

Supplemental Online Materials

Table S1. Unconstrained polychoric correlations at wave one (above the diagonal) and wave two (below the diagonal).

	PHQ1	PHQ2	PHQ3	PHQ4	PHQ5	PHQ6	PHQ7	PHQ8	PHQ9	GAD1	GAD2	GAD3	GAD4	GAD5	GAD6	GAD7
PHQ1	-	0.80	0.62	0.70	0.55	0.69	0.65	0.64	0.65	0.48	0.60	0.59	0.57	0.51	0.59	0.51
PHQ2	0.84	-	0.63	0.65	0.57	0.76	0.63	0.66	0.78	0.59	0.68	0.67	0.59	0.54	0.63	0.62
PHQ3	0.63	0.54	-	0.75	0.57	0.55	0.54	0.49	0.44	0.54	0.62	0.56	0.58	0.54	0.52	0.47
PHQ4	0.77	0.66	0.72	-	0.62	0.56	0.62	0.53	0.49	0.53	0.56	0.59	0.58	0.43	0.59	0.41
PHQ5	0.63	0.60	0.59	0.66	-	0.57	0.58	0.54	0.47	0.36	0.43	0.50	0.40	0.42	0.50	0.46
PHQ6	0.68	0.79	0.47	0.58	0.64	-	0.59	0.59	0.74	0.60	0.65	0.66	0.56	0.52	0.56	0.62
PHQ7	0.69	0.63	0.63	0.69	0.61	0.60	-	0.64	0.55	0.48	0.55	0.57	0.60	0.60	0.61	0.46
PHQ8	0.72	0.66	0.58	0.62	0.61	0.59	0.72	-	0.69	0.47	0.51	0.51	0.49	0.62	0.55	0.52
PHQ9	0.68	0.77	0.51	0.57	0.47	0.79	0.58	0.61	-	0.51	0.54	0.57	0.46	0.44	0.43	0.52
GAD1	0.51	0.63	0.53	0.56	0.43	0.56	0.54	0.56	0.56	-	0.77	0.72	0.69	0.61	0.49	0.61
GAD2	0.61	0.70	0.56	0.56	0.48	0.64	0.58	0.56	0.59	0.81	-	0.91	0.73	0.60	0.53	0.71
GAD3	0.63	0.68	0.51	0.59	0.51	0.65	0.52	0.52	0.54	0.75	0.86	-	0.75	0.61	0.53	0.69
GAD4	0.64	0.63	0.57	0.68	0.54	0.56	0.62	0.58	0.57	0.76	0.74	0.73	-	0.73	0.58	0.62
GAD5	0.57	0.54	0.49	0.50	0.45	0.40	0.62	0.70	0.45	0.65	0.63	0.57	0.67	-	0.63	0.60
GAD6	0.65	0.58	0.49	0.62	0.55	0.52	0.60	0.56	0.54	0.58	0.57	0.60	0.65	0.62	-	0.51
GAD7	0.55	0.61	0.52	0.52	0.54	0.59	0.54	0.58	0.54	0.69	0.76	0.71	0.64	0.62	0.59	-

Table S2. All six pairwise comparisons using the complementary metrics for network comparison among the four individually estimated PTSD symptom networks in Fried et al. (2018).

