

Supplementary Online Content

Isvoranu, A.M., Epskamp, S., Cheung, M. Network Models of Post-traumatic Stress Disorder:
A Meta-analysis

Appendix S1. R-function.

Appendix S2. Table of node descriptions.

Appendix S3. Table of numeric results.

Supplemental Figure S1. Overview of the cumulative number of articles, and overall number of articles published annually.

Supplemental Figure S2. Number of samples for each pair of variables for which different types of correlations were available.

Supplemental Figure S3. Estimated edge-weights and confidence regions.

Supplemental Figure S4. Multiverse plot displaying MAGNA results for distinct MAGNA estimation procedures.

Supplemental Figure S5. Centrality indices obtained through all analyses run in the multiverse analysis.

Supplemental Figure S6. Comparison of the pooled MAGNA network results of PTSD systematic review and a large sample PTSD symptom network.

Supplemental Figure S7. Comparison of centrality measures obtained through the pooled MAGNA network and a large sample PTSD symptom network.

This supplementary material has been provided by the authors to give readers additional information about their work.

Appendix S1. R-function

```
# This function can be used to write the following files:
# - Pearson_listwise.csv - Listwise Pearson correlations
# - Pearson_pairwise.csv - Pairwise Pearson correlations
# - Spearman_listwise.csv - Listwise Spearman correlations
# - Spearman_pairwise.csv - Pairwise Spearman correlations
# - descriptives.txt - Some general descriptive measures

getCorrelations <- function(data){
  # Check if this is a matrix or data frame:
  if (!is.matrix(data) && !is.data.frame(data)){
    stop("Input is not a matrix or data frame.")
  }

  # If it is a matrix, make it a data frame:
  if (is.matrix(data)){
    data <- as.data.frame(data)
  }

  # Descriptives:
  nSample_listwise <-
sum(apply(data,1,function(x)all(!is.na(x))))
  nSample_full <- sum(apply(data,1,function(x)any(!is.na(x))))

  # Compute average sample size for pairwise correlations:
  nomisdata <- !is.na(as.matrix(data))
  nMat <- t(nomisdata) %*% nomisdata
  nSample_pairwise <-
mean(nMat[lower.tri(nMat,diag=FALSE)],na.omit=TRUE)

  # Means:
  means <- colMeans(data,na.rm = TRUE)

  # SDs:
  SDs <- sapply(data,sd,na.rm = TRUE)

  # Number of levels:
  nLevels <- sapply(data,
function(x)length(unique(x)[!is.na(unique(x))]))

  # Set names:
  if (is.null(colnames(data))){
    colnames(data) <- paste0("V",seq_len(ncol(data)))
  }

  # Write these to a file:
  descriptivesFile <- paste0(getwd(),"/descriptives.txt")
  write(paste0(
    "Sample size (full): ", nSample_full, "\n",
    "Sample size (listwise): ", nSample_listwise, "\n",
```

```

    "Sample size (pairwise average): ", nSample_pairwise,
"\n",
    "Name: ", paste0(colnames(data), collapse = "; "), "\n",
    "Means: ", paste0(means, collapse = "; "), "\n",
    "Standard deviations: ", paste0(SDs, collapse = "; "),
"\n",
    "Number of levels: ", paste0(nLevels, collapse = "; ")
), file = descriptivesFile)

# Correlations:
try({
  pearsonCorsFile_listwise <-
paste0(getwd(), "/Pearson_listwise.csv")
  write.csv(cor(data, use = "complete.obs"), file =
pearsonCorsFile_listwise)
})

try({
  pearsonCorsFile_pairwise <-
paste0(getwd(), "/Pearson_pairwise.csv")
  write.csv(cor(data, use = "pairwise.complete.obs"), file =
pearsonCorsFile_pairwise)
})

try({
  spearmanCorsFile_listwise <-
paste0(getwd(), "/Spearman_listwise.csv")
  write.csv(cor(data, use = "complete.obs", method =
"spearman"), file = spearmanCorsFile_listwise)
})

try({
  spearmanCorsFile_pairwise <-
paste0(getwd(), "/Spearman_pairwise.csv")
  write.csv(cor(data, use = "pairwise.complete.obs", method =
"spearman"), file = spearmanCorsFile_pairwise)
})

cat("Done! Please mail us the following files:\n\n1.
",pearsonCorsFile_listwise,
    "\n2. ",pearsonCorsFile_pairwise,
    "\n3. ",spearmanCorsFile_listwise,
    "\n4. ",spearmanCorsFile_pairwise,
    "\n5. ",descriptivesFile,"\n\nThank you for your
assistance!")
}

```

Appendix S2. Table of node descriptions and alternative descriptions mapped to the nodes included.

