

SUPPLEMENTARY MATERIALS

Part 1a of Supplementary Material

Participant characteristics for Study 1 (NZ) shown as percentage (%) unless otherwise indicated.

| | | All participants (n=180) | Emoji users* (n=165) |
|-------------------------------|---------------------|-----------------------------|-------------------------|
| <i>Gender</i> | | | |
| | Female | 50 | 47 |
| | Male | 50 | 53 |
| <i>Age</i> | | | |
| | 18-30 y.o. | 16 | 18 |
| | 31-45 y.o. | 34 | 38 |
| | 46-65 y.o. | 49 | 45 |
| <i>Ethnicity**</i> | | | |
| | NZ European | 62 | 61 |
| | Maori | 6 | 7 |
| | Pacific Island | 6 | 6 |
| | European | 8 | 8 |
| | Chinese | 10 | 11 |
| | Japanese | 1 | 1 |
| | Indian | 13 | 13 |
| | Other ¹ | 9 | 9 |
| <i>Household size**</i> | | | |
| | Alone | 13 | 12 |
| | Spouse | 60 | 59 |
| | Child under 18 | 40 | 41 |
| | Child over 18 | 13 | 12 |
| | Parents | 12 | 13 |
| | Flatmate | 14 | 15 |
| | Other ² | 5 | 5 |
| <i>Household size</i> | | | |
| | 1 – 2 | 35 | 35 |
| | 3 – 4 | 47 | 47 |
| | 5+ | 18 | 18 |
| <i>Household income (NZD)</i> | | | |
| | Less than \$30,000 | 4 | 4 |
| | \$30,000 - \$49,999 | 7 | 7 |
| | \$50,000 - \$79,999 | 20 | 21 |
| | \$80,000 - \$99,999 | 12 | 11 |

| | | |
|-----------------------|----|----|
| \$100,000 - \$119,999 | 16 | 16 |
| \$120,000 or more | 34 | 34 |
| Prefer not to answer | 7 | 6 |

Notes: *) Participants who use emoji at least infrequently (>10%) in their messages and social media conversations. **) Total responses are >100% as consumers may select multiple options. ¹⁾ Other ethnicities included African, Filipino, Indonesian, Korean, Latin American, Malaysian, Maltese, and South African. ²⁾ Other household members included cousin, grandparents, in-laws, nephew, and siblings.

Part 1b of Supplementary Material

Participant characteristics for Study 2 (UK) shown as percentage (%) unless otherwise indicated.

| | All participants (n=1047) | Emoji users* (n=861) |
|-------------------------------|------------------------------|-------------------------|
| <i>Gender</i> | | |
| Female | 50 | 46 |
| Male | 50 | 54 |
| <i>Age</i> | | |
| 18-30 y.o. | 14 | 17 |
| 31-45 y.o. | 35 | 39 |
| 46-65 y.o. | 51 | 44 |
| <i>Ethnicity**</i> | | |
| British | 85 | 83 |
| Chinese | 1 | 2 |
| Indian | 2 | 2 |
| Pakistani | 2 | 2 |
| Black African | 2 | 2 |
| Black Caribbean | 1 | 2 |
| Other ¹ | 9 | 10 |
| <i>Household member**</i> | | |
| Alone | 22 | 20 |
| Spouse | 57 | 57 |
| Child under 18 | 29 | 31 |
| Child over 18 | 11 | 11 |
| Parents | 13 | 13 |
| Flatmate | 3 | 3 |
| Other ² | 3 | 4 |
| <i>Household size</i> | | |
| 1 – 2 | 55 | 52 |
| 3 – 4 | 39 | 41 |
| 5+ | 6 | 7 |
| <i>Household income (GBP)</i> | | |
| Less than £10,000 | 7 | 6 |
| £10,000-£19,999 | 16 | 15 |
| £20,000-£29,999 | 18 | 18 |
| £30,000-£39,999 | 17 | 18 |
| £40,000-£49,999 | 13 | 13 |
| £50,000 or more | 24 | 25 |
| Prefer not to answer | 5 | 5 |

Notes: *) Participants who use emoji at least infrequently (>10%) in their messages and social media conversations. **) Total responses are >100% as consumers may select multiple options. ¹) Other

ethnicities included American, Australian, Canadian, European, Filipino, Japanese, Latin American, Middle Easterner, mixed background, Nepalese, Russian, South African, and prefer not to answer. ²⁾ Other household members included cousin, grandparents, in-laws, siblings, and prefer not to answer

2a. Exemplar ballot for PAD scales used in Study 1 (NZ)

[illegible]

2b. PAD scale screenshot from Study 2 (UK)

Please look at this emoji and then rate it on the following scale.

























Please select your answer from the scale below

| | | | |
|------------|-----------------------|-------------|------|
| Happy | <input type="range"/> | Unhappy | 1/18 |
| Pleased | <input type="range"/> | Annoyed | 2/18 |
| Satisfied | <input type="range"/> | Unsatisfied | 3/18 |
| Contented | <input type="range"/> | Melancholic | 4/18 |
| Hopeful | <input type="range"/> | Despairing | 5/18 |
| Amused | <input type="range"/> | Bored | 6/18 |
| Stimulated | <input type="range"/> | Relaxed | 7/18 |
| Excited | <input type="range"/> | Calm | 8/18 |

Part 3 of Supplementary Material

3a. Emoji allocation in Study 1 (NZ)

Each participant in Study 1 evaluated six emoji and participants were assigned to one of the 4 groups shown below, which collectively covered the 24 emoji included in the study.

| Group 1 | Group 2 | Group 3 | Group 4 |
|--|--|---|---|
| Collision  | Beating heart  | Clapping hands  | Expressionless face  |
| Face savoring food  | Exploding head  | Flexed biceps  | Face with steam from nose  |
| Face screaming in fear  | Nauseated face  | Pouting face  | Oncoming fist  |
| Face vomiting  | Person shrugging  | Warning  | Party popper  |
| Person in lotus position  | Zzz  | Yawning face  | Sleeping face  |
| Flushed face  | Face with tongue  | Smiling face with sunglasses  | Persevering face  |

3b. Emoji allocation in Study 2 (UK)

Each person completed the task for 3 of the 24 emoji (full listing in Table 1 in Main paper), and the allocation of emoji to participants were such that each participant evaluated 3 different emoji, and each emoji were evaluated by the same proportion of participants in four groups defined as younger men, older men, younger women and older women (where the younger age group was 18 to 45 years old and the older age group was 46 to 65 years old).

