SUPPLEMENTS

Supplement 1. The Beck Depression Inventory (Beck & Beamesderfer, 1974)

Item	Question (range)		Answers
BDI-1	Sadness (0-3)	0	I do not feel sad.
		1	I feel sad
		2	I am sad all the time and I can't snap out of it.
		3	I am so sad and unhappy that I can't stand it.
BDI-2	Discouraged about future (0-3)	0	I am not particularly discouraged about the future.
		1	I feel discouraged about the future.
		2	I feel I have nothing to look forward to.
		3	I feel the future is hopeless and that things cannot improve.
BDI-3	Feeling a failure (0-3)	0	I do not feel like a failure.
		1	I feel I have failed more than the average person.
		2	As I look back on my life, all I can see is a lot of failures.
		3	I feel I am a complete failure as a person.
BDI-4	Loss of satisfaction (0-3)	0	I get as much satisfaction out of things as I used to.
		1	I don't enjoy things the way I used to.
		2	I don't get real satisfaction out of anything anymore.
		3	I am dissatisfied or bored with everything.
BDI-5	Feeling guilty (0-3)	0	I don't feel particularly guilty
		1	I feel guilty a good part of the time.
		2	I feel quite guilty most of the time.
		3	I f eel guilty all of the time.
BDI-6	Punishment feelings (0-3)	0	I don't feel I am being punished.
		1	I feel I may be punished.
		2	I expect to be punished.
		3	I feel I am being punished.
BDI-7	Self-dislike (0-3)	0	I don't feel disappointed in myself.
		1	I am disappointed in myself.
		2	I am disgusted with myself.
		3	I hate myself.
BDI-8	Critical of self (0-3)	0	I don't feel I am any worse than anybody else.
		1	I am critical of myself for my weaknesses or mistakes.
		2	I blame myself all the time for my faults.
		3	I blame myself for everything bad that happens.
BDI-9	Suicidal ideation (0-3)	0	I don't have any thoughts of killing myself.
		1	I have thoughts of killing myself, but I would not carry them out.
		2	I would like to kill myself.
		3	I would kill myself if I had the chance.
BDI-10	Crying (0-3)	0	I don't cry any more than usual.
		1	I cry more now than I used to.
		2	I cry all the time now.
		3	I used to be able to cry, but now I can't cry even though I want to.
BDI-11	Irritability (0-3)	0	I am no more irritated by things than I ever was.
		1	I am slightly more irritated now than usual.
		2	I am quite annoyed or irritated a good deal of the time.
		3	I feel irritated all the time.
BDI-12	Loss of interest in people (0-3)	0	I have not lost interest in other people.
		1	I am less interested in other people than I used to be.
		2	I have lost most of my interest in other people.
		3	I have lost all of my interest in other people.
BDI-13	Difficulty with decisions (0-3)	0	I make decisions about as well as I ever could.
		1	I put off making decisions more than I used to.
		2	I have greater difficulty in making decisions more than I used to.
		3	I can't make decisions at all anymore.
BDI-14	Look unattractive (0-3)	0	I don't feel that I look any worse than I used to.
		1	I am worried that I am looking old or unattractive.
		2	I feel there are permanent changes in my appearance that make me look unattractive
		3	I believe that I look ugly.

BDI-15	Work inhibition (0-3)	0	I can work about as well as before.
		1	It takes an extra effort to get started at doing something.
		2	I have to push myself very hard to do anything.
		3	I can't do any work at all.
BDI-16	Sleep disturbed (0-3)	0	I can sleep as well as usual.
		1	I don't sleep as well as I used to.
		2	I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
		3	I wake up several hours earlier than I used to and cannot get back to sleep.
BDI-17	Fatigue (0-3)	0	I don't get more tired than usual.
		1	I get tired more easily than I used to.
		2	I get tired from doing almost anything.
		3	I am too tired to do anything.
BDI-18	Anorexia (0-3)	0	My appetite is no worse than usual.
		1	My appetite is not as good as it used to be.
		2	My appetite is much worse now.
		3	I have no appetite at all anymore.
BDI-19	Weight loss (0-3)	0	I haven't lost much weight, if any, lately.
		1	I have lost more than five pounds.
		2	I have lost more than ten pounds.
		3	I have lost more than fifteen pounds.
BDI-20	Worried about health (0-3)	0	I am no more worried about my health than usual.
		1	I am worried about physical problems like aches, pains, upset stomach, or constipation.
		2	I am very worried about physical problems and it's hard to think of much else.
		3	I am so worried about my physical problems that I cannot think of anything else.
BDI-21	Libido (0-3)	0	I have not noticed any recent change in my interest in sex.
		1	I am less interested in sex than I used to be.
		2	I have almost no interest in sex.
		3	I have lost interest in sex completely.

