Supplementary Material

1 Supplement A: *Information regarding CFAs, internal consistency, and node selection*

CFAs were performed for all seven weeks of measurement. The settings of the CFA were as follows: maximum likelihood estimator; standardized latent variables; full information maximum likelihood to process missing values; fit based on interpretation of the standardized root mean square residual (SRMR), root mean square error of approximation (RMSEA), Tucker-Lewis index (TLI), comparative fit index (CFI), and $\chi2$; measurement invariance of the final model (age, gender, longitudinal). The number of cases in the sample was smallest at the seventh week, with approximately 240 patients participating in the data collection.

Originally, we hoped to include all subscales from all four questionnaires as nodes in the network. In that case, however, the total number of nodes from the MAIA, ERSQ, CPAQ-S-8, and ORS questionnaires would be 18 (including only latent variables). Because the secondary analysis in this study is both exploratory and a pilot analysis, the inclusion of individual subscales in the network was driven empirically by testing the possibility for the model to converge as nodes are iteratively added one by one. Given the small sample size and computational difficulty, the maximum number of nodes that could be included together in a single network using our particular dataset was established to be 13. Furthermore, we determined that we would include at least all nodes that are directly related to the outcome of wellbeing. If interested, the reader may refer to the ---INFORMATION WAS OMITTED IN THE BLIND REVIEW PROCESS--- validation studies of the MAIA and ERSQ, where all subscales were modeled separately for each questionnaire and validated as predictors of wellbeing using the same type of dynamic lag-1 network model with cross-lagged effects that were used in this secondary data analysis. Nodes demonstrating any association with the wellbeing outcome (ORS) were selected for inclusion in the final network model across questionnaires in this study. This procedure resulted in nine nodes: MAIA (not worrying, trusting, self-regulation, and emotional awareness), ERSQ (modification, acceptance/tolerance, readiness for confrontation, and bodily sensations), CPAQ-S-8 (activity engagement).

To complete the network model with up to 13 nodes, we selected the most central nodes from the MAIA and ERSQ, even if these nodes were not directly associated with the outcome of wellbeing. In the separate questionnaire networks, edge strength centrality was divided by the number of nodes to obtain standardized numbers across all questionnaires for comparison purposes. Regarding the separately estimated MAIA network (see ---INFORMATION WAS OMITTED IN THE BLIND REVIEW PROCESS---), in the temporal network, the most central node in terms of betweenness was body listening, which was also the most central node in terms of closeness in the contemporaneous network. In the between-subjects network, the most central node in terms of all centrality indices was attention regulation. Noticing was the third most central MAIA subscale in terms of betweenness centrality in the contemporaneous network. Therefore, body listening, attention regulation, and noticing were included in the network to complement the other nodes associated directly with wellbeing. None of the ERSQ nodes that were not directly connected to wellbeing were central enough to be included.

Fit of the Confirmatory Factor Analysis for the Final Models at Baseline (All Questionnaires)

Tested factor structure	χ^2	**df**	**SRMR**	**RMSEA**	**TLI**	**CFI**
MAIA	1014.16	435	.077	.063 [.06-.07]	.849	.868
ERSQ	765.63	278	.069	.073 [.07-.08]	.862	.882
CPAQ	18.85	19	.027	.022 [.00-.05]	.994	.996
ORS	1.28	2	.010	.000 [.00-.10]	1.00	1.00

Baseline model RMSEAs: MAIA = .161; ERSQ = .196; CPAQ = .280; ORS = .614.

McDonald´s ω reached satisfactory values in all extracted and included latent variables across MAIA, ERSQ, SAQ-8, and ORS, and across all seven measurement waves. Overall, lowest internal consistency was reached by Not worrying subscale from MAIA (ω from .708 at week two to .813 at week seven), whereas the highest internal consistency was reached by Well-being outcome (ω from .857 at baseline to .932 at week seven).