DSM-IV ID	Label	Examples of alternative descriptions	DSM-IV description
B1	Intrusive Thoughts	Intrusive recollections; Thought about it when didn't mean to	Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note: In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
B2	Nightmares	Dreams, Traumatic dreams, Distressing dreams; Has upsetting dreams; Had dreams about it	Recurrent distressing dreams of the event.
B3	Flashbacks	Re-experiencing; Reminders brought back feelings; Pictures popped into mind	Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur on awakening or when intoxicated). Note: In young children, trauma-specific re-enactment may occur.
B4	Psychological reactivity	Upset at reminder of trauma; Heightened emotional reactivity; Avoid letting themselves getting upset when thinking or being reminded of it	Intense psychological distress at exposure to the internal or external cues that symbolize or resemble an aspect of the traumatic event.
B5	Physiological reactivity	Physiological cue reactivity; Physiological reaction on exposure	Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.
C1	Internal avoidance	Avoiding Thoughts/Feelings	Efforts to avoid thoughts, feelings, or conversations associated with the trauma.
C2	External avoidance	Avoidance of activities	Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
C3	Amnesia	Inability remembering; felt as if it hadn't happened or wasn't real	Inability to recall important aspect of the trauma.
C4	Loss of interest	Anhedonia	Markedly diminished interest or participation in significant activities.
C5	Feeling detached	Feeling distant or cut off from others; Difficulties feeling close to others	Feelings of detachment or estrangement from others.
C6	Emotional numbing	Numbness Happiness/Love; Restricted Affect	Restricted range of affect (e.g., unable to have loving feelings).
D2	Irritability / anger	Anger; Irritability	Irritability or outbursts of anger
D4	Hypervigilant	Overly Alert; Watchful / On-guard	Hyper vigilance
D5	Easily startled	Exaggerated startle, Exaggerated startle response	Exaggerated startle response
D3	Difficulty concentrating	Concentration	Difficulty concentrating
D1	Sleep disturbance	difficulty falling or staying asleep; Trouble staying asleep; Trouble falling asleep	Difficulty falling or staying asleep
C7	Hopelessness	Future foreshortening; Feeling plans won't come true	Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).

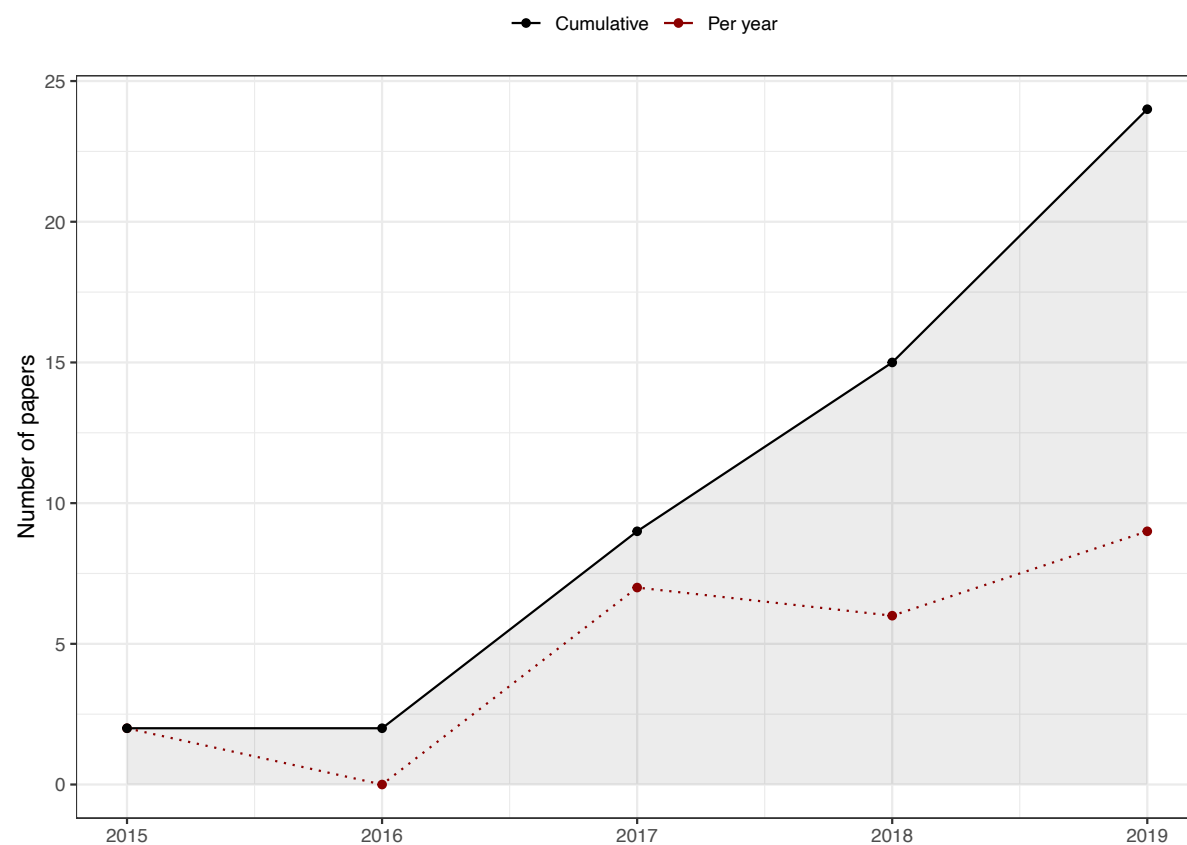
Appendix S3. Table of numeric results.

