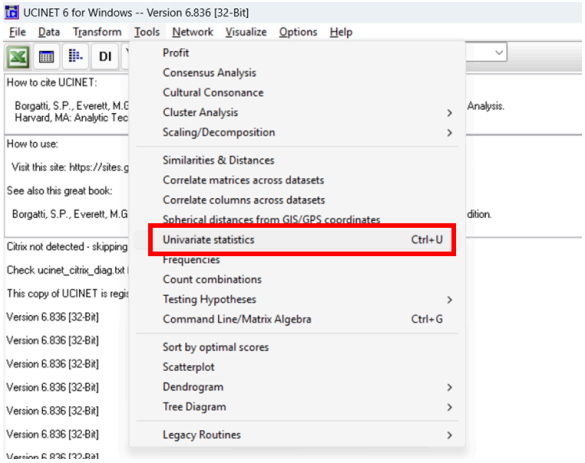
Then paste in the data from Excel. After pasting, set the data format to Matrix and make sure all of the options and checkboxes are set as below:

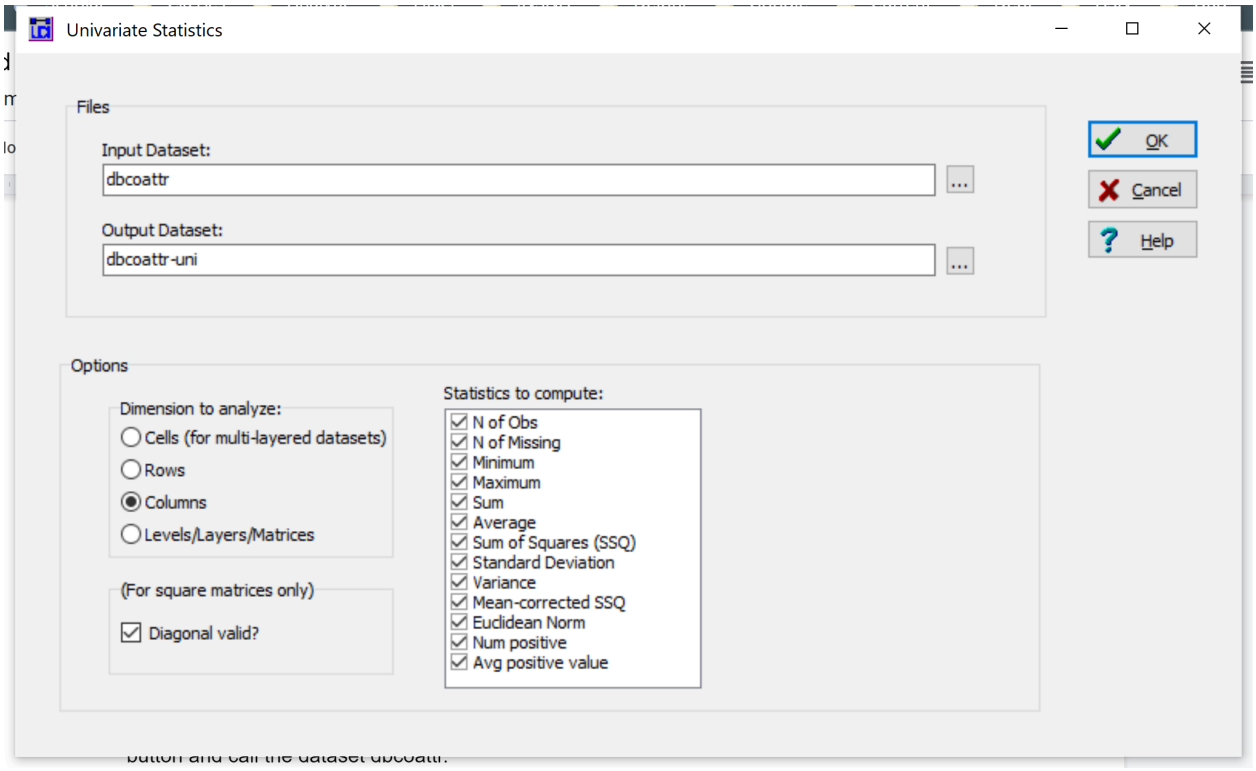


id	zcomp	zeval	level	age	fem	sales	seniority	singapore
1	0.25984281	0.4589873	6	34	0	1	4.6699948	0
2	1.510588	0.35688749	7	46	0	1	2.590039	0
3	-0.5354595	0.35688749	6	34	0	0	10.50996	0
4	2.9486549	-0.9371417	8	57	0	1	4.0099611	0
5	-0.4478322	0.69188279	6	53	1	0	12.17	0
6	1.817162	0.56953532	7	47	0	1	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

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.
```

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"