Longitudinal information of internal consistency and sample size

Questionnaire	Node	W1	W2	W3	W4	W5	W6	W7
CPAQ-S-8	Activity engagement	426 (.822)	380 (.856)	352 (.857)	311 (.890)	303 (.893)	277 (.897)	238 (.919)
ERSQ	Acceptance-Tolerance	427 (.855)	380 (.873)	356 (.896)	314 (.906)	302 (.902)	280 (.930)	237 (.921)
	Self-support	427 (.814)	380 (.805)	356 (.851)	314 (.842)	302 (.867)	280 (.904)	237 (.884)
	Modification	427 (.748)	380 (.766)	356 (.756)	314 (.827)	302 (.791)	280 (.830)	237 (.845)
	Readiness to confrontation	427 (.838)	380 (.849)	356 (.859)	314 (.883)	302 (.908)	280 (.877)	237 (.907)
MAIA	Not worrying	431 (.719)	382 (.708)	357 (.776)	314 (.745)	303 (.737)	279 (.776)	239 (.813)
	Noticing	431 (.713)	382 (.754)	357 (.811)	314 (.802)	303 (.843)	279 (.841)	239 (.824)

	Body listening	431 (.833)	382 (.850)	357 (.860)	314 (.883)	303 (.896)	279 (.873)	239 (.882)
	Self-regulation	431 (.811)	382 (.821)	357 (.860)	314 (.869)	303 (.876)	279 (.891)	239 (.896)
	Trusting	431 (.874)	382 (.892)	357 (.887)	314 (.907)	303 (.910)	279 (.907)	239 (.901)
ORS	Wellbeing	422 (.857)	376 (.860)	357 (.894)	310 (.917)	303 (.910)	276 (.928)	238 (.932)

Longitudinal panel network model of the CPAQ-S-8 and well-being

In this study we took the advantage of longitudinal data during therapy and computed a dynamic latent variable network model for panel data with the lag 1. The available dataset did not allow us to use the model in the whole 20 CPAQ-S items, but we could shed light into the relationships between the items of the very brief CPAQ-S-8 and ORS items in the longitudinal format to separate within-patient and between-patient effects. Before estimating the model, all items were centered and detrended (mean centered to zero and standard deviation to 1). First, a saturated model was fitted using a Gaussian graphical model designed as 12 variables (8 CPAQ-S + 4 ORS items) times 7 occasions. Missing values were handled using a full information maximum likelihood (FIML) estimation method. Second, to reduce the number of parameters, all insignificant ones were pruned off ($\alpha = .01$). This model estimated three separate networks: temporal, contemporaneous, and between-subjects. However, to present and interpret all of them would be beyond the scope of this article. Therefore, the most important network in terms of predictive validity is the temporal one, representing within-subject effects of average patient across measurement waves with lag of one week. Temporal network includes cross-lagged effects based on partial directed correlations, where relationship between any two nodes is controlled for the variance of all other nodes in the network (Selig & Little, 2012). Cross-lagged effects with lag 1 are directed and the predictor is always identified in the previous measurement wave. The curve loops beginning and ending in the same node are vector autoregressive effects (van der Krieke et al., 2015) with lag 1, meaning how the response to an item influenced the response to the same item after week.

Saturated and pruned models were compared for model fit using the same fit indices as in the CFA. Centrality indices (Epskamp, Borsboom, et al., 2017) of the pruned network model were estimated: edge strength (strength of node's relationships with other nodes), closeness (frequency of node's position in the shortest path), and betweenness (frequency of node's position in between two other nodes).