Variable 1	Variable 12	Edge	SE	p	Implied Correlation	Random-effect SD
nightmares	intrusive thoughts	.229	0.016	<.001	.548	0.133
flashbacks	intrusive thoughts	.235	0.023	<.001	.550	0.133
psychological reactivity	intrusive thoughts	.174	0.025	<.001	.529	0.155
physiological reactivity	intrusive thoughts	.075	0.017	<.001	.505	0.099
internal avoidance	intrusive thoughts	.105	0.014	<.001	.448	0.117
external avoidance	intrusive thoughts	.023	0.012	.051	.413	0.118
amnesia	intrusive thoughts	-.014	0.014	.314	.256	0.129
loss of interest	intrusive thoughts	.016	0.013	.217	.354	0.124
feeling detached	intrusive thoughts	-.001	0.015	.948	.361	0.120
emotional numbing	intrusive thoughts	.025	0.015	.093	.346	0.118
irritability anger	intrusive thoughts	-.010	0.013	.437	.325	0.119
hypervigilant	intrusive thoughts	.043	0.012	<.001	.373	0.114
easily startled	intrusive thoughts	.009	0.013	.483	.388	0.113
difficulty concentrating	intrusive thoughts	.046	0.013	<.001	.390	0.099
sleep disturbance	intrusive thoughts	.027	0.017	.114	.394	0.109
hopelessness	intrusive thoughts	.061	0.019	.001	.368	0.108
flashbacks	nightmares	.211	0.020	<.001	.511	0.140
psychological reactivity	nightmares	-.009	0.023	0.694	.416	0.151
physiological reactivity	nightmares	.147	0.023	<.001	.493	0.134
internal avoidance	nightmares	.016	0.015	.260	.373	0.125
external avoidance	nightmares	.033	0.013	.010	.372	0.133
amnesia	nightmares	.003	0.017	.872	.233	0.142
loss of interest	nightmares	.021	0.016	.174	.320	0.139
feeling detached	nightmares	-.028	0.016	.080	.314	0.129
emotional numbing	nightmares	.009	0.014	.538	.302	0.115
irritability anger	nightmares	-.018	0.020	.362	.298	0.118
hypervigilant	nightmares	.023	0.011	.038	.341	0.108
easily startled	nightmares	.026	0.014	.069	.371	0.140
difficulty concentrating	nightmares	.006	0.018	.724	.352	0.120
sleep disturbance	nightmares	.234	0.025	<.001	.472	0.141
hopelessness	nightmares	.005	0.015	.749	.310	0.099
psychological reactivity	flashbacks	.118	0.021	<.001	.472	0.153
physiological reactivity	flashbacks	.088	0.031	.004	.470	0.144
internal avoidance	flashbacks	-.005	0.014	.739	.362	0.120
external avoidance	flashbacks	.038	0.011	.001	.372	0.135
amnesia	flashbacks	.063	0.014	<.001	.268	0.127
loss of interest	flashbacks	-.012	0.016	.452	.302	0.133

Variable 1	Variable 12	Edge	SE	p	Implied Correlation	Random-effect SD
feeling detached	flashbacks	-.000	0.018	.992	.318	0.130
emotional numbing	flashbacks	.016	0.014	.245	.307	0.115
irritability anger	flashbacks	.032	0.017	.070	.307	0.124
hypervigilant	flashbacks	.016	0.013	.227	.330	0.120
easily startled	flashbacks	.041	0.014	.002	.364	0.128
difficulty concentrating	flashbacks	-.007	0.016	.666	.327	0.114
sleep disturbance	flashbacks	-.018	0.014	.196	.336	0.129
hopelessness	flashbacks	.050	0.016	.002	.329	0.116
physiological reactivity	psychological reactivity	.249	0.025	<.001	.567	0.140
internal avoidance	psychological reactivity	.108	0.021	<.001	.461	0.148
external avoidance	psychological reactivity	.077	0.016	<.001	.446	0.149
amnesia	psychological reactivity	.035	0.015	.021	.286	0.130
loss of interest	psychological reactivity	.023	0.014	.109	.366	0.115
feeling detached	psychological reactivity	.041	0.020	.037	.388	0.120
emotional numbing	psychological reactivity	-.004	0.019	.831	.343	0.121
irritability anger	psychological reactivity	.065	0.016	<.001	.367	0.122
hypervigilant	psychological reactivity	.017	0.013	.208	.366	0.126
easily startled	psychological reactivity	.050	0.018	.006	.409	0.123
difficulty concentrating	psychological reactivity	.010	0.014	.468	.380	0.108
sleep disturbance	psychological reactivity	-.005	0.012	.682	.357	0.102
hopelessness	psychological reactivity	.035	0.017	.036	.354	0.103
internal avoidance	physiological reactivity	.056	0.018	.002	.444	0.123
external avoidance	physiological reactivity	.096	0.018	<.001	.455	0.135
amnesia	physiological reactivity	.025	0.019	.177	.283	0.125
loss of interest	physiological reactivity	.000	0.014	.990	.364	0.122
feeling detached	physiological reactivity	.032	0.026	.224	.391	0.123
emotional numbing	physiological reactivity	.011	0.021	.587	.351	0.133
irritability anger	physiological reactivity	.044	0.015	.003	.369	0.126
hypervigilant	physiological reactivity	.016	0.016	.309	.385	0.126
easily startled	physiological reactivity	.105	0.019	<.001	.450	0.128
difficulty concentrating	physiological reactivity	.048	0.018	.006	.408	0.124
sleep disturbance	physiological reactivity	.046	0.014	.001	.406	0.132
hopelessness	physiological reactivity	.008	0.018	.660	.346	0.115
external avoidance	internal avoidance	.332	0.027	<.001	.560	0.177
amnesia	internal avoidance	.079	0.016	<.001	.307	0.140
loss of interest	internal avoidance	.036	0.014	.011	.369	0.126
feeling detached	internal avoidance	.010	0.015	.513	.361	0.132
emotional numbing	internal avoidance	.037	0.013	.003	.339	0.119
irritability anger	internal avoidance	.011	0.013	.412	.318	0.121
hypervigilant	internal avoidance	.052	0.012	<.001	.362	0.107