Abbreviations: BDI = Beck Depression Inventory

Supplement 2. Bootstrapped CIs of estimated edge-weights for the estimated network
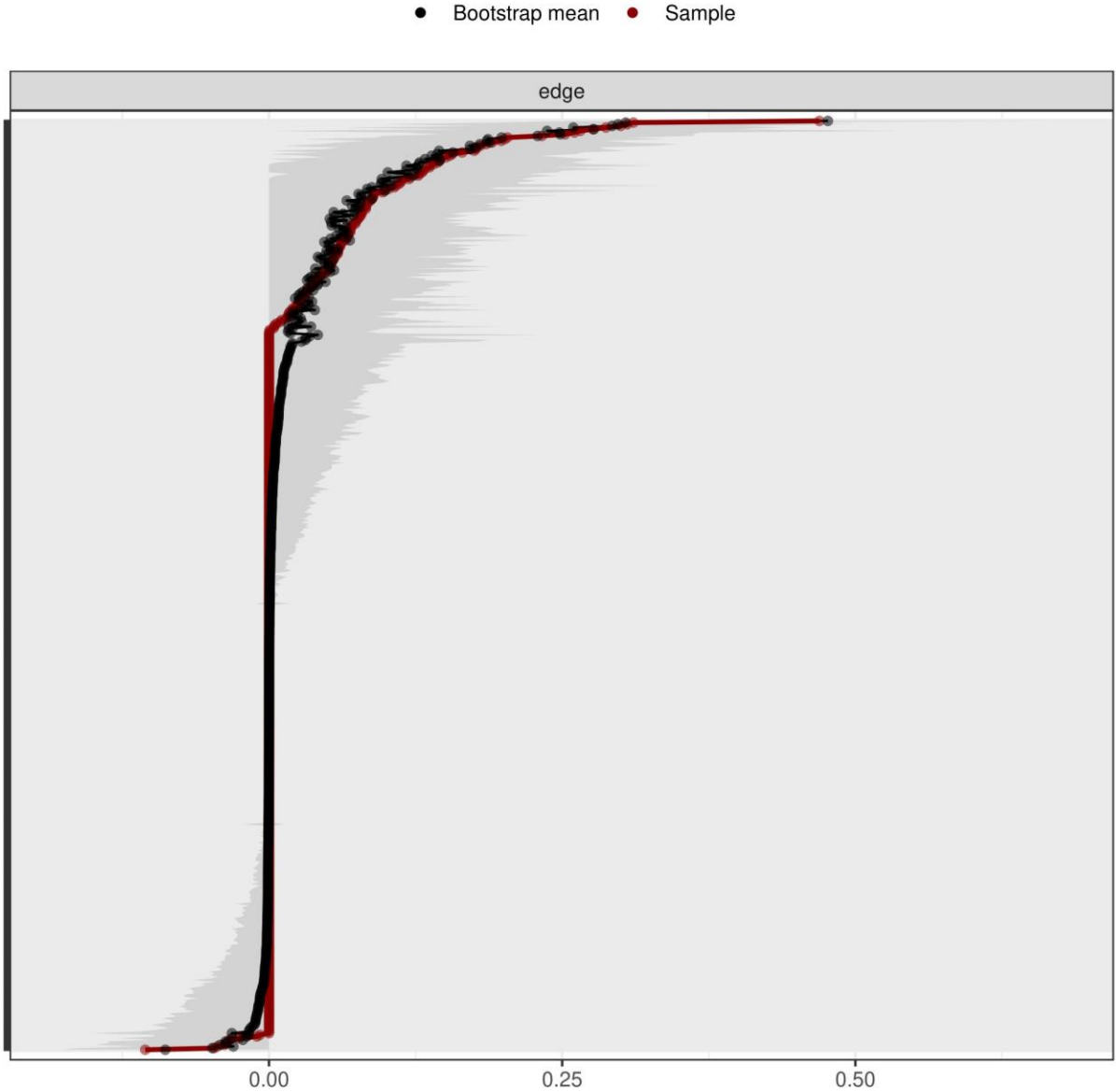