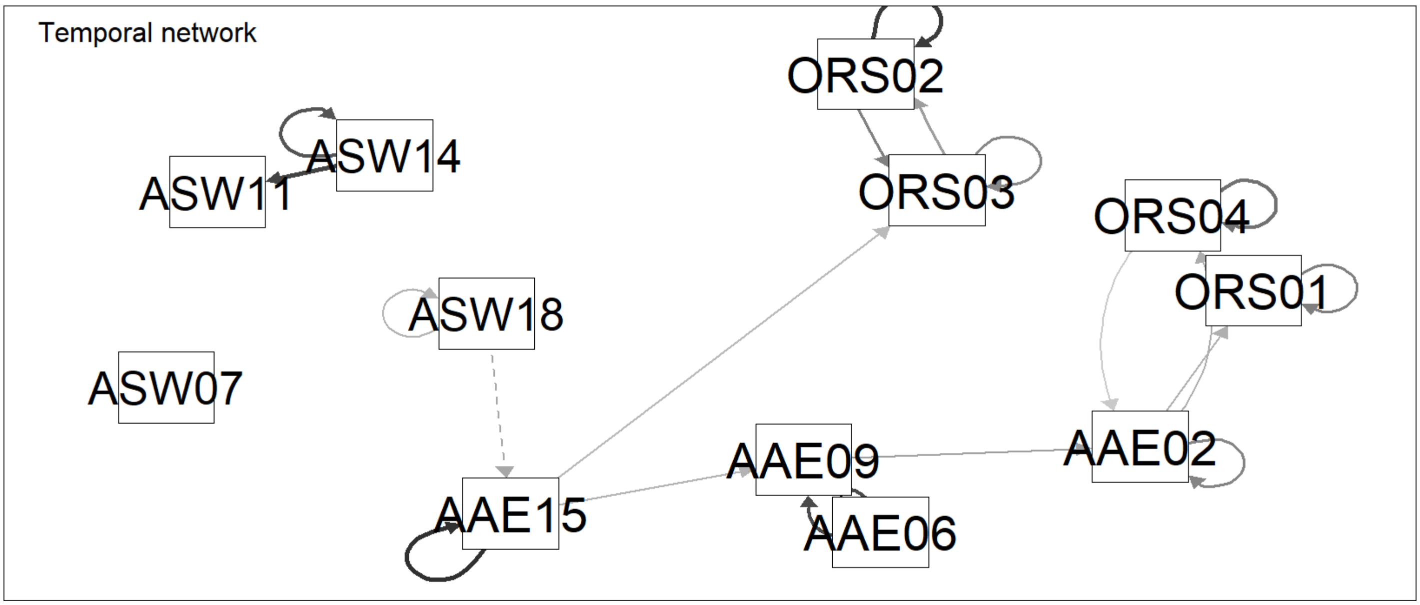
The Activity engagement subscale demonstrated better predictive validity than Symptom willingness subscale. Temporal network (see Table 7 and Figure 1) showed that only items from Activity engagement subscale independently predicted well-being items in the next week during therapy. Overall, the associations were weak. Some nodes did not show autoregressive effects (CPAQ-S-8 items 6, 7, and 11). The potential causal pathway from Activity engagement to well-being could be tracked from the source node of item 18 ("My worries and fears about what difficulties will do to me are true."; from Symptom willingness subscale), which negatively influenced item 15 ("When my difficulties increase, I can still take care of my responsibilities.") (r = -.073). Because the item 18 was reverse-coded, patients who stopped believing that their worries about what will their difficulties do to them were true in one week, were less likely able to take care of their responsibilities when their difficulties increased in the following week. But when patients took care of their responsibilities despite difficulties in one week, their social well-being associated with friendships or work-relations was increased in the week after (r = .057). Further in this line of relationships a feedback loop between social and interpersonal (family, partner) well-being emerged in the temporal network. Increased social well-being in one week further increases interpersonal well-being in the following week (r = .081) and subsequently increased interpersonal well-being increases back the social well-being the week after (r = .105). When patients took care of their responsibilities despite increase in their difficulties, they reported that they could lead a "full life even though they had difficulties in the next week" (item 9) (r = .063). Item 9 was also the most central node in the temporal network, in terms of edge strength (out degree) and betweenness (the z-scored centrality indices are reported in the Figure 2). And this further lead to both increase in item 6 ("Although things have changed, I am living a normal life despite my difficulties.") and item 2 ("My life is going well, even though I have my difficulties."). Interestingly, when patients perceived their life as being "going well" despite difficulties in one week, their personal (r = .066) and overall well-being (r = .069) were increased in the next week and this effect seem to last given the feedback loop from overall well-being back to item 2 (r = .045). Moreover, Activity engagement items were more densely connected together than the Symptom willingness items.

