

Supplementary Tables

Table S1
Computation of Unit-Weighted Factor Scores

Source / Factor	Score
Iwanicki and Lehmann (2015)	
Extraversion ¹	(dominant + stingy.greedy – submissive + independent – timid + defiant + reckless – depressed – cautious – solitary + 40)/10
Agreeableness ²	(affectionate + helpful + cool – aggressive – irritable + gentle + 16)/6
Conscientiousness	(predictable + protective + conventional + intelligent)/4
Openness	(active + curious + inventive)/3
Koski et al. (2017)	
Conscientiousness	(– thoughtless – bullying – clumsy – reckless – disorganized – imitative – erratic – jealous – aggressive – irritable – impulsive – excitable depressed – stingy.greedy – playful + 128)/15
Agreeableness	(friendly + affectionate + gentle + sociable + helpful + predictable + unemotional + protective)/8
Assertiveness	(– cautious – dependent..follower – dominant + independent – timid – submissive – fearful – vulnerable – sympathetic + 56)/9
Patience	(– distractible + intelligent + inventive + sensitive + 8)/4
Inquisitive	(– lazy + inquisitive + active - solitary + 16)/4
Inoue-Murayama et al. (2018)	
Dominance	(defiant + stingy.greedy + jealous + aggressive + dominant + irritable + bullying + excitable + impulsive – submissive – friendly – gentle – cool + disorganized + erratic + active + manipulative – conventional – predictable + distractible + thoughtless + 48)/21
Sociability	(helpful – solitary + imitative + dependent..follower + protective – individualistic – independent + sociable + sympathetic + affectionate + playful + sensitive + curious + inquisitive – lazy + 32)/15
Neuroticism	(timid – stable + autistic + fearful + vulnerable – intelligent + clumsy + depressed + 16)/8

Note. A constant equal to 8 time the number of items with negative loadings was added to some factor scores. ¹ The factor from the original paper had a positive loading on “bold”. We substituted “timid” (reversed) for this item. ² The factor from the original paper had positive loadings on “calm” and “cooperative”. We substituted “cool” and “helpful”, respectively, for these items.

Table S2
Bayesian Information Criteria (BIC) for Each Analysis

Factors	Analyses					
	Primary	Residualized scores	Rater 1	Rater 2	Rater 3	Weighted correlation matrix
1	-1884.750	-1988.770	-2207.226	-2296.935	-2872.866	-3450.794
2	-2598.698	-2658.946	-2550.354	-2938.084	-2897.494	-3773.106
3	-2749.458	-2835.079	-2882.278	-3007.134	-2918.697	-3819.233
4	-2883.281	-2942.436	-2962.079	-3044.861	-2859.360	-3776.708
5	-2968.296	-2991.407	-3032.412	-3036.543	-2769.791	-3707.196
6	-2919.464	-2932.316	-2983.858	-2978.983	-2680.952	-3589.986
7	-2840.690	-2843.370	-2896.522	-2918.050	-2568.438	-3466.880
8	-2751.406	-2750.118	-2784.261	-2808.443	-2463.626	-3324.194

Note. The lowest BIC for each analysis is in bold.

Table S3

Congruence Coefficients for Comparison of Varimax- and Promax-Rotated Structure

	ML1	ML4	ML5	ML2	ML3
ML1	0.95	-0.37	-0.32	0.12	-0.08
ML4	-0.35	0.92	0.39	0.22	-0.18
ML5	-0.32	0.40	0.94	0.24	-0.06
ML2	0.12	0.14	0.14	0.97	-0.23
ML3	-0.05	-0.11	-0.03	-0.19	0.97

Table S4

Pattern Matrix from the First-Order Factor Analysis of the Hominoid Personality Questionnaire