Figure S2 shows the bootstrapped 95% CIs around edge-weights. The X-axis represents the strength of the edge-weights. The y-axis lists all possible edges (i.e., (n*(n-1))/2) = 561) between all items. The y-axis labels have been removed to avoid cluttering. The red line indicates the sample values, and the grey area indicates the bootstrapped CIs. Each horizontal line represents a specific edge-weight between two items. For an edge to be significant, it should have a narrow bootstrapped CI, which in turn could not contain zero.

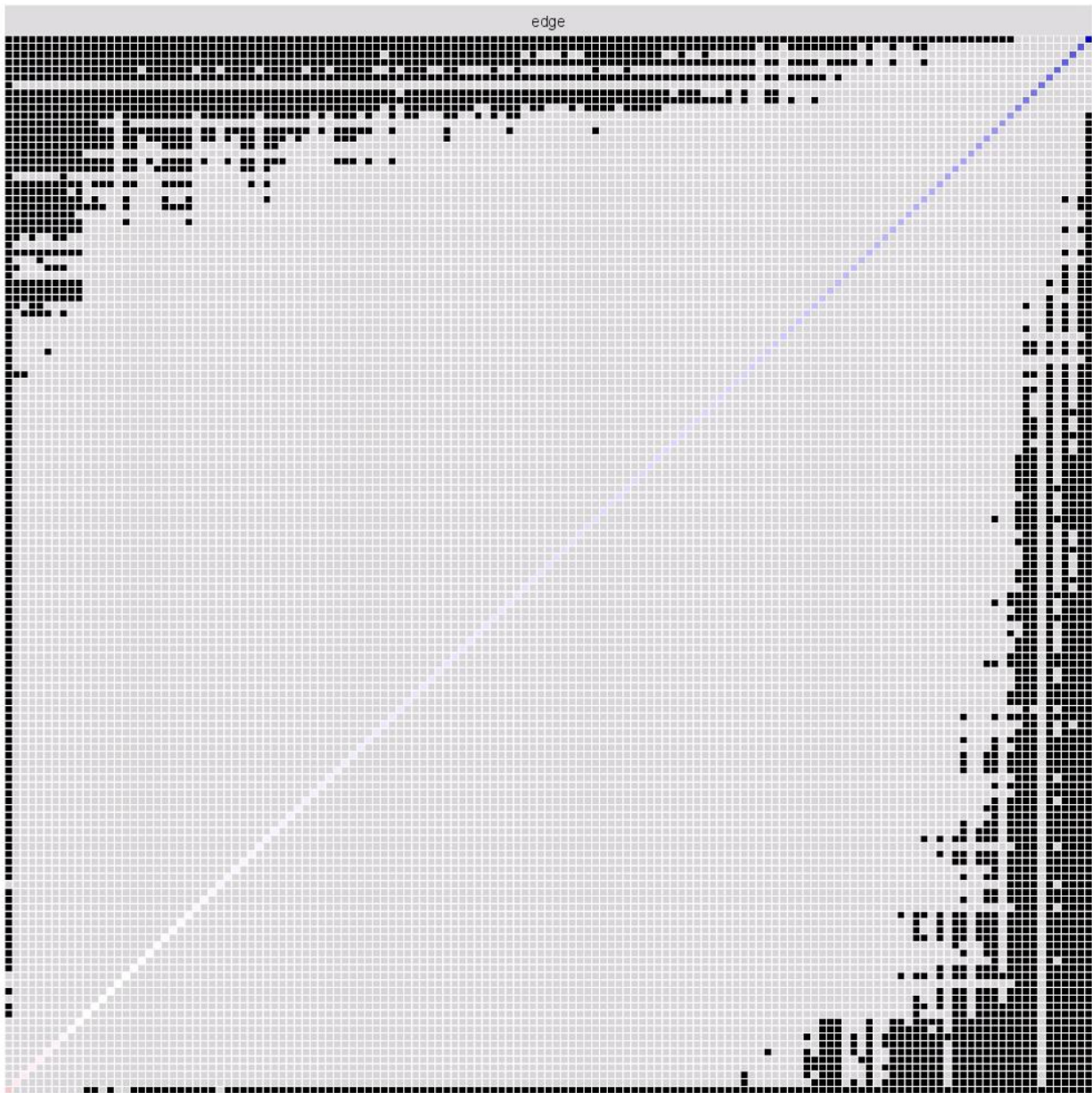**Supplement 3**. Plot of the different test for edge-weights

