Enhancing the accuracy of emotional response measurements by incorporating baseline emotion measures

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Keywords

Emotional Response; Baseline Emotion; Check-All-That-Apply (CATA); Food; Valence; Arousal

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Table S1. Frequency (%) of emotions used to describe samples and sample difference across NB, WB, Adj. Pre-test and Adj. Per-sample approaches

Attributes	Method	Study1								Study2							
		Range	Median CI width	p-values	A	B	C	D	E	Range	Median CI width	p-values	A	B	C	D	E
Active	None-B	20.9	1.46	**<0.001**	6^{a}	17.2^{bc}	12.7^{ab}	11.9^{ab}	26.9^{c}	20.1	1.82	**<0.001**	14^{ab}	4.7^{a}	24^{b}	7^{a}	24.8^{b}
	With-B	16.4	1.55	**0.002**	7.5^{a}	18.7^{b}	14.2^{ab}	13.4^{ab}	23.9^{b}	16.3	1.82	**<0.001**	15.5^{bc}	3.9^{a}	20.2^{c}	6.2^{ab}	20.2^{c}
	Adj. Pre-test	16.4	1.73	**<0.001**	-8.2^{a}	3^{a}	-1.5^{a}	-2.2^{a}	8.2^{a}	16.3	0.01	**<0.001**	3.1^{c}	-8.5^{a}	7.8^{d}	-6.2^{b}	7.8^{d}
	Adj. Per-sample	12.7	1.15	0.164	-6^{a}	6.7^{a}	-2.2^{a}	0^{a}	5.2^{a}	21.7	1.26	**<0.001**	3.1^{abc}	-7.8^{ab}	7^{bc}	-10.1^{a}	11.6^{c}
Adventurous	None-B	9	2.05	0.066	12.7^{a}	7.5^{a}	8.2^{a}	3.7^{a}	6^{a}	13.2	2.38	**0.002**	7^{abc}	3.9^{ab}	10.9^{bc}	2.3^{a}	15.5^{c}
	With-B	8.2	2.20	**0.033**	11.2^{a}	9.7^{a}	5.2^{a}	4.5^{a}	12.7^{a}	14.8	3.10	**<0.001**	7^{ab}	2.3^{a}	10.9^{bc}	2.3^{a}	17.1^{c}
	Adj. Pre-test	8.2	1.27	0.424	-0.7^{a}	-2.2^{a}	-6.7^{a}	-7.5^{a}	0.7^{a}	14.8	3.12	**<0.001**	3.1^{a}	-1.6^{a}	7^{a}	-1.6^{a}	13.2^{a}
	Adj. Per-sample	12	1.44	0.054	4.5^{a}	0^{a}	-2.2^{a}	-7.5^{a}	3.7^{a}	16.3	1.94	**<0.001**	2.3^{ab}	-2.3^{a}	6.2^{ab}	-4.7^{a}	11.6^{b}
Aggressive	None-B	18.7	2.59	**<0.001**	20.9^{b}	5.2^{a}	4.5^{a}	2.2^{a}	3^{a}	10.1	5.37	**0.007**	0.8^{a}	0^{ab}	2.3^{a}	0^{ab}	10.1^{b}
	With-B	13.5	2.37	**<0.001**	15.7^{b}	5.2^{a}	4.5^{a}	2.2^{a}	4.5^{a}	8.5	3.74	0.284	4.7^{a}	1.6^{a}	3.1^{a}	0^{a}	8.5^{a}
	Adj. Pre-test	13.4	1.67	**0.006**	11.9^{b}	1.5^{ab}	0.7^{a}	-1.5^{a}	0.7^{a}	8.6	2.50	0.052	3.1^{a}	0^{a}	1.6^{a}	-1.6^{a}	7^{a}
	Adj. Per-sample	15.7	2.03	**<0.001**	14.2^{b}	3.7^{ab}	0^{a}	-1.5^{a}	2.2^{ab}	10.1	2.85	**0.017**	1.6^{a}	0.8^{a}	1.6^{a}	-2.3^{a}	7.8^{a}
Bored	None-B	14.9	1.38	**0.002**	23.1^{b}	22.4^{b}	20.9^{b}	11.9^{ab}	8.2^{a}	25.6	1.56	**<0.001**	9.3^{a}	34.1^{b}	8.5^{a}	24.8^{b}	10.1^{a}
	With-B	17.2	1.64	**<0.001**	23.9^{b}	18.7^{b}	20.1^{b}	7.5^{a}	6.7^{a}	30.3	1.55	**<0.001**	8.5^{a}	38.8^{b}	9.3^{a}	28.7^{b}	9.3^{a}
	Adj. Pre-test	17.2	1.63	**<0.001**	-11.2^{a}	-16.4^{a}	-14.9^{a}	-27.6^{a}	-28.4^{a}	30.2	1.57	**<0.001**	-24.8^{a}	5.4^{c}	-24^{ab}	-4.7^{bc}	-24^{ab}
	Adj. Per-sample	26.1	1.02	**0.002**	4.5^{b}	-9^{ab}	-7.5^{ab}	-20.1^{a}	-21.6^{a}	34.1	1.08	**<0.001**	-17.8^{a}	16.3^{c}	-13.2^{ab}	3.1^{bc}	-17.8^{a}
Calm	None-B	26.9	1.20	**<0.001**	8.2^{a}	31.3^{bc}	35.1^{c}	32.8^{c}	17.9^{ab}	26.3	1.27	**<0.001**	35.7^{ab}	48.8^{b}	23.3^{a}	40.3^{b}	22.5^{a}
	With-B	25.4	1.30	**<0.001**	9.7^{a}	28.4^{b}	35.1^{b}	29.1^{b}	13.4^{a}	21	1.19	**<0.001**	29.5^{ab}	39.5^{b}	20.9^{a}	41.9^{b}	24.8^{a}
	Adj. Pre-test	25.4	1.29	**<0.001**	-46.3^{a}	-27.6^{b}	-20.9^{b}	-26.9^{b}	-42.5^{a}	20.9	0.00	**<0.001**	-37.2^{c}	-27.1^{d}	-45.7^{a}	-24.8^{e}	-41.9^{b}
	Adj. Per-sample	41.1	0.94	**<0.001**	-47.8^{a}	-21.6^{bc}	-6.7^{c}	-20.1^{bc}	-39.6^{ab}	23.3	0.99	**0.037**	-21.7^{ab}	-17.8^{ab}	-27.1^{ab}	-9.3^{b}	-32.6^{a}
Disgusted	None-B	51.5	2.40	**<0.001**	52.2^{c}	7.5^{ab}	13.4^{b}	3^{a}	0.7^{a}	3.9	3.68	0.082	0^{a}	3.9^{a}	3.1^{a}	2.3^{a}	0.8^{a}
	With-B	49.3	2.52	**<0.001**	51.5^{b}	10.4^{a}	6.7^{a}	3^{a}	2.2^{a}	8.5	2.99	0.115	0^{a}	8.5^{a}	2.3^{a}	2.3^{a}	2.3^{a}
	Adj. Pre-test	49.3	2.45	**<0.001**	47.8^{b}	6.7^{a}	3^{a}	-0.7^{a}	-1.5^{a}	8.5	2.99	0.090	0^{a}	8.5^{a}	2.3^{a}	2.3^{a}	2.3^{a}
	Adj. Per-sample	51.5	1.52	**<0.001**	47^{b}	5.2^{a}	-1.5^{a}	-3.7^{a}	-4.5^{a}	8.6	3.41	**0.024**	-0.8^{a}	7.8^{b}	2.3^{ab}	0.8^{ab}	2.3^{ab}

