

Supplementary Materials

Effects of Intermittent Hypoxia and Electrical Muscle Stimulation on Cognitive and Physiological Metrics

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Table S1. Changes in the values of biochemical and cognitive parameters. The group in which there was a significant change compared to the control group is highlighted in bold.

Parameter	Hypoxia	Control	EMS
Lactate, mmol/l	0.42 ± 0.17	-0.12 ± 0.23	-0.04 ± 0.13
MCV, fl	-0.40 ± 0.29	0.45 ± 0.31	0.30 ± 0.21
Adrenalin, pg/ml	-3.53 ± 3.51	6.04 ± 3.46	2.27 ± 2.88
Serotonin, ng/ml	10.73 ± 10.47	-22.57 ± 13.38	-13.0 ± 9.46
Norepinephrine, pg/ml	-15.25 ± 27.45	86.21 ± 37.83	-21.02 ± 30.41
Lymphocytes, %	0.72 ± 1.63	1.88 ± 0.89	-0.67 ± 0.91
LYM, 10 ⁹ /l	0.03 ± 0.10	0.15 ± 0.14	-0.12 ± 0.10
Contextual Memory	140.2 ± 19.83	50.5 ± 28.97	93.13 ± 15.48
Short Term Memory	57.0 ± 28.43	148.9 ± 28.6	160.73 ± 53.54
Reaction Time	8.87 ± 38.73	-73.3 ± 27.25	25.93 ± 53.0
Non verbal Memory	25.2 ± 27.83	1.4 ± 20.58	102.4 ± 45.14
Attention	214.14 ± 108.36	55.62 ± 49.76	-66.0 ± 65.83

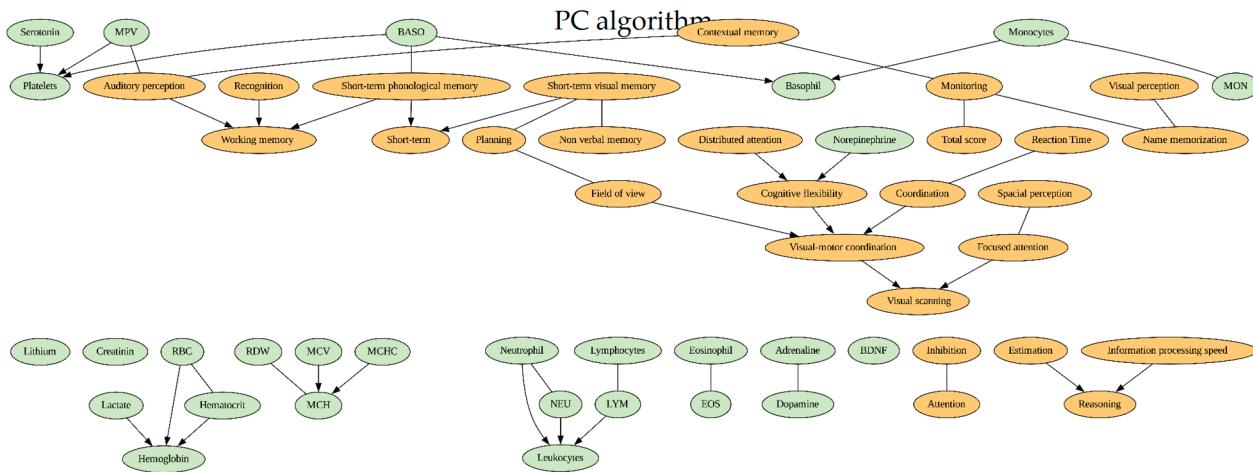


Figure S1. The result of causal analysis from PC algorithm from cognitive and biochemical parameters. Biochemical parameters - in green, cognitive parameters - in orange.