Part 4a of Supplementary Material

Averages* for the 18 PAD scales in Study 1 (NZ) (P1 to P6 for *Pleasure* (P), A1 to A6 for *Arousal* (A) and D1 to D6 for *Dominance*). Generally: for P dimension, the low anchor (1) is associated with pleasure and the high anchor (9) is associated with displeasure; for the A dimension, the low anchor (1) is associated with arousal and the high anchor (9) is associated with non-arousal; for the D dimension, the low anchor (1) is associated with dominance and the high anchor (9) is associated with submissiveness. Table 1 in the main text has the full set of scale anchors.

| Emoji name | P1 | P2 | P3 | P4 | P5 | P6 | A1 | A2 | A3 | A4 | A5 | A6 | D1 | D2 | D3 | D4 | D5 | D6 |
|----------------------------|-------------|------------|-------------|-------------|--------------|---------------|------------|-------------|-------------|-------------|--------------|---------------|---------------|---------------|------------------|---------------|--------------|------------|
| Beating heart | 1.7 l | 2.0 jk | 2.1 hij | 2.1 j | 2.0 l | 2.9 jk | 4.0 cde | 2.5 fgh | 3.7 ghi | 4.2 ef | 3.1 efgh | 2.8 jkl | 4.5 bcdefg | 4.0 defg | 5.6 ab | 3.3 gh | 4.4 cdef | 4.9 abc |
| Clapping hands | 2.0 i | 1.6 k | 2.3 hij | 2.6 hij | 2.7 kl | 2.7 jk | 2.9 def | 2.2 gh | 3.5 ghi | 4.2 ef | 2.4 fgh | 3.2 jkl | 4.8 abcdef | 4.2 cdefg | 4.0 cdefghi | 4.2 cdefg | 4.5 bcdef | 4.5 abc |
| Collision | 4.1 g | 4.9 fgh | 4.0 fg | 4.2 efg | 4.2 hij | 3.3 ijk | 2.0 f | 2.2 gh | 2.9 hi | 3.1 f | 2.1 gh | 3.2 ijkl | 4.0 defg | 3.7 efg | 4.0 defghi | 3.6 fgh | 2.5 ghi | 4.0 bc |
| Exploding head | 7.5 abcd | 7.3 bcd | 7.2 abc | 5.7 abcd | 7.1 abcd | 4.8 fgh | 2.9 def | 3.4 defg | 2.8 hi | 3.3 f | 2.9 efgh | 5.4 defg | 5.1 abcde | 5.4 abcd | 5.3 abcde | 5.0 abcdef | 4.0 defg | 5.1 abc |
| Expressionless f. | 6.8 bcde | 6.9 cde | 7.2 abc | 5.7 abcd | 6.7 abcde | 7.1 abc | 5.6 b | 5.6 b | 6.7 ab | 6.8 ab | 5.9 b | 7.0 abcd | 5.7 abc | 5.8 ab | 5.1 abcdef | 5.2 abcde | 5.9 abc | 4.9 abc |
| F. savoring food | 1.4 i | 1.7 k | 1.7 j | 1.9 j | 2.4 l | 2.5 jk | 4.0 cde | 2.4 fgh | 3.9 fghi | 4.5 cdef | 2.6 efgh | 2.6 kl | 4.8 abcdef | 3.9 defg | 4.3 abcdefgh | 3.8 efgh | 3.9 defg | 4.5 abc |
| F. screaming in fear | 6.6 cde | 6.6 cde | 6.7 bcd | 6.0 abc | 7.0 abcd | 4.6 ghi | 3.0 def | 3.3 defg | 3.4 ghi | 3.5 ef | 3.2 efgh | 4.3 ghij | 6.1 a | 5.5 abcd | 4.6 abcdefg | 5.4 abc | 4.8 abcde | 4.8 abc |
| F. vomiting | 8.3 a | 7.9 abc | 8.3 a | 6.9 a | 7.8 ab | 6.1 bcdef | 3.2 def | 4.7 bcd | 4.0 efgh | 4.1 ef | 4.0 cde | 6.0 bcdef | 6.0 ab | 5.0 bcdef | 5.5 abcd | 5.6 abc | 5.0 abcd | 5.0 abc |
| F. with steam from nose | 8.5 a | 8.5 ab | 8.0 ab | 6.0 abc | 7.2 abcd | 5.6 defg | 3.0 def | 3.7 cdef | 3.5 ghi | 3.4 f | 3.3 defgh | 4.1 ghijk | 4.0 defg | 5.1 abcde | 4.2 bcdefghi | 4.5 bcdefg | 3.6 defgh | 4.4 abc |
| F. with tongue | 1.7 i | 2.0 jk | 2.7 ghij | 2.5 hij | 2.7 kl | 2.0 k | 3.1 def | 2.5 fgh | 3.8 fghi | 4.2 ef | 2.1 gh | 3.4 hijkl | 4.4 bcdefg | 4.2 cdefg | 3.6 fghi | 3.9 efgh | 4.1 def | 4.6 abc |
| Flexed biceps | 3.5 gh | 3.3 ij | 3.2 ghi | 3.5 ghi | 3.4 jkl | 3.6 hij | 2.8 def | 3.2 efg | 3.6 ghi | 4.5 cdef | 2.8 efgh | 3.5 hijkl | 3.2 fg | 3.4 fg | 2.7 i | 3.7 efgh | 2.3 hi | 4.0 bc |
| Flushed f. | 6.6 cde | 6.2 def | 6.8 bcd | 6.1 abc | 6.5 bcdef | 5.4 efg | 3.5 def | 4.6 bcd | 4.4 defg | 4.4 cdef | 3.8 cdef | 5.0 efgh | 6.3 a | 6.6 a | 5.6 ab | 6.2 a | 5.9 abc | 5.3 abc |
| Nauseated f. | 8.1 ab | 7.2 bcd | 8.0 ab | 6.8 a | 7.3 abc | 5.8 bcdefg | 3.8 cde | 5.0 bc | 5.4 bcde | 4.5 cdef | 4.0 cde | 6.6 abcde | 5.9 abc | 5.5 abcd | 5.8 a | 5.4 abcd | 6.0 ab | 5.1 abc |
| Oncoming fist | 4.1 g | 4.0 hi | 3.6 fgh | 3.7 fgh | 4.0 ijk | 3.7 hij | 2.8 def | 2.4 fgh | 3.4 ghi | 4.1 ef | 2.5 fgh | 3.3 ijkl | 3.0 g | 3.3 g | 2.7 i | 3.5 gh | 2.0 i | 3.8 c |
| Party popper | 1.3 i | 1.8 k | 1.9 ij | 2.7 hij | 2.2 l | 2.1 k | 2.2 f | 1.6 h | 2.5 i | 3.7 ef | 1.9 h | 2.1 l | 4.3 cdefg | 3.6 efg | 3.9 efghi | 3.5 gh | 3.3 efghi | 4.2 abc |
| Persevering f. | 7.7 abc | 7.3 bcd | 8.0 ab | 6.4 abc | 8.0 a | 6.2 bcde | 4.2 bcd | 4.7 bcd | 5.2 cdef | 5.0 cde | 5.2 bc | 5.7 cdefg | 6.0 ab | 5.9 ab | 5.3 abcde | 5.4 abcd | 6.0 a | 4.9 abc |
| Person in lotus position | 2.5 hi | 2.5 jk | 2.2 hij | 2.5 hij | 2.5 l | 4.8 fgh | 7.8 a | 7.4 a | 5.9 bc | 5.8 bc | 5.9 b | 4.8 fghi | 4.7 abcdef | 4.6 bcdefg | 3.0 hi | 4.4 bcdefg | 5.7 abc | 5.2 abc |
| Person shrugging | 5.9 ef | 5.8 efg | 6.1 cde | 6.0 abc | 5.9 defg | 6.0 bcdef | 5.1 bc | 5.5 b | 5.8 bcd | 5.8 bcd | 4.7 bcd | 6.4 abcdef | 6.0 ab | 5.7 abc | 5.5 abc | 5.7 ab | 6.1 a | 5.6 a |
| Pouting f | 8.7 a | 8.8 a | 8.4 a | 6.5 ab | 7.5 abc | 5.7 cdefg | 2.5 ef | 4.3 bcde | 3.4 ghi | 3.3 f | 3.4 defg | 4.8 fghi | 3.7 efg | 4.8 bcdefg | 4.2 abcdefghi | 4.3 bcdefg | 3.2 fghi | 4.7 abc |
| Sleeping f. | 4.7 fg | 4.6 ghi | 4.9 ef | 4.4 defg | 5.1 ghi | 7.2 ab | 8.1 a | 7.9 a | 7.5 a | 6.9 ab | 8.5 a | 7.5 ab | 5.5 abcd | 6.0 ab | 5.7 ab | 5.2 abcde | 6.1 a | 4.8 abc |
| Smiling f. with sunglasses | 1.9 i | 1.9 jk | 2.2 hij | 2.2 ij | 2.5 l | 2.6 jk | 4.3 bcd | 3.4 defg | 4.0 efgh | 4.3 def | 2.7 efgh | 3.4 hijkl | 4.8 abcdef | 4.2 cdefg | 3.7 fghi | 4.0 defgh | 4.0 defg | 4.1 abc |