Attributes	Method	Study1								Study2							
		Range	Median CI width	p-values	A	B	C	D	E	Range	Median CI width	p-values	A	B	C	D	E
Enthusiastic	None-B	24.7	1.98	**<0.001**	0.7^{a}	12.7^{b}	6^{ab}	13.4^{b}	25.4^{c}	22.5	2.54	**<0.001**	14^{b}	3.1^{a}	18.6^{b}	3.1^{a}	25.6^{b}
	With-B	13.4	2.13	**<0.001**	3^{a}	10.4^{abc}	4.5^{ab}	11.9^{bc}	16.4^{c}	19.4	2.29	**<0.001**	10.9^{ab}	3.9^{a}	17.1^{bc}	3.9^{a}	23.3^{c}
	Adj. Pre-test	13.5	1.32	**0.049**	-7.5^{a}	0^{a}	-6^{a}	1.5^{a}	6^{a}	19.4	2.40	**<0.001**	-1.6^{a}	-8.5^{a}	4.7^{a}	-8.5^{a}	10.9^{a}
	Adj. Per-sample	15.7	1.43	**0.001**	-9^{a}	5.2^{bc}	-6.7^{ab}	2.2^{abc}	6.7^{c}	19.4	1.37	**0.003**	0^{ab}	-7.8^{a}	3.1^{ab}	-5.4^{a}	11.6^{b}
Free	None-B	16.4	1.86	**<0.001**	3.7^{a}	13.4^{bc}	6^{ab}	9.7^{abc}	20.1^{c}	5.4	1.77	0.585	12.4^{a}	7^{a}	11.6^{a}	10.9^{a}	10.9^{a}
	With-B	9	1.68	0.091	3.7^{a}	11.2^{a}	9^{a}	11.9^{a}	12.7^{a}	5.4	1.93	0.501	13.2^{a}	7.8^{a}	12.4^{a}	10.1^{a}	9.3^{a}
	Adj. Pre-test	9	1.11	0.610	-18.7^{a}	-11.2^{a}	-13.4^{a}	-10.4^{a}	-9.7^{a}	5.5	2.14	0.387	0.8^{a}	-4.7^{a}	0^{a}	-2.3^{a}	-3.1^{a}
	Adj. Per-sample	11.9	1.19	0.235	-17.9^{a}	-7.5^{a}	-9.7^{a}	-6^{a}	-8.2^{a}	12.4	0.01	**<0.001**	0.8^{e}	-11.6^{a}	-0.8^{d}	-7^{b}	-3.1^{c}
Good	None-B	30.6	1.37	**<0.001**	0.7^{a}	17.2^{bc}	11.9^{b}	30.6^{cd}	31.3^{d}	18.6	1.40	**0.002**	27.1^{b}	8.5^{a}	18.6^{ab}	15.5^{ab}	23.3^{b}
	With-B	38.1	1.23	**<0.001**	1.5^{a}	17.9^{b}	17.9^{b}	27.6^{bc}	39.6^{c}	9.3	1.37	0.284	22.5^{a}	13.2^{a}	21.7^{a}	17.8^{a}	20.9^{a}
	Adj. Pre-test	38.1	1.33	**<0.001**	-8.2^{a}	8.2^{b}	8.2^{b}	17.9^{bc}	29.9^{c}	9.3	1.42	0.241	8.5^{a}	-0.8^{a}	7.8^{a}	3.9^{a}	7^{a}
	Adj. Per-sample	46.3	1.08	**<0.001**	-17.2^{a}	3.7^{b}	6^{b}	11.9^{bc}	29.1^{c}	10.1	1.22	0.371	7^{a}	-2.3^{a}	1.6^{a}	0.8^{a}	7.8^{a}
Good Natured	None-B	20.2	1.54	**<0.001**	2.2^{a}	12.7^{b}	15.7^{b}	22.4^{b}	11.2^{b}	7.7	1.67	0.299	10.9^{a}	15.5^{a}	13.2^{a}	14^{a}	7.8^{a}
	With-B	18	1.60	**0.005**	0.7^{a}	14.2^{b}	10.4^{ab}	18.7^{b}	10.4^{ab}	7.7	1.61	0.284	14.7^{a}	10.9^{a}	11.6^{a}	14.7^{a}	7^{a}
	Adj. Pre-test	17.9	1.06	0.120	-25.4^{a}	-11.9^{a}	-15.7^{a}	-7.5^{a}	-15.7^{a}	7.8	1.10	0.813	-8.5^{a}	-12.4^{a}	-11.6^{a}	-8.5^{a}	-16.3^{a}
	Adj. Per-sample	13.4	1.16	0.274	-16.4^{a}	-8.2^{a}	-8.2^{a}	-3^{a}	-9.7^{a}	10.1	1.17	0.501	-3.1^{a}	-4.7^{a}	-7^{a}	-9.3^{a}	-13.2^{a}
Guilty	None-B	14.2	2.76	**<0.001**	14.9^{c}	5.2^{ab}	9^{bc}	3^{ab}	0.7^{a}	0.8	5.57	0.774	0.8^{a}	0.8^{a}	0^{a}	0.8^{a}	0.8^{a}
	With-B	13.5	4.71	**<0.001**	14.2^{b}	5.2^{a}	5.2^{a}	0.7^{a}	0.7^{a}	0.8	5.57	0.593	0^{a}	0.8^{a}	0.8^{a}	0^{a}	0.8^{a}
	Adj. Pre-test	13.4	4.14	**<0.001**	11.9^{a}	3^{a}	3^{a}	-1.5^{a}	-1.5^{a}	0.7	7.85	0.822	-2.3^{a}	-1.6^{a}	-1.6^{a}	-2.3^{a}	-1.6^{a}
	Adj. Per-sample	11.1	0.01	**<0.001**	10.4^{e}	2.2^{c}	3^{d}	-0.7^{b}	-0.7^{a}	3.1	NA	**0.024**	-1.6^{a}	0.8^{a}	0.8^{a}	0^{a}	-2.3^{a}
Happy	None-B	35.8	1.55	**<0.001**	1.5^{a}	11.9^{b}	9^{ab}	26.1^{c}	37.3^{c}	11.7	1.56	**0.031**	17.1^{ab}	8.5^{a}	19.4^{ab}	11.6^{ab}	20.2^{b}
	With-B	29.9	1.48	**<0.001**	0^{abc}	14.2^{ab}	7.5^{a}	29.9^{c}	24.6^{bc}	14.7	1.63	**0.010**	17.1^{b}	6.2^{a}	20.9^{b}	14^{ab}	10.9^{ab}
	Adj. Pre-test	29.9	1.85	**<0.001**	-11.2^{a}	3^{a}	-3.7^{a}	18.7^{a}	13.4^{a}	14.8	0.02	**<0.001**	6.2^{d}	-4.7^{a}	10.1^{e}	3.1^{c}	0^{b}
	Adj. Per-sample	32.9	1.18	**<0.001**	-17.2^{a}	0.7^{bc}	-3.7^{ab}	15.7^{d}	14.9^{cd}	12.4	1.33	0.147	5.4^{a}	-5.4^{a}	7^{a}	2.3^{a}	1.6^{a}
Interested	None-B	26.1	1.43	**<0.001**	3^{a}	13.4^{b}	11.9^{ab}	18.7^{bc}	29.1^{c}	17.1	1.58	**<0.001**	18.6^{bc}	6.2^{a}	23.3^{c}	8.5^{ab}	22.5^{c}
	With-B	27.6	1.40	**<0.001**	1.5^{a}	11.9^{b}	16.4^{bc}	23.9^{bc}	29.1^{c}	17	1.36	**0.007**	23.3^{b}	7.8^{a}	18.6^{ab}	15.5^{ab}	24.8^{b}
	Adj. Pre-test	27.6	1.52	**<0.001**	-22.4^{a}	-11.9^{a}	-7.5^{a}	0^{a}	5.2^{a}	17	1.44	**0.002**	0.8^{a}	-14.7^{a}	-3.9^{a}	-7^{a}	2.3^{a}

