

Supplementary Information for Paper “Vagus Activation by Cold Face Test Reduces Acute Psychosocial Stress Responses”

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Supplementary Table S1

Posthoc results of HR(V) measures during the MIST. Pairwise t-tests were performed separately for BL, AT, and FB subphases between pairs of MIST phases.

<i>Subphase</i>	<i>A</i>	<i>B</i>	ΔHR			RMSSD			pRR50		
			<i>t</i> (12)	p	Hedges' g	<i>t</i> (12)	p	Hedges' g	<i>t</i> (12)	p	Hedges' g
<i>BL</i>	<i>MIST1</i>	<i>MIST2</i>	-1.378	0.580	-0.411	0.317	>0.999	0.050	0.527	>0.999	0.090
		<i>MIST3</i>	-4.019	0.005**	-1.028	1.861	0.262	0.439	1.768	0.307	0.377
	<i>MIST2</i>	<i>MIST3</i>	-2.399	0.101	-0.643	1.703	0.343	0.381	1.245	0.711	0.301
<i>AT</i>	<i>MIST1</i>	<i>MIST2</i>	-2.832	0.045*	-0.892	2.719	0.056	0.480	2.879	0.042*	0.532
		<i>MIST3</i>	-4.187	0.004**	-1.332	3.588	0.011*	0.658	3.388	0.016*	0.662
	<i>MIST2</i>	<i>MIST3</i>	-1.571	0.427	-0.414	1.397	0.563	0.204	0.934	>0.999	0.145
<i>FB</i>	<i>MIST1</i>	<i>MIST2</i>	-1.936	0.230	-0.367	0.847	>0.999	0.104	0.973	>0.999	0.130
		<i>MIST3</i>	-3.528	0.013*	-1.012	3.100	0.028*	0.514	1.442	0.525	0.300
	<i>MIST2</i>	<i>MIST3</i>	-2.755	0.053	-0.596	3.292	0.019*	0.383	1.480	0.494	0.171

Supplementary Table S2.1

Heart Rate increase between BL and AT subphases for each individual MIST phase. Values are depicted as $M \pm SD$.

<i>Condition Phase</i>	CFT	Control
MIST1	$1.3 \pm 5.6 \%$	$4.34 \pm 4.73 \%$
MIST2	$8.23 \pm 6.98 \%$	$11.63 \pm 9.99 \%$
MIST3	$15.16 \pm 8.09 \%$	$11.69 \pm 10.95 \%$

Supplementary Table S2.2

HR(V) responses to AT. Paired t-tests were performed between BL and AT subphases for each condition and each individual MIST phase, respectively.

<i>Condition</i>	<i>Measure</i>	<i>A</i>	<i>B</i>	MIST1				MIST2				MIST3			
				t	df	p	Hedges' g	t	df	p	Hedges' g	t	df	p	Hedges' g
<i>CFT</i>	ΔHR	<i>AT</i>	<i>BL</i>	0.803	11	>0.999	0.251	4.086	11	0.005**	1.359	6.491	11	<0.001***	1.886
	<i>RMSSD</i>	<i>AT</i>	<i>BL</i>	2.058	11	0.192	0.423	-1.404	11	0.564	-0.215	-3.911	11	0.007**	-0.461
	<i>pRR50</i>	<i>AT</i>	<i>BL</i>	2.315	11	0.123	0.475	-1.029	11	0.977	-0.216	-2.754	11	0.056	-0.370
<i>Control</i>	ΔHR	<i>AT</i>	<i>BL</i>	3.311	12	0.019*	0.655	4.199	12	0.004**	0.894	3.850	12	0.007**	0.762
	<i>RMSSD</i>	<i>AT</i>	<i>BL</i>	-1.290	12	0.664	-0.202	-3.103	12	0.027*	-0.534	-1.936	12	0.230	-0.351
	<i>pRR50</i>	<i>AT</i>	<i>BL</i>	-0.724	12	>0.999	-0.052	-2.740	12	0.054	-0.473	-1.177	12	0.786	-0.258

Supplementary Table S3

Post-hoc results (interaction effect MIST Phase x Condition) of HR(V) measures during BL subphase. Pairwise t-tests were performed for each MIST phase between Control and CFT condition.