Regarding Symptom willingness, item 14 ("Before I can make any serious plans, I have to get some control over my difficulties.") predicted item 11 ("My thoughts and feelings about my difficulties must change before I can take important steps in my life.") over time (r = .155). These items were also reverse-coded. Thus, when patients did not need to control their difficulties to make serious plans in one week, they did not have to change their thoughts and feelings about their difficulties to take important life-steps in the following week during therapy. Item 7 ("I need to concentrate on getting rid of my difficulties") was not independently associated with the rest of the temporal network.

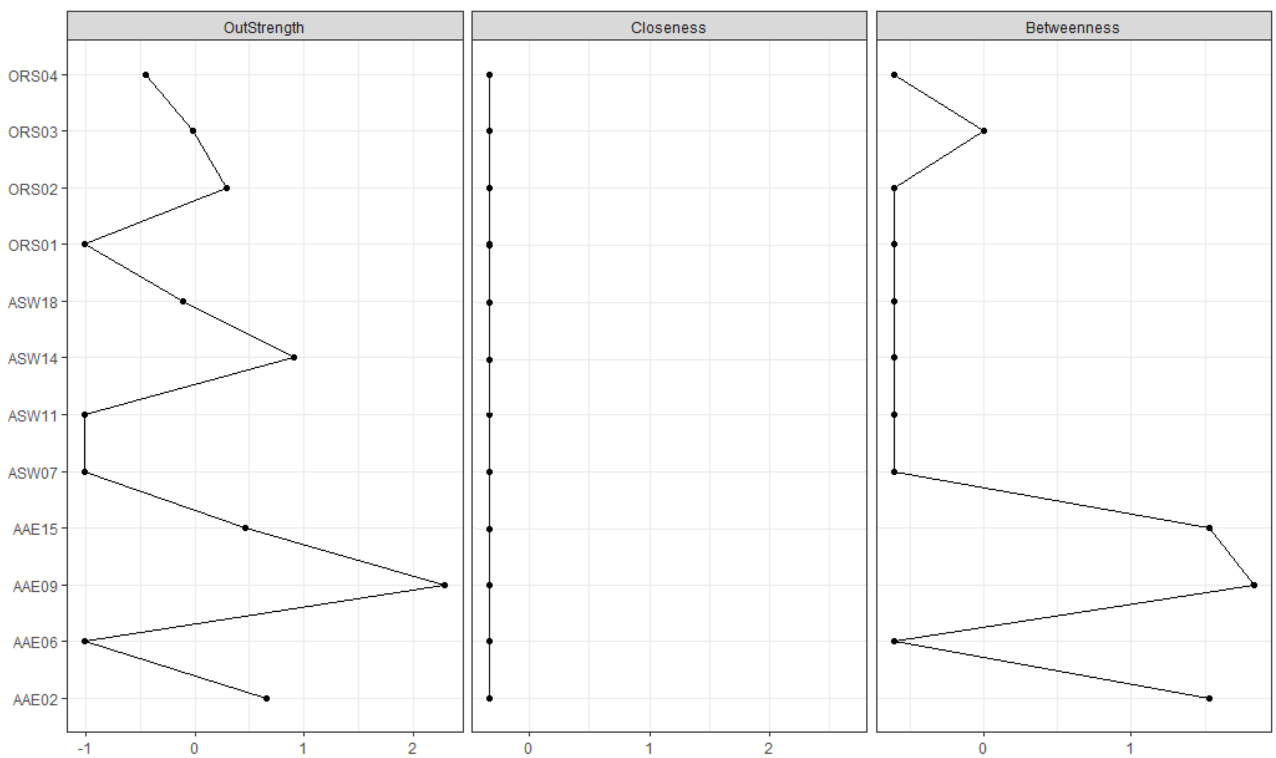
Temporal network relationships

	ORS 1	ORS 2	ORS 3	ORS 4	AE 2	AE 6	SW 7	AE 9	SW 11	SW 14	AE 15	SW 18
ORS 1	.106	0	0	0	0	0	0	0	0	0	0	0
ORS 2	0	.162	.105	0	0	0	0	0	0	0	0	0
ORS 3	0	.081	.099	0	0	0	0	0	0	0	0	0
ORS 4	0	0	0	.118	.045	0	0	0	0	0	0	0
AE 2	.066	0	0	.069	.102	0	0	0	0	0	0	0
AE 6	0	0	0	0	0	0	0	0	0	0	0	0
SW 7	0	0	0	0	0	0	0	0	0	0	0	0
AE 9	0	0	0	0	.079	.189	0	.149	0	0	0	0
SW 11	0	0	0	0	0	0	0	0	0	0	0	0
SW 14	0	0	0	0	0	0	0	0	.155	.141	0	0
AE 15	0	0	.057	0	0	0	0	.063	0	0	.171	0
SW 18	0	0	0	0	0	0	0	0	0	0	-.073	.064

Temporal network model (CPAQ-S-8 and ORS)



Centrality indices of the CPAQ-S-8 and ORS Temporal network (Z-scored)



2 **Supplement B:** *Confidence intervals of edge weights in contemporaneous and between-subjects networks*

