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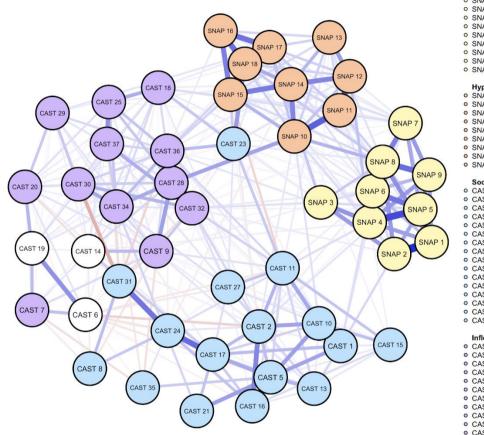
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## Figures



#### Inattention symptoms

- SNAP 1: Fails to give close attention to details
- SNAP 2: Does not sustain attention
- SNAP 3: Does not seem to listen
- SNAP 4: Does not follow through on instructions
- SNAP 5: Does not organize tasks SNAP 6: Avoids tasks that require sustained attention
- SNAP 7: Loses things
- SNAP 8: Is easily distracted • SNAP 9: Is forgetful

#### Hyperactivity-impulsivity symptoms

- SNAP 10: Fidgets hands or feet; squirms in seat
- SNAP 11: Leaves seat
- SNAP 12: Runs about excessively
- SNAP 13: Does not play quietly
- SNAP 14: Is on the go or is driven by motor SNAP 15: Talks excessively
- SNAP 16: Blurts out answers
- SNAP 17: Does not wait turn
- SNAP 18: Intrudes on others

#### Social-communication symptoms

- · CAST 1: Does not join in playing
- · CAST 2: Does not spontaneously chat CAST 5: Does not care about fitting in
- CAST 8: Did not pretend-play at 3 years old
- · CAST 10: Finds interacting with peers difficult
- CAST 11: Unable to keep conversation going
- · CAST 13: Does not have similar interests as peers
- CAST 15: Does not have friends, only acquaintances
- · CAST 16: Does not bring things to show
- CAST 17: Does not enjoy joking around
- · CAST 21: Does not consider people are important
- CAST 23: Is bad at taking turns in conversations
- CAST 24: Does not role-play
- · CAST 27: Does not make eye contact
- CAST 31: Prefers numbers rather than imaginative activities

### Inflexible language and behaviors

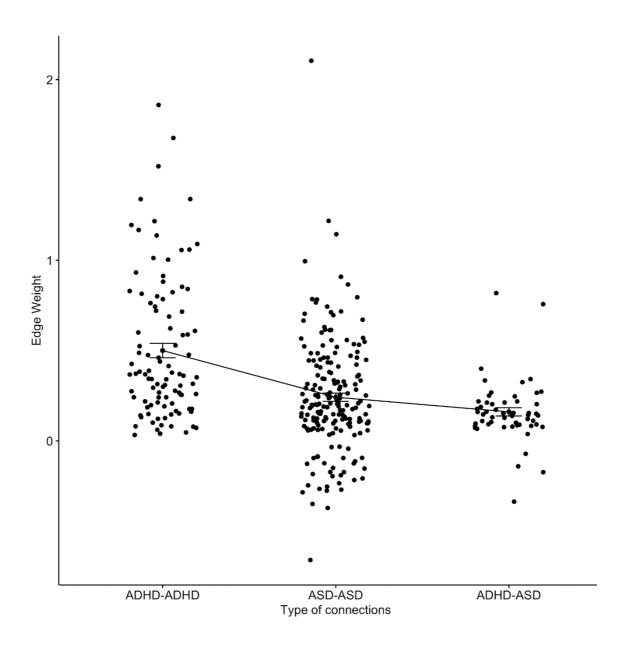
- · CAST 7: Takes things literally
- · CAST 9: Does things repeatedly
- CAST 18: Does not understand polite behavior
- · CAST 20: Has unusual voice
- CAST 25: Does things that are socially inappropriate
- CAST 28: Has unusual repetitive movements
- CAST 29: Social-behavior is one-sided
- · CAST 30: Refers to oneself in 3rd party
- CAST 32: Loses the listener because of not explaining
- CAST 34: Imposes routines
- · CAST 36: Turns conversations to favorite subjects
- CAST 37: Has odd or unusual phrases

