Appendix B. Supplementary Results

B.1 Supplementary material sAA and Cortisol analyses

Table B.1.1 χ2 table comparing different LMMs with ln(sAA) levels as outcome variable

Model	df	Log Likelihood	X^2	Δ df	p-value
1. Full Model	44	-499.989			
2. Group x Time	18	-607.764	215.550	26	0.000 *
3. Group [a]	16	-608.098	0.668	2	0.716
4. Time [a]	5	-815.605	415.682	13	0.000 *

[a] χ2 and p-values for Model 3 and 4 are based on the comparisons with Model 2; * p<.05

Table B.1.2 Tukey adjusted post-hoc pairwise comparisons of ln(sAA) levels between experimental Groups (per timepoint).

contrast	timepoint	estimate	SE	df	t-ratio	p-value	Cohen's d
Delayed - Immediate	T1	-0.109	0.156	171.513	-0.703	0.762	-0.107
Delayed - Control	T1	-0.080	0.158	171.513	-0.508	0.868	-0.078
Immediate - Control	T1	0.029	0.150	171.513	0.196	0.979	0.030
Delayed - Immediate	T2	0.398	0.156	171.513	2.554	0.031 *	0.390
Delayed - Control	T2	0.329	0.158	171.513	2.092	0.095	0.319
Immediate - Control	T2	-0.068	0.150	171.513	-0.454	0.893	-0.069
Delayed - Immediate	T3	0.239	0.156	171.513	1.534	0.278	0.234
Delayed - Control	T3	0.205	0.158	171.513	1.300	0.397	0.199
Immediate - Control	T3	-0.034	0.150	171.513	-0.227	0.972	-0.035
Delayed - Immediate	T4	0.169	0.156	171.513	1.084	0.525	0.166
Delayed - Control	T4	0.097	0.158	171.513	0.617	0.811	0.094
Immediate - Control	T4	-0.072	0.150	171.513	-0.477	0.882	-0.073
Delayed - Immediate	T5	0.031	0.156	171.513	0.198	0.979	0.030
Delayed - Control	T5	0.086	0.158	171.513	0.545	0.849	0.083
Immediate - Control	T5	0.055	0.150	171.513	0.366	0.929	0.056
Delayed - Immediate	T6	0.029	0.156	171.513	0.188	0.981	0.029
Delayed - Control	T6	0.038	0.158	171.513	0.239	0.969	0.037
Immediate - Control	T6	0.008	0.150	171.513	0.056	0.998	0.009

contrast	timepoint	estimate	SE	df	t-ratio	p-value	Cohen's d
Delayed - Immediate	T7	0.029	0.156	171.513	0.188	0.981	0.029
Delayed - Control	T7	-0.036	0.158	171.513	-0.228	0.972	-0.035
Immediate - Control	T7	-0.065	0.150	171.513	-0.433	0.902	-0.066
Delayed - Immediate	T8	0.034	0.156	171.513	0.217	0.974	0.033
Delayed - Control	T8	0.054	0.158	171.513	0.345	0.937	0.053
Immediate - Control	T8	0.020	0.150	171.513	0.136	0.990	0.021
Delayed - Immediate	T9	-0.329	0.156	171.513	-2.112	0.090	-0.322
Delayed - Control	T9	0.224	0.158	172.281	1.418	0.334	0.216
Immediate - Control	T9	0.552	0.151	172.356	3.670	0.001 *	0.559
Delayed - Immediate	T10	-0.454	0.156	171.513	-2.912	0.011 *	-0.445
Delayed - Control	T10	0.077	0.158	171.513	0.488	0.877	0.075
Immediate - Control	T10	0.530	0.150	171.513	3.528	0.002 *	0.539
Delayed - Immediate	T11	-0.194	0.156	171.513	-1.248	0.427	-0.191
Delayed - Control	T11	0.028	0.158	171.513	0.179	0.982	0.027
Immediate - Control	T11	0.223	0.150	171.513	1.481	0.303	0.226
Delayed - Immediate	T12	-0.247	0.156	171.513	-1.584	0.255	-0.242
Delayed - Control	T12	-0.095	0.158	171.513	-0.601	0.820	-0.092
Immediate - Control	T12	0.152	0.150	171.513	1.012	0.571	0.154
Delayed - Immediate	T13	-0.153	0.156	171.513	-0.983	0.589	-0.150
Delayed - Control	T13	-0.075	0.158	171.513	-0.475	0.883	-0.073
Immediate - Control	T13	0.078	0.150	171.513	0.520	0.861	0.079
Delayed - Immediate	T14	-0.135	0.156	171.513	-0.868	0.661	-0.133
Delayed - Control	T14	0.013	0.158	171.513	0.084	0.996	0.013
Immediate - Control	T14	0.148	0.150	171.513	0.987	0.586	0.151

* $p<.05$; Tukey's method is used to adjust for comparing a family of 3 estimates.