Figure S3 shows the results of the bootstrapped difference tests ($\alpha = 0.05$) for edge-weights. All possible edges (i.e., $(n*(n-1))/2) = 561$) between all items are shown at both axes. The axis labels have been removed for a clear, concise figure. Grey-colored boxes represent non-significant differences, while black boxes represent significant differences. The diagonal line indicates the strength of edge-weights, shifting from red (negative associations), to white (representing weaker edges) and ultimately dark blue (representing stronger edge-weights).

**Supplement 4.** Results of case-dropping bootstrap
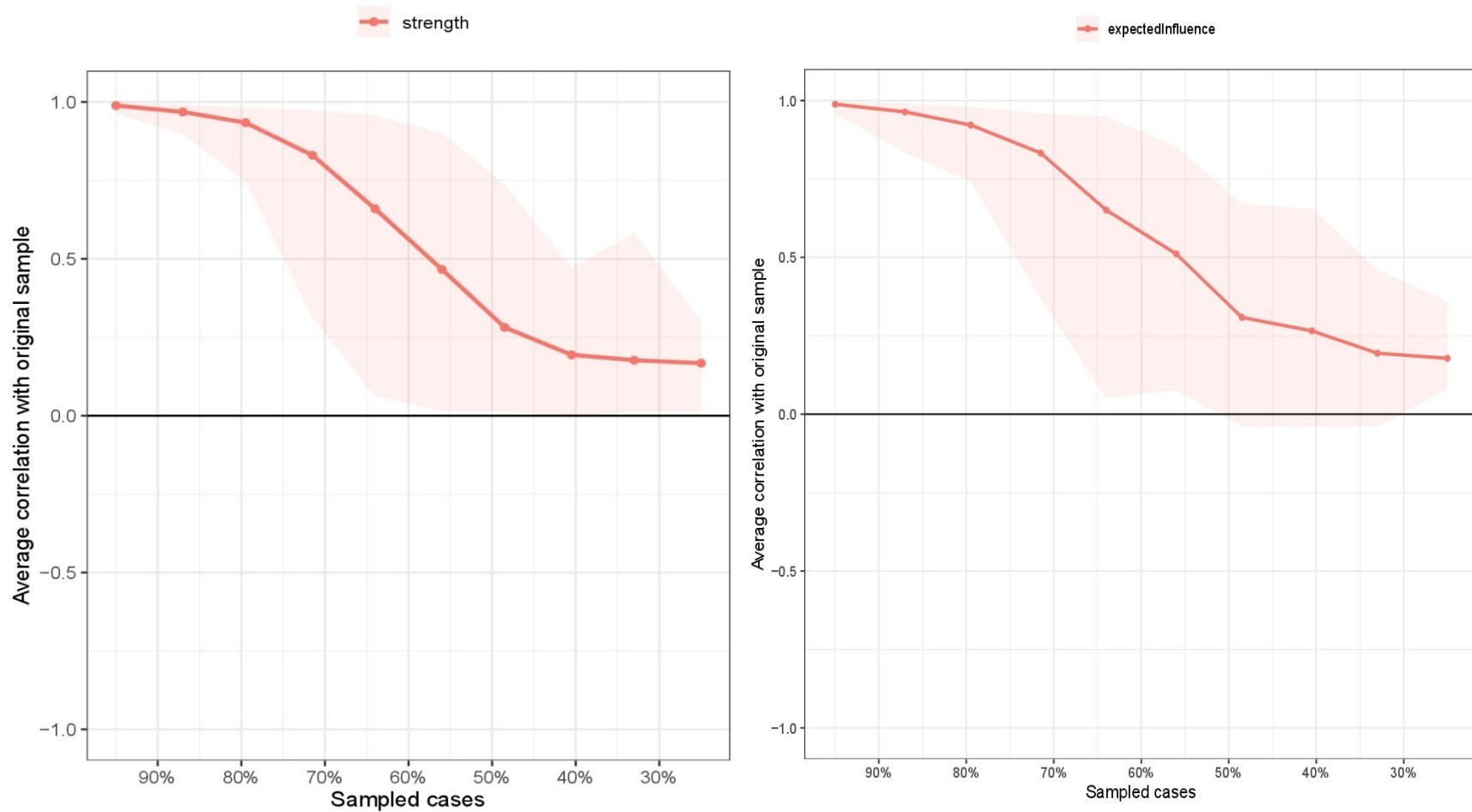
Stability of the node strength and expected influence centrality was quantified using the CS-coefficient, which was used to calculate the maximum drop in proportions to retain a correlation of 0.7 in at least 95 % of the sample. We found that the CS-coefficient for both strength and expected influence was close to 0.25.