<i>Measure</i>	MIST1				MIST2				MIST3			
	t	df	p	Hedges' g	t	df	p	Hedges' g	t	df	p	Hedges' g
ΔHR	-1.430	21.285	0.502	-0.545	-2.854	17.471	0.032*	-1.076	-4.092	14.976	0.003**	-1.533
$\hat{t}_{Glo}(HR)$	-1.098	22.179	0.853	-0.420	-2.733	18.937	0.040*	-1.034	-4.420	21.696	<0.001***	-1.688
<i>RMSSD</i>	-1.273	16.590	0.662	-0.479	-0.595	18.823	>0.999	-0.225	0.051	21.529	>0.999	0.020
$\hat{t}_{Glo}(RMSSD)$	0.269	23	>0.999	0.104	1.405	22.813	0.520	0.540	1.022	22.846	0.952	0.396
<i>pRR50</i>	-1.354	19.977	0.573	-0.514	-0.326	22.841	>0.999	-0.125	-0.294	20.864	>0.999	-0.112
$\hat{t}_{Glo}(pRR50)$	-0.356	22.823	>0.999	-0.138	1.044	21.031	0.925	0.408	1.453	22.898	0.479	0.562

Supplementary Table S4

Mixed-ANOVA results (interaction effect MIST Phase x Condition) of HR(V) measures during RP/CFI subphase.

<i>Measure</i>	$F(2, 46)$	p	η_p^2
ΔHR	2.266	0.115	0.090
$\hat{t}_{Glo}(HR)$	3.369	0.043*	0.128
<i>RMSSD</i>	0.113	0.893	0.005
$\hat{t}_{Glo}(RMSSD)$	0.018	0.982	0.001
<i>pRR50</i>	0.034	0.967	0.002
$\hat{t}_{Glo}(pRR50)$	0.128	0.880	0.005

Supplementary Table S5

Mixed-ANOVA results (interaction effect Time x Condition) of self-reported mood, assessed via MDBF.

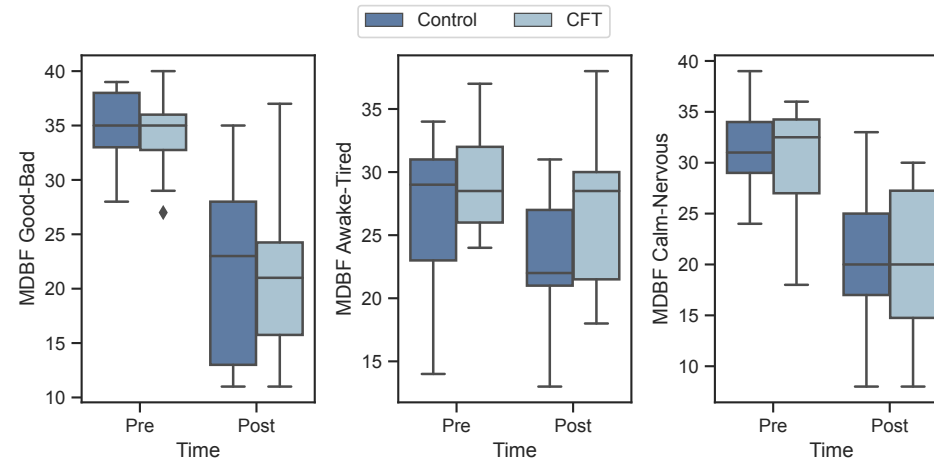
<i>Dimension</i>	$F(1, 23)$	p	η_p^2
<i>Good-Bad</i>	0.009	0.923	0.000
<i>Awake-Tired</i>	0.087	0.770	0.004
<i>Calm-Nervous</i>	0.650	0.428	0.028

Supplementary Table S6

Mixed-ANOVA results (main effect Condition) of self-reported mood, assessed via MDBF.

<i>Dimension</i>	$F(1, 23)$	p	η_p^2
<i>Good-Bad</i>	0.054	0.819	0.002
<i>Awake-Tired</i>	2.356	0.139	0.093
<i>Calm-Nervous</i>	0.176	0.678	0.008

Supplementary Figure S1



Self-reported mood, assessed via MDBF, before and after MIST for each condition individually.

Supplementary Table S7

T-tests of cortisol measures between Control and CFT condition.

<i>Measure</i>	U	p	Hedges' g
AUC_G	64	0.463	-0.380
AUC_I	44	0.068	-0.787
Δc_{max}	40	0.041*	-0.863
a_{S1S4}	36	0.024*	-0.887