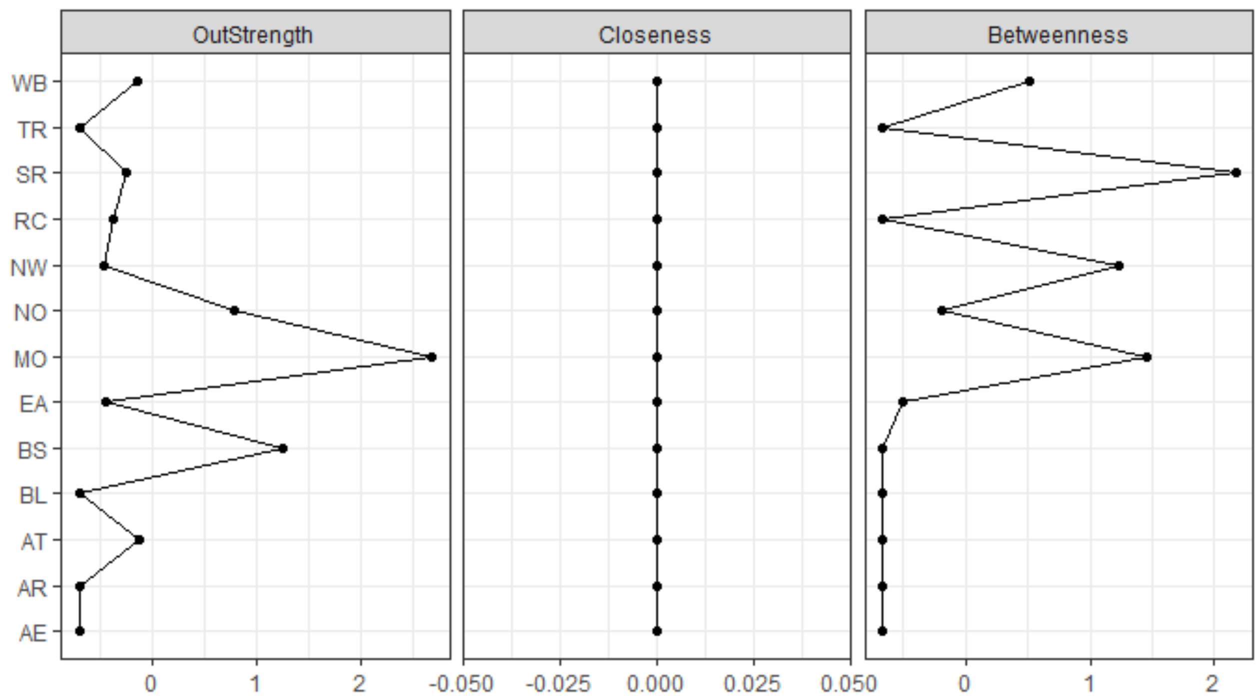
	SAQ1	ERSQ1	ERSQ2	ERSQ3	ERSQ4	MAIA1	MAIA2	MAIA3	MAIA4	MAIA5	MAIA6	MAIA7	ORS
SAQ1: Activity engagement	0 [0;0]	0 [0;0]	.31 [.22;.39]	-.07 [-.15;.01]	.51 [.44;.58]	0 [0;0]	0 [0;0]	0 [0;0]	-.07 [-.12;-.02]	0 [0;0]	0 [0;0]	0 [0;0]	.34 [.28;.44]
ERSQ1: Bodily sensations	0 [0;0]	0 [0;0]	0 [0;0]	.21 [.13;.29]	0 [0;0]	.31 [.19;.42]	.26 [.14;.38]	0 [0;0]	0 [0;0]	-.21 [-.31;-.11]	.19 [.08;.30]	0 [0;0]	0 [0;0]
ERSQ2: Acceptance	.08 [.04;.13]	0 [0;0]	0 [0;0]	.67 [.61;.73]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]
ERSQ3: Modification	.06 [.02;.10]	.31 [.29;.34]	.66 [.64;.68]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [-.07;.08]	.38 [.30;.47]	0 [0;0]	0 [0;0]	.12 [.06;,17]
ERSQ4: Confrontation	.09 [.05;.13]	0 [0;0]	.24 [.19;.28]	.12 [.08;.16]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]
MAIA1: Noticing	0 [0;0]	.11 [.07;.14]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	-.58 [-.65;-.51]	.16 [.05;.26]	.48 [.41;.56]	0 [0;0]	.36 [.28;.43]	-.19 [-.25;-.14]	0 [0;0]
MAIA2: Not worrying	.11 [.07;.15]	0 [0;0]	.11 [.08;.14]	0 [0;0]	0 [0;0]	-.23 [-.27;-.18]	0 [0;0]	.32 [.25;.39]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]
MAIA3: Attention regulation	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	.33 [.29;.37]	.12 [.08;.17]	0 [0;0]	.10 [.02;.17]	.44 [.36;.51]	.46 [.40;.53]	.38 [.31;.44]	0 [0;0]
