

SUPPLEMENTARY INFORMATION

Heart–Brain Temporal Coupling as a Candidate Biomarker of Self-Congruency

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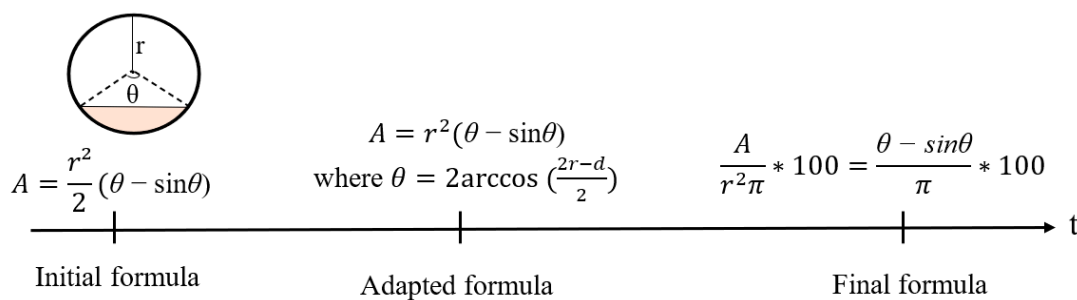
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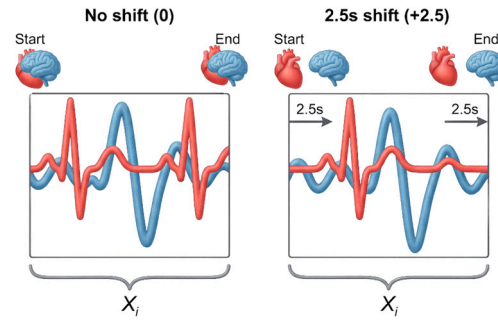
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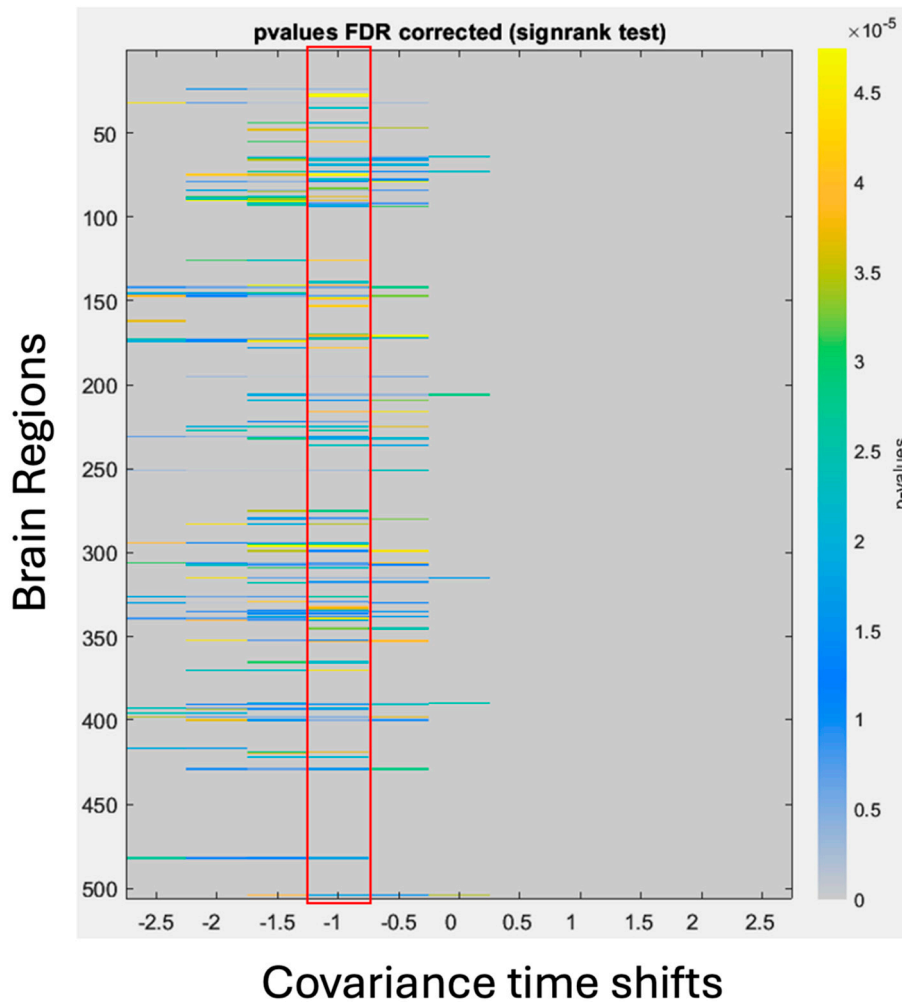
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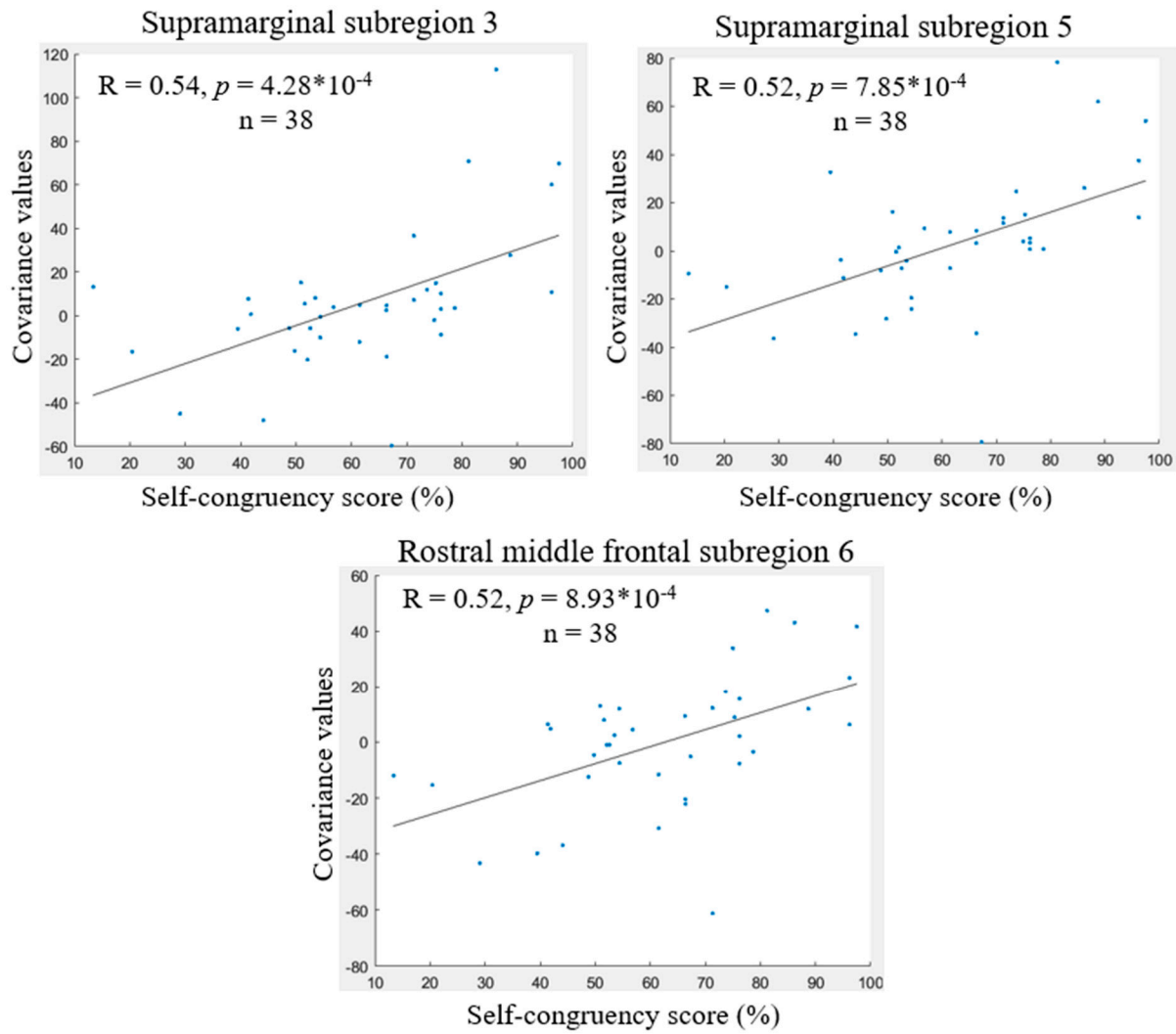
Supplementary Figure S1 – Schematic illustration of self-congruency assessment.