Supplement 5-1. Bootstrapped difference tests on the nodal strength of all the items in the network
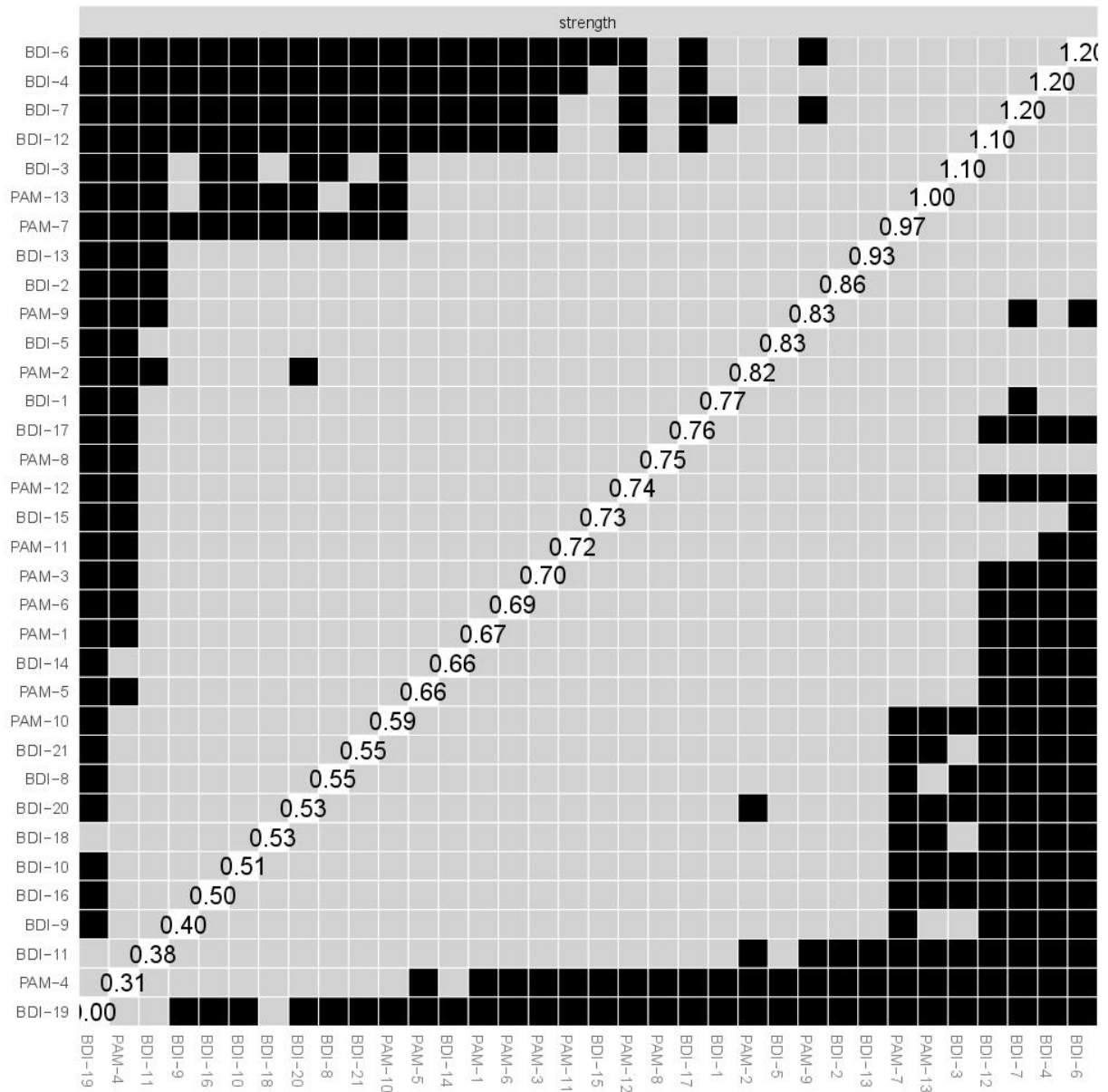
Box colors connote significant difference between nodes (black boxes for significant differences and grey for no significant differences). The numbers in white boxes in the centrality plot indicate strengths of the corresponding nodes.

