Supplementary material

Table S 1. Colour and emotion terms in English and French. The validated French version of emotion terms taken from http://www.affective-sciences.org/gew. French has two basic terms for the "brown" category – *brun* and *marron* (Forbes, 1979). We chose *brun* since it has the least contextually restricted meaning (N. C. W. Spence, 1989). However, we hypothesise that *marron* would result in very similar affective associations to *brun*, since both *brun* and *marron* map to comparable perceptual colours (N. C. W. Spence, 1989).

EnglishFrenchRedRougeOrangeOrangeYellowJauneGreenVertTurquoiseTurquoiseBlueBleuPurpleVioletPinkRoseBrownBrunWhiteBlancGreyGrisBlackNoirInterestIntérêtAmusementAmusementPrideFiertéJoyJoiePleasurePlaisirContentmentContentementAdmirationAdmirationLoveAmourReliefSoulagementCompassionCompassionSadnessTristesseGuiltCulpabilitéRegretRegretShameHonteDisappointmentDéceptionFearPeurDisgustDégoûtContemptMéprisHateHaineAngerColère		
Orange Yellow Green Vert Turquoise Blue Bleu Purple Violet Pink Rose Brown Brun White Blanc Grey Gris Black Noir Interest Amusement Pride Fierté Joy Pleasure Contentment Admiration Love Relief Compassion Sadness Guilt Regret Shame Disappointment Piaune Contempt Piaune Disgust Contempt Peur Disgust Contempt Hate Paune Over Person Peur Disgust Contempt Mépris Haine	English	French
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Blue Bleu Purple Violet Pink Rose Brown Brun White Blanc Grey Gris Black Noir Interest Intérêt Amusement Amusement Pride Fierté Joy Joie Pleasure Plaisir Contentment Contentement Admiration Admiration Love Amour Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Meire	Green	Vert
Purple Violet Pink Rose Brown Brun White Blanc Grey Gris Black Noir Interest Intérêt Amusement Amusement Pride Fierté Joy Joie Pleasure Plaisir Contentment Contentement Admiration Admiration Love Amour Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Turquoise	Turquoise
Pink Rose Brown Brun White Blanc Grey Gris Black Noir Interest Intérêt Amusement Amusement Pride Fierté Joy Joie Pleasure Plaisir Contentment Contentement Admiration Admiration Love Amour Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Blue	Bleu
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Pride Fierté Joy Joie Pleasure Plaisir Contentment Contentement Admiration Admiration Love Amour Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Interest	Intérêt
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Pleasure Plaisir Contentment Contentement Admiration Admiration Love Amour Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Pride	Fierté
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Love Amour Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Contentment	Contentement
Relief Soulagement Compassion Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Admiration	Admiration
Compassion Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Fear Disgust Contempt Hate Haine	Love	Amour
Sadness Tristesse Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Relief	Soulagement
Guilt Culpabilité Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Compassion	Compassion
Regret Regret Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Sadness	Tristesse
Shame Honte Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Guilt	Culpabilité
Disappointment Déception Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Regret	Regret
Fear Peur Disgust Dégoût Contempt Mépris Hate Haine	Shame	Honte
Disgust Dégoût Contempt Mépris Hate Haine	Disappointment	Déception
Contempt Mépris Hate Haine	Fear	Peur
Hate Haine	Disgust	Dégoût
Traine	Contempt	Mépris
Anger Colère	Hate	Haine
	Anger	Colère

Table S 2. The 20 emotions used in the Geneva Emotion Wheel. We show their categorisation regarding on emotion dimensions of valence, arousal, and power (Fontaine, 2013; Scherer, 2005; Scherer et al., 2013; Soriano et al., 2013).

Emotion	Valence	Arousal	Power	
Interest	Positive	Low	Strong	
Amusement	Positive	High	Strong	
Pride	Positive	Low	Strong	
Joy	Positive	High	Strong	
Pleasure	Positive	High	Strong	
Contentment	Positive	Low	Weak	
Admiration	Positive	High	Weak	
Love	Positive	High	Weak	
Relief	Positive	Low	Weak	
Compassion	Positive	Low	Weak	
Sadness	Negative	Low	Weak	
Guilt	Negative	High	Weak	
Regret	Negative	Low	Weak	
Shame	Negative	High	Weak	
Disappointment	Negative	Low	Weak	
Fear	Negative	High	Strong	
Disgust	Negative	Low	Strong	
Contempt	Negative	Low	Strong	
Hate	Negative	High	Strong	
Anger	Negative	High	Strong	

Table S 3. This colour-emotion association matrix indicates the proportion of participants who endorse given colours as being associated with given emotions. These proportions were derived from pooled data, i.e., colour-emotion associations for both colour terms and colour patches.

