Simultaneously Presented Facial and Contextual Information Influences Observers' Facial Expressions and Self-Reports of Emotion

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A. Supplementary Stimuli Information

Image Category	Image Codes	Number of faces visible							
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8+**
Neutral*	neutral_010, neutral_056, neutral_057, neutral_128, neutral_232, neutral_279, neutral_311, neutral_471, neutral_509, neutral_511, neutral_542, neutral_547, neutral_548, neutral_549, neutral_593, neutral_647, social_001, social_008, social_044, social_053	9	9	1	1	-	-	-	-
Erotic	4604, 4607, 4611, 4647, 4651, 4652, 4656, 4658, 4664, 4666, 4669, 4672, 4681, 4683, 4687, 4690, 4698, 4800, 4810, opposite-sex_couple_005*	1	19	-	-	-	-	-	-
Happy	1340, 2151, 2152, 2154, 2156, 2158, 2165, 2274, 2331, 2340, 2346, 2373, 2387, 2391, 2530, 2598, 4603, 4622, 4628, 8461	1	11	4	2	-	2	-	-
Mutilation	2710, 3010, 3016, 3017, 3061, 3063, 3069, 3100, 3102, 3120, 3130, 3131, 3181, 6022, 6831, 9250, 9253, 9410, 9412, 9433	16	3	-	1	-	-	-	-
Threat	2683, 3500, 3530, 6212, 6312, 6313, 6315, 6520, 6540, 6560, 6563, 6571, 6830, 6838, 9050, 9414, 9425, 9428, 9429, 9800	5	9	2	-	-	-	3	1

Note: *Images selected from NAPS database. The rest of the images were selected from the IAPS database.

B. Additional analyses on all facial electromyography data (i.e. including outliers)

We tested whether including the outliers has a drastic effect on our facial electromyography results. We performed the same analysis as the one carried out in the main paper.

Corrugator

Our analysis revealed a non-significant main effect of *Condition* ($\chi 2\ (1)\ =\ 0.04,\ p\ =.840$)and a significant main effect of *Category* ($\chi 2(4) = 22.94$, $p < .001$). Corrugator activity showed a selective increase following threat pictures vs neutral pictures ($t(1) = 3.30$, $p < .001$) and mutilation pictures vs neutral pictures ($t(1) = 4.16$, $p < .001$) and a selective decrease following happy pictures vs neutral pictures ($t(1) = -4.05$, $p < .001$). Erotic images elicited a non-significant increase in the corrugator when compared to the corrugator response to neutral pictures ($t(1) = 1.17$, $p = .238$).

We also found a significant *Condition x Category* interaction ($\chi 2(4) = 13.32$, $p = .009$). The corrugator response was larger following negative images in the face-context condition than in the context-only condition (threat: $t(1) = 2.01$, $p = .043$; mutilation: $t(1) = 2.18$, $p = .028$) and smaller following happy images in the face-context condition than in the context-only condition ($t(1) = -3.49$, $p < .001$). The corrugator response to neutral face-context vs neutral context-only conditions ($t(1) = -1.05$, $p = .291$) and erotic face-context vs erotic context-only conditions ($t(1) = -0.30$, $p = .756$) was non-significant.

Zygomatic

We found a significant main effect of *Category* ($\chi 2(4) = 11.09$, $p = .025$). The zygomatic activity showed a selective increase following happy images vs threat images ($t(1) = 2.11$, $p = .034$), happy images vs mutilation images ($t(1) = 2.29$, $p = .021$), happy images vs

erotic images (t(1) = 3.58, p < .001) and happy images vs neutral images (t(1) = 2.34, p = .018). No other comparisons reached significance. The main effect of *Condition* was not significant ($\chi 2\ (1) = 0.887,\ p = .346$).We did not find a significant *Condition x Category* interaction ($\chi 2(4) = 3.51$, p = .475).

Startle eyeblink

We found a non-significant main effect of *Condition* ($\chi 2\ (1) = 0.65,\ p = .419$) and a significant main effect of *Category* ($\chi 2\ (4) = 19.81,\ p < .001$).The startle eyeblink showed a significant potentiation following mutilation pictures vs erotic pictures (t(1) = 4.90, p < .001), mutilation pictures vs happy pictures (t(1) = 3.63, p < .001), mutilation pictures vs threat pictures (t(1) = 3.22, p = .002) and mutilation pictures vs neutral pictures (t(1) = 4.11, p < .001). The startle eyeblink response showed a significant increase following threat pictures vs erotic pictures (t(1) = 3.16, p = .001) and threat vs neutral pictures (t(1) = 2.06, p = .0389). Also, happy pictures showed a significant potentiation in comparison to erotic pictures (t(1) = 2.08, p = .037).

No other comparisons reached significance. Although we did not find a significant *Condition x Category* interaction ($\chi 2\ (4) = 2.52,\ p = .640$)since we were specifically interested in the condition effects on the negative image categories, we looked at the simple effects of the threat and mutilation image categories. There were no significant condition effects at the level of each of these two image categories (threat: t(1) = -1.01, p =.308; mutilation: t(1) = -0.36, p = .713).

C. Analyses of Context-only data

To assess whether the Condition effects were solely driven by the facial information available in the Face-context condition, we ran a model with only the data collected from the Context-only condition. Behavioural data still showed a significant main effect of Category

for the valence ($\chi 2\ (4)\ =\ 64.71,\ p\ <\ .001$) and arousal ($\chi 2\ (4)\ =\ 66.82,\ p\ <\ .001$) ratings. Likewise, we still found a significant main effect of Category ($\chi 2\ (4)\ =\ 14.78,\ p\ =\ .005$)on the corrugator data while the Category effect on zygomatic activity became non-significant($\chi 2\ (4)\ =\ 5.83,\ p\ =\ .211$).