Network characteristic	Complementary metric for comparison	Pairwise Network Comparisons (A vs. B)					
		Sample 1 vs. Sample 2	Sample 1 vs. Sample 3	Sample 1 vs. Sample 4	Sample 2 vs. Sample 3	Sample 2 vs. Sample 4	Sample 3 vs. Sample 4
Non-zero (present) edges	Number in Network A	77	77	77	73	73	77
	Number in Network B	73	77	77	77	77	77
	Total edges estimated in A or B	94	98	100	95	99	95
	Number of edges estimated consistently (present and with the same sign) in A and B	54	54	54	54	51	58
	Number of edges that reversed in sign (e.g., positive to negative)	2	2	0	1	0	1
	Proportion of edges replicated (<i>unreplicated</i>) from Network A	70.1% (29.9%)	70.1% (29.9%)	70.1% (29.9%)	74.0% (26.0%)	69.9% (30.1%)	75.3% (24.7%)
	Proportion of edges replicated (<i>unreplicated</i>) from Network B	74.0% (26.0%)	70.1% (29.9%)	70.1% (29.9%)	70.1% (29.9%)	66.2% (33.8%)	75.3% (24.7%)
	Proportion of total edges replicated (<i>unreplicated</i>)	57.4% (42.6%)	55.1% (44.9%)	54.0% (46.0%)	56.8% (43.2%)	51.5% (48.5%)	61.1% (38.9%)
	Zero (absent) edges	Number in Network A	43	43	43	47	47
Number in Network B		47	43	43	43	43	43
Total edges estimated in A or B		64	64	66	65	69	61
Number of edges estimated consistently (absent) in A and B		26	22	20	25	21	25
Proportion of edges replicated (<i>unreplicated</i>) from Network A		60.5% (39.5%)	51.2% (48.8%)	46.5% (53.5%)	53.2% (46.8%)	44.7% (55.3%)	58.1% (41.9%)
Proportion of edges replicated (<i>unreplicated</i>) from Network B		55.3% (44.7%)	51.2% (48.8%)	46.5% (53.5%)	58.1% (41.9%)	48.8% (51.2%)	58.1% (41.9%)
Proportion of total edges replicated (<i>unreplicated</i>)		40.6% (59.4%)	34.4% (65.6%)	30.3% (69.7%)	38.5% (61.5%)	30.4% (69.6%)	41.0% (59.0%)

Table S2. (continued)

Network characteristic	Complementary metric for comparison	Pairwise Network Comparisons (A vs. B)					
		Sample 1 vs. Sample 2	Sample 1 vs. Sample 3	Sample 1 vs. Sample 4	Sample 2 vs. Sample 3	Sample 2 vs. Sample 4	Sample 3 vs. Sample 4
Edges with bootstrapped 95% confidence intervals that do not include zero (“bootnet-significant”)	Number in Network A	26	26	26	17	17	34
	Number in Network B	17	34	27	34	27	27
	Total edges estimated in A or B	34	40	36	37	34	43
	Number of edges estimated consistently (present and with the same sign) in A and B	9	20	17	14	10	18
	Number of edges that reversed in sign (e.g., positive to negative)	0	0	0	0	0	0
	Proportion of edges consistent (<i>inconsistent</i>) from Network A	34.6% (65.4%)	76.9% (23.1%)	65.4% (34.6%)	82.4% (17.6%)	58.8% (41.2%)	52.9% (47.1%)
	Proportion of edges consistent (<i>inconsistent</i>) from Network B	52.9% (47.1%)	58.8% (41.2%)	63.0% (37.0%)	41.2% (58.8%)	37.0% (63.0%)	66.7% (33.3%)
	Proportion of total edges consistent (<i>inconsistent</i>)	26.5% (73.5%)	50.0% (50.0%)	47.2% (52.8%)	37.8% (62.2%)	29.4% (70.6%)	41.9% (58.1%)
	Average % change in consistent “bootnet-significant” edges	From A to B	46.5%	39.4%	20.9%	24.9%	49.3%
From B to A		52.1%	43.5%	24.6%	36.0%	82.2%	55.7%
Symptom strength centrality	Spearman's rho	0.50	0.38	0.40	0.42	0.60	0.45
	Kendall's tau-b	0.38	0.25	0.30	0.30	0.45	0.35
	Number and proportion of possible rank-order matches	4 (25%)	2 (12.5%)	2 (12.5%)	0 (0%)	4 (25%)	2 (12.5%)