	BLACK	BLUE	BROWN	GREEN	GREY	ORANGE	PINK	PURPLE	RED	TURQUOISE	WHITE	YELLOW
Interest	.08	.30	.08	.33	.08	.23	.17	.20	.18	.29	.21	.20
Amusement	.03	.26	.05	.36	.03	.41	.42	.18	.13	.33	.08	.44
Pride	.09	.24	.05	.18	.05	.17	.11	.14	.23	.18	.22	.26
Joy	.02	.32	.05	.33	.03	.48	.55	.14	.17	.45	.18	.61
Pleasure	.04	.30	.08	.30	.04	.35	.63	.19	.39	.41	.14	.36
Contentment	.06	.33	.10	.31	.07	.28	.33	.17	.13	.33	.25	.24
Admiration	.05	.36	.07	.19	.06	.26	.33	.12	.20	.27	.23	.36
Love	.03	.12	.06	.11	.04	.07	.63	.17	.68	.11	.15	.10
Relief	.04	.38	.09	.22	.11	.14	.23	.14	.07	.33	.44	.16
Compassion	.05	.25	.10	.14	.08	.16	.32	.20	.17	.20	.25	.19
Sadness	.45	.27	.11	.06	.61	.08	.04	.19	.05	.11	.12	.04
Guilt	.34	.15	.14	.14	.32	.08	.05	.20	.13	.05	.11	.12
Regret	.45	.17	.20	.11	.55	.08	.05	.15	.11	.08	.17	.07
Shame	.27	.06	.18	.11	.22	.08	.08	.16	.28	.04	.08	.11
Disappointment	.48	.12	.20	.09	.54	.08	.05	.19	.08	.07	.11	.08
Fear	.45	.16	.06	.11	.21	.05	.05	.11	.16	.06	.12	.12
Disgust	.35	.02	.50	.27	.20	.08	.06	.19	.11	.05	.04	.18
Contempt	.43	.06	.26	.12	.26	.15	.05	.16	.20	.05	.07	.15
Hate	.47	.03	.07	.08	.11	.11	.04	.13	.51	.04	.03	.05
Anger	.34	.03	.08	.08	.10	.11	.04	.12	.73	.04	.02	.12

Table S 4. This colour-emotion association matrix indicates the proportion of participants who endorse given colours as being associated with given emotions. These proportions were derived from colour-emotion associations for colour terms.

Terms	BLACK	BLUE	BROWN	GREEN	GREY	ORANGE	PINK	PURPLE	RED	TURQUOISE	WHITE	YELLOW
Interest	.10	.26	.12	.35	.08	.26	.15	.27	.19	.23	.22	.19
Amusement	.04	.22	.06	.45	.05	.46	.47	.22	.12	.29	.10	.40
Pride	.13	.29	.06	.19	.06	.18	.09	.22	.21	.21	.24	.19
Joy	.04	.36	.08	.36	.05	.49	.63	.19	.15	.50	.22	.56
Pleasure	.04	.27	.08	.29	.06	.36	.72	.22	.41	.41	.13	.35
Contentment	.06	.26	.14	.33	.06	.28	.29	.19	.15	.35	.27	.19
Admiration	.06	.32	.09	.21	.08	.26	.28	.19	.15	.26	.28	.31
Love	.05	.12	.05	.13	.05	.10	.72	.15	.74	.09	.17	.10
Relief	.05	.40	.09	.22	.06	.12	.23	.13	.05	.31	.49	.17
Compassion	.06	.28	.13	.15	.08	.17	.28	.21	.15	.14	.29	.15
Sadness	.58	.31	.09	.05	.64	.06	.06	.17	.06	.12	.15	.05
Guilt	.37	.19	.15	.13	.33	.08	.06	.18	.14	.06	.10	.15
Regret	.59	.22	.19	.09	.60	.08	.04	.17	.10	.06	.18	.10
Shame	.32	.10	.21	.13	.24	.09	.05	.15	.35	.05	.10	.13
Disappointment	.54	.15	.14	.08	.60	.08	.06	.17	.08	.08	.15	.10
Fear	.55	.21	.04	.14	.26	.05	.05	.13	.12	.05	.12	.15
Disgust	.31	.04	.38	.29	.26	.08	.06	.18	.13	.08	.06	.26
Contempt	.53	.09	.22	.13	.29	.14	.05	.15	.23	.06	.09	.18
Hate	.67	.04	.08	.12	.14	.13	.05	.14	.63	.06	.05	.08
Anger	.47	.05	.10	.09	.12	.14	.05	.14	.83	.06	.03	.15

Table S 5. This colour-emotion association matrix indicates the proportion of participants who endorse given colours as being associated with given emotions. These proportions were derived from colour-emotion associations for colour patches.