| | | | | | | | | | | | | | | | | | | |
|------------|-----------|------------|------------|-------------|--------------|-------------|------------|-------------|------------|-----------|-------------|--------------|-------------|-------------|------------|--------------|--------------|------------|
| Warning | 5.7 ef | 6.0 def | 5.7 de | 5.3 bcde | 5.4 efgh | 4.8 efgh | 3.2 def | 3.3 defg | 3.6 ghi | 4.2 ef | 3.1 efgh | 4.1 ghijk | 3.8 efg | 3.6 efg | 3.4 ghi | 2.5 h | 3.3 efghi | 5.5 ab |
| Yawning f. | 6.3 de | 5.8 efg | 6.8 bcd | 6.2 abc | 6.3 cdefg | 8.1 a | 7.7 a | 7.2 a | 7.6 a | 7.5 a | 8.5 a | 8.0 a | 5.8 abc | 5.8 abc | 5.7 ab | 5.7 abc | 6.2 a | 5.3 abc |
| Zzz | 4.8 fg | 5.0 fgh | 5.0 ef | 5.0 cdef | 5.2 fghi | 6.9 abcd | 7.8 a | 7.8 a | 7.6 a | 7.2 ab | 8.4 a | 7.1 abc | 5.5 abcd | 5.5 abcd | 5.5 abc | 5.2 abcde | 6.1 a | 4.9 abc |

Notes. *) Tukey's HSD used for post-hoc tests. Within columns, emoji that share a letter are not significantly different at the 5% level.

Part 4b of Supplementary Material

Averages* for the 18 PAD scales in Study 2 (UK) (P1 to P6 for *Pleasure* (P), A1 to A6 for *Arousal* (A) and D1 to D6 for *Dominance*). Generally: for P dimension, the low anchor (1) is associated with pleasure and the high anchor (9) is associated with displeasure; for the A dimension, the low anchor (1) is associated with arousal and the high anchor (9) is associated with non-arousal; for the D dimension, the low anchor (1) is associated with dominance and the high anchor (9) is associated with submissiveness. Table 1 in the main text has the full set of scale anchors.