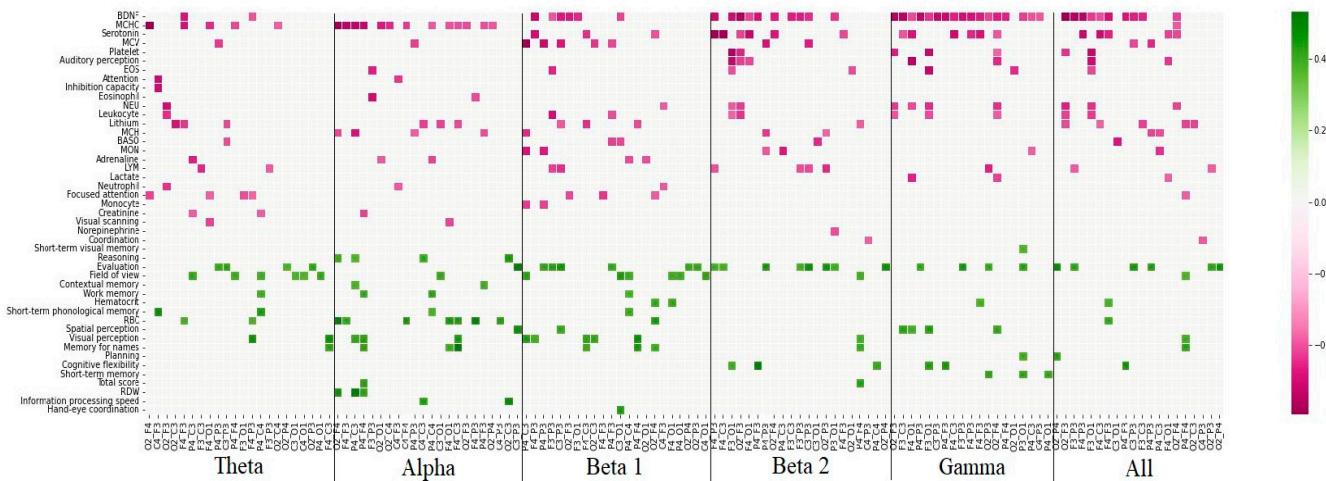


Figure S2. Spearman's rank correlation between cognitive/biochemical parameters and FC in open-eyes state before the experiment. FC calculated using the coherence method. Colors indicate the correlation coefficients.

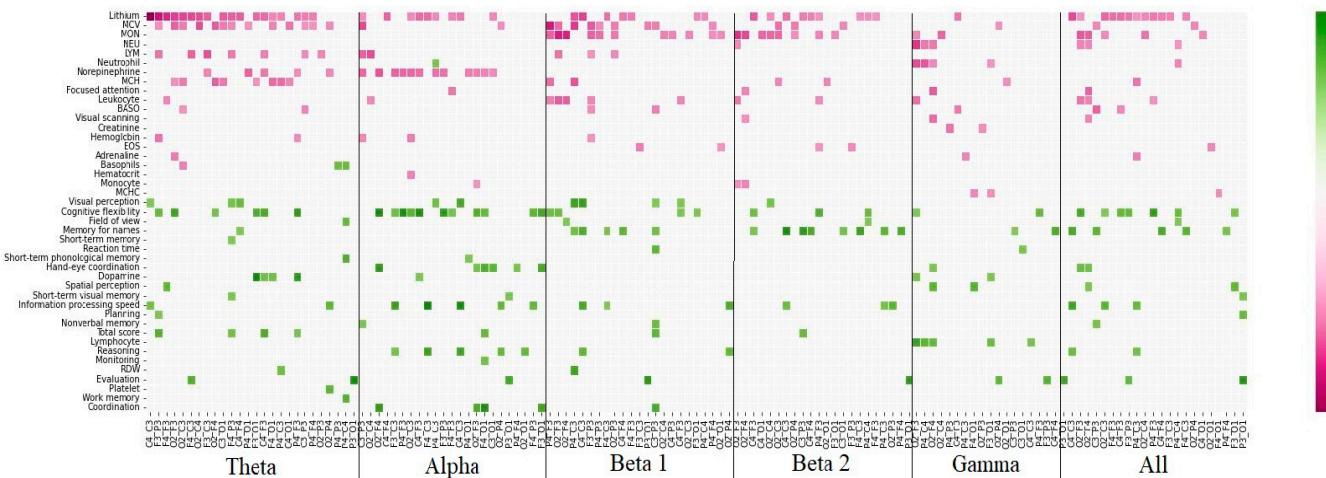


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