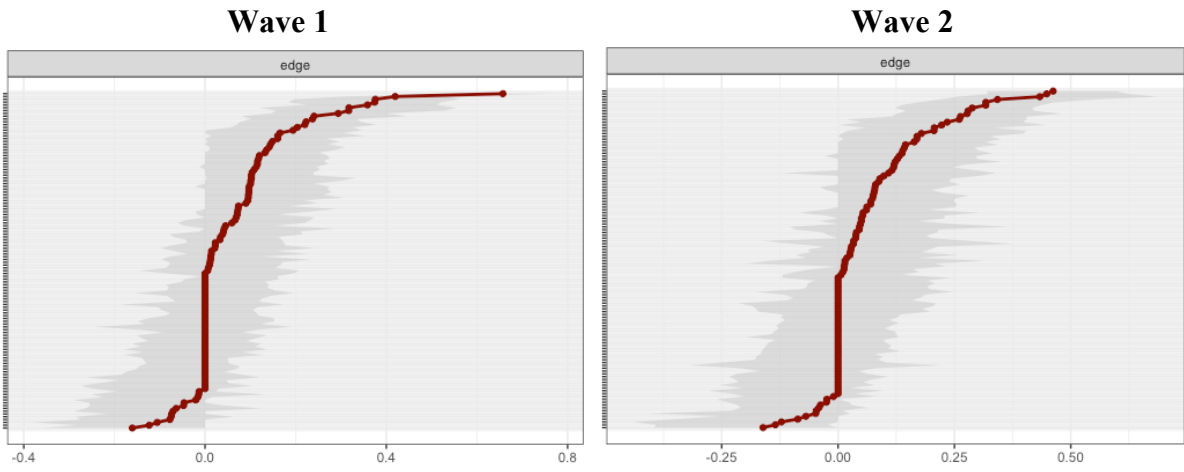
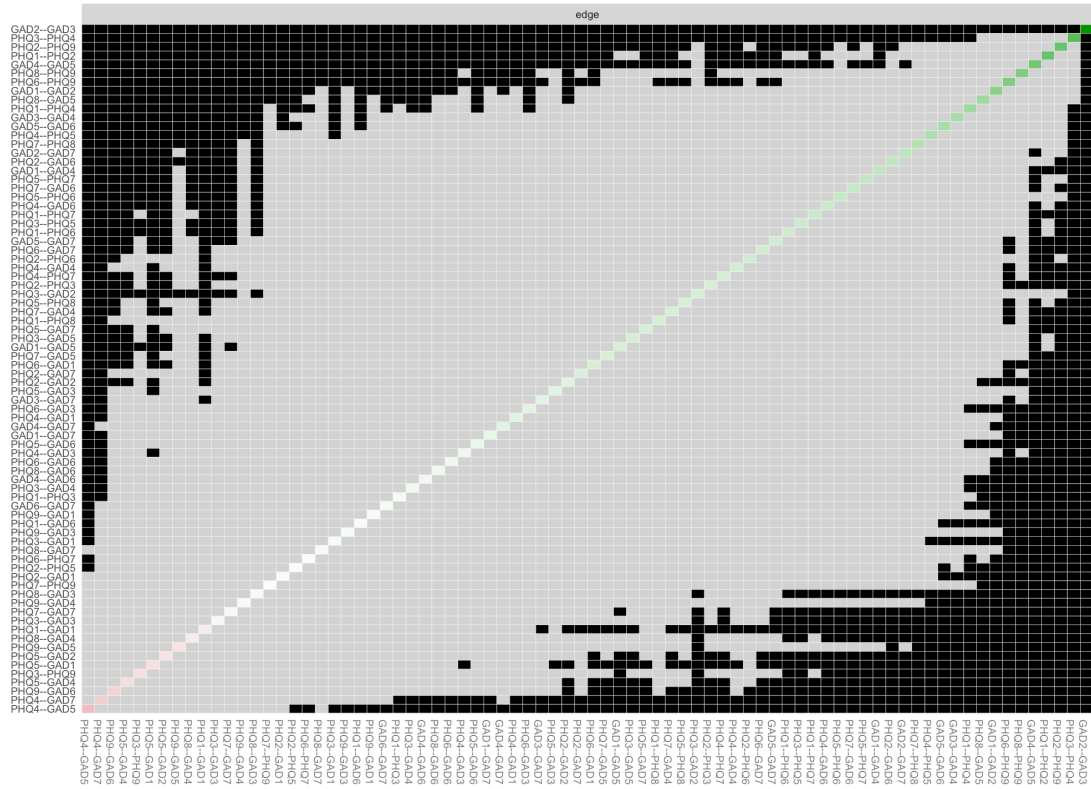


Figure S1. 95% confidence intervals for edge weights at each wave.