Patches	BLACK	BLUE	BROWN	GREEN	GREY	ORANGE	PINK	PURPLE	RED	TURQUOISE	WHITE	YELLOW
Interest	.04	.37	.04	.31	.07	.20	.19	.09	.17	.37	.20	.22
Amusement	.02	.31	.02	.24	.00	.33	.35	.13	.15	.39	.04	.50
Pride	.04	.17	.02	.17	.02	.17	.15	.04	.26	.15	.19	.35
Joy	.00	.26	.02	.28	.00	.48	.44	.07	.20	.37	.13	.69
Pleasure	.04	.35	.07	.30	.00	.33	.50	.15	.37	.41	.17	.37
Contentment	.06	.44	.04	.28	.07	.28	.39	.15	.09	.30	.22	.31
Admiration	.02	.43	.04	.17	.04	.26	.39	.02	.26	.30	.15	.43
Love	.00	.13	.07	.07	.02	.02	.50	.20	.59	.15	.13	.09
Relief	.02	.35	.09	.22	.19	.17	.24	.17	.09	.35	.37	.15
Compassion	.02	.20	.06	.13	.09	.15	.37	.19	.19	.30	.19	.24
Sadness	.26	.22	.15	.07	.57	.09	.00	.22	.04	.11	.07	.02
Guilt	.30	.09	.13	.15	.30	.09	.04	.22	.11	.04	.11	.07
Regret	.24	.11	.20	.13	.48	.09	.07	.13	.11	.09	.15	.02
Shame	.20	.00	.15	.09	.19	.06	.11	.17	.19	.02	.04	.07
Disappointment	.41	.07	.30	.11	.44	.09	.02	.22	.07	.06	.06	.06
Fear	.30	.09	.09	.07	.15	.04	.04	.07	.22	.07	.13	.07
Disgust	.41	.00	.67	.22	.13	.09	.06	.20	.07	.02	.00	.07
Contempt	.30	.02	.31	.11	.20	.17	.06	.17	.17	.02	.04	.11
Hate	.19	.02	.06	.04	.06	.07	.02	.11	.33	.00	.00	.02
Anger	.15	.00	.06	.07	.07	.06	.02	.09	.59	.00	.00	.07

Table S 6. Valence, arousal, and power loadings for each colour, separated by term and patch. The term *Bias* represents the mean loading, and 95% CI represents 95% confidence intervals of the mean. The same information appears in **Error! Reference source not found.**.

Colour		Valence		Arousal		Power	
presentation mode	Colour	Bias	95% CI	Bias	95% CI	Bias	95% CI
Colour term	Red	-0.33	[-0.86, 0.19]	2.28	[1.92, 2.65]	1.03	[0.70, 1.36]
	Orange	1.74	[1.24, 2.24]	0.72	[0.30, 1.14]	0.97	[0.62, 1.33]
	Yellow	1.26	[0.61, 1.91]	0.80	[0.49, 1.10]	1.05	[0.74, 1.36]
	Green	1.44	[0.76, 2.11]	0.15	[-0.17, 0.48]	0.90	[0.58, 1.22]
	Turquoise	2.09	[1.59, 2.61]	0.22	[-0.11, 0.55]	0.45	[0.11, 0.79]
	Blue	1.37	[0.83, 1.92]	-0.42	[-0.80, -0.05]	-0.53	[-0.96, -0.09]
	Purple	0.41	[-0.22, 1.04]	-0.13	[-0.48, 0.22]	0.15	[-0.19, 0.50]
	Pink	3.32	[2.76, 3.89]	1.76	[1.42, 2.09]	0.24	[-0.04, 0.53]
	Brown	-0.71	[-1.07, -0.34]	-0.63	[-0.86, -0.39]	-0.06	[-0.37, 0.24]
	Grey	1.37	[0.88, 1.86]	-0.86	[-1.22, -0.50]	-0.94	[-1.23, -0.64]
	White	-2.85	[-3.37, -2.32]	-1.36	[-1.63, -1.09]	-1.39	[-1.73, -1.04]
-	Black	-4.28	[-4.95, -3.61]	-0.33	[-0.64, -0.03]	0.18	[-0.19, 0.55]
Colour patch	Red	0.46	[-0.38, 1.31]	1.76	[1.34, 2.18]	0.80	[0.40, 1.19]
	Orange	1.54	[0.74, 2.33]	0.24	[-0.23, 0.71]	0.65	[0.23, 1.06]
	Yellow	2.76	[2.04, 3.48]	0.83	[0.46, 1.21]	1.02	[0.61, 1.42]
	Green	1.09	[0.15, 2.04]	-0.28	[-0.74, 0.19]	0.39	[-0.02, 0.80]
	Turquoise	2.65	[1.91, 3.39]	-0.02	[-0.39, 0.35]	0.09	[-0.35, 0.54]
	Blue	2.39	[1.59, 3.19]	-0.28	[-0.72, 0.16]	-0.46	[-0.91, -0.02]
	Purple	-0.41	[-1.23, 0.42]	-0.33	[-0.65, -0.02]	-0.56	[-1.02, -0.09]
	Pink	3.09	[2.32, 3.87]	0.87	[0.39, 1.35]	-0.32	[-0.76, 0.13]
	Brown	-1.65	[-2.18, -1.11]	-1.17	[-1.47, -0.86]	0.13	[-0.31, 0.56]
	Grey	1.19	[0.60, 1.78]	-0.59	[-0.92, -0.26]	-0.59	[-0.90, -0.29]
	White	-2.09	[-2.76, -1.43]	-1.46	[-1.78, -1.15]	-1.69	[-2.08, -1.29]
	Black	-2.50	[-3.19, -1.81]	-0.57	[-0.960, -0.19]	-0.06	[-0.55, 0.44]

Emotion with colour terms vs. colour patches