Variable 1	Variable 12	Edge	SE	p	Implied Correlation	Random-effect SD
easily startled	internal avoidance	-.001	0.014	.949	.363	0.123
difficulty concentrating	internal avoidance	.057	0.017	.001	.376	0.129
sleep disturbance	internal avoidance	.043	0.014	.003	.355	0.120
hopelessness	internal avoidance	-.005	0.014	.709	.318	0.107
amnesia	external avoidance	.074	0.015	<.001	.303	0.130
loss of interest	external avoidance	.086	0.013	<.001	.380	0.122
feeling detached	external avoidance	.025	0.012	.046	.360	0.121
emotional numbing	external avoidance	-.021	0.015	.160	.313	0.139
irritability anger	external avoidance	.001	0.013	.948	.307	0.133
hypervigilant	external avoidance	.065	0.016	<.001	.373	0.123
easily startled	external avoidance	.062	0.021	.003	.388	0.128
difficulty concentrating	external avoidance	-.021	0.014	.127	.341	0.112
sleep disturbance	external avoidance	.011	0.014	.434	.335	0.121
hopelessness	external avoidance	.040	0.018	.024	.327	0.106
loss of interest	amnesia	.053	0.018	.003	.289	0.135
feeling detached	amnesia	.027	0.018	.125	.289	0.104
emotional numbing	amnesia	.065	0.016	<.001	.290	0.120
irritability anger	amnesia	.012	0.013	0.348	.233	0.134
hypervigilant	amnesia	-.000	0.014	.981	.224	0.122
easily startled	amnesia	.023	0.011	.042	.250	0.106
difficulty concentrating	amnesia	.036	0.014	.011	.273	0.127
sleep disturbance	amnesia	-.005	0.016	.772	.223	0.142
hopelessness	amnesia	.055	0.017	.001	.270	0.125
feeling detached	loss of interest	.243	0.023	<.001	.552	0.145
emotional numbing	loss of interest	.146	0.016	<.001	.489	0.125
irritability anger	loss of interest	.075	0.014	<.001	.396	0.127
hypervigilant	loss of interest	.017	0.017	.294	.328	0.125
easily startled	loss of interest	.003	0.013	.845	.347	0.131
difficulty concentrating	loss of interest	.129	0.018	<.001	.454	0.137
sleep disturbance	loss of interest	.032	0.017	.067	.363	0.119
hopelessness	loss of interest	.055	0.023	.016	.400	0.152
emotional numbing	feeling detached	.299	0.017	<.001	.580	0.120
irritability anger	feeling detached	.087	0.018	<.001	.427	0.139
hypervigilant	feeling detached	.011	0.015	.472	.345	0.137
easily startled	feeling detached	.045	0.016	.006	.379	0.132
difficulty concentrating	feeling detached	.076	0.013	<.001	.457	0.124
sleep disturbance	feeling detached	.071	0.018	<.001	.393	0.134
hopelessness	feeling detached	.137	0.017	<.001	.464	0.098
irritability anger	emotional numbing	.098	0.017	<.001	.402	0.142

Variable 1	Variable 12	Edge	SE	p	Implied Correlation	Random-effect SD
hypervigilant	emotional numbing	.006	0.014	.661	.312	0.134
easily startled	emotional numbing	.016	0.014	.267	.334	0.121
difficulty concentrating	emotional numbing	.050	0.015	.001	.415	0.115
sleep disturbance	emotional numbing	.011	0.020	.586	.343	0.127
hopelessness	emotional numbing	.160	0.017	<.001	.454	0.115
hypervigilant	irritability anger	.066	0.017	<.001	.347	0.131
easily startled	irritability anger	.051	0.016	.002	.367	0.138
difficulty concentrating	irritability anger	.121	0.017	<.001	.425	0.155
sleep disturbance	irritability anger	.122	0.021	<.001	.391	0.147
hopelessness	irritability anger	.024	0.020	.222	.336	0.147
easily startled	hypervigilant	.357	0.024	<.001	.555	0.164
difficulty concentrating	hypervigilant	.041	0.015	.007	.380	0.130
sleep disturbance	hypervigilant	.037	0.014	.007	.351	0.108
hopelessness	hypervigilant	.068	0.015	<.001	.327	0.104
difficulty concentrating	easily startled	.128	0.016	<.001	.436	0.135
sleep disturbance	easily startled	.070	0.012	<.001	.390	0.119
hopelessness	easily startled	-.037	0.020	.071	.304	0.143
sleep disturbance	difficulty concentrating	.131	0.019	<.001	.433	0.128
hopelessness	difficulty concentrating	.106	0.014	<.001	.408	0.097
hopelessness	sleep disturbance	.037	0.016	.019	.335	0.110