(A)



(B)

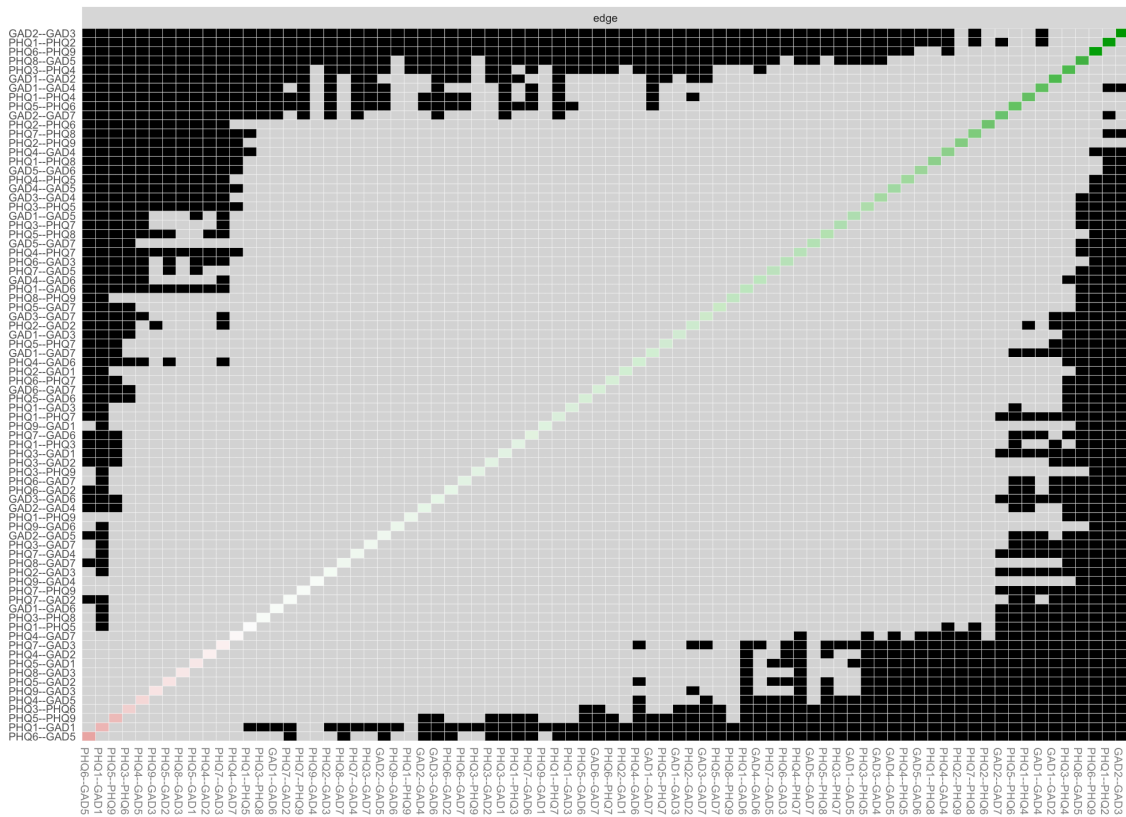


Figure S2. Significance of difference tests between edges within each network. (A) Wave 1; (B) Wave 2.