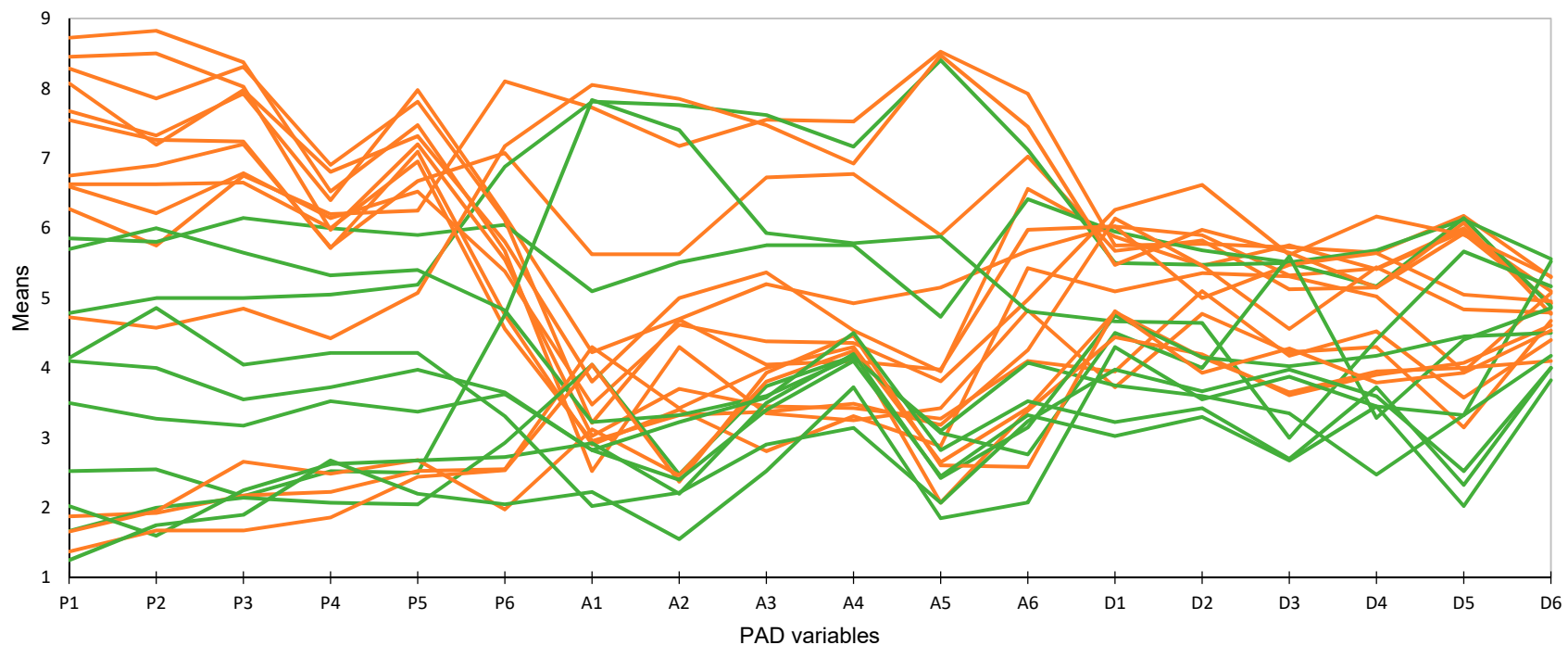
| Emoji name | P1 | P2 | P3 | P4 | P5 | P6 | A1 | A2 | A3 | A4 | A5 | A6 | D1 | D2 | D3 | D4 | D5 | D6 |
|--------------------------|------------|-------------|-------------|--------------|-------------|--------------|--------------|--------------|------------|--------------|--------------|---------------|---------------|----------------|-------------|--------------|--------------|------------|
| Beating heart | 2.6 i | 2.9 jk | 3.0 kl | 3.4 hij | 3.1 i | 3.5 klm | 4.5 cd | 3.9 hijk | 4.4 fg | 4.4 ghij | 3.5 hijkl | 3.8 k | 4.9 bcdefg | 4.5 efghi | 5.5 a | 4.7 bcdef | 4.6 cdef | 4.8 abc |
| Clapping hands | 2.9 i | 3.3 ij | 3.0 kl | 3.8 ghi | 3.5 hi | 3.8 kl | 4.0 defg | 3.3 jkl | 4.2 g | 4.7 efghi | 3.4 hijkl | 4.6 fghijk | 4.9 bcdefg | 4.2 ghi | 4.4 bcde | 4.4 def | 4.2 fg | 4.9 abc |
| Collision | 4.4 gh | 5.1 fg | 4.3 ij | 4.8 def | 4.7 fg | 4.0 jk | 3.2 g | 3.1 kl | 3.1 h | 3.8 ij | 3.0 kl | 4.3 ghijk | 4.3 fg | 4.3 fghi | 4.4 cde | 4.3 ef | 3.3 h | 4.4 c |
| Exploding head | 6.5 cd | 6.3 bcde | 6.2 def | 5.6 abcd | 6.6 abcd | 4.7 hij | 3.4 fg | 3.9 ijk | 3.1 h | 3.7 j | 3.3 ijkl | 4.8 fghij | 5.2 abcde | 5.3 abcde | 4.8 abc | 5.1 abcde | 4.7 cdef | 4.7 abc |
| Expressionless f. | 5.6 def | 5.7 defg | 5.9 fgh | 5.5 abcde | 5.7 de | 6.2 bcd | 5.5 b | 6.1 cd | 6.1 bc | 6.1 bc | 5.8 b | 6.4 abc | 5.5 abcd | 5.1 abcdef | 4.8 abc | 5.1 abcde | 5.2 abcde | 4.8 abc |
| F. Savoring food | 2.2 i | 2.4 k | 2.7 l | 2.9 ij | 3.3 hi | 2.9 lm | 4.0 defg | 3.3 jkl | 4.1 g | 4.5 fghij | 3.2 ijkl | 4.0 ijk | 4.9 bcdefg | 4.7 bcdefgh | 4.5 bcd | 4.5 cdef | 4.5 def | 5.1 abc |
| F. Screaming in fear | 6.5 cde | 6.0 cdef | 6.3 cdef | 5.6 abcd | 6.7 abc | 5.0 fghi | 4.0 defg | 4.1 hij | 4.3 fg | 4.2 hij | 4.1 efghi | 5.1 efgh | 5.3 abcde | 5.4 abcd | 4.9 abc | 5.3 abc | 5.1 bcde | 4.9 abc |
| F. Vomiting | 7.4 ab | 7.0 b | 7.5 ab | 6.2 ab | 7.0 a | 5.8 cdefg | 4.4 cde | 5.0 efg | 5.5 cd | 5.0 defgh | 4.7 defg | 6.2 abcd | 5.7 ab | 5.3 abcde | 5.1 abc | 5.3 abc | 5.2 abcd | 5.0 abc |
| F. With steam from nose | 7.1 bc | 7.2 b | 6.9 bcde | 5.8 abc | 6.7 ab | 5.9 bcdef | 4.0 defg | 4.6 efghi | 4.1 g | 4.4 ghij | 4.3 efgh | 5.1 efgh | 4.7 defg | 5.2 abcde | 4.4 bcde | 5.1 abcde | 4.3 ef | 4.7 abc |
| F. With tongue | 2.8 i | 3.3 ij | 3.3 kl | 3.4 hij | 3.5 hi | 2.8 m | 3.9 defg | 3.4 jk | 4.1 g | 4.3 ghij | 3.1 jkl | 4.1 hijk | 4.7 defg | 4.6 defghi | 4.6 bc | 4.7 bcdef | 4.6 cdef | 4.5 bc |
| Flexed biceps | 4.0 h | 4.0 hi | 3.7 jk | 4.2 fgh | 4.1 gh | 4.4 ijk | 3.5 efg | 4.1 ghij | 4.1 g | 4.8 defgh | 3.4 hijkl | 4.9 fghi | 4.0 g | 4.0 hi | 3.2 f | 4.2 ef | 3.2 h | 4.7 abc |
| Flushed f. | 5.7 def | 5.6 efg | 6.0 efg | 5.8 abc | 6.0 bcde | 5.2 efghi | 4.5 cd | 4.7 efgh | 5.1 def | 4.8 defgh | 4.4 efg | 5.2 defg | 5.5 abcd | 5.7 a | 5.1 abc | 5.6 a | 5.7 ab | 5.2 abc |
| Nauseated f. | 7.4 bc | 6.5 bcd | 7.1 bcd | 6.3 a | 6.8 ab | 5.8 cdef | 4.7 bcd | 5.3 de | 6.1 bc | 5.4 cdef | 4.9 bcde | 6.3 abc | 5.7 abc | 5.6 ab | 5.2 abc | 5.2 abcd | 6.0 a | 5.2 ab |
| Oncoming fist | 4.9 fgh | 4.9 gh | 4.4 ij | 4.5 fg | 4.8 fg | 4.7 hij | 4.1 cdefg | 4.3 ghi | 4.4 efg | 4.7 defgh | 4.0 fghij | 4.7 fghijk | 4.1 g | 4.2 ghi | 3.7 def | 4.4 def | 3.3 gh | 4.7 abc |
| Party popper | 2.2 i | 2.6 jk | 2.7 l | 3.0 ij | 2.9 i | 2.9 m | 3.3 g | 2.5 l | 3.8 gh | 4.3 hij | 2.8 l | 3.8 jk | 4.4 efg | 4.2 ghi | 4.4 bcde | 3.9 f | 4.3 ef | 4.6 bc |
| Persevering f. | 7.2 bc | 6.9 bc | 7.2 bc | 6.2 ab | 7.2 a | 6.1 bcd | 4.6 bcd | 5.2 ef | 5.6 cd | 5.2 defg | 5.7 bc | 6.4 abc | 5.8 a | 5.7 a | 5.2 ab | 5.3 abc | 6.0 a | 5.2 ab |
| Person in lotus position | 3.1 i | 3.4 ij | 3.1 kl | 2.9 j | 3.4 hi | 5.0 ghi | 7.1 a | 7.4 a | 5.5 cd | 5.5 cd | 5.4 bcd | 6.0 bcde | 5.1 abcdef | 4.8 bcdefgh | 3.4 f | 4.8 abcde | 5.5 abc | 5.5 a |
| Person shrugging | 5.6 ef | 5.5 efg | 5.8 fgh | 5.4 abcde | 5.8 cde | 5.6 defg | 5.1 bc | 5.2 ef | 5.3 cde | 5.4 cde | 4.8 cdef | 5.6 cdef | 5.6 abcd | 5.5 ab | 4.9 abc | 5.2 abcd | 5.8 ab | 5.1 abc |
| Pouting f. | 8.3 a | 8.3 a | 8.1 a | 6.0 ab | 7.4 a | 6.0 bcde | 3.3 fg | 4.3 ghi | 3.9 gh | 4.3 hij | 3.9 ghijk | 5.3 def | 4.2 fg | 4.9 abcdefg | 4.5 bc | 4.9 abcde | 3.8 fgh | 4.8 abc |
| Sleeping f. | 4.9 fgh | 4.9 gh | 5.0 hi | 4.6 efg | 5.2 ef | 6.7 b | 7.1 a | 6.9 abc | 7.1 a | 6.7 ab | 8.1 a | 7.0 a | 5.5 abcd | 5.5 abc | 5.5 a | 5.1 abcd | 5.9 ab | 5.2 ab |