MAIA4: Emotional awareness	0 [0;0]	.09 [.05;.13]	0 [0;0]	0 [0;0]	0 [0;0]	.28 [.24;.32]	-.11 [-.15;-.06]	0 [0;0]	0 [0;0]	.04 [-.06;.13]	0 [0;0]	0 [0;0]	0 [0;0]
MAIA5: Self-regulation	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	-.22 [-.26;-.18]	.09 [.05;.13]	.35 [.31;.39]	.13 [.09;.17]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]
MAIA6: Body listening	0 [0;0]	.17 [.14;.20]	0 [0;0]	0 [0;0]	0 [0;0]	.22 [.18;.27]	-.08 [-.12;-.04]	.26 [.22;.30]	.17 [.13;.21]	.34 [.30;.37]	0 [0;0]	0 [0;0]	0 [0;0]
MAIA7: Trusting	.17 [.13;.20]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	-.08 [-.12;-.04]	0 [0;0]	.09 [.05;.14]	0 [0;0]	.19 [.15;.24]	.16 [.11;.20]	0 [0;0]	.29 [.20;.37]
ORS: Well-being	.16 [.12;.21]	0 [0;0]	0 [0;0]	.16 [.13;.19]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]	0 [0;0]

Note: CPAQ-S1 = Activity engagement; ERSQ1 = Bodily sensations; ERSQ2 = Acceptance or Tolerance of negative emotions; ERSQ3 = Modification; ERSQ4 = Readiness to confrontation; MAIA1 = Noticing; MAIA2 = Not worrying; MAIA3 = Attention regulation; MAIA4 = Emotional awareness; MAIA5 = Self-regulation; MAIA6 = Body listening; MAIA7 = Trusting; ORS = Well-being. Below diagonal are contemporaneous effects; above diagonal are between-subjects effects.