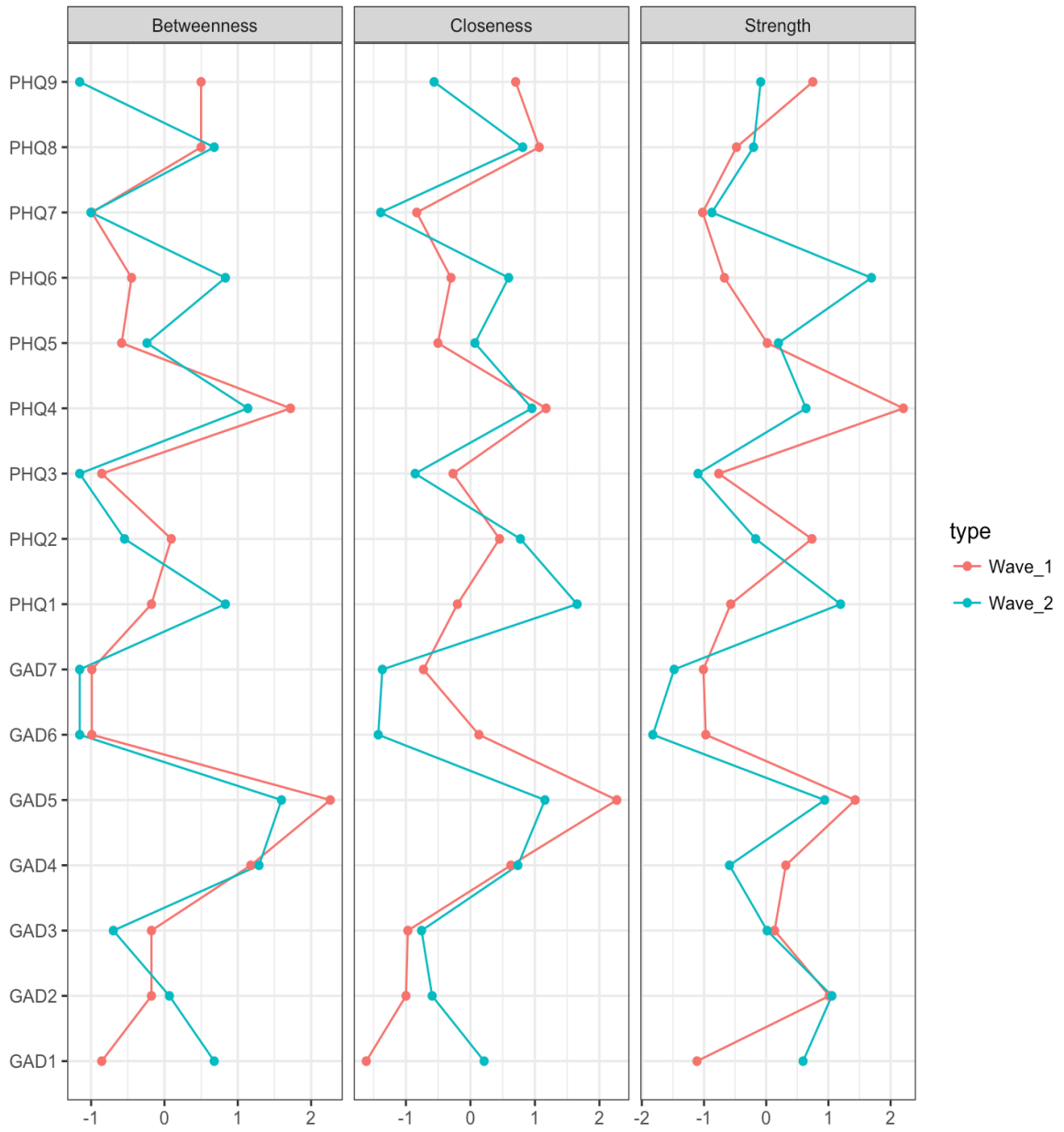
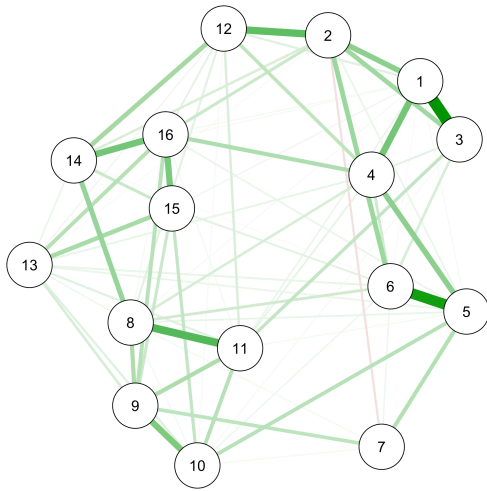
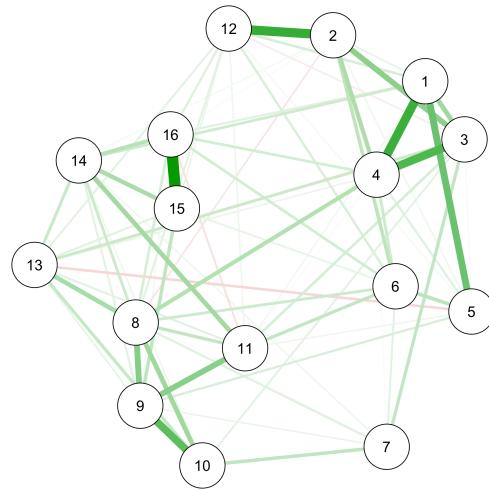


Figure S5. Standardized symptom centrality estimates at each wave (plotted as z-scores, per *centralityPlot* in the *qgraph* package in R).