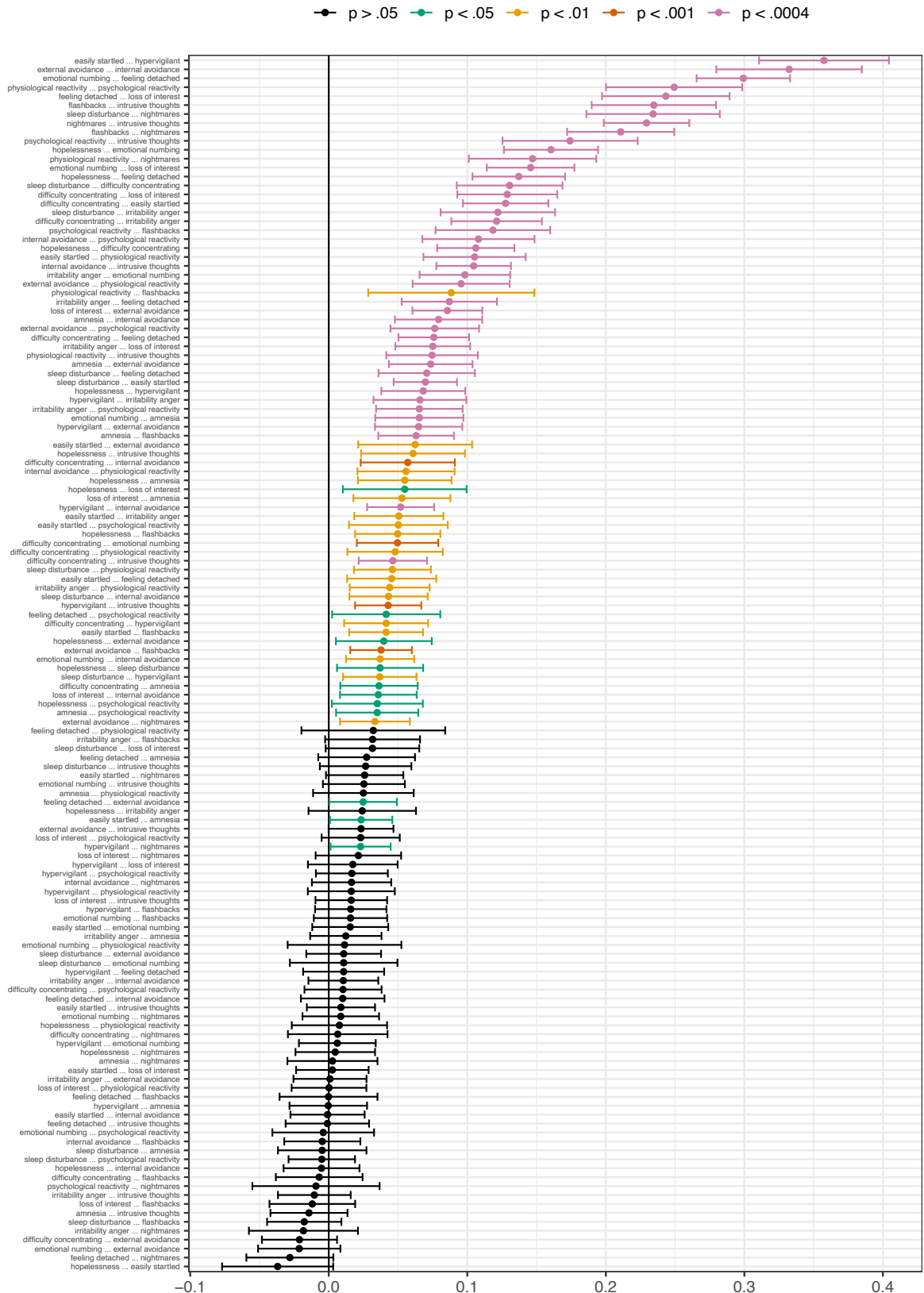
Supplemental Figure S1. Overview of the cumulative number of articles, and overall number of articles published per year.

	Pearson – Listwise																Pearson – Pairwise																	
intrusive thoughts	49	45	39	40	33	47	49	39	34	43	43	44	48	48	39	38	23	49	45	39	40	33	47	49	39	34	43	43	44	48	48	39	38	23
nightmares	45	46	37	36	33	45	46	36	34	43	44	40	46	46	35	35	23	45	46	37	36	33	45	46	36	34	43	44	40	46	46	35	35	23
flashbacks	39	37	40	35	32	40	40	38	34	35	36	38	40	40	38	38	23	39	37	40	35	32	40	40	38	34	35	36	38	40	40	38	38	23
psychological reactivity	40	36	35	40	32	39	40	34	30	35	35	39	39	39	35	34	19	40	36	35	40	32	39	40	34	30	35	35	39	39	39	35	34	19
physiological reactivity	33	33	32	32	33	32	33	32	30	30	31	32	33	33	31	31	19	33	33	32	32	33	32	33	32	30	30	31	32	33	33	31	31	19
internal avoidance	47	45	40	39	32	48	48	38	34	43	44	42	48	48	38	38	23	47	45	40	39	32	48	48	38	34	43	44	42	48	48	38	38	23
external avoidance	49	46	40	40	33	48	50	39	34	44	44	44	49	49	39	38	23	49	46	40	40	33	48	50	39	34	44	44	44	49	49	39	38	23
amnesia	39	36	38	34	32	38	39	39	34	34	35	39	39	39	38	38	23	39	36	38	34	32	38	39	39	34	34	35	39	39	39	38	38	23
loss of interest	34	34	34	30	30	34	34	34	34	34	34	34	34	34	34	34	23	34	34	34	30	30	34	34	34	34	34	34	34	34	34	34	34	23
feeling detached	43	43	35	35	30	43	44	34	34	44	43	39	43	43	35	34	23	43	43	35	35	30	43	44	34	34	44	43	39	43	43	35	34	23
emotional numbing	43	44	36	35	31	44	44	35	34	43	44	39	44	44	35	35	23	43	44	36	35	31	44	44	35	34	43	44	39	44	44	35	35	23
irritability anger	44	40	38	39	32	42	44	39	34	39	39	44	43	43	39	38	23	44	40	38	39	32	42	44	39	34	39	39	44	43	43	39	38	23
hypervigilant	48	46	40	39	33	48	49	39	34	43	44	43	49	49	38	38	23	48	46	40	39	33	48	49	39	34	43	44	43	49	49	38	38	23
easily startled	48	46	40	39	33	48	49	39	34	43	44	43	49	49	38	38	23	48	46	40	39	33	48	49	39	34	43	44	43	49	49	38	38	23
difficulty concentrating	39	35	38	35	31	38	39	38	34	35	35	39	38	38	39	38	23	39	35	38	35	31	38	39	38	34	35	35	39	38	38	39	38	23
sleep disturbance	38	35	38	34	31	38	38	38	34	34	35	38	38	38	38	38	23	38	35	38	34	31	38	38	38	34	34	35	38	38	38	38	38	23
hopelessness (DSM IV only)	23	23	23	19	19	23	23	23	23	23	23	23	23	23	23	23	23	23	23	19	19	23	23	23	23	23	23	23	23	23	23	23	23	23