Attributes	Method	Study1								Study2							
		Range	Median CI width	p-values	A	B	C	D	E	Range	Median CI width	p-values	A	B	C	D	E
Joyful	Adj. Per-sample	29.1	1.16	**<0.001**	-19.4^{a}	-3^{b}	-4.5^{ab}	3^{b}	9.7^{b}	20.2	1.15	**0.024**	3.9^{b}	-16.3^{a}	-3.1^{ab}	-6.2^{ab}	1.6^{b}
	None-B	33.6	1.64	**<0.001**	0.7^{a}	12.7^{bc}	8.2^{ab}	24.6^{cd}	34.3^{d}	16.3	1.71	**<0.001**	23.3^{b}	7^{a}	19.4^{b}	7.8^{a}	16.3^{ab}
	With-B	32.9	1.30	**<0.001**	0.7^{a}	20.1^{bc}	14.9^{b}	31.3^{c}	33.6^{c}	15.5	1.46	**0.007**	18.6^{b}	6.2^{a}	21.7^{b}	14^{ab}	20.9^{b}
	Adj. Pre-test	32.9	1.39	**<0.001**	-15.7^{a}	3.7^{b}	-1.5^{ab}	14.9^{b}	17.2^{b}	15.6	1.61	**0.002**	4.7^{a}	-7.8^{a}	7.8^{a}	0^{a}	7^{a}
Loving	Adj. Per-sample	41	1.09	**<0.001**	-21.6^{a}	3.7^{bc}	0.7^{b}	17.9^{c}	19.4^{c}	18.6	1.20	**0.034**	3.1^{ab}	-9.3^{a}	-0.8^{ab}	-3.9^{ab}	9.3^{b}
	None-B	22.4	1.96	**<0.001**	0.7^{a}	11.9^{bc}	6^{ab}	21.6^{c}	23.1^{c}	9.3	2.35	**0.037**	10.1^{ab}	5.4^{ab}	12.4^{b}	3.1^{a}	8.5^{ab}
	With-B	24.7	1.91	**<0.001**	0.7^{a}	7.5^{ab}	5.2^{a}	17.9^{bc}	25.4^{c}	7	1.99	0.225	8.5^{a}	2.3^{a}	9.3^{a}	6.2^{a}	9.3^{a}
	Adj. Pre-test	24.6	1.82	**<0.001**	-3^{a}	3.7^{a}	1.5^{a}	14.2^{a}	21.6^{a}	7	2.27	0.104	4.7^{a}	-1.6^{a}	5.4^{a}	2.3^{a}	5.4^{a}
Mild	Adj. Per-sample	25.4	1.51	**<0.001**	-6^{a}	3^{a}	2.2^{a}	16.4^{b}	19.4^{b}	9.4	1.82	0.147	5.4^{a}	-1.6^{a}	4.7^{a}	3.1^{a}	7.8^{a}
	None-B	28.4	1.19	**<0.001**	3.7^{a}	20.1^{b}	21.6^{b}	32.1^{b}	24.6^{b}	15.5	1.48	**0.009**	23.3^{ab}	21.7^{ab}	17.1^{a}	29.5^{b}	14^{a}
	With-B	27.6	1.27	**<0.001**	4.5^{a}	19.4^{bc}	21.6^{bc}	32.1^{c}	15.7^{b}	11.6	1.53	0.061	24^{a}	14^{a}	17.1^{a}	25.6^{a}	20.2^{a}
	Adj. Pre-test	27.6	1.30	**<0.001**	-36.6^{a}	-21.6^{b}	-19.4^{b}	-9^{b}	-25.4^{ab}	11.6	1.68	**0.027**	-8.5^{a}	-18.6^{a}	-15.5^{a}	-7^{a}	-12.4^{a}
Nostalgic	Adj. Per-sample	28.4	1.02	**0.001**	-28.4^{a}	-17.9^{ab}	-7.5^{b}	0^{b}	-16.4^{ab}	10.8	1.07	0.588	-14^{a}	-16.3^{a}	-18.6^{a}	-7.8^{a}	-11.6^{a}
	None-B	2.9	1.73	0.871	7.5^{a}	8.2^{a}	10.4^{a}	10.4^{a}	9.7^{a}	8.5	1.82	0.154	13.2^{a}	8.5^{a}	7.8^{a}	11.6^{a}	4.7^{a}
	With-B	6.7	2.27	0.064	3^{a}	3.7^{a}	9^{a}	9.7^{a}	4.5^{a}	7	1.93	0.225	10.1^{a}	9.3^{a}	6.2^{a}	10.1^{a}	3.1^{a}
	Adj. Pre-test	6.7	2.46	**0.030**	-1.5^{a}	-0.7^{a}	4.5^{a}	5.2^{a}	0^{a}	7	2.18	0.104	3.1^{a}	2.3^{a}	-0.8^{a}	3.1^{a}	-3.9^{a}
Pleasant	Adj. Per-sample	10.5	1.50	0.109	-6^{a}	-3.7^{a}	4.5^{a}	2.2^{a}	-1.5^{a}	10.1	1.63	0.079	8.5^{a}	1.6^{a}	0^{a}	7^{a}	-1.6^{a}
	None-B	51.5	1.25	**<0.001**	3^{a}	20.1^{b}	17.9^{b}	28.4^{b}	54.5^{c}	22.5	1.38	**<0.001**	31^{c}	8.5^{a}	24.8^{bc}	13.2^{ab}	23.3^{bc}
	With-B	42.6	1.26	**<0.001**	0.7^{a}	25.4^{b}	16.4^{b}	26.9^{b}	43.3^{c}	17	1.49	**<0.001**	23.3^{bc}	10.1^{a}	24.8^{bc}	14^{ab}	27.1^{c}
	Adj. Pre-test	42.5	1.35	**<0.001**	-29.1^{a}	-4.5^{bc}	-13.4^{ab}	-3^{bc}	13.4^{c}	17.1	1.61	**<0.001**	-0.8^{a}	-14^{a}	0.8^{a}	-10.1^{a}	3.1^{a}
Satisfied	Adj. Per-sample	52.3	1.01	**<0.001**	-25.4^{a}	2.2^{b}	-8.2^{ab}	3.7^{b}	26.9^{c}	21	1.14	**0.024**	0^{ab}	-10.9^{a}	0^{ab}	-6.2^{ab}	10.1^{b}
	None-B	35.8	1.57	**<0.001**	1.5^{a}	18.7^{bc}	7.5^{ab}	31.3^{cd}	37.3^{d}	20.2	1.34	**<0.001**	25.6^{b}	9.3^{a}	24.8^{b}	16.3^{ab}	29.5^{b}
	With-B	34.3	1.29	**<0.001**	1.5^{a}	21.6^{bc}	13.4^{b}	35.1^{c}	35.8^{c}	28.7	1.38	**<0.001**	35.7^{c}	7^{a}	21.7^{b}	18.6^{b}	26.4^{bc}
	Adj. Pre-test	34.4	1.36	**<0.001**	-15.7^{a}	4.5^{bc}	-3.7^{ab}	17.9^{c}	18.7^{c}	28.7	1.46	**<0.001**	21.7^{b}	-7^{a}	7.8^{b}	4.7^{ab}	12.4^{b}
Secure	Adj. Per-sample	38.8	1.09	**<0.001**	-19.4^{a}	3^{bc}	-5.2^{ab}	19.4^{c}	19.4^{c}	27.9	1.15	**<0.001**	18.6^{b}	-9.3^{a}	-4.7^{a}	3.1^{ab}	13.2^{b}
	None-B	23.1	1.40	**<0.001**	1.5^{a}	13.4^{b}	17.9^{b}	24.6^{b}	16.4^{b}	7.7	1.77	0.218	13.2^{a}	10.1^{a}	10.9^{a}	17.8^{a}	10.9^{a}
	With-B	20.1	1.50	**<0.001**	3^{a}	11.9^{b}	20.9^{b}	23.1^{b}	15.7^{b}	5.4	1.73	0.654	11.6^{a}	10.9^{a}	11.6^{a}	13.2^{a}	7.8^{a}

Attributes	Method	Study1								Study2							
		Range	Median CI width	p-values	A	B	C	D	E	Range	Median CI width	p-values	A	B	C	D	E
Tame	Adj. Pre-test	20.1	1.07	**0.026**	-17.9^{a}	-9^{ab}	0^{ab}	2.2^{b}	-5.2^{ab}	5.5	1.96	0.586	-7^{a}	-7.8^{a}	-7^{a}	-5.4^{a}	-10.9^{a}
	Adj. Per-sample	27.6	1.10	**<0.001**	-23.9^{a}	-5.2^{b}	3.7^{b}	-2.2^{b}	-6.7^{ab}	13.2	1.28	0.085	-17.1^{a}	-4.7^{a}	-7^{a}	-7.8^{a}	-3.9^{a}
	None-B	18.6	1.24	**0.002**	3^{a}	20.9^{b}	18.7^{b}	21.6^{b}	19.4^{b}	12.4	1.70	**0.006**	10.9^{ab}	20.9^{b}	14^{ab}	20.9^{b}	8.5^{a}
	With-B	19.4	1.32	**<0.001**	3^{a}	21.6^{b}	15.7^{b}	22.4^{b}	14.2^{b}	9.3	1.86	0.051	7.8^{a}	13.2^{a}	17.1^{a}	15.5^{a}	7.8^{a}
Understanding	Adj. Pre-test	19.4	0.01	**<0.001**	-11.2^{a}	7.5^{d}	1.5^{c}	8.2^{e}	0^{b}	9.3	2.04	**0.017**	-5.4^{a}	0^{a}	3.9^{a}	2.3^{a}	-5.4^{a}
	Adj. Per-sample	25.4	1.09	**0.001**	-18.7^{a}	3^{b}	-2.2^{ab}	6.7^{b}	0^{b}	4.7	1.28	0.822	-4.7^{a}	-7^{a}	-2.3^{a}	-2.3^{a}	-7^{a}
	None-B	23.9	1.28	**<0.001**	5.2^{a}	19.4^{b}	29.1^{b}	17.2^{b}	18.7^{b}	9.3	2.23	**0.031**	8.5^{ab}	14^{ab}	10.1^{ab}	17.1^{b}	7.8^{a}
	With-B	12.7	1.39	**0.023**	11.9^{a}	16.4^{ab}	24.6^{b}	19.4^{ab}	11.9^{a}	3.8	1.54	0.798	14.7^{a}	17.1^{a}	17.8^{a}	17.8^{a}	14^{a}
	Adj. Pre-test	12.7	1.51	0.099	0.7^{a}	5.2^{a}	13.4^{a}	8.2^{a}	0.7^{a}	3.9	1.70	0.798	-1.6^{a}	0.8^{a}	1.6^{a}	1.6^{a}	-2.3^{a}
	Adj. Per-sample	11.9	1.10	0.388	-6.7^{a}	-2.2^{a}	5.2^{a}	-0.7^{a}	-3^{a}	11.6	1.27	0.218	0.8^{a}	-4.7^{a}	3.1^{a}	0.8^{a}	-8.5^{a}
Warm	None-B	16.4	2.06	**<0.001**	1.5^{a}	11.2^{bc}	4.5^{ab}	17.9^{c}	17.2^{c}	5.4	1.77	0.530	14.7^{a}	10.9^{a}	9.3^{a}	14^{a}	10.9^{a}
	With-B	20.1	1.58	**0.016**	0^{ab}	9.7^{ab}	8.2^{a}	20.1^{b}	17.9^{ab}	7	1.57	0.284	16.3^{a}	10.1^{a}	17.1^{a}	12.4^{a}	10.1^{a}
	Adj. Pre-test	20.2	1.97	**<0.001**	-12.7^{a}	-3^{a}	-4.5^{a}	7.5^{a}	5.2^{a}	7	1.65	0.241	6.2^{a}	0^{a}	7^{a}	2.3^{a}	0^{a}
	Adj. Per-sample	26.1	1.21	**<0.001**	-16.4^{a}	-4.5^{ab}	-3.7^{ab}	9.7^{b}	5.2^{b}	7.8	1.31	0.516	3.9^{a}	-1.6^{a}	4.7^{a}	-3.1^{a}	1.6^{a}
Wild	None-B	35.9	1.99	**<0.001**	39.6^{b}	8.2^{a}	10.4^{a}	3.7^{a}	5.2^{a}	13.2	3.35	**0.007**	3.1^{a}	0.8^{a}	5.4^{ab}	0^{ab}	13.2^{b}
	With-B	31.3	2.08	**<0.001**	35.8^{b}	6.7^{a}	6^{a}	4.5^{a}	5.2^{a}	12.4	2.81	**0.034**	3.1^{a}	0^{ab}	9.3^{ab}	2.3^{a}	12.4^{b}
	Adj. Pre-test	31.3	2.09	**<0.001**	32.8^{b}	3.7^{a}	3^{a}	1.5^{a}	2.2^{a}	12.4	2.00	**0.005**	0^{abc}	-3.1^{a}	6.2^{bc}	-0.8^{ab}	9.3^{c}
	Adj. Per-sample	36.6	1.66	**<0.001**	33.6^{b}	3.7^{a}	-3^{a}	0^{a}	1.5^{a}	11.7	2.34	**0.006**	2.3^{a}	-1.6^{a}	7^{a}	0^{a}	10.1^{a}
Worried	None-B	36.6	1.99	**<0.001**	39.6^{b}	8.2^{a}	9.7^{a}	5.2^{a}	3^{a}	6.2	2.99	0.135	2.3^{a}	4.7^{a}	7.8^{a}	1.6^{a}	3.1^{a}
	With-B	27.6	1.93	**<0.001**	31.3^{b}	7.5^{a}	10.4^{a}	6^{a}	3.7^{a}	5.4	2.97	0.149	2.3^{a}	6.2^{a}	7^{a}	2.3^{a}	1.6^{a}
	Adj. Pre-test	27.6	0.00	**<0.001**	17.2^{e}	-6.7^{c}	-3.7^{d}	-8.2^{b}	-10.4^{a}	5.4	3.13	0.058	-5.4^{a}	-1.6^{a}	-0.8^{a}	-5.4^{a}	-6.2^{a}
	Adj. Per-sample	34.4	1.29	**<0.001**	25.4^{b}	-2.2^{a}	-3^{a}	-6^{a}	-9^{a}	9.3	1.96	0.066	-2.3^{a}	1.6^{a}	3.1^{a}	-6.2^{a}	-3.9^{a}