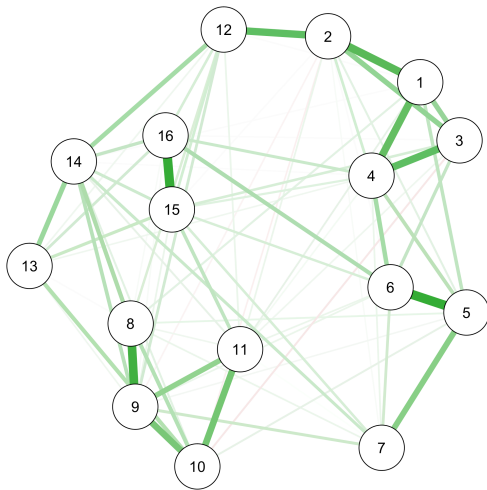
Sample 1 (n = 526)



Sample 2 (n = 365)



Sample 3 (n = 926)



Sample 4 (n = 965)

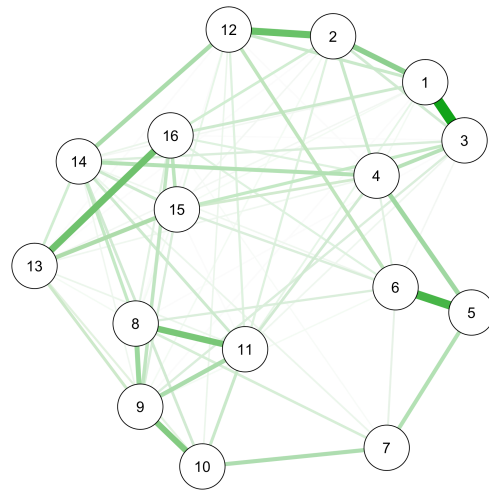
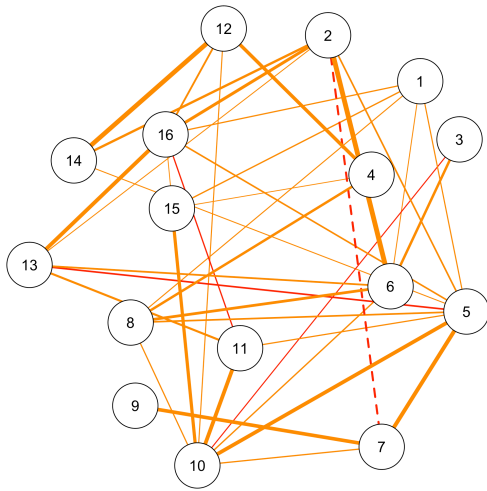
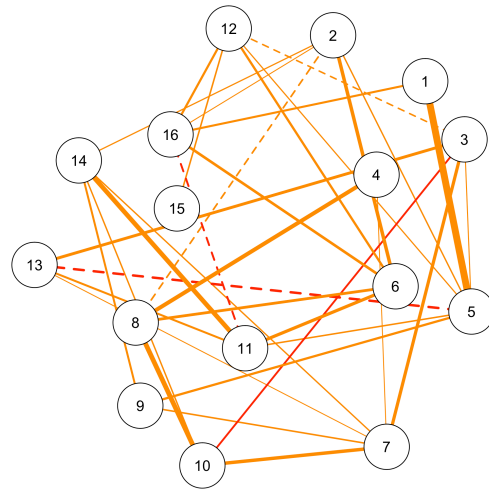


Figure S6. Individually estimated Gaussian graphical model PTSD symptom networks from Fried et al. (2018) using graphical lasso regularisation with EBIC.