| | | | | | | | | | | | | | | | | | | |
|----------------------------|-----------|-------------|--------------|-------------|-------------|--------------|-------------|--------------|-----------|--------------|--------------|--------------|--------------|----------------|-------------|------------|------------|------------|
| Smiling f. With sunglasses | 2.4 i | 2.7 jk | 2.7 l | 3.1 ij | 3.6 hi | 3.0 lm | 4.8 bcd | 4.4 fghi | 4.3 fg | 4.6 efghi | 3.4 hijkl | 4.3 ghijk | 4.1 g | 3.8 i | 3.7 ef | 3.9 f | 3.8 fgh | 4.4 bc |
| Warning | 6.0 de | 6.1 cde | 5.7 fgh | 5.4 bcde | 6.0 bcde | 5.4 defgh | 4.2 cdef | 4.6 efghi | 4.3 fg | 4.5 ghij | 3.8 ghijk | 4.9 fghi | 4.8 cdefg | 4.7 cdefghi | 4.4 bcde | 3.9 f | 4.0 fgh | 5.4 a |
| Yawning f. | 6.1 de | 5.7 defg | 6.6 bcdef | 6.0 ab | 6.0 bcde | 7.7 a | 6.5 a | 6.4 bc | 7.3 a | 7.1 a | 8.0 a | 7.0 a | 5.5 abcd | 5.4 abcd | 5.5 a | 5.5 ab | 5.9 ab | 5.2 ab |
| Zzz | 5.0 fg | 4.9 gh | 5.1 ghi | 5.0 cdef | 5.3 ef | 6.5 bc | 7.3 a | 7.1 ab | 6.9 ab | 6.5 ab | 8.0 a | 7.0 ab | 5.4 abcd | 5.4 abc | 5.5 a | 5.3 abc | 6.0 a | 5.0 abc |

Notes. *) Tukey's HSD used for post-hoc tests. Within columns, emoji that share a letter are not significantly different at the 5% level.