Range = difference between the highest and lowest sample citation frequencies for each attribute.

Median CI Width of the pairwise LogOR: Median width of the 95% confidence intervals for all pairwise log odds ratios (LogORs) across emotion terms. This metric reflects estimation precision, with narrower intervals indicating greater confidence in the estimated sample differences.

p-values are from GLMM/CLMM models with FDR correction for multiple comparisons (Benjamini-Hochberg, q = 0.05).

None-B = no baseline measurement; With-B = baseline measured but not adjusted; Adj. Pre-test = adjustment using a single pre-test baseline; Adj. Per-sample = adjustment using per-sample baseline.

Table S2a. Baseline citation frequencies, sample citation frequency and Thurstonian latent shift parameters (**δ**) for emotional terms under Adj. Per-sampleand pre-test baseline Adj. Pre-test approach in study1.

Term	Sample	Adj. Per-sample					Adj. Pre-test				
		Baseline frequency (%)	**Citation frequency (%)**	**p-value**	**Thurstonian δ**	**95% CI**	**Baseline frequency (%)**	**Citation frequency (%)**	**p-value**	**Thurstonian δ**	**95% CI**
Active	A	13.4	-6	0.306	-0.336	[-0.75, 0.08]	15.7	-8.2	0.113	**-0.4341**	**[-0.84, -0.03]**
	B	11.9	6.7	0.306	0.287	[-0.08, 0.66]	15.7	3	0.791	0.1174	[-0.24, 0.47]
	C	16.4	-2.2	0.835	-0.095	[-0.46, 0.27]	15.7	-1.5	0.965	-0.0643	[-0.43, 0.3]
	D	13.4	0	1.000	0.000	[-0.38, 0.38]	15.7	-2.2	0.865	-0.0981	[-0.47, 0.27]
	E	18.7	5.2	0.504	0.181	[-0.16, 0.52]	15.7	8.2	0.211	0.2979	[-0.05, 0.64]
Adventurous	A	6.7	4.5	0.463	0.281	[-0.15, 0.71]	11.9	-0.7	1.000	-0.0383	[-0.43, 0.35]
	B	9.7	0	1.000	0.000	[-0.41, 0.41]	11.9	-2.2	0.854	-0.1208	[-0.52, 0.28]
	C	7.5	-2.2	0.726	-0.181	[-0.65, 0.29]	11.9	-6.7	0.158	-0.4455	[-0.89, 0]
	D	11.9	-7.5	0.067	**-0.520**	**[-0.98, -0.06]**	11.9	-7.5	0.098	**-0.5198**	**[-0.98, -0.06]**
	E	9	3.7	0.603	0.202	[-0.2, 0.61]	11.9	0.7	1.000	0.0366	[-0.35, 0.42]
Aggressive	A	1.5	14.2	**<0.001**	**1.164**	**[0.56, 1.77]**	3.7	11.9	**0.008**	**0.7747**	**[0.3, 1.24]**
	B	1.5	3.7	0.284	0.549	[-0.1, 1.2]	3.7	1.5	0.896	0.1592	[-0.37, 0.69]
	C	4.5	0	1.000	0.000	[-0.52, 0.52]	3.7	0.7	1.000	0.085	[-0.46, 0.63]
	D	3.7	-1.5	0.811	-0.224	[-0.84, 0.39]	3.7	-1.5	0.865	-0.224	[-0.84, 0.39]
	E	2.2	2.2	0.695	0.309	[-0.29, 0.91]	3.7	0.7	1.000	0.085	[-0.46, 0.63]
Bored	A	19.4	4.5	0.641	0.153	[-0.18, 0.49]	35.1	-11.2	0.121	**-0.3268**	**[-0.65, -0.01]**
	B	27.6	-9	0.221	-0.296	[-0.63, 0.04]	35.1	-16.4	**0.005**	**-0.5073**	**[-0.84, -0.18]**

