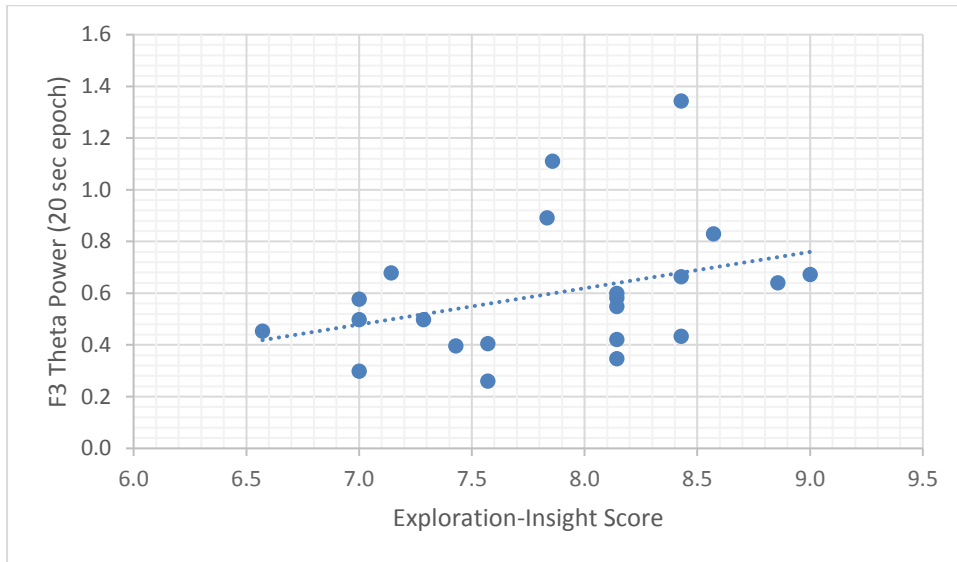


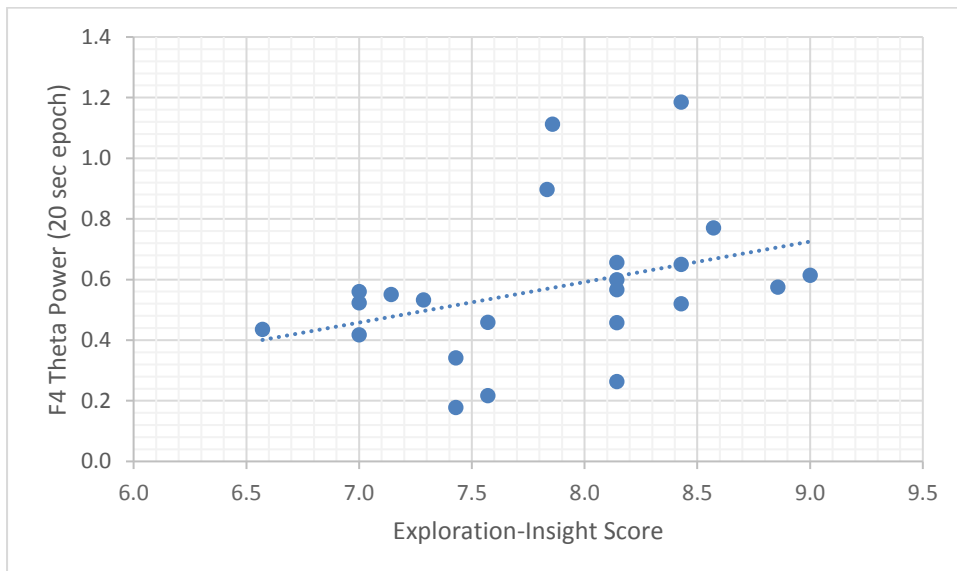
Supplemental material 3

EEG power analyses.

Scatterplot of correlation between F3 theta power and Exploration-Insight for N2 condition (n=22, Spearman's rho = .41, p=.057)



Scatterplot of correlation between F4 theta power and Exploration-Insight for N2 condition (n=23, Spearman's rho = .51, p=.014)



Sample size for sleep conditions in study. REM, n=30; N2, n=26.

One participant had missing data for REM and N2;

One participant removed from REM and N2 analyses as signals very noisy;

Three excluded from REM analyses due to large amount of artifactual REM periods, including eye movements intrusions;

For N2 analyses one participant had low EEG power and low Exploration-Insight score, this participant was having a disproportionate influence on rho, rho decreased when this participant was excluded, and we are reporting only this lower and more robust value for N2 correlations.

One participant had poor F3 channel data for REM and N2, F3 data excluded and F4 data retained

Resultant sample sizes for power analyses. REM: F3 n=24, F4 n=25; N2: F3 n=22, F4 n=23.

The Table below shows mean power (V^2/Hz) and SDs for the last three minutes of sleep used for correlations with Exploration-Insight scores, as a factor of waveband (theta/sigma/beta) and stage of sleep (REM/N2).

		n	Theta		Sigma		Beta	
			Mean	SD	Mean	SD	Mean	SD
REM	F3	24	0.394	0.262	0.074	0.061	0.094	0.046
	F4	25	0.392	0.305	0.065	0.044	0.088	0.044
N2	F3	22	0.598	0.260	0.283	0.180	0.096	0.045
	F4	23	0.569	0.246	0.295	0.168	0.096	0.047