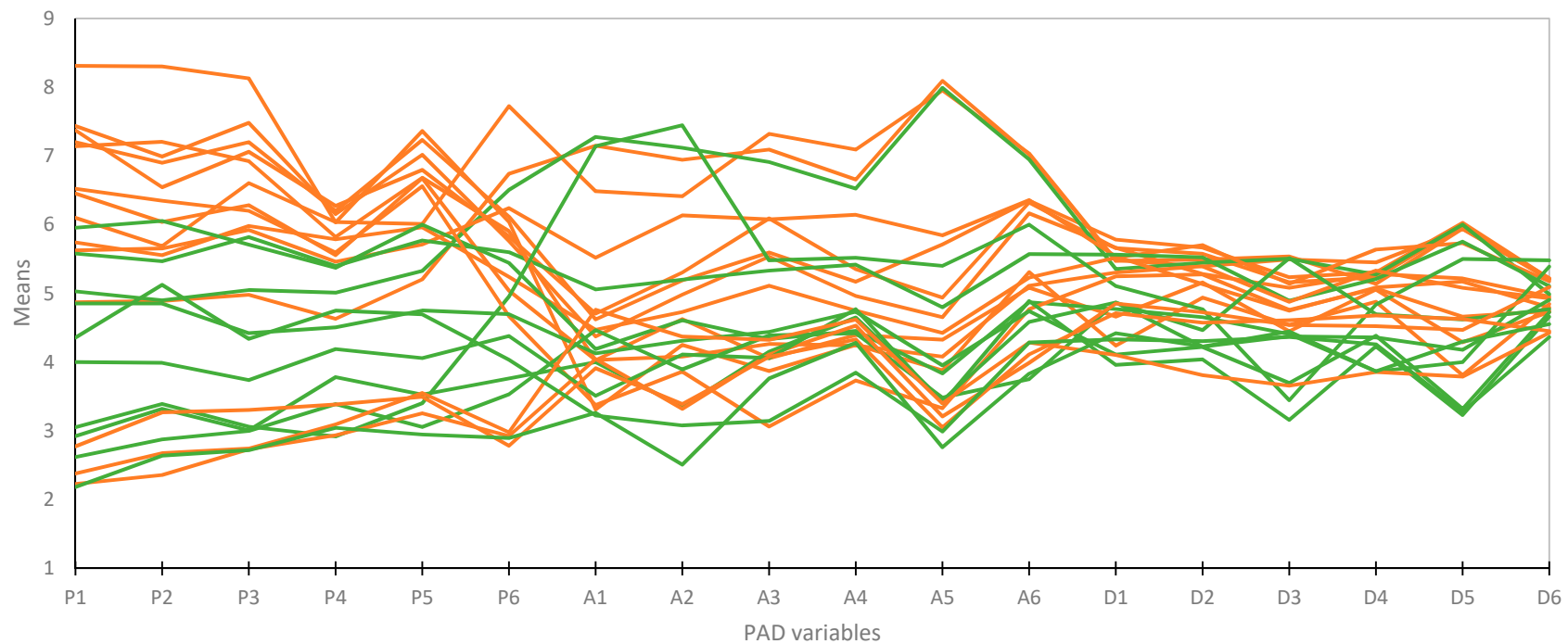
Part 5a of Supplementary Material

Means for the 18 PAD variables (all face emoji in orange, all non-face emoji in green) on the 24 emoji in Study 1 (NZ). PAD variables are labelled: P1 to P6 for *Pleasure* (P), A1 to A6 for *Arousal* (A) and D1 to D6 for *Dominance*. Table 1 has full details, but generally: P - low anchor (1) is associated with pleasure and high anchor (9) is associated with displeasure; A - low anchor (1) is associated with arousal and high anchor (9) is associated with non-arousal; D - low anchor (1) is associated with dominance and high anchor (9) is associated with submissiveness.



Part 5b of Supplementary Material

Means for the 18 PAD variables (all face emoji in orange, all non-face emoji in green) on the 24 emoji in Study 2 (UK). PAD variables are labelled: P1 to P6 for *Pleasure* (P), A1 to A6 for *Arousal* (A) and D1 to D6 for *Dominance*. Table 1 has full details, but generally: P - low anchor (1) is associated with pleasure and high anchor (9) is associated with displeasure; A - low anchor (1) is associated with arousal and high anchor (9) is associated with non-arousal; D - low anchor (1) is associated with dominance and high anchor (9) is associated with submissiveness.



Part 6a of Supplementary Material

Averages* for the 3 PAD dimensions in Study 1 (NZ). For P dimension (*Pleasure*), the low anchor (1) is associated with pleasure and the high anchor (9) is associated with displeasure; for A dimension (*Arousal*), the low anchor (1) is associated with arousal and the high anchor (9) is associated with non-arousal; for D dimension (*Dominance*), the low anchor (1) is associated with dominance and the high anchor (9) is associated with submissiveness. Table 1 in the main text has the full set of scale anchors.