	Spearman – Listwise																Spearman – Pairwise																	
intrusive thoughts	44	40	32	37	30	42	44	32	27	38	38	37	43	43	32	31	18	44	40	32	37	30	42	44	32	27	38	38	37	43	43	32	31	18
nightmares	40	40	29	33	30	39	40	29	27	37	38	33	40	40	28	28	18	40	40	29	33	30	39	40	29	27	37	38	33	40	40	28	28	18
flashbacks	32	29	32	32	29	32	32	31	27	27	28	31	32	32	31	31	18	32	29	32	32	29	32	32	31	27	27	28	31	32	32	31	31	18
psychological reactivity	37	33	32	37	29	36	37	31	27	32	32	36	36	36	32	31	18	37	33	32	37	29	36	37	31	27	32	32	36	36	36	32	31	18
physiological reactivity	30	30	29	29	30	29	30	29	27	27	28	29	30	30	28	28	18	30	30	29	29	30	29	30	29	27	27	28	29	30	30	28	28	18
internal avoidance	42	39	32	36	29	42	42	31	27	37	38	35	42	42	31	31	18	42	39	32	36	29	42	42	31	27	37	38	35	42	42	31	31	18
external avoidance	44	40	32	37	30	42	44	32	27	38	38	37	43	43	32	31	18	44	40	32	37	30	42	44	32	27	38	38	37	43	43	32	31	18
amnesia	32	29	31	31	29	31	32	32	27	27	28	32	32	32	31	31	18	32	29	31	31	29	31	32	32	27	27	28	32	32	32	31	31	18
loss of interest	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	18	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	18
feeling detached	38	37	27	32	27	37	38	27	27	38	37	32	37	37	28	27	18	38	37	27	32	27	37	38	27	27	38	37	32	37	37	28	27	18
emotional numbing	38	38	28	32	28	38	38	28	27	37	38	32	38	38	28	28	18	38	38	28	32	28	38	38	28	27	37	38	32	38	38	28	28	18
irritability anger	37	33	31	36	29	35	37	32	27	32	32	37	36	36	32	31	18	37	33	31	36	29	35	37	32	27	32	32	37	36	36	32	31	18
hypervigilant	43	40	32	36	30	42	43	32	27	37	38	36	43	43	31	31	18	43	40	32	36	30	42	43	32	27	37	38	36	43	43	31	31	18
easily startled	43	40	32	36	30	42	43	32	27	37	38	36	43	43	31	31	18	43	40	32	36	30	42	43	32	27	37	38	36	43	43	31	31	18
difficulty concentrating	32	28	31	32	28	31	32	31	27	28	28	32	31	31	32	31	18	32	28	31	32	28	31	32	31	27	28	28	32	31	31	32	31	18
sleep disturbance	31	28	31	31	28	31	31	31	27	27	28	31	31	31	31	31	18	31	28	31	31	28	31	31	31	27	27	28	31	31	31	31	31	18
hopelessness (DSM IV only)	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18

intrusive thoughts	intrusive thoughts	nightmares	flashbacks	psychological reactivity	physiological reactivity	internal avoidance	external avoidance	amnesia	loss of interest	feeling detached	emotional numbing	irritability anger	hypervigilant	easily startled	difficulty concentrating	sleep disturbance	hopelessness (DSM IV only)
nightmares																	
flashbacks																	
psychological reactivity																	
physiological reactivity																	
internal avoidance																	
external avoidance																	
amnesia																	
loss of interest																	
feeling detached																	
emotional numbing																	
irritability anger																	
hypervigilant																	
easily startled																	
difficulty concentrating																	
sleep disturbance																	
hopelessness (DSM IV only)																	

Supplemental Figure S2. Number of samples for each pair of variables for which different types of correlations were available.