Figure S1. The network structure of ADHD, autism symptoms colored according to symptom domains. Each node (circle) corresponds to an individual ADHD or autism symptom. Blue nodes

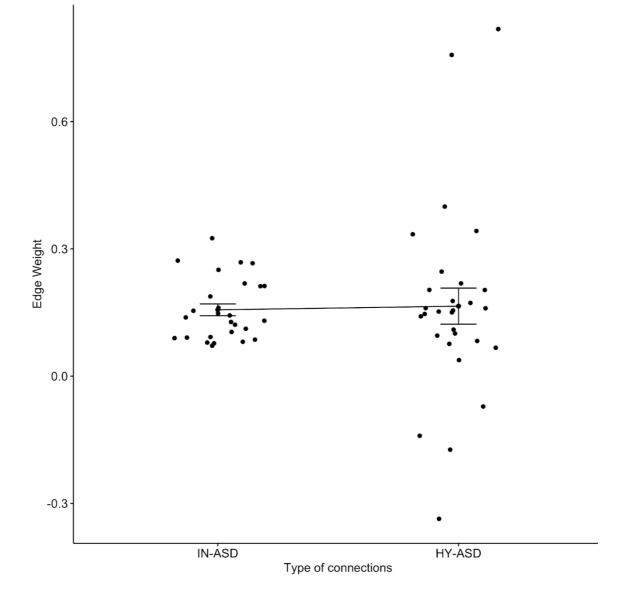
indicate social-communication symptoms; purple nodes inflexible language and behaviors symptoms; yellow nodes inattention symptoms and orange hyperactivity symptoms.

· CAST 35: Does not care about how is perceived

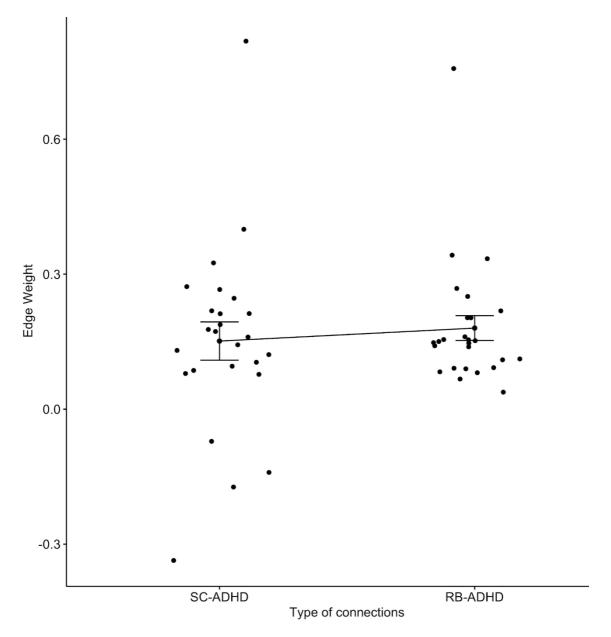
(lines) between symptoms represent edges. Width of each connection indicates the strength of the association between symptoms. Blue indicates a positive correlation whereas red indicates a negative correlation.



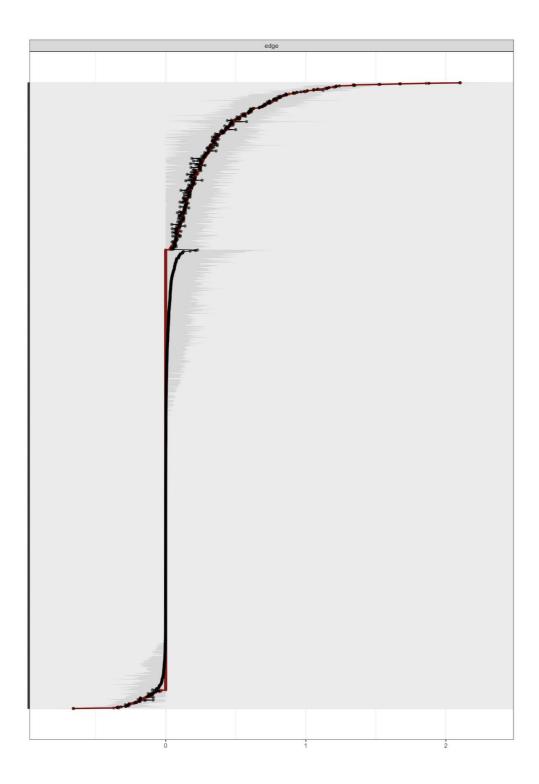
**Figure S2.** Line plot demonstrating the mean and standard error of the edge weights for connections between two ADHD symptoms, two autism symptoms and one ADHD and one autism symptom. ADHD-autism connections were significantly weaker than ADHD-ADHD and autism-autism connections.