Table B.1.3 χ^2 table comparing different LMMs with ln(cortisol) levels as outcome variable

Model	df	Log Likelihood	X^2	Δ df	p-value
5. Full Model	44	-93.109			
6. Group x Time	18	-330.024	473.831	26	0.000 *

7. Group [a]	16	-340.187	20.325	2	0.000 *	
8. Time [a]	5	-516.296	372.543	13	0.000 *	

[a] χ2 and p-values for Model 7 and 8 are based on the comparisons with Model 6; * p<.05

Table B.1.4 Tukey adjusted post-hoc pairwise comparisons of ln(cortisol) levels between experimental Groups (per timepoint).

contrast	timepoint	estimate	SE	df	t-ratio	p-value	Cohen's d
Delayed - Immediate	T1	0.028	0.069	586.827	0.399	0.916	0.033
Delayed - Control	T1	0.109	0.071	586.827	1.537	0.275	0.127
Immediate - Control	T1	0.081	0.067	586.827	1.198	0.455	0.099
Delayed - Immediate	T2	0.080	0.069	586.827	1.147	0.486	0.095
Delayed - Control	T2	0.076	0.071	586.827	1.074	0.531	0.089
Immediate - Control	T2	-0.004	0.067	586.827	-0.056	0.998	-0.005
Delayed - Immediate	T3	0.400	0.069	586.827	5.756	0.000 *	0.475
Delayed - Control	T3	0.411	0.071	586.827	5.812	0.000 *	0.480
Immediate - Control	T3	0.011	0.067	586.827	0.161	0.986	0.013
Delayed - Immediate	T4	0.673	0.069	586.827	9.688	0.000 *	0.800
Delayed - Control	T4	0.720	0.071	586.827	10.190	0.000 *	0.841
Immediate - Control	T4	0.047	0.067	586.827	0.699	0.764	0.058
Delayed - Immediate	T5	0.552	0.069	586.827	7.944	0.000 *	0.656
Delayed - Control	T5	0.594	0.071	586.827	8.402	0.000 *	0.694
Immediate - Control	T5	0.042	0.067	586.827	0.621	0.809	0.051
Delayed - Immediate	T6	0.300	0.069	586.827	4.318	0.000 *	0.357
Delayed - Control	T6	0.339	0.071	586.827	4.803	0.000 *	0.397
Immediate - Control	T6	0.039	0.067	586.827	0.585	0.828	0.048
Delayed - Immediate	T7	0.153	0.069	586.827	2.207	0.071	0.182
Delayed - Control	T7	0.152	0.071	586.827	2.151	0.081	0.178
Immediate - Control	T7	-0.001	0.067	586.827	-0.019	1.000	-0.002
Delayed - Immediate	T8	0.069	0.069	586.827	0.991	0.583	0.082
Delayed - Control	T8	0.116	0.071	586.827	1.640	0.230	0.135
Immediate - Control	T8	0.047	0.067	586.827	0.697	0.765	0.058
Delayed - Immediate	T9	-0.017	0.070	593.458	-0.237	0.969	-0.019