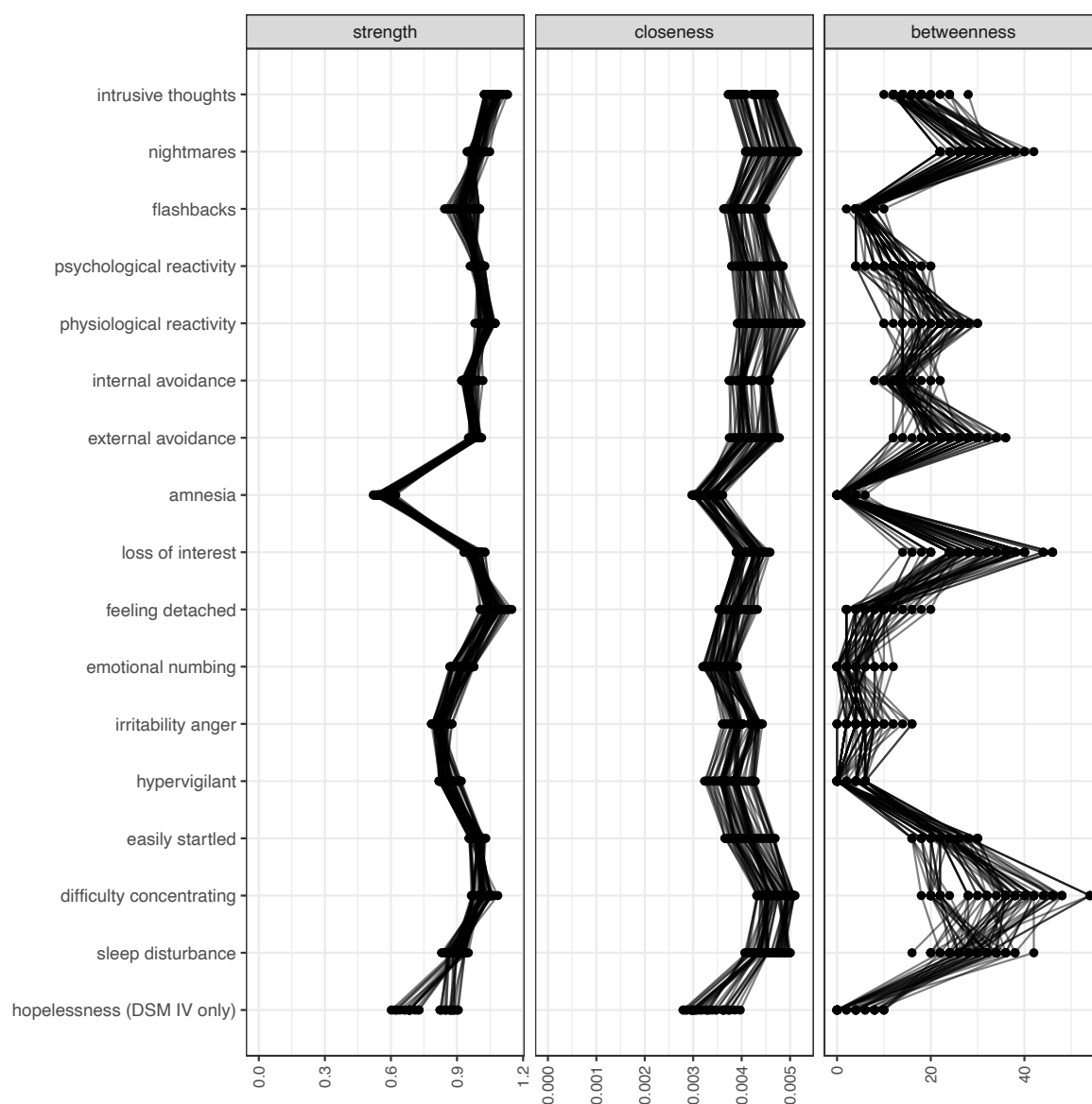


Supplemental Figure S3. Estimated edge weights in the pooled MAGNA and 95% confidence regions based on the estimated standard. The $\alpha = .0004$ level corresponds to a Bonferroni corrected α level of .05 rounded to four digits.

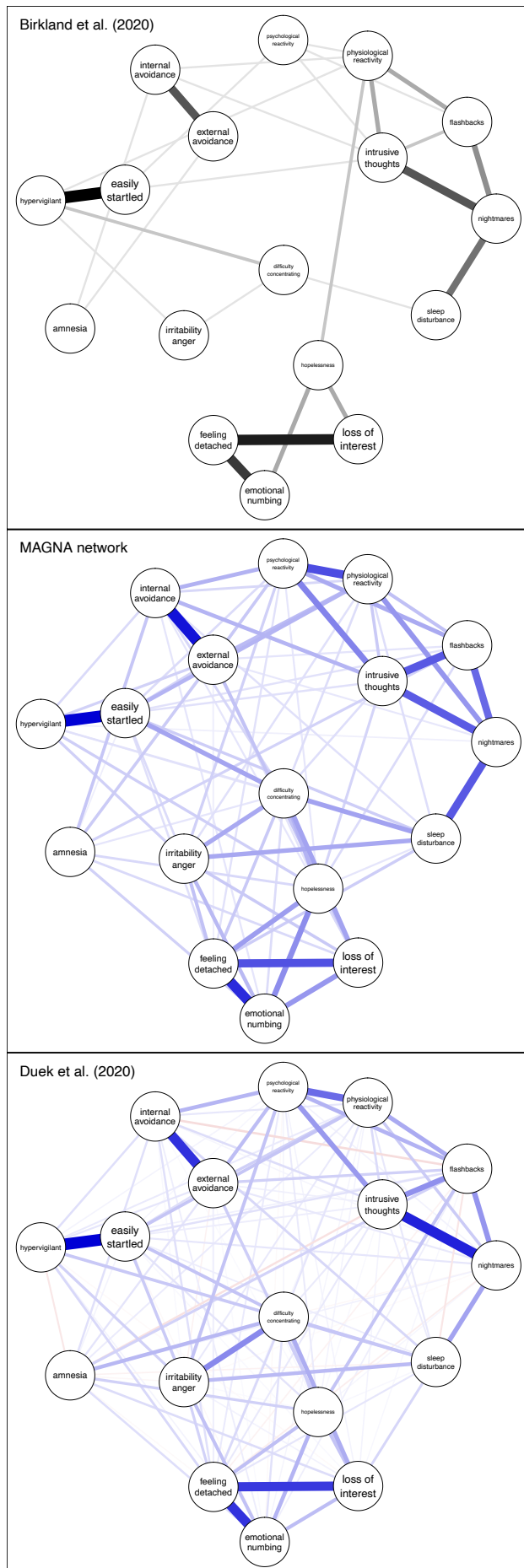
Edge weights saturated network

[illegible]