| Emoji name | Pleasure | Arousal | Dominance |
|------------------------------|-------------|-------------|--------------|
| Beating heart | 2.1 j | 3.4 efgh | 4.4 cdef |
| Clapping hands | 2.3 j | 3.1 ghi | 4.3 def |
| Collision | 4.1 gh | 2.6 hi | 3.6 fgh |
| Exploding head | 6.6 abc | 3.5 efgh | 5.0 abcde |
| Expressionless face | 6.7 abc | 6.3 b | 5.4 abc |
| Face savoring food | 1.9 j | 3.3 fghi | 4.2 efg |
| Face screaming in fear | 6.2 bcde | 3.4 efgh | 5.2 abcd |
| Face vomiting | 7.5 a | 4.4 de | 5.3 abc |
| Face with steam from nose | 7.3 ab | 3.5 efgh | 4.3 def |
| Face with tongue | 2.3 j | 3.2 ghi | 4.2 efg |
| Flexed biceps | 3.4 hi | 3.4 efgh | 3.2 gh |
| Flushed face | 6.2 bcde | 4.3 def | 5.9 a |
| Nauseated face | 7.2 ab | 4.9 cd | 5.6 a |
| Oncoming fist | 3.8 hi | 3.1 ghi | 3.1 h |
| Party popper | 2.0 j | 2.3 i | 3.8 fgh |
| Persevering face | 7.2 ab | 5.0 cd | 5.6 a |
| Person in lotus position | 2.8 ij | 6.2 b | 4.6 bcdef |
| Person shrugging | 5.9 cdef | 5.5 bc | 5.7 a |
| Pouting face | 7.6 a | 3.6 efgh | 4.1 efg |
| Sleeping face | 5.1 fg | 7.7 a | 5.5 ab |
| Smiling face with sunglasses | 2.2 j | 3.7 efg | 4.1 efg |
| Warning | 5.5 def | 3.6 efgh | 3.7 fgh |
| Yawning face | 6.6 abcd | 7.7 a | 5.7 a |
| Zzz | 5.3 ef | 7.6 a | 5.4 ab |

Notes. *) Tukey's HSD used for post-hoc tests. Within columns, emoji that share a letter are not significantly different at the 5% level.

Part 6b of Supplementary Material

Averages* for the 3 PAD dimensions in Study 2 (UK). For P dimension (*Pleasure*), the low anchor (1) is associated with pleasure and the high anchor (9) is associated with displeasure; for A dimension (*Arousal*), the low anchor (1) is associated with arousal and the high anchor (9) is associated with non-arousal; for D dimension (*Dominance*), the low anchor (1) is associated with dominance and the high anchor (9) is associated with submissiveness. Table 1 in the main text has the full set of scale anchors.

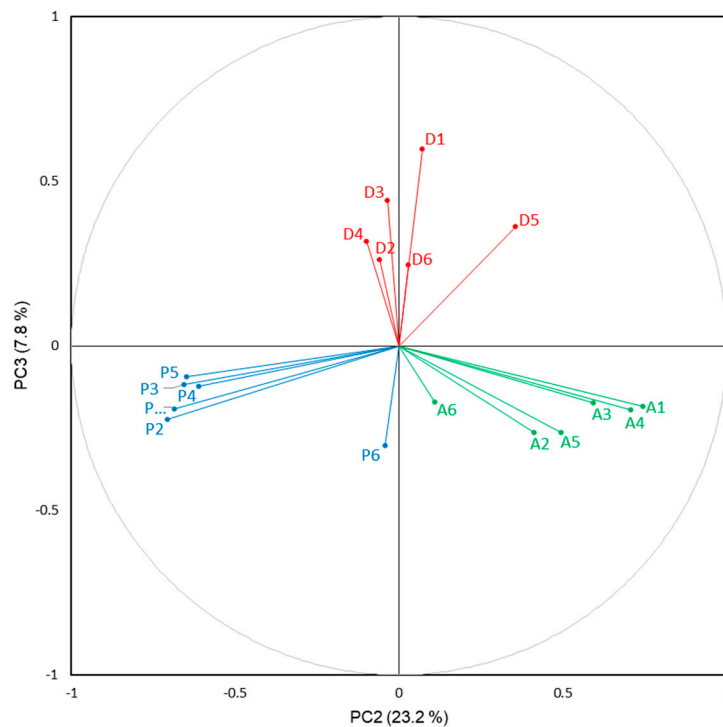
| Emoji name | Pleasure | Arousal | Dominance |
|------------------------------|------------|-------------|---------------|
| Beating heart | 3.1 kl | 4.1 ghi | 4.8 cdefgh |
| Clapping hands | 3.4 jkl | 4 ghij | 4.5 ghijk |
| Collision | 4.6 hi | 3.4 ij | 4.2 ijkl |
| Exploding head | 6 cde | 3.7 hij | 5.0 bcdefg |
| Expressionless face | 5.8 def | 6 bc | 5.1 abcdef |
| Face savoring food | 2.7 l | 3.9 ghij | 4.7 defghi |
| Face screaming in fear | 6 cde | 4.3 fgh | 5.2 abcde |
| Face vomiting | 6.8 ab | 5.1 de | 5.2 abcd |
| Face with steam from nose | 6.6 bc | 4.4 fg | 4.7 defgh |
| Face with tongue | 3.2 kl | 3.8 ghij | 4.6 efghij |
| Flexed biceps | 4.1 ij | 4.1 gh | 3.9 l |
| Flushed face | 5.7 def | 4.8 ef | 5.5 ab |
| Nauseated face | 6.6 bc | 5.5 cd | 5.5 ab |
| Oncoming fist | 4.7 ghi | 4.4 fg | 4.1 jkl |
| Party popper | 2.7 l | 3.4 j | 4.3 hijkl |
| Persevering face | 6.8 ab | 5.4 cd | 5.5 a |
| Person in lotus position | 3.5 jk | 6.2 b | 4.9 cdefg |
| Person shrugging | 5.6 ef | 5.2 de | 5.3 abc |
| Pouting face | 7.4 a | 4.1 gh | 4.5 fghij |
| Sleeping face | 5.2 fgh | 7.2 a | 5.5 ab |
| Smiling face with sunglasses | 2.9 kl | 4.3 fgh | 3.9 kl |
| Warning | 5.8 def | 4.4 fg | 4.5 fghij |
| Yawning face | 6.4 bcd | 7.1 a | 5.5 ab |
| Zzz | 5.3 efg | 7.1 a | 5.4 ab |

Notes. *) Tukey's HSD used for post-hoc tests. Within columns, emoji that share a letter are not significantly different at the 5% level.

