

TABLE I. Clinical Characteristics of the Participants [5]

AGE	BMI ($\frac{kg}{m^2}$)
28	20.8
41	23.6
41	22.5
24	20.7
23	27.4
26	25.2
23	29.3
37	29.6
44	29.9
42	22.9

BMI refers to Body Mass Index. None of the participants had a current diagnosis of depression.

TABLE II. The estimated model parameters for the fits to the experimental ACTH and cortisol time series

Participant	$\theta_1(\text{min}^{-1})$	$\theta_2(\text{min}^{-1})$	$\theta_3(\text{min}^{-1})$	$\theta_4(\text{min}^{-1})$	$\theta_5(\text{min}^{-1})$
1	0.0043	4.2×10^{-7}	561	0.5044	0.0510
2	0.0046	2.4×10^{-7}	530	0.6513	0.0549
3	0.0054	2.5×10^{-7}	997	0.9162	0.1055
4	0.0082	1.6×10^{-7}	335	0.9788	0.0506
5	0.0054	2.8×10^{-7}	804	0.9959	0.1092
6	0.0062	1.9×10^{-7}	792	0.9995	0.0914
7	0.0060	1.3×10^{-7}	1161	0.4494	0.1122
8	0.0070	1.4×10^{-7}	382	0.7089	0.0573
9	0.0045	1.1×10^{-7}	205	0.1953	0.0488
10	0.0035	2.6×10^{-7}	548	0.8185	0.0919
Median	0.0054	2.2×10^{-7}	554	0.7637	0.0743

The parameter θ_1 is the estimated infusion rate of ACTH from the anterior pituitary into the circulation; θ_2 is the estimated cortisol negative feedback gain; θ_3 is the estimated ACTH gain; θ_4 is the estimated coefficient corresponding to infusion of cortisol into the circulation from the adrenal glands and θ_5 is the estimated coefficient corresponding to clearance of cortisol by the liver.

TABLE III. The estimated number of pulses and the squares of the multiple correlation coefficients (R^2) for the fits to the experimental ACTH and cortisol time series

participant	M	N	R_C^2	R_A^2
1	18	18	0.94	0.74
2	17	17	0.88	0.65
3	16	16	0.94	0.66
4	17	17	0.88	0.73
5	18	15	0.89	0.52
6	20	15	0.92	0.58
7	16	17	0.91	0.51
8	16	16	0.89	0.79
9	16	17	0.83	0.67
10	20	17	0.82	0.46
Median	17	17	0.89	0.66

M is the estimated number of cortisol pulses using only measurements of cortisol levels, and N is the estimated number of ACTH pulses using concurrent measurements of ACTH and cortisol levels. R_C^2 and R_A^2 are the square of the multiple correlation coefficient for cortisol and ACTH time series, respectively.