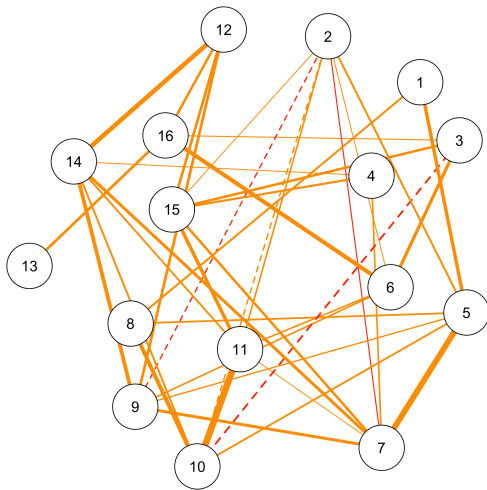
Sample 1 (n = 526)



Sample 2 (n = 365)



Sample 3 (n = 926)



Sample 4 (n = 965)

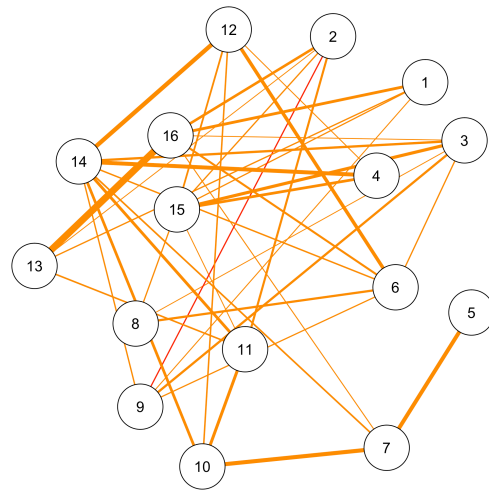
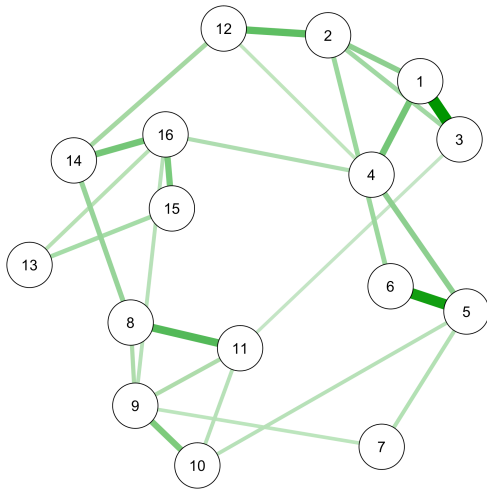
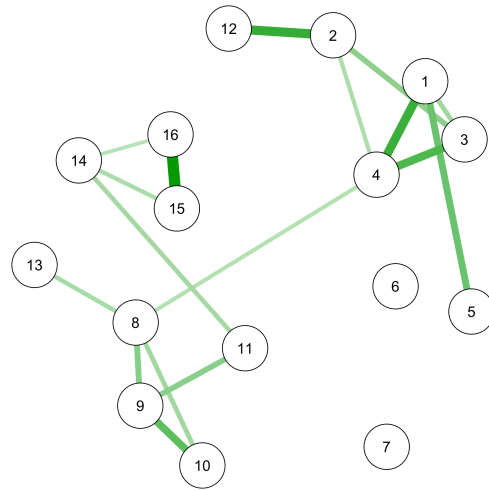


Figure S7. Inconsistently estimated edges among the four PTSD symptom networks. Orange edges were inconsistently estimated (present/absent), red edges reversed in sign, and dashed edges are negative.

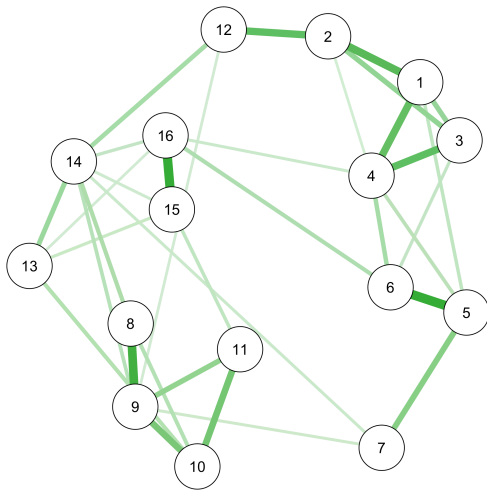
Sample 1 (n = 526)



Sample 2 (n = 365)



Sample 3 (n = 926)



Sample 4 (n = 965)