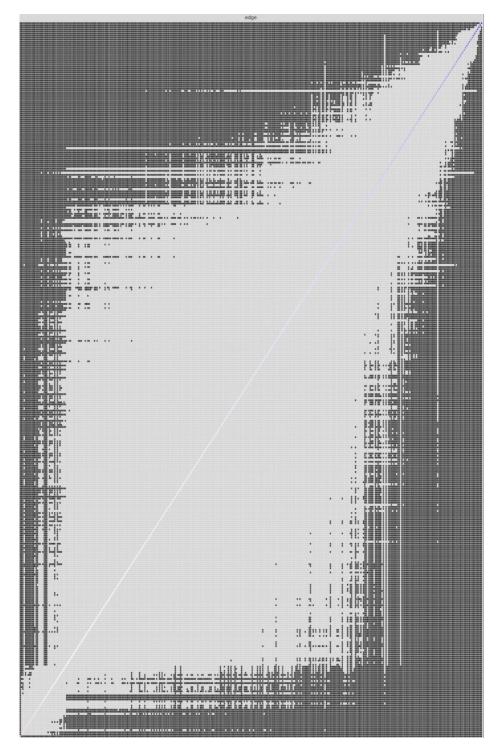
**Figure S3.** Line plot demonstrating the mean and standard error of the edge weights for connections between one inattention ADHD symptom and one autism symptom and one hyperactivity ADHD symptom and one autism symptom. No significant differences were detected in edge strength of inattention versus hyperactivity connections when these cross-condition connections were considered.



**Figure S4.** Line plot demonstrating the mean and standard error of the edge weights for connections between one social-communication autism symptom and one ADHD symptom and one inflexible, restricted behaviors autism symptom and one ADHD symptom. No significant differences were detected in edge strength of inattention versus hyperactivity connections when these cross-condition connections were considered



**Figure S5.** Bootstrapped confidence intervals of estimated edge-weights for the ADHD/autism network. The red line indicates the sample values, the black line the bootstrapped values and the gray area the bootstrapped confidence interval. Each horizontal line represents one edge of the network. In the ADHD/autism network, there was relatively little overlap of CIs across edges.



**Figure S6.** Bootstrapped difference tests (alfa = 0.05) between edge-weights that were non-zero in the estimated network. Gray boxes indicate nodes that do not differ significantly from one another and black boxes represent nodes that differ significantly from one another. In the ADHD/autism network, a large number of edges were perceived as significantly different from one another.

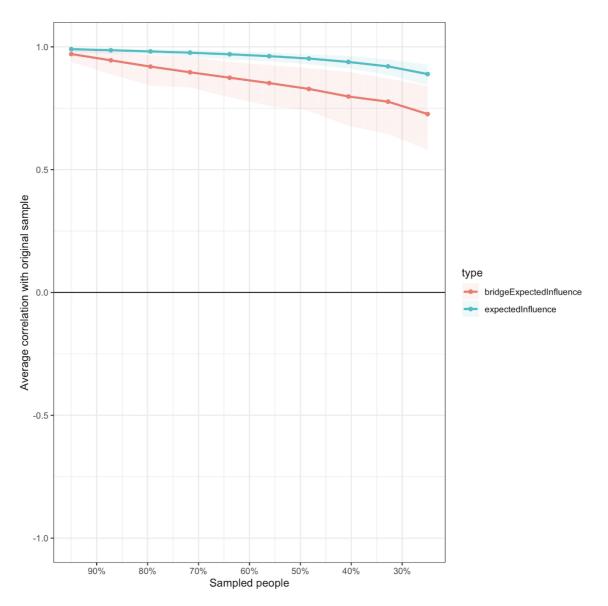


Figure S7. Average correlations between centrality indices of networks sampled with persons dropped and the

original sample