

Table S1. Emoji usage questionnaire of Study 1 (projective mapping): Familiarity; Frequency of usage; Social use; Motivation; Valence of emoji; Enjoyment in using emoji. Total frequencies (%) and frequencies divided by genders (girls and boys) and age (9–11 and 12–13). Depending on data analysis *p* values refer to Kruskal Wallis (*) or Chi-square test. In bold *p* values ≤ 0.05 .

Question	Domain	Scale Categories/Items	Frequency (%)					
			Total (n = 162)	Gender		<i>p</i> Value	Age	
				Girls (n = 87)	Boys (n = 75)		9-11 (n = 75)	12-13 (n = 87)
1 Did you know what emoji were before participating in this study?	Familiarity	I use them regularly	71	68	76	0.271*	60	82
		I use them occasionally	23	27	18		30	17
		I had used them but only once	2	1	3		4	0
		I had heard of them but had never used them	1	1	0		1	0
		I never heard of them	3	3	3		5	1
2 How often do you usually use emoji?	Frequency of usage	every day	56	57	55	0.963*	32	77
		a few times a week	29	24	33		40	18
		a couple of times a month or less	10	15	5		19	4
		never	5	4	7		9	1
3 To whom do you send emoji?	Social use	friends	84	83	85	0.656	68	98
		siblings	35	31	39	0.308	28	40
		parents	54	54	55	0.935	45	62
		relatives	54	55	52	0.686	48	59
		teachers	2	5	0	0.060	3	2
4 Why do you use emoji?	Motivation	other	22	21	24	0.613	27	18
		they are fun	49	45	55	0.212	68	33
		I can use emoji instead of words	41	38	44	0.433	39	43
		they make my text messages more understandable	51	43	61	0.017	36	64
		to save time when sending messages	23	14	33	0.003	21	24
5 Do you use more emoji with positive or negative meaning?	Valence	they highlight a part of the message	30	31	28	0.673	24	34
		they express something I normally can't describe in words, e.g. how I feel	56	56	55	0.833	44	66
		they are quick to use	25	17	33	0.018	25	24
		positive	78	83	72	0.131*	78	78
		negative	1	1	1		1	1
6 How much do you like using emoji?	Enjoyment	almost the same	13	8	19		12	14
		I don't know	8	8	8		9	7
		a lot	63	67	60	0.573*	80	50
		fairly	32	26	39		19	44
		so and so	4	6	1		3	5
		a bit	1	1	0		0	1
		by no means	0	0	0		0	0

Table S2. Emoji usage questionnaire of Study 2 (CATA questionnaire): Familiarity; Frequency of usage; Social use; Motivation; Valence of emoji; Enjoyment in using emoji. Total frequencies (%) and frequencies divided by genders (girls and boys). Depending on data analysis *p* values refer to Kruskal Wallis (*) or Chi-square test. In bold *p* values ≤ 0.05 .

Question	Domain	Scale Categories/Items	Frequency			<i>p</i> -Value
			Total (n = 92)	Girls (n = 52)	Boys (n = 40)	
1 Did you know what emoji were before participating in this study?	Familiarity	I use them regularly	77	65	92	
		I use them occasionally	20	31	5	
		I had used them but only once	0	0	0	0.003*
		I had heard of them but had never used them	1	0	3	
		I never heard of them	2	4	0	
2 How often do you usually use emoji?	Frequency of usage	every day	66	56	80	
		a few times a week	27	32	20	0.009*
		a couple of times a month or less	6	10	0	
		never	1	2	0	
3 To whom do you send emoji?	Social use	friends	97	94	100	0.122
		siblings	47	37	60	0.025
		parents	59	46	75	0.005
		relatives	50	40	63	0.035
		teachers	1	0	3	0.252
		other	26	27	25	0.835
4 Why do you use emoji?	Motivation	they are fun	53	60	45	0.164
		I can use emoji instead of words	39	33	48	0.149
		they make my text messages more understandable	62	60	65	0.598
		to save time when sending messages	15	13	18	0.593
		they highlight a part of the message	28	29	28	0.887
		they express something I normally can't describe in words, e.g. how I feel	57	56	58	0.868
5 Do you use more emoji with positive or negative meaning?	Valence	they are quick to use	22	29	13	0.060
		positive	55	62	45	
		negative	1	2	0	
		almost the same	29	23	38	0.131
		I don't know	15	13	17	
6 How much do you like using emoji?	Enjoyment	a lot	62	56	70	
		fairly	32	34	28	
		so and so	4	6	2	
		a bit	1	2	0	
		by no means	1	2	0	0.123*

Table S3. Frequency of use (%) for each of the 46 facial emojis by each of the 30 CATA terms. In the last raw additional words provided by children are reported. Frequencies >20% are marked in bold. Different letters (in brackets) indicate a significant difference according to Sheskin post-hoc test ($p < 0.05$). Additional words (grouped by their meaning) were mentioned by >10% of children in the open-ended response option.

Cont.