	C	27.6	-7.5	0.433	-0.242	[-0.57, 0.09]	35.1	-14.9	**0.023**	**-0.453**	**[-0.78, -0.13]**
	D	27.6	-20.1	**<0.001**	**-0.848**	**[-1.24, -0.46]**	35.1	-27.6	**<0.001**	**-1.0589**	**[-1.44, -0.68]**
	E	28.4	-21.6	**<0.001**	**-0.925**	**[-1.32, -0.53]**	35.1	-28.4	**<0.001**	**-1.1139**	**[-1.51, -0.72]**
	A	57.5	-47.8	**<0.001**	**-1.487**	**[-1.85, -1.13]**	56	-46.3	**<0.001**	**-1.449**	**[-1.81, -1.09]**
	B	50	-21.6	**<0.001**	**-0.572**	**[-0.88, -0.26]**	56	-27.6	**<0.001**	**-0.7224**	**[-1.03, -0.41]**
Calm	C	41.8	-6.7	0.503	-0.176	[-0.48, 0.13]	56	-20.9	**0.003**	**-0.5335**	**[-0.84, -0.23]**
	D	49.3	-20.1	**0.003**	**-0.532**	**[-0.84, -0.22]**	56	-26.9	**<0.001**	**-0.7005**	**[-1.01, -0.39]**
	E	53	-39.6	**<0.001**	**-1.181**	**[-1.52, -0.84]**	56	-42.5	**<0.001**	**-1.2564**	**[-1.6, -0.91]**
	A	4.5	47	**<0.001**	**1.735**	**[1.31, 2.16]**	3.7	47.8	**<0.001**	**1.8202**	**[1.37, 2.27]**
	B	5.2	5.2	0.304	0.367	[-0.09, 0.82]	3.7	6.7	0.112	**0.5263**	**[0.04, 1.01]**
Disgusted	C	8.2	-1.5	0.903	-0.106	[-0.55, 0.34]	3.7	3	0.603	0.2855	[-0.23, 0.8]
	D	6.7	-3.7	0.463	-0.386	[-0.92, 0.15]	3.7	-0.7	1.000	-0.1002	[-0.68, 0.48]
	E	6.7	-4.5	0.258	-0.510	[-1.08, 0.06]	3.7	-1.5	0.865	-0.224	[-0.84, 0.39]
	A	11.9	-9	**0.015**	**-0.705**	**[-1.21, -0.2]**	10.4	-7.5	0.054	**-0.6265**	**[-1.14, -0.11]**
	B	5.2	5.2	0.304	0.367	[-0.09, 0.82]	10.4	0	1.000	0	[-0.4, 0.4]
Enthusiastic	C	11.2	-6.7	0.204	**-0.482**	**[-0.95, -0.02]**	10.4	-6	0.222	-0.4413	[-0.91, 0.03]
	D	9.7	2.2	0.759	0.121	[-0.28, 0.52]	10.4	1.5	0.945	0.0785	[-0.32, 0.48]
	E	9.7	6.7	0.228	0.321	[-0.07, 0.71]	10.4	6	0.317	0.279	[-0.1, 0.66]
	A	21.6	-17.9	**<0.001**	**-0.998**	**[-1.46, -0.54]**	22.4	-18.7	**<0.001**	**-1.0236**	**[-1.48, -0.56]**
	B	18.7	-7.5	0.237	-0.326	[-0.7, 0.05]	22.4	-11.2	**0.043**	**-0.4571**	**[-0.82, -0.09]**
Free	C	18.7	-9.7	0.088	**-0.453**	**[-0.84, -0.07]**	22.4	-13.4	**0.012**	**-0.5844**	**[-0.97, -0.2]**
	D	17.9	-6	0.335	-0.259	[-0.63, 0.11]	22.4	-10.4	0.069	**-0.4188**	**[-0.78, -0.06]**
	E	20.9	-8.2	0.145	-0.331	[-0.69, 0.03]	22.4	-9.7	0.060	**-0.3822**	**[-0.74, -0.02]**
	A	18.7	-17.2	**<0.001**	**-1.281**	**[-1.88, -0.68]**	9.7	-8.2	**0.011**	**-0.8733**	**[-1.49, -0.26]**
	B	14.2	3.7	0.695	0.154	[-0.21, 0.52]	9.7	8.2	0.113	0.38	[0, 0.76]
Good	C	11.9	6	0.463	0.259	[-0.11, 0.63]	9.7	8.2	0.145	0.38	[0, 0.76]
	D	15.7	11.9	0.079	**0.414**	**[0.07, 0.76]**	9.7	17.9	**<0.001**	**0.7043**	**[0.33, 1.07]**
	E	10.4	29.1	**<0.001**	**0.992**	**[0.63, 1.35]**	9.7	29.9	**<0.001**	**1.0338**	**[0.67, 1.4]**
Good.Natured	A	17.2	-16.4	**<0.001**	**-1.487**	**[-2.24, -0.74]**	26.1	-25.4	**<0.001**	**-1.7945**	**[-2.54, -1.05]**
	B	22.4	-8.2	0.163	-0.313	[-0.67, 0.04]	26.1	-11.9	**0.043**	**-0.4326**	**[-0.78, -0.08]**

	C	18.7	-8.2	0.204	-0.366	[-0.74, 0.01]	26.1	-15.7	**0.003**	**-0.6168**	**[-0.98, -0.25]**
	D	21.6	-3	0.769	-0.106	[-0.45, 0.24]	26.1	-7.5	0.302	-0.2509	[-0.59, 0.08]
	E	20.1	-9.7	0.063	**-0.420**	**[-0.79, -0.05]**	26.1	-15.7	**0.003**	**-0.6168**	**[-0.98, -0.25]**
	A	3.7	10.4	**0.005**	**0.710**	**[0.24, 1.18]**	2.2	11.9	**0.002**	**0.9344**	**[0.4, 1.47]**
	B	3	2.2	0.579	0.260	[-0.29, 0.81]	2.2	3	0.457	0.3832	[-0.2, 0.97]
Guilty	C	2.2	3	0.546	0.383	[-0.2, 0.97]	2.2	3	0.518	0.3832	[-0.2, 0.97]
	D	1.5	-0.7	1.000	-0.262	[-1.15, 0.63]	2.2	-1.5	0.797	-0.4274	[-1.28, 0.42]
	E	1.5	-0.7	1.000	-0.262	[-1.15, 0.63]	2.2	-1.5	0.797	-0.4274	[-1.28, 0.42]
	A	17.2	-17.2	**<0.001**	-3.876	[-44.89, 37.14]	11.2	-11.2	**<0.001**	-3.4763	[-33.94, 26.99]
	B	13.4	0.7	1.000	0.034	[-0.34, 0.41]	11.2	3	0.769	0.144	[-0.24, 0.53]
Happy	C	11.2	-3.7	0.584	-0.226	[-0.65, 0.2]	11.2	-3.7	0.530	-0.2259	[-0.65, 0.2]
	D	14.2	15.7	**0.016**	**0.544**	**[0.2, 0.89]**	11.2	18.7	**0.001**	**0.6876**	**[0.33, 1.05]**
	E	9.7	14.9	**0.001**	**0.613**	**[0.24, 0.99]**	11.2	13.4	**0.004**	**0.53**	**[0.17, 0.89]**
	A	20.9	-19.4	**<0.001**	**-1.362**	**[-1.96, -0.77]**	23.9	-22.4	**<0.001**	**-1.4619**	**[-2.05, -0.87]**
	B	14.9	-3	0.726	-0.138	[-0.52, 0.24]	23.9	-11.9	**0.026**	**-0.4678**	**[-0.83, -0.11]**
Interested	C	20.9	-4.5	0.590	-0.167	[-0.52, 0.18]	23.9	-7.5	0.289	-0.2673	[-0.61, 0.08]
	D	20.9	3	0.753	0.100	[-0.23, 0.43]	23.9	0	1.000	0	[-0.33, 0.33]
	E	19.4	9.7	0.102	0.313	[-0.02, 0.64]	23.9	5.2	0.530	0.1598	[-0.16, 0.48]
	A	22.4	-21.6	**<0.001**	**-1.675**	**[-2.42, -0.93]**	16.4	-15.7	**<0.001**	**-1.4568**	**[-2.21, -0.71]**
	B	16.4	3.7	0.672	0.141	[-0.21, 0.49]	16.4	3.7	0.687	0.1411	[-0.21, 0.49]
Joyful	C	14.2	0.7	1.000	0.033	[-0.34, 0.4]	16.4	-1.5	0.965	-0.0622	[-0.43, 0.3]
	D	13.4	17.9	**0.002**	**0.620**	**[0.27, 0.97]**	16.4	14.9	**0.011**	**0.4913**	**[0.15, 0.83]**
	E	14.2	19.4	**<0.001**	**0.648**	**[0.31, 0.99]**	16.4	17.2	**0.006**	**0.5535**	**[0.22, 0.89]**
	A	6.7	-6	0.067	**-0.937**	**[-1.72, -0.16]**	3.7	-3	0.365	-0.6514	[-1.46, 0.16]
	B	4.5	3	0.653	0.256	[-0.23, 0.74]	3.7	3.7	0.466	0.3406	[-0.16, 0.85]
Loving	C	3	2.2	0.726	0.260	[-0.29, 0.81]	3.7	1.5	0.889	0.1592	[-0.37, 0.69]
	D	1.5	16.4	**<0.001**	**1.253**	**[0.65, 1.85]**	3.7	14.2	**0.003**	**0.864**	**[0.4, 1.33]**
	E	6	19.4	**<0.001**	**0.895**	**[0.49, 1.3]**	3.7	21.6	**<0.001**	**1.12**	**[0.66, 1.58]**
Mild	A	32.8	-28.4	**<0.001**	**-1.253**	**[-1.68, -0.82]**	41	-36.6	**<0.001**	**-1.4714**	**[-1.9, -1.04]**
	B	37.3	-17.9	**0.002**	**-0.540**	**[-0.87, -0.21]**	41	-21.6	**<0.001**	**-0.6367**	**[-0.96, -0.31]**