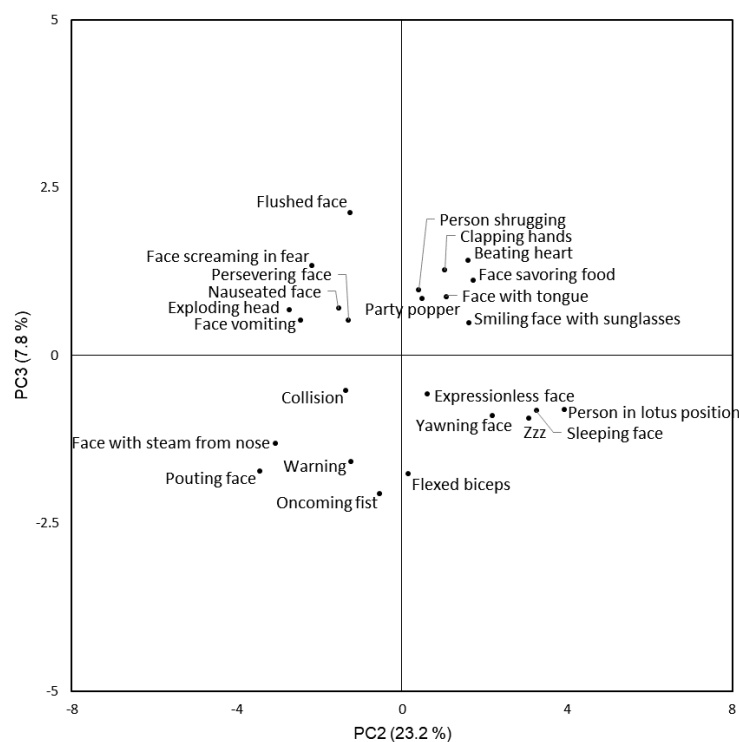
Part 7a of Supplementary Material

Two-dimensional spaces following Principal Components Analysis for PAD ratings of 24 emoji in Study 1 (NZ). A) Variables plot spanned by PC2 and PC3 and B) observations plot spanned by PC2 and PC3. For variables plot, colours are used to visually highlight the PAD dimensions, with blue for P1 to P6, green for A1 to A6 and red for D1 to D6.

A)



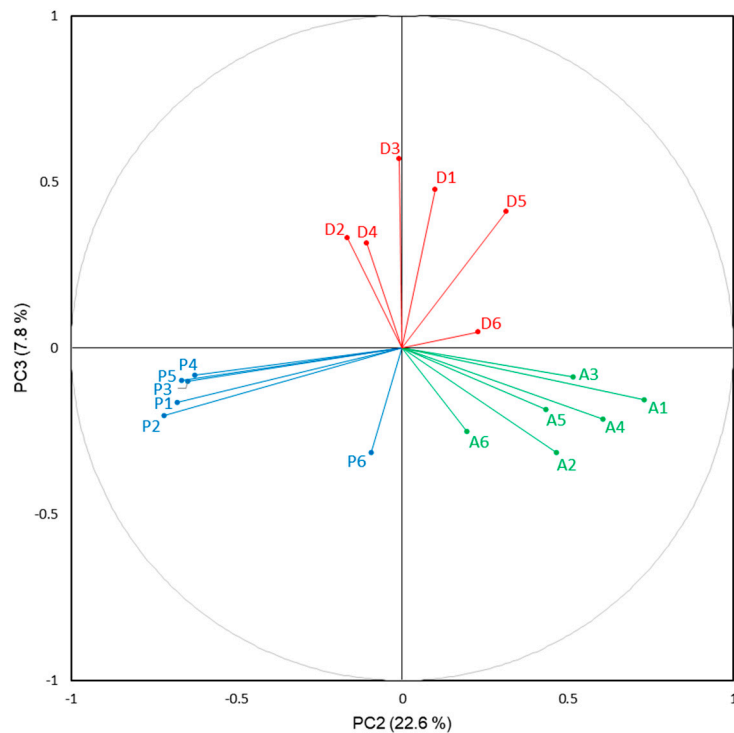
B)



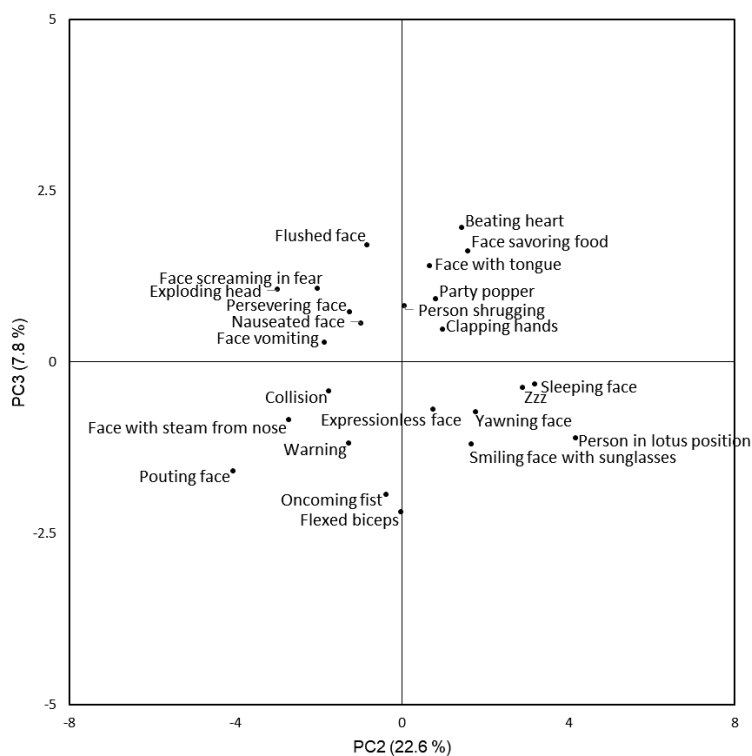
Part 7b of Supplementary Material

Two-dimensional spaces following Principal Components Analysis for PAD ratings of 24 emoji in Study 2 (UK). A) Variables plot spanned by PC2 and PC3 and B) observations plot spanned by PC2 and PC3. For variables plot, colours are used to visually highlight the PAD dimensions, with blue for P1 to P6, green for A1 to A6 and red for D1 to D6.

A)



B)



Part 8 of Supplementary Material

Profile plot following hierarchical cluster analysis (Euclidian distance, Ward's method) on merged data from Study 1 and Study 2 that were entered as mean centred (within participants). Two retained clusters of roughly even size (48% in Cluster 1 and 52% in Cluster 2), where participants were roughly evenly distributed between studies (Study 2 participants allocated with 46% in Cluster 1 and 54% in Cluster 2).