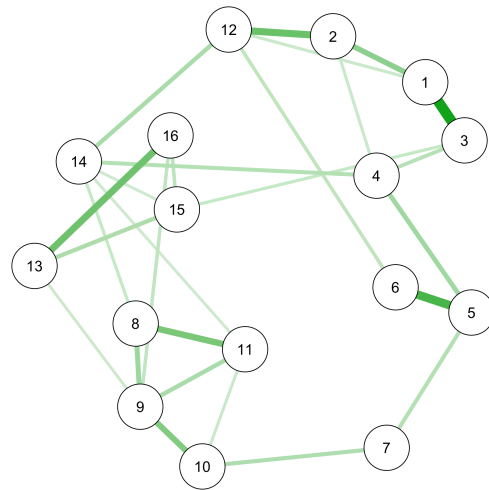
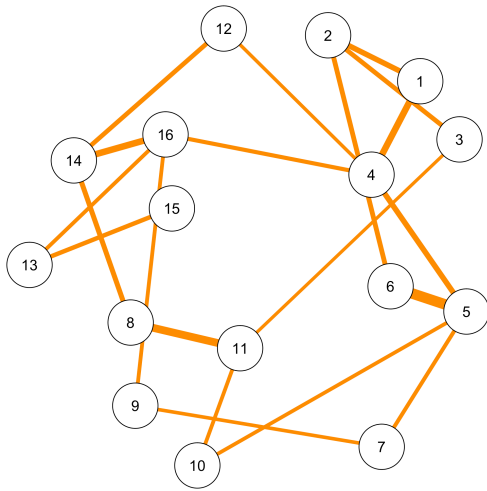
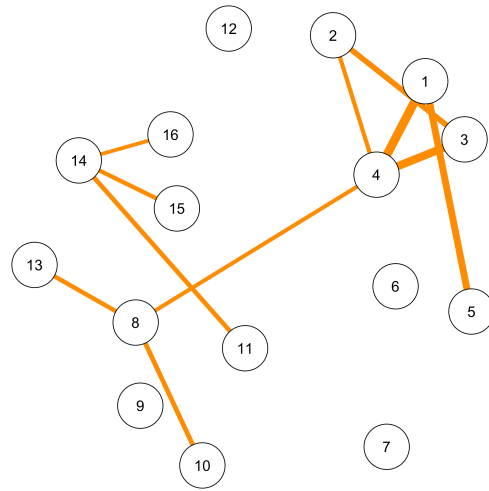


Figure S8. Subsets of the networks in Figure S5 showing the edges in each network with 95% bootstrapped confidence intervals that did not include zero (“bootnet-significant” edges).

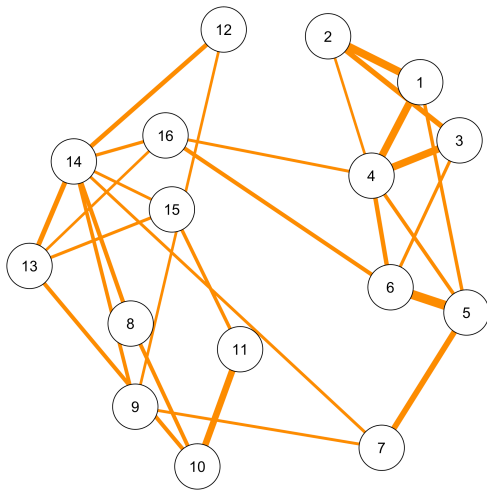
Sample 1 (n = 526)



Sample 2 (n = 365)



Sample 3 (n = 926)



Sample 4 (n = 965)

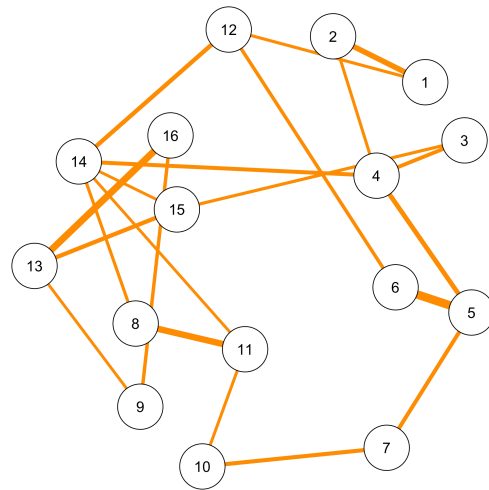


Figure S9. Inconsistently estimated edges among the four “*bootnet*-significant” edge networks in Figure S7.