	C	29.1	-7.5	0.407	-0.234	[-0.56, 0.09]	41	-19.4	**0.005**	**-0.558**	**[-0.88, -0.24]**
	D	32.1	0	1.000	0.000	[-0.31, 0.31]	41	-9	0.232	-0.2388	[-0.55, 0.07]
	E	32.1	-16.4	**0.006**	**-0.543**	**[-0.88, -0.2]**	41	-25.4	**<0.001**	**-0.7817**	**[-1.12, -0.45]**
	A	9	-6	0.156	**-0.540**	**[-1.06, -0.02]**	4.5	-1.5	0.854	-0.1852	[-0.75, 0.38]
	B	7.5	-3.7	0.463	-0.341	[-0.85, 0.16]	4.5	-0.7	1.000	-0.085	[-0.63, 0.46]
Nostalgic	C	4.5	4.5	0.444	0.354	[-0.12, 0.83]	4.5	4.5	0.355	0.3542	[-0.12, 0.83]
	D	7.5	2.2	0.807	0.143	[-0.29, 0.57]	4.5	5.2	0.256	0.399	[-0.07, 0.87]
	E	6	-1.5	0.864	-0.141	[-0.64, 0.36]	4.5	0	1.000	0	[-0.52, 0.52]
	A	26.1	-25.4	**<0.001**	**-1.795**	**[-2.54, -1.05]**	29.9	-29.1	**<0.001**	**-1.9055**	**[-2.65, -1.16]**
	B	23.1	2.2	0.871	0.072	[-0.26, 0.4]	29.9	-4.5	0.671	-0.1341	[-0.45, 0.19]
Pleasant	C	24.6	-8.2	0.298	-0.291	[-0.63, 0.05]	29.9	-13.4	**0.042**	**-0.4487**	**[-0.79, -0.11]**
	D	23.1	3.7	0.726	0.118	[-0.21, 0.44]	29.9	-3	0.854	-0.0882	[-0.41, 0.23]
	E	16.4	26.9	**<0.001**	**0.808**	**[0.48, 1.14]**	29.9	13.4	0.067	**0.3595**	**[0.05, 0.67]**
	A	20.9	-19.4	**<0.001**	**-1.362**	**[-1.96, -0.77]**	17.2	-15.7	**<0.001**	**-1.2244**	**[-1.82, -0.62]**
	B	18.7	3	0.769	0.106	[-0.24, 0.45]	17.2	4.5	0.603	0.1633	[-0.18, 0.51]
Satisfied	C	18.7	-5.2	0.475	-0.216	[-0.58, 0.15]	17.2	-3.7	0.603	-0.1585	[-0.52, 0.21]
	D	15.7	19.4	**0.001**	**0.625**	**[0.29, 0.96]**	17.2	17.9	**0.005**	**0.5644**	**[0.23, 0.9]**
	E	16.4	19.4	**<0.001**	**0.614**	**[0.28, 0.95]**	17.2	18.7	**0.003**	**0.5844**	**[0.25, 0.92]**
	A	26.9	-23.9	**<0.001**	**-1.266**	**[-1.75, -0.78]**	20.9	-17.9	**<0.001**	**-1.0729**	**[-1.56, -0.58]**
	B	17.2	-5.2	0.494	-0.230	[-0.6, 0.14]	20.9	-9	0.121	**-0.3679**	**[-0.73, 0]**
Secure	C	17.2	3.7	0.694	0.138	[-0.21, 0.48]	20.9	0	1.000	0	[-0.34, 0.34]
	D	25.4	-2.2	0.864	-0.072	[-0.4, 0.26]	20.9	2.2	0.895	0.0756	[-0.26, 0.41]
	E	22.4	-6.7	0.298	-0.249	[-0.6, 0.1]	20.9	-5.2	0.494	-0.198	[-0.55, 0.15]
	A	21.6	-18.7	**<0.001**	**-1.099**	**[-1.59, -0.61]**	14.2	-11.2	**0.001**	**-0.8107**	**[-1.31, -0.31]**
	B	18.7	3	0.782	0.106	[-0.24, 0.45]	14.2	7.5	0.256	0.288	[-0.07, 0.64]
Tame	C	17.9	-2.2	0.835	-0.089	[-0.45, 0.27]	14.2	1.5	0.965	0.0643	[-0.3, 0.43]
	D	15.7	6.7	0.390	0.249	[-0.1, 0.6]	14.2	8.2	0.196	0.3132	[-0.04, 0.67]
	E	14.2	0	1.000	0.000	[-0.37, 0.37]	14.2	0	1.000	0	[-0.37, 0.37]
	A	18.7	-6.7	0.306	-0.287	[-0.66, 0.08]	11.2	0.7	1.000	0.0383	[-0.35, 0.43]
Understanding	B	18.7	-2.2	0.831	-0.087	[-0.44, 0.27]	11.2	5.2	0.402	0.2388	[-0.14, 0.62]

	C	19.4	5.2	0.579	0.177	[-0.16, 0.51]	11.2	13.4	**0.027**	**0.53**	**[0.17, 0.89]**
	D	20.1	-0.7	1.000	-0.027	[-0.37, 0.32]	11.2	8.2	0.113	0.3531	[-0.02, 0.72]
	E	14.9	-3	0.746	-0.138	[-0.52, 0.24]	11.2	0.7	1.000	0.0383	[-0.35, 0.43]
	A	16.4	-16.4	**<0.001**	-3.844	[-44.64, 36.95]	12.7	-12.7	**<0.001**	-3.6322	[-40.18, 32.92]
	B	14.2	-4.5	0.546	-0.226	[-0.62, 0.17]	12.7	-3	0.741	-0.1574	[-0.56, 0.24]
Warm	C	11.9	-3.7	0.624	-0.213	[-0.63, 0.2]	12.7	-4.5	0.422	-0.2498	[-0.66, 0.16]
	D	10.4	9.7	0.116	**0.420**	**[0.05, 0.79]**	12.7	7.5	0.228	0.305	[-0.06, 0.67]
	E	12.7	5.2	0.475	0.223	[-0.14, 0.59]	12.7	5.2	0.463	0.2225	[-0.14, 0.59]
	A	2.2	33.6	**<0.001**	**1.644**	**[1.13, 2.16]**	3	32.8	**<0.001**	**1.5197**	**[1.04, 2]**
	B	3	3.7	0.463	0.386	[-0.15, 0.92]	3	3.7	0.373	0.3857	[-0.15, 0.92]
Wild	C	9	-3	0.675	-0.214	[-0.67, 0.24]	3	3	0.564	0.3257	[-0.22, 0.87]
	D	4.5	0	1.000	0.000	[-0.52, 0.52]	3	1.5	0.865	0.1852	[-0.38, 0.75]
	E	3.7	1.5	0.864	0.159	[-0.37, 0.69]	3	2.2	0.687	0.2595	[-0.29, 0.81]
	A	6	25.4	**<0.001**	**1.071**	**[0.67, 1.48]**	14.2	17.2	**0.005**	**0.5862**	**[0.24, 0.93]**
	B	9.7	-2.2	0.798	-0.143	[-0.57, 0.29]	14.2	-6.7	0.228	-0.3699	[-0.78, 0.04]
Worried	C	13.4	-3	0.737	-0.150	[-0.54, 0.24]	14.2	-3.7	0.637	-0.1841	[-0.57, 0.2]
	D	11.9	-6	0.267	-0.379	[-0.82, 0.06]	14.2	-8.2	0.100	**-0.485**	**[-0.91, -0.06]**
	E	12.7	-9	**0.026**	**-0.641**	**[-1.12, -0.16]**	14.2	-10.4	**0.008**	**-0.7104**	**[-1.18, -0.24]**

Baseline frequency (%): Citation frequency for the emotion term prior to sample evaluation.

Citation frequency (%): citation frequency for the emotion calculated according to the respective adjustment method (Adj. Pre-test or Adj. Per-sample).

p-value: Statistical significance from McNemar's exact binomial test assessing directional symmetry between baseline and sample responses.

Thurstonian δ: estimated shift in latent mean in standard deviation units; positive values indicate induction, negative values indicate suppression.

95% CI: confidence interval for δ derived from the Hessian matrix.

Bold values indicate 95% CI does not contain zero (confirmed genuine effect) or $p < 0.05$ (McNemar test).

Table S2b. Baseline citation frequencies, sample citation frequency and Thurstonian latent shift parameters (**δ**) for emotional terms under Adj. Per-sampleand pre-test baseline Adj. Pre-test approach in study2.