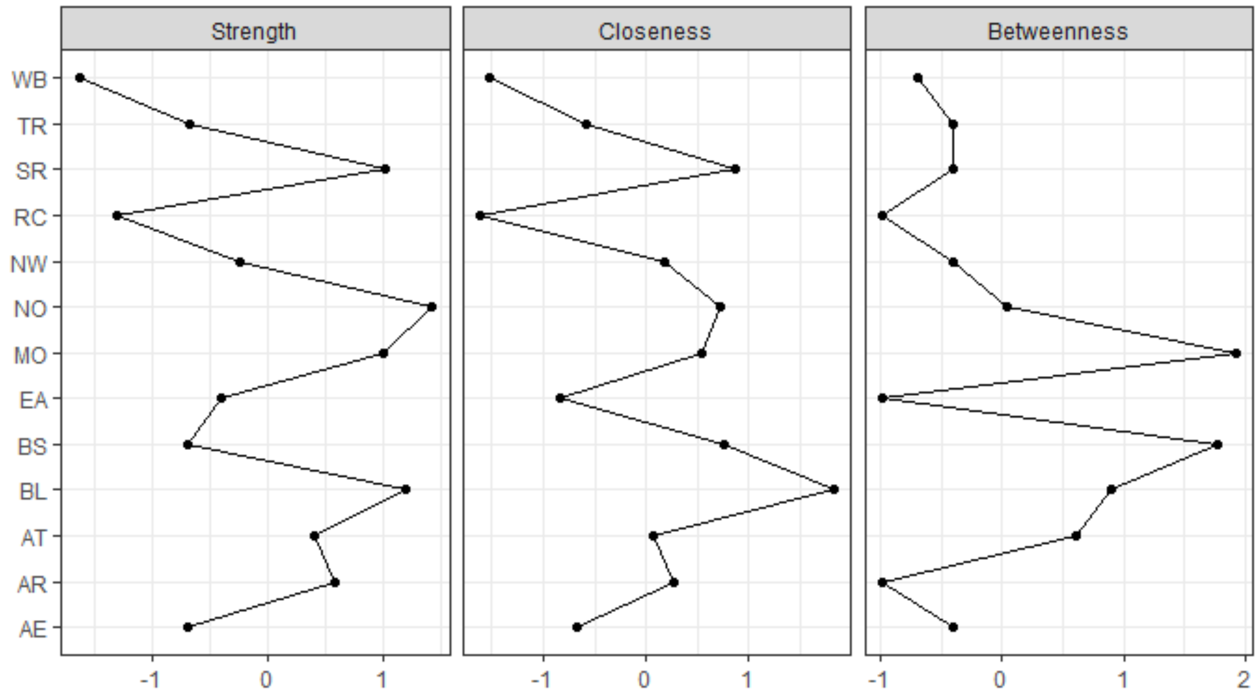
3 **Supplement C:** *Centrality figures for temporal, contemporaneous, and between-subjects networks*

Edge strength represents the sum of all associations between a particular node and other nodes (Epskamp et al., 2018a). In the present study, the sum of associations was divided by the number of nodes to compute the average edge strength for each node. Closeness and betweenness are centrality indices based on the position of a node in the whole network. Closeness is calculated from the shortest path length between a node and other nodes in the network. Betweenness represents how often a node lies in between two other nodes (Costantini et al., 2019).

Temporal Network Centrality



Contemporaneous Network Centrality



Between-Subjects Network Centrality