contrast	timepoint	estimate	SE	df	t-ratio	p-value	Cohen's d
Delayed - Control	T9	0.075	0.071	594.271	1.061	0.539	0.087
Immediate - Control	T9	0.092	0.068	602.003	1.349	0.369	0.110
Delayed - Immediate	T10	-0.245	0.069	586.827	-3.531	0.001 *	-0.292
Delayed - Control	T10	0.099	0.071	586.827	1.400	0.342	0.116
Immediate - Control	T10	0.344	0.067	586.827	5.100	0.000 *	0.421
Delayed - Immediate	T11	-0.585	0.069	586.827	-8.418	0.000 *	-0.695
Delayed - Control	T11	0.058	0.071	586.827	0.819	0.691	0.068
Immediate - Control	T11	0.642	0.067	586.827	9.522	0.000 *	0.786
Delayed - Immediate	T12	-0.188	0.069	586.827	-2.706	0.019 *	-0.223
Delayed - Control	T12	0.117	0.071	586.827	1.662	0.221	0.137
Immediate - Control	T12	0.305	0.067	586.827	4.526	0.000 *	0.374
Delayed - Immediate	T13	-0.018	0.069	586.827	-0.264	0.962	-0.022
Delayed - Control	T13	0.081	0.071	586.827	1.141	0.489	0.094
Immediate - Control	T13	0.099	0.067	586.827	1.467	0.308	0.121
Delayed - Immediate	T14	-0.084	0.069	586.827	-1.207	0.450	-0.100
Delayed - Control	T14	-0.008	0.071	586.827	-0.116	0.993	-0.010
Immediate - Control	T14	0.076	0.067	586.827	1.121	0.502	0.093

* p<.05; Tukey's method is used to adjust for comparing a family of 3 estimates.

B.2 Supplementary material FPS analyses

Table B.2.1 Results LMMs fitted to ln(FPS) data from the Acquisition phase

Epoch	Model		Dm	rm	df1	df2	p-value
1) Pre-acquisition noise alone: All Trials [a]	1.	Group x Trialnumber	0.797	2.271	16	3278.850	0.691
	2.	Group	1.657	0.066	2	49704.802	0.191
	3.	Trialnumber	3.673	3.232	8	1353.484	0.000*
2) CUE-probe Acquisition: All Trials [a]	4.	Group x Trialnumber x Trialtype	0.247	0.125	22	175290.539	1.000
	5.	Group x Trialnumber	0.530	0.135	22	154023.345	0.964
	6.	Group x Trialtype	0.228	0.123	24	198670.529	1.000
	7.	Trialnumber x Trialtype	5.353	0.135	11	76891.243	0.000*
	8.	Group	2.008	0.003	2	26224040.478	0.134
	9.	Trialtype	20.509	0.120	1	8040.907	0.000*
	10.	Trialnumber	28.621	0.133	11	78745.138	0.000*
3) CUE-probe Acquisition: mean early trials [b]	11.	Group x Trialtype	2.478	0.448	2	2003.851	0.084
	12.	Group	1.160	0.171	2	8961.041	0.313
	13.	Trialtype	0.085	0.372	1	1256.947	0.771
4) CUE-probe Acquisition: mean mid trials [b]	14.	Group x Trialtype	0.349	0.384	2	2488.634	0.705
	15.	Group	1.750	0.104	2	21460.459	0.174
	16.	Trialtype	1.947	0.344	1	1413.856	0.163
5) CUE-probe Acquisition: mean late trials [b]	17.	Group x Trialtype	0.321	0.399	2	2357.445	0.726
	18.	Group	1.693	0.146	2	11680.133	0.184
	19.	Trialtype	4.455	0.356	1	1339.001	0.035*
6) CTX-probe Acquisition: All Trials [a]	20.	Group x Trialnumber x Trialtype	0.485	0.124	10	81170.945	0.901
	21.	Group x Trialnumber	1.664	0.122	10	83708.023	0.083
	22.	Group x Trialtype	0.407	0.122	12	100376.930	0.962
	23.	Trialnumber x Trialtype	0.387	0.101	5	57867.230	0.858
	24.	Group	2.402	0.005	2	8324193.439	0.091
	25.	Trialtype	7.310	0.134	1	6582.796	0.007*
	26.	Trialnumber	50.493	0.113	5	47360.576	0.000*
7) CTX-probe Acquisition: mean early trials [b]	27.	Group x Trialtype	0.081	0.243	2	4993.509	0.922
	28.	Group	2.050	0.119	2	16772.475	0.129
	29.	Trialtype	0.217	0.265	1	2103.964	0.641
8) CUE-probe Acquisition: mean mid trials [b]	30.	Group x Trialtype	0.285	0.308	2	3447.891	0.752
	31.	Group	2.764	0.119	2	16749.473	0.063
	32.	Trialtype	1.007	0.318	1	1583.504	0.316
9) CUE-probe Acquisition: mean late trials [b]	33.	Group x Trialtype	0.304	0.363	2	2696.170	0.738
	34.	Group	1.966	0.131	2	14287.707	0.140
	35.	Trialtype	3.354	0.299	1	1742.088	0.067