Term	**Sample**	**Adj. Per-sample**					**Adj. Pre-test**				

		Baseline frequency (%)	Citation frequency (%)	p-value	Thurstonian δ	95% CI	Baseline frequency (%)	Citation frequency (%)	p-value	Thurstonian δ	95% CI
Active	A	12.4	3.1	0.785	0.140	[-0.24, 0.52]	12.4	3.1	0.523	0.140	[-0.24, 0.52]
	B	11.6	-7.8	0.051	**-0.572**	**[-1.06, -0.08]**	12.4	-8.5	**0.013**	**-0.610**	**[-1.09, -0.13]**
	C	13.2	7	0.351	0.282	[-0.09, 0.65]	12.4	7.8	0.099	0.319	[-0.05, 0.69]
	D	16.3	-10.1	**0.039**	**-0.555**	**[-0.98, -0.13]**	12.4	-6.2	0.115	-0.383	[-0.82, 0.06]
	E	8.5	11.6	0.051	**0.534**	**[0.14, 0.93]**	12.4	7.8	0.087	0.319	[-0.05, 0.69]
Adventurous	A	4.7	2.3	0.785	0.202	[-0.3, 0.7]	3.9	3.1	0.289	0.288	[-0.23, 0.8]
	B	4.7	-2.3	0.617	-0.311	[-0.91, 0.29]	3.9	-1.6	0.688	-0.226	[-0.84, 0.39]
	C	4.7	6.2	0.079	0.445	[-0.03, 0.92]	3.9	7	**0.012**	**0.531**	**[0.04, 1.02]**
	D	7	-4.7	0.191	-0.513	[-1.09, 0.06]	3.9	-1.6	0.625	-0.226	[-0.84, 0.39]
	E	5.4	11.6	**0.025**	**0.653**	**[0.22, 1.09]**	3.9	13.2	**<0.001**	**0.813**	**[0.34, 1.29]**
Aggressive	A	3.1	1.6	0.876	0.187	[-0.38, 0.75]	1.6	3.1	0.219	0.477	[-0.19, 1.14]
	B	0.8	0.8	1.000	0.263	[-0.63, 1.16]	1.6	0	1.000	0.000	[-0.77, 0.77]
	C	1.6	1.6	0.876	0.291	[-0.4, 0.99]	1.6	1.6	0.688	0.291	[-0.4, 0.99]
	D	2.3	-2.3	0.460	-2.869	[-48.3, 42.56]	1.6	-1.6	0.500	-3.088	[-118.78, 112.61]
	E	0.8	7.8	**0.036**	**1.050**	**[0.28, 1.82]**	1.6	7	**0.022**	**0.787**	**[0.16, 1.41]**
Bored	A	26.4	-17.8	**0.001**	**-0.738**	**[-1.12, -0.35]**	33.3	-24.8	**<0.001**	**-0.940**	**[-1.32, -0.56]**
	B	22.5	16.3	**0.032**	**0.471**	**[0.15, 0.8]**	33.3	5.4	0.392	0.145	[-0.17, 0.46]
	C	22.5	-13.2	**0.036**	**-0.566**	**[-0.95, -0.18]**	33.3	-24	**<0.001**	**-0.892**	**[-1.27, -0.52]**
	D	25.6	3.1	0.876	0.094	[-0.23, 0.42]	33.3	-4.7	0.497	-0.132	[-0.45, 0.19]
	E	27.1	-17.8	**0.005**	**-0.714**	**[-1.09, -0.33]**	33.3	-24	**<0.001**	**-0.892**	**[-1.27, -0.52]**
Calm	A	51.2	-21.7	**0.004**	**-0.569**	**[-0.88, -0.25]**	66.7	-37.2	**<0.001**	**-0.971**	**[-1.29, -0.65]**
	B	57.4	-17.8	**0.032**	**-0.451**	**[-0.76, -0.14]**	66.7	-27.1	**<0.001**	**-0.696**	**[-1.01, -0.38]**
	C	48.1	-27.1	**<0.001**	**-0.760**	**[-1.09, -0.43]**	66.7	-45.7	**<0.001**	**-1.240**	**[-1.57, -0.91]**
	D	51.2	-9.3	0.230	-0.235	[-0.54, 0.07]	66.7	-24.8	**<0.001**	**-0.636**	**[-0.95, -0.32]**
	E	57.4	-32.6	**<0.001**	**-0.866**	**[-1.19, -0.55]**	66.7	-41.9	**<0.001**	**-1.111**	**[-1.44, -0.79]**
Disgusted	A	0.8	-0.8	1.000	-2.509	[-56.06, 51.04]	0	0	1.000	0.000	[0, 0]
	B	0.8	7.8	**0.022**	**1.050**	**[0.28, 1.82]**	0	8.5	**<0.001**	3.303	[-26.41, 33.01]

	C	0	2.3	0.460	2.724	[-29.87, 35.32]	0	2.3	0.250	2.724	[-29.87, 35.32]
	D	1.6	0.8	1.000	0.166	[-0.56, 0.89]	0	2.3	0.250	2.724	[-29.87, 35.32]
	E	0	2.3	0.460	2.724	[-29.87, 35.32]	0	2.3	0.250	2.724	[-29.87, 35.32]
	A	10.9	0	1.000	0.000	[-0.41, 0.41]	12.4	-1.6	0.832	-0.079	[-0.48, 0.32]
	B	11.6	-7.8	0.051	**-0.572**	**[-1.06, -0.08]**	12.4	-8.5	**0.007**	**-0.610**	**[-1.09, -0.13]**
Enthusiastic	C	14	3.1	0.785	0.130	[-0.24, 0.5]	12.4	4.7	0.307	0.203	[-0.17, 0.58]
	D	9.3	-5.4	0.299	-0.443	[-0.94, 0.06]	12.4	-8.5	**0.007**	**-0.610**	**[-1.09, -0.13]**
	E	11.6	11.6	**0.036**	**0.463**	**[0.09, 0.83]**	12.4	10.9	**0.016**	**0.425**	**[0.06, 0.79]**
	A	12.4	0.8	1.000	0.037	[-0.35, 0.43]	12.4	0.8	1.000	0.037	[-0.35, 0.43]
	B	19.4	-11.6	**0.032**	**-0.558**	**[-0.96, -0.15]**	12.4	-4.7	0.210	-0.267	[-0.69, 0.16]
Free	C	13.2	-0.8	1.000	-0.037	[-0.43, 0.35]	12.4	0	1.000	0.000	[-0.39, 0.39]
	D	17.1	-7	0.182	-0.325	[-0.72, 0.06]	12.4	-2.3	0.648	-0.122	[-0.53, 0.28]
	E	12.4	-3.1	0.679	-0.167	[-0.58, 0.24]	12.4	-3.1	0.388	-0.167	[-0.58, 0.24]
	A	15.5	7	0.332	0.259	[-0.1, 0.61]	14	8.5	0.071	0.326	[-0.03, 0.69]
	B	15.5	-2.3	0.876	-0.103	[-0.48, 0.28]	14	-0.8	1.000	-0.036	[-0.42, 0.35]
Good	C	20.2	1.6	0.987	0.054	[-0.29, 0.4]	14	7.8	0.064	0.300	[-0.06, 0.66]
	D	17.1	0.8	1.000	0.030	[-0.33, 0.39]	14	3.9	0.424	0.161	[-0.21, 0.53]
	E	13.2	7.8	0.182	0.309	[-0.06, 0.68]	14	7	0.108	0.274	[-0.09, 0.64]
	A	17.8	-3.1	0.811	-0.126	[-0.49, 0.24]	23.3	-8.5	0.108	-0.318	[-0.67, 0.04]
	B	15.5	-4.7	0.603	-0.219	[-0.61, 0.17]	23.3	-12.4	**0.009**	**-0.504**	**[-0.88, -0.13]**
Good.Natured	C	18.6	-7	0.299	-0.301	[-0.68, 0.08]	23.3	-11.6	**0.017**	**-0.463**	**[-0.83, -0.09]**
	D	24	-9.3	0.137	-0.343	[-0.7, 0.01]	23.3	-8.5	0.090	-0.318	[-0.67, 0.04]
	E	20.2	-13.2	**0.024**	**-0.641**	**[-1.05, -0.23]**	23.3	-16.3	**<0.001**	**-0.747**	**[-1.15, -0.34]**
	A	1.6	-1.6	0.749	-3.088	[-118.78, 112.61]	2.3	-2.3	0.250	-2.869	[-48.3, 42.56]
	B	0	0.8	1.000	2.452	[-44.3, 49.2]	2.3	-1.6	0.625	-0.430	[-1.28, 0.42]
Guilty	C	0	0.8	1.000	2.452	[-44.3, 49.2]	2.3	-1.6	0.625	-0.430	[-1.28, 0.42]
	D	0	0	1.000	0.000	[0, 0]	2.3	-2.3	0.250	-2.869	[-48.3, 42.56]
	E	3.1	-2.3	0.460	-0.554	[-1.38, 0.27]	2.3	-1.6	0.500	-0.430	[-1.28, 0.42]
Happy	A	11.6	5.4	0.460	0.242	[-0.14, 0.62]	10.9	6.2	0.152	0.282	[-0.1, 0.67]