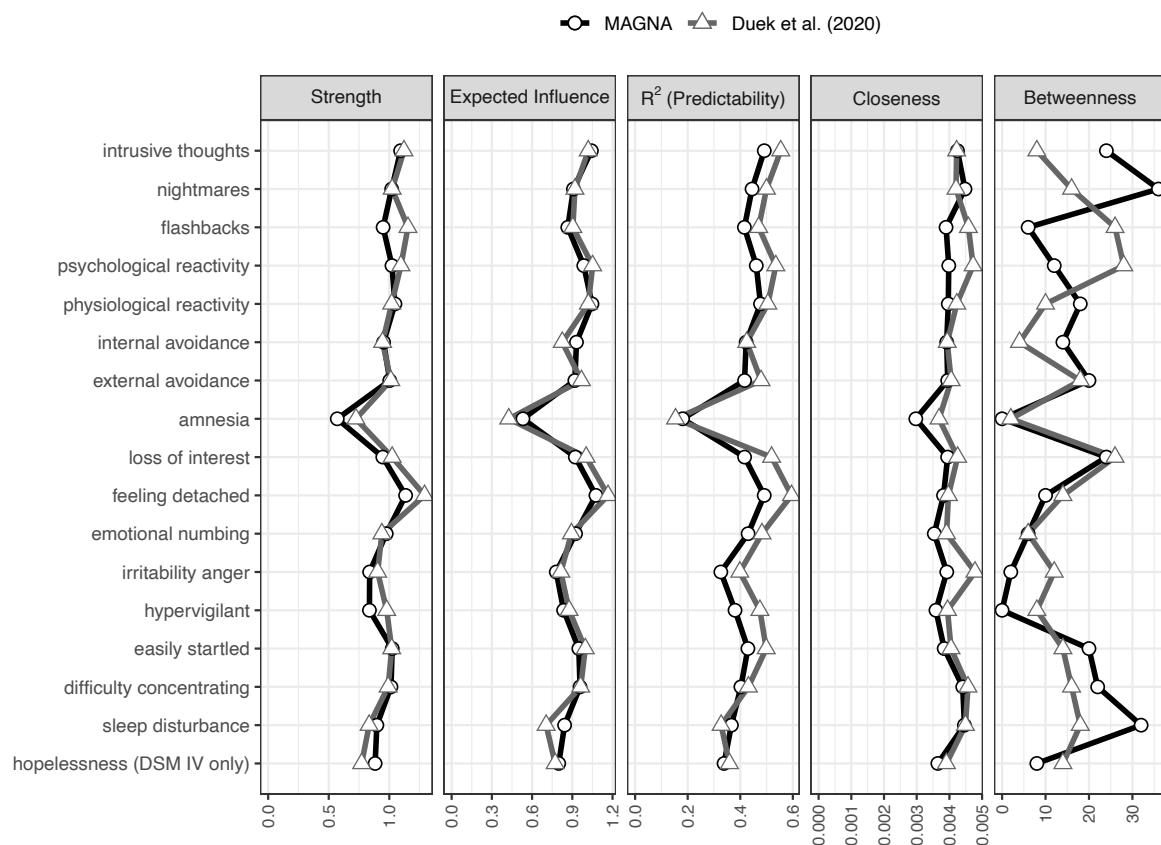
Supplemental Figure S4. Multiverse plot displaying results for distinct MAGNA estimation procedures and data variants. Each box shows the edge weight estimated using different settings and different data sources in MAGNA. To handle dependent samples (samples of the same participants), we *collapsed* samples by averaging correlations and by taking the largest sample size as input sample size. Of note, we made two simplifications to the optimization routine to make the multiverse analysis feasible (as the main analysis took over 5 hours to run and cannot be parallelized): we used a lower convergence tolerance level of 1×10^{-5} instead of the default of 1.5×10^{-8} , and we used the model estimates of Pearson (listwise) analyses using individual (averaged) estimation—which is the analysis shown in the paper—as starting values for the optimizer in other model evaluations to improve convergence time (the analysis is very slow without good starting values). This may inflate similarity, although there is no principle reason to believe these choices to have a substantial effect on the outcomes (all models converged adequately).



Supplemental Figure S5. Multiverse analysis of centrality indices. Each line corresponds to the centrality results of one of the variants reported in Supplemental Figure S4.



Supplemental Figure S6. This figure compares the pooled MAGNA network (middle panel) to results from the literature review presented by Birkland and colleagues (2020, top panel) and a recent large-scale PTSD symptom network estimated by Duek and colleagues (2020, bottom panel) on a sample of 158,139 veterans with PTSD. The top panel is a visual representation of the table presented in Figure 3 of Birkland et al. (2020), and shows how often edges were be stronger than two-thirds of the included edges of a given network.



Supplemental Figure S7. Centrality coefficients of the pooled MAGNA network compared to the results from Duek and colleagues (2020).

References

- Birkeland, M. S., Greene, T., & Spiller, T. R. (2020). The network approach to posttraumatic stress disorder: a systematic review. *European Journal of Psychotraumatology*, *11*(1), 1700614. <https://doi.org/10.1080/20008198.2019.1700614>
- Duek, O., Spiller, T. R., Pietrzak, R. H., Fried, E. I., & Harpaz-Rotem, I. (2020). Network analysis of PTSD and depressive symptoms in 158,139 treatment-seeking veterans with PTSD. *Depression and Anxiety*, 1–9. <https://doi.org/10.1002/da.23112>