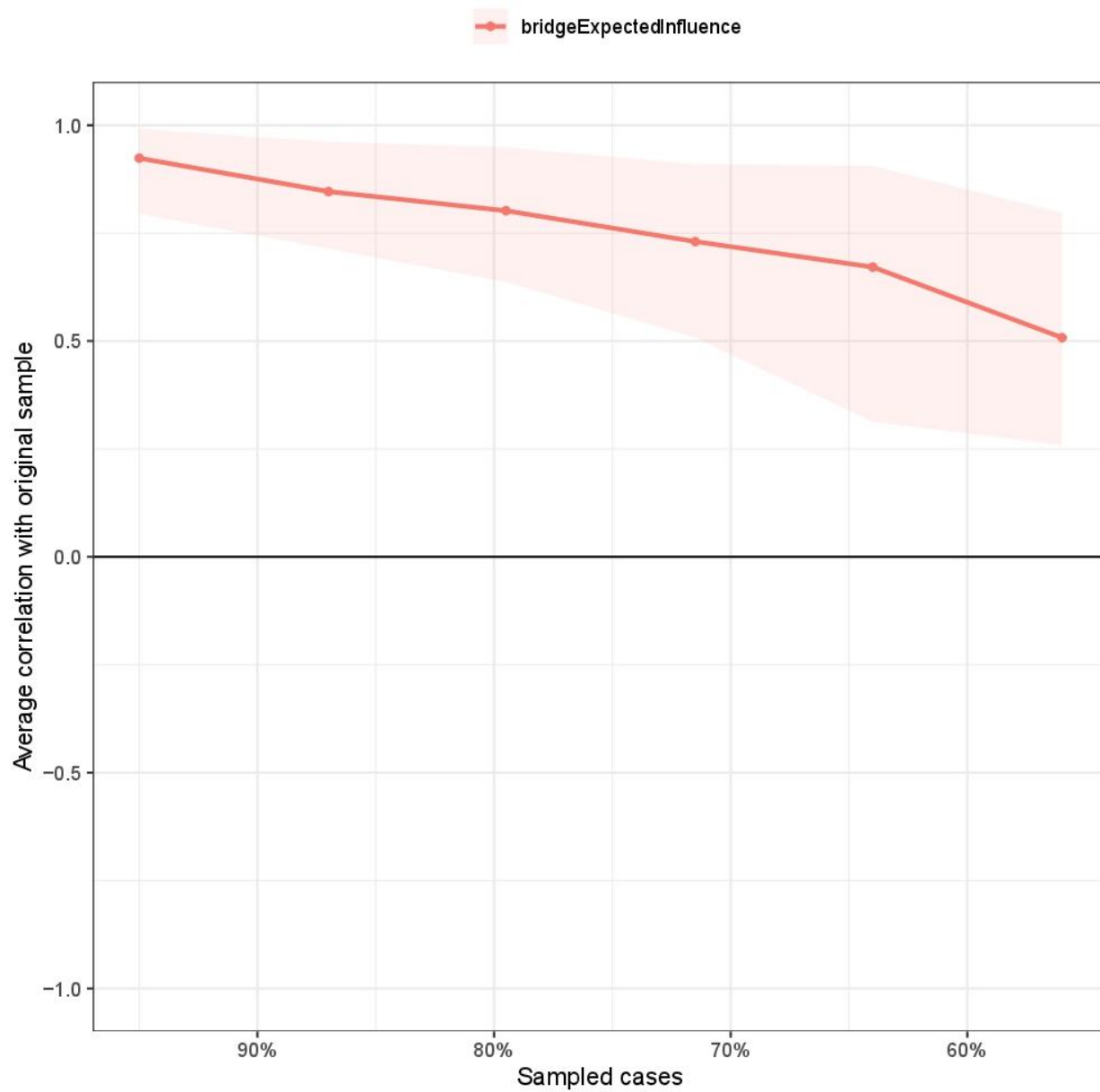**Supplement 5-2.** Results of bootstrapped difference tests comparing the expected influence dimensions
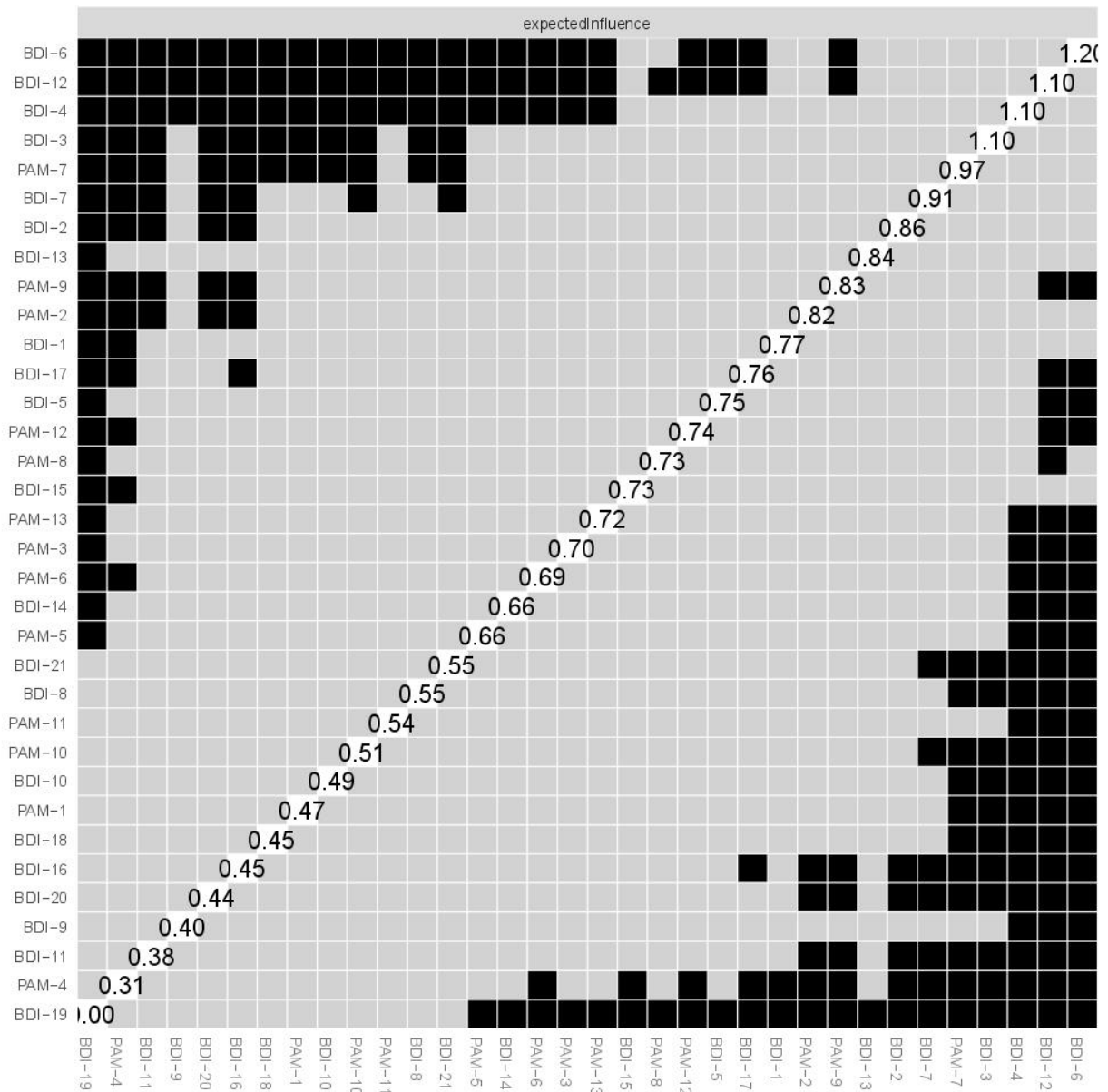
Box colors connote significant difference between nodes (black boxes for significant differences and grey for no significant differences). The numbers in white boxes in the centrality plot indicate strengths of the corresponding nodes.

