

Supplementary methods

Table S1: MNI coordinates of the group maxima during working memory processing, 2-back > 0-back

Group; brain region	MNI coordinates (x, y, z)	Brodman Area	Cluster size
HC, <i>n</i> = 19			
Left middle frontal gyrus	(-30, 0, 56)	6, bordering on 8	2524
Right middle frontal gyrus	(32, 0, 54)	6, bordering on 8	3181
Left superior parietal lobule	(-18, -56, 56)	7	1546
Right superior parietal lobule	(14, -64, 52)	7	1557
ARMS, <i>n</i> = 27			
Left middle frontal gyrus	(-24, 4, 58)	6, bordering on 8	2519
Right middle frontal gyrus	(30, -4, 56)	6, bordering on 8	1065
Left superior parietal lobule	(-22, -68, 64)	7	1255
Right superior parietal lobule	(18, -64, 56)	7	1392

ARMS = at-risk mental state; FWE = family-wise error; HC = healthy controls; MNI = Montreal Neurological Institute. Activations are FWE peak and cluster-level corrected at $p < 0.001$ within the anatomical mask.

Supplementary results

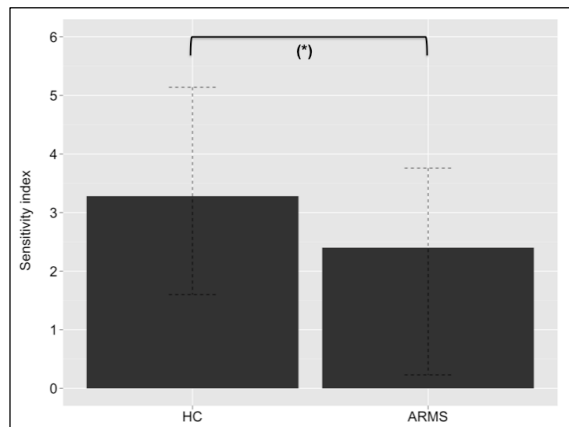


Figure S1: Comparison of the sensitivity indices between healthy controls (HC) and individuals with an at-risk mental state (ARMS). Note: Between-group differences * $p < 0.05$.

Table S2: Backward linear regression examining the relation between working memory-induced modulation of right MFG to SPL connectivity and psychopathological measurements in ARMS subjects (BPRS, SANS and GAF)*

Model, measurement	Coefficient†	<i>t</i> value	<i>p</i> value
Model 1			
Constant	—	0.576	0.58
BPRS	-0.575	-3.127	0.005
SANS	0.373	1.728	0.10
GAF	0.351	1.531	0.14
Model 2			
Constant	—	4.436	0.13
BPRS	-0.672	-3.778	0.001
SANS	0.174	0.981	0.34
Model 3			
Constant	—	4.371	0.13
BPRS	-0.608	-3.676	0.001

BPRS = Brief Psychiatric Rating Scale; GAF = Global Assessment of Functioning; MFG = middle frontal gyrus; SANS = Scale for the Assessment of Negative Symptoms; SPL = superior parietal lobule.

*Model 1: $R^2 = 0.457$; model 2: $R^2 = 0.397$, $\Delta R^2 = -0.61$; model 3: $R^2 = 0.37$, $\Delta R^2 = -0.026$.

†Standardized regression coefficient.