Supplementary Figure S2 – Schematic illustration of cross-covariance analyses. The shifts represented depict the analyses done when both signals were perfectly overlaid (illustrated on the left), and when the IBI signal was shifted from 0.5 to 2.5 seconds before the BOLD signal (illustrated for the 2.5 seconds shift; on the right).



Supplementary Figure S3 – The global relation between the BOLD and the IBI signals at all shifts (x-axis). The red frame shows the results presented in Fig. 3. The color scale represents p -values. Brain regions (y-axis) are significant at $p < 0.001$ FDR-corrected.



Supplementary Figure S4 – Correlation results between self-congruency and heart-brain covariance. Results for supramarginal subregion 3 (top left panel), supramarginal subregion 5 (top right panel), and rostral middle frontal subregion 6 (bottom panel).

Supplementary Table S1 – Table summarizing the eighty-eight brain regions correlated to the heart signal at the shift presented in Fig. 3, and framed in red in Supplementary Figure S3.

Brain regions					
rh n°	lh n°	Name	rh n°	lh n°	Name
24,27,28,32,35	275,279,280,283	ctx-rostralmiddlefrontal	153	-	ctx-pericalcarine
44,47	294,295,296,299	ctx-superiorfrontal	170,171,172	419,422	ctx-lingual
55	306,307,309	ctx-caudalmiddlefrontal	173,178	429	ctx-fusiform
64,65,66,69,73	315,317,318	ctx-precentral	195	-	ctx-midletemporal
75,78,79	326,329,330	ctx-paracentral	206,209	-	ctx-superiortemporal
-	332,333	ctx-rostralanteriorcingulate	216	-	ctx-transversetemporal
83,84	334,335,336	ctx-caudalanteriorcingulate	222	-	ctx-insula
88	338,339,340	ctx-posteriorcingulate	225	-	thal-anterior
90	-	ctx-isthmuscingulate	227	-	thal-ventral_latero_dorsal

92,93,94	345,352,353	ctx-postcentral	231	482	subc-caudate
-	365, 370	ctx-superiorparietal	232	-	subc-putamen
126	-	ctx-inferiorparietal	236	-	subc-hippocampus
139,141,142,147	390,391,393,394,398	ctx-precuneus	251	-	cer-cerebellum
148,149	400	ctx-cuneus		504	brain-stem-pons