SUPPORTING INFORMATION

Temporal Stability of Functional Brain Modules Associated with Human Intelligence

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static network

dynamic network



FIGURE S1 Associations between intelligence and (variability of) global modularity across varying resolution levels. *Left:* Association between intelligence and global modularity *Q* in static (i.e., time-averaged) networks, for different levels of the network resolution parameter gamma (γ ; x-axis). *Right:* Association between intelligence and the variability in global modularity (operationalized as standard deviation of *Q*_{ind} across time) in dynamic networks, displayed across gamma (γ) levels. *Bottom row:* Significance levels (*p*-values, uncorrected for multiple comparisons) across different network resolutions (gamma levels); area indicating *p*-values < .05 is marked in red; area indicating *p*-values < .00083 (Bonferroni corrected for 60 multiple comparisons) is marked in dark red. *Q*, global modularity of individual-specific module partitions; *SD*, standard deviation; *rho*, Spearman correlation coefficient for the partial-correlation between intelligence and (*SD* of) *Q* after controlling for effects of age, sex, handedness, and mean framewise displacement; γ , resolution parameter gamma (adjusting size/number of modules received from modularity maximization).



FIGURE S2 Histograms of intelligence scores for subjects demonstrating subject-specific states of (*A*) extreme high modularity and (*B*) states of extreme low modularity (blue) in comparison with subjects demonstrating no such states (grey).