	B	11.6	-5.4	0.326	-0.344	[-0.79, 0.1]	10.9	-4.7	0.238	-0.304	[-0.75, 0.14]
	C	14	7	0.299	0.274	[-0.09, 0.64]	10.9	10.1	**0.024**	**0.426**	**[0.05, 0.8]**
	D	11.6	2.3	0.870	0.111	[-0.28, 0.5]	10.9	3.1	0.454	0.152	[-0.24, 0.55]
	E	9.3	1.6	0.972	0.088	[-0.33, 0.5]	10.9	0	1.000	0.000	[-0.41, 0.41]
	A	19.4	3.9	0.730	0.134	[-0.21, 0.48]	22.5	0.8	1.000	0.026	[-0.31, 0.36]
	B	24	-16.3	**0.004**	**-0.717**	**[-1.11, -0.32]**	22.5	-14.7	**<0.001**	**-0.666**	**[-1.06, -0.27]**
Interested	C	21.7	-3.1	0.785	-0.110	[-0.46, 0.24]	22.5	-3.9	0.487	-0.137	[-0.48, 0.21]
	D	21.7	-6.2	0.332	-0.233	[-0.59, 0.12]	22.5	-7	0.122	-0.259	[-0.61, 0.1]
	E	23.3	1.6	1.000	0.050	[-0.29, 0.39]	22.5	2.3	0.728	0.076	[-0.26, 0.41]
	A	15.5	3.1	0.785	0.123	[-0.24, 0.49]	14	4.7	0.327	0.190	[-0.18, 0.56]
	B	15.5	-9.3	0.064	**-0.523**	**[-0.95, -0.09]**	14	-7.8	0.052	**-0.456**	**[-0.89, -0.02]**
Joyful	C	22.5	-0.8	1.000	-0.026	[-0.37, 0.32]	14	7.8	0.087	0.300	[-0.06, 0.66]
	D	17.8	-3.9	0.700	-0.161	[-0.53, 0.21]	14	0	1.000	0.000	[-0.38, 0.38]
	E	11.6	9.3	0.157	**0.385**	**[0.01, 0.76]**	14	7	0.175	0.274	[-0.09, 0.64]
	A	3.1	5.4	0.182	0.496	[-0.03, 1.02]	3.9	4.7	0.146	0.395	[-0.11, 0.9]
	B	3.9	-1.6	0.876	-0.226	[-0.84, 0.39]	3.9	-1.6	0.727	-0.226	[-0.84, 0.39]
Loving	C	4.7	4.7	0.431	0.357	[-0.12, 0.84]	3.9	5.4	0.092	0.443	[-0.06, 0.94]
	D	3.1	3.1	0.509	0.328	[-0.22, 0.87]	3.9	2.3	0.549	0.227	[-0.3, 0.75]
	E	1.6	7.8	**0.036**	**0.835**	**[0.21, 1.46]**	3.9	5.4	0.092	0.443	[-0.06, 0.94]
	A	38	-14	**0.040**	**-0.399**	**[-0.72, -0.08]**	32.6	-8.5	0.117	-0.253	[-0.58, 0.07]
	B	30.2	-16.3	**0.004**	**-0.565**	**[-0.92, -0.21]**	32.6	-18.6	**<0.001**	**-0.630**	**[-0.98, -0.28]**
Mild	C	35.7	-18.6	**0.002**	**-0.584**	**[-0.92, -0.25]**	32.6	-15.5	**0.001**	**-0.500**	**[-0.84, -0.16]**
	D	33.3	-7.8	0.313	-0.226	[-0.55, 0.1]	32.6	-7	0.211	-0.204	[-0.53, 0.12]
	E	31.8	-11.6	0.121	**-0.362**	**[-0.7, -0.03]**	32.6	-12.4	**0.020**	**-0.384**	**[-0.72, -0.05]**
	A	1.6	8.5	**0.031**	**0.880**	**[0.26, 1.5]**	7	3.1	0.523	0.200	[-0.24, 0.64]
	B	7.8	1.6	0.972	0.100	[-0.34, 0.54]	7	2.3	0.648	0.155	[-0.29, 0.6]
Nostalgic	C	6.2	0	1.000	0.000	[-0.48, 0.48]	7	-0.8	1.000	-0.061	[-0.53, 0.41]
	D	3.1	7	0.051	**0.589**	**[0.07, 1.11]**	7	3.1	0.481	0.200	[-0.24, 0.64]
	E	4.7	-1.6	0.899	-0.187	[-0.75, 0.38]	7	-3.9	0.227	-0.389	[-0.93, 0.15]

	A	23.3	0	1.000	0.000	[-0.34, 0.34]	24	-0.8	1.000	-0.025	[-0.36, 0.31]
	B	20.9	-10.9	0.051	**-0.468**	**[-0.85, -0.09]**	24	-14	**<0.001**	**-0.572**	**[-0.95, -0.19]**
Pleasant	C	24.8	0	1.000	0.000	[-0.33, 0.33]	24	0.8	1.000	0.025	[-0.31, 0.36]
	D	20.2	-6.2	0.425	-0.246	[-0.61, 0.12]	24	-10.1	**0.024**	**-0.377**	**[-0.74, -0.02]**
	E	17.1	10.1	0.105	0.343	[0, 0.69]	24	3.1	0.597	0.097	[-0.23, 0.43]
	A	17.1	18.6	**0.005**	**0.584**	**[0.25, 0.92]**	14	21.7	**<0.001**	**0.715**	**[0.37, 1.06]**
	B	16.3	-9.3	0.051	**-0.495**	**[-0.91, -0.08]**	14	-7	0.064	-0.395	[-0.82, 0.03]
Satisfied	C	26.4	-4.7	0.603	-0.150	[-0.49, 0.19]	14	7.8	0.076	0.300	[-0.06, 0.66]
	D	15.5	3.1	0.785	0.123	[-0.24, 0.49]	14	4.7	0.345	0.190	[-0.18, 0.56]
	E	13.2	13.2	**0.040**	**0.486**	**[0.13, 0.84]**	14	12.4	**0.014**	**0.450**	**[0.09, 0.81]**
	A	28.7	-17.1	**0.009**	**-0.631**	**[-1, -0.27]**	18.6	-7	0.122	-0.301	[-0.68, 0.08]
	B	15.5	-4.7	0.460	-0.219	[-0.61, 0.17]	18.6	-7.8	0.076	-0.342	[-0.72, 0.04]
Secure	C	18.6	-7	0.182	-0.301	[-0.68, 0.08]	18.6	-7	0.064	-0.301	[-0.68, 0.08]
	D	20.9	-7.8	0.201	-0.309	[-0.68, 0.06]	18.6	-5.4	0.189	-0.225	[-0.6, 0.15]
	E	11.6	-3.9	0.603	-0.228	[-0.65, 0.2]	18.6	-10.9	**0.009**	**-0.529**	**[-0.93, -0.12]**
	A	12.4	-4.7	0.431	-0.267	[-0.69, 0.16]	13.2	-5.4	0.210	-0.304	[-0.72, 0.12]
	B	20.2	-7	0.315	-0.282	[-0.65, 0.09]	13.2	0	1.000	0.000	[-0.39, 0.39]
Tame	C	19.4	-2.3	0.876	-0.088	[-0.44, 0.27]	13.2	3.9	0.424	0.166	[-0.21, 0.54]
	D	17.8	-2.3	0.876	-0.093	[-0.46, 0.27]	13.2	2.3	0.690	0.103	[-0.28, 0.48]
	E	14.7	-7	0.182	-0.374	[-0.79, 0.04]	13.2	-5.4	0.143	-0.304	[-0.72, 0.12]
	A	14	0.8	1.000	0.034	[-0.34, 0.41]	16.3	-1.6	0.845	-0.065	[-0.44, 0.31]
	B	21.7	-4.7	0.509	-0.170	[-0.52, 0.18]	16.3	0.8	1.000	0.031	[-0.33, 0.4]
Underatanding	C	14.7	3.1	0.749	0.126	[-0.24, 0.49]	16.3	1.6	0.845	0.061	[-0.3, 0.42]
	D	17.1	0.8	1.000	0.030	[-0.33, 0.39]	16.3	1.6	0.856	0.061	[-0.3, 0.42]
	E	22.5	-8.5	0.121	-0.326	[-0.69, 0.03]	16.3	-2.3	0.664	-0.099	[-0.47, 0.27]
	A	12.4	3.9	0.657	0.172	[-0.21, 0.55]	10.1	6.2	0.185	0.294	[-0.1, 0.69]
	B	11.6	-1.6	0.972	-0.083	[-0.49, 0.32]	10.1	0	1.000	0.000	[-0.42, 0.42]
Warm	C	12.4	4.7	0.534	0.203	[-0.17, 0.58]	10.1	7	0.078	0.325	[-0.06, 0.72]
	D	15.5	-3.1	0.785	-0.140	[-0.52, 0.24]	10.1	2.3	0.664	0.122	[-0.28, 0.53]
	E	8.5	1.6	0.972	0.093	[-0.33, 0.52]	10.1	0	1.000	0.000	[-0.42, 0.42]

Wild	A	0.8	2.3	0.460	0.554	[-0.27, 1.38]	3.1	0	1.000	0.000	[-0.6, 0.6]
	B	1.6	-1.6	0.749	-3.088	[-118.78, 112.61]	3.1	-3.1	0.125	-2.905	[-39.96, 34.15]
	C	2.3	7	0.051	**0.668**	**[0.11, 1.23]**	3.1	6.2	0.057	**0.544**	**[0.02, 1.07]**
	D	2.3	0	1.000	0.000	[-0.67, 0.67]	3.1	-0.8	1.000	-0.125	[-0.76, 0.51]
	E	2.3	10.1	**0.032**	**0.836**	**[0.29, 1.38]**	3.1	9.3	**0.004**	**0.711**	**[0.2, 1.22]**
Worried	A	4.7	-2.3	0.708	-0.311	[-0.91, 0.29]	7.8	-5.4	0.092	-0.569	[-1.14, 0]
	B	4.7	1.6	0.969	0.142	[-0.36, 0.65]	7.8	-1.6	0.815	-0.116	[-0.58, 0.35]
	C	3.9	3.1	0.509	0.288	[-0.23, 0.8]	7.8	-0.8	1.000	-0.056	[-0.51, 0.4]
	D	8.5	-6.2	0.127	**-0.620**	**[-1.19, -0.06]**	7.8	-5.4	0.092	-0.569	[-1.14, 0]
	E	5.4	-3.9	0.301	-0.552	[-1.2, 0.1]	7.8	-6.2	**0.021**	**-0.735**	**[-1.37, -0.1]**

Baseline frequency (%): Citation frequency for the emotion term prior to sample evaluation.

Citation frequency (%): citation frequency for the emotion calculated according to the respective adjustment method (Adj. Pre-test or Adj. Per-sample).

p-value: Statistical significance from McNemar's exact binomial test assessing directional symmetry between baseline and sample responses.

Thurstonian δ: estimated shift in latent mean in standard deviation units; positive values indicate induction, negative values indicate suppression.

95% CI: confidence interval for δ derived from the Hessian matrix.

Bold values indicate 95% CI does not contain zero (confirmed genuine effect) or $p < 0.05$ (McNemar test).