Supplement 6. Results of case-dropping bootstrap

Supplement 7. Results of bootstrapped difference tests comparing the expected influence dimensions

The color of the boxes indicates whether there was a significant difference between dimensions (Grey boxes reflect no significant differences and black boxes reflect significant differences).

Supplement 8. Centrality table

Node	Strength	Betweenness	Closeness	Expected Influence	Bridge Expected Influence (1-step)	Bridge Expected Influence (2-step)
BDI-1	0.154	-0.309	-0.336	0.333	0	-0.016
BDI-2	0.480	-0.445	0.388	0.673	0	-0.002
BDI-3	1.268	1.158	1.638	1.492	0	-0.036
BDI-4	1.768	0.984	1.506	1.674	-0.044	-0.100
BDI-5	0.359	-0.039	0.280	0.268	-0.036	-0.073
BDI-6	1.897	0.579	1.129	2.146	0	-0.016
BDI-7	1.714	3.416	2.507	0.879	-0.141	-0.261
BDI-8	-0.666	-0.618	0.196	-0.520	0	-0.028
BDI-9	-1.197	-0.599	0.060	-1.072	0	-0.006
BDI-10	-0.795	-0.618	-0.509	-0.734	-0.010	-0.022
BDI-11	-1.280	-0.599	-1.399	-1.159	0	-0.012
BDI-12	1.519	0.405	1.178	1.753	0	-0.015
BDI-13	0.724	-0.502	-0.166	0.609	-0.041	-0.083
BDI-14	-0.255	-0.618	1.273	-0.093	0	-0.045
BDI-15	-0.016	-0.599	0.214	0.156	0	-0.023
BDI-16	-0.856	-0.618	-0.817	-0.915	-0.026	-0.045
BDI-17	0.130	-0.232	-0.265	0.308	0	-0.015
BDI-18	-0.747	-0.252	-0.710	-0.895	-0.038	-0.068
BDI-19	-2.686	-0.618	NA	-2.621	0	0.000
BDI-20	-0.737	-0.387	-0.321	-0.953	-0.047	-0.090
BDI-21	-0.658	-0.599	-0.170	-0.512	0	-0.016
PAM-1	-0.227	-0.445	-1.283	-0.829	-0.100	-0.159
PAM-2	0.339	-0.097	-1.045	0.526	0	-0.047
PAM-3	-0.095	0.250	-0.625	0.074	0	-0.023
PAM-4	-1.553	-0.618	-1.802	-1.443	0	0.000
PAM-5	-0.258	-0.618	-0.549	-0.095	0	-0.001
PAM-6	-0.150	-0.348	-0.351	0.016	0	-0.001
PAM-7	0.871	1.080	0.553	1.079	0	-0.028
PAM-8	0.093	-0.522	-1.304	0.190	-0.010	-0.024
PAM-9	0.376	-0.290	-1.019	0.564	0	-0.022
PAM-10	-0.511	-0.618	0.444	-0.686	-0.043	-0.135
PAM-11	-0.021	0.096	-0.295	-0.547	-0.091	-0.179
PAM-12	0.038	-0.116	0.081	0.212	0	-0.050
PAM-13	0.980	3.358	1.519	0.125	-0.139	-0.301

Abbreviations: BDI = Beck Depression Inventory, PAM = Patient Activation