[a] Overall analysis; [b] follow-up significant effects factor Trialnumber in overall analyses; * p < 0.05

Table B.2.2 Results LMMs fitted to ln(FPS) data from the Surprise Test phase

Epoch	Model		Dm	rm	df1	df2	p-value
1) Pre-Test noise alone: All Trials [a]	1.	Group x Trialnumber	0.784	2.189	16	3355.023	0.705
	2.	Group	0.632	0.028	2	263937.115	0.531
	3.	Trialnumber	1.234	2.670	8	1490.642	0.275
2) CUE-probe Test: All Trials [a]	4.	Group x Trialnumber x Trialtype	0.411	0.150	20	115598.236	0.990
	5.	Group x Trialnumber	0.297	0.135	10	69521.137	0.982
	6.	Group x Trialtype	0.464	0.156	24	130457.231	0.988
	7.	Trialnumber x Trialtype	1.006	0.128	10	76023.830	0.435
	8.	Group	0.473	0.002	2	67494641.497	0.623
	9.	Trialtype	27.175	0.120	2	16718.773	0.000*
	10.	Trialnumber	81.029	0.110	5	49364.528	0.000*
3) CUE-probe Test: mean early trials [b]	11.	Group x Trialtype	0.923	0.285	4	7895.866	0.449
	12.	Group	0.427	0.041	2	122319.660	0.653
	13.	Trialtype	5.075	0.321	2	3239.173	0.006*
4) CUE-probe Test: mean mid trials [b]	14.	Group x Trialtype	0.099	0.292	4	7606.973	0.983
	15.	Group	0.457	0.026	2	285972.414	0.633
	16.	Trialtype	6.787	0.269	2	4262.980	0.001*
5) CUE-probe Test: mean late trials [b]	17.	Group x Trialtype	1.068	0.369	4	5350.477	0.371
	18.	Group	0.182	0.034	2	177455.352	0.834
	19.	Trialtype	4.141	0.318	2	3278.485	0.016*
6) CTX-probe Test: All Trials [a]	20.	Group x Trialnumber x Trialtype	0.267	0.088	8	120870.685	0.977
	21.	Group x Trialnumber	1.097	0.097	4	49630.627	0.356
	22.	Group x Trialtype	0.219	0.094	12	159346.035	0.998
	23.	Trialnumber x Trialtype	0.796	0.086	4	61547.166	0.527
	24.	Group	0.888	0.004	2	10882635.914	0.412
	25.	Trialtype	2.412	0.075	2	39040.056	0.090
	26.	Trialnumber	43.240	0.118	2	17094.434	0.000*

[a] Overall analysis; [b] follow-up significant effects factor Trialnumber in overall analyses; * $p < 0.05$

Table B.2.3 Estimated marginal Means ln(FPS) per Trialtype, for epochs with significant influences of factor Trialtype in overall or follow-up analyses.

Epoch	Trialtype	Pooled-Means	Total Variance	95% CI
1) CUE-probe Acquisition [b]: mean late trials per Trialtype	Threat	4.050	0.102	3.416 - 4.685
	Safe	3.828	0.103	3.190 - 4.466
2) CTX-probe Acquisition [a]: mean <u>all Trials</u> per Trialtype	Threat	3.885	0.109	3.231 - 4.540
	Safe	3.775	0.109	3.120 - 4.430
3) CUE-probe Test [b]: mean early trials per Trialtype	Threat	4.433	0.093	3.827 - 5.039
	Safe	4.203	0.092	3.600 - 4.806
	New	4.345	0.093	3.741 - 4.949
4) CUE-probe Test [b]: mean mid trials per Trialtype	Threat	4.133	0.105	3.490 - 4.776
	Safe	3.920	0.105	3.278 - 4.563
	New	3.953	0.105	3.311 - 4.595
5) CUE-probe Test [b]: mean late trials per Trialtype	Threat	3.885	0.116	3.211 - 4.560
	Safe	3.723	0.115	3.048 - 4.397
	New	3.701	0.115	3.028 - 4.375

[a] Main effect Trialtype overall analyses; [b] Main effect Trialtype follow-up analyses