Item	Factor Loadings					h^2
	Soc	Dom	Imp	Opn	Neg	
Helpful	0.85	-0.10	-0.16	0.12	-0.13	0.79
Sympathetic	0.82	-0.21	-0.20	0.06	0.04	0.76
Protective	0.77	-0.14	-0.11	0.06	-0.17	0.66
Individualistic	-0.77	0.22	0.11	0.07	0.23	0.71
Sociable	0.74	-0.40	-0.31	0.15	-0.17	0.85
Dependent/follower	0.73	-0.15	-0.14	0.16	0.31	0.69
Solitary	-0.72	0.14	0.08	-0.24	0.38	0.74
Independent	-0.71	0.32	-0.08	0.06	0.05	0.62
Affectionate	0.69	-0.27	-0.26	0.17	0.07	0.65
Sensitive	0.67	-0.26	-0.29	-0.05	0.03	0.61
Imitative	0.66	-0.10	-0.03	0.18	0.11	0.49
Friendly	0.66	-0.56	-0.32	0.08	0.03	0.86
Gentle	0.65	-0.50	-0.38	0.08	0.08	0.83
Conventional	0.61	-0.15	-0.39	-0.18	0.19	0.62
Intelligent	0.55	0.07	-0.20	0.04	-0.22	0.39
Reckless	-0.50	0.10	0.43	0.41	-0.08	0.62
Jealous	-0.24	0.82	0.20	0.25	0.01	0.83
Stingy/greedy	-0.31	0.79	0.20	0.30	0.01	0.86
Bullying	-0.29	0.78	0.23	0.16	-0.03	0.77
Dominant	-0.34	0.76	0.27	0.09	-0.15	0.80
Aggressive	-0.36	0.71	0.33	0.05	-0.22	0.80
Defiant	-0.32	0.69	0.36	0.10	-0.25	0.78
Manipulative	0.03	0.62	0.06	0.14	-0.40	0.57
Irritable	-0.27	0.58	0.55	-0.07	-0.12	0.74
Excitable	-0.26	0.37	0.75	0.03	-0.06	0.78
Impulsive	-0.30	0.28	0.73	0.20	0.10	0.76
Unemotional	0.04	-0.09	-0.66	-0.13	0.25	0.52
Cool	0.35	-0.28	-0.66	-0.14	0.02	0.65
Disorganized	-0.27	0.30	0.54	0.22	0.07	0.51
Distractible	-0.21	0.13	0.51	0.26	0.06	0.40
Stable	0.40	-0.30	-0.50	0.07	-0.37	0.64
Fearful	0.05	-0.02	0.47	-0.40	0.36	0.51
Thoughtless	-0.28	0.15	0.43	0.40	-0.04	0.45
Erratic	-0.40	0.41	0.43	-0.03	0.18	0.55
Predictable	0.24	-0.21	-0.40	-0.02	0.02	0.27
Curious	0.13	0.15	0.14	0.73	-0.14	0.61
Inquisitive	0.16	0.12	0.11	0.70	-0.07	0.55
Playful	0.22	-0.02	0.28	0.67	-0.16	0.60
Inventive	0.26	0.12	0.00	0.65	-0.05	0.51
Active	0.16	0.27	0.42	0.60	-0.25	0.69
Cautious	0.31	-0.02	0.12	-0.57	0.30	0.53
Timid	0.00	-0.01	0.27	-0.25	0.66	0.58

Autistic	0.02	-0.15	0.06	0.06	0.64	0.44
Depressed	-0.16	-0.04	-0.21	-0.19	0.64	0.51
Vulnerable	0.01	-0.23	-0.06	-0.08	0.57	0.39
Clumsy	-0.11	0.09	0.00	-0.10	0.55	0.33
Lazy	-0.14	-0.18	-0.40	-0.31	0.53	0.59
Submissive	0.40	-0.36	-0.28	-0.12	0.49	0.62
Proportion of variance	0.20	0.14	0.12	0.08	0.08	

Note. $N = 128$. Soc = Sociability, Dom = Dominance, Imp = Impulsiveness, Opn = Openness, Neg = Negative Affect, h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the varimax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S5
Pattern Matrix from the Factor Analysis of Residualized Ratings

Item	Factor		h^2
	I	II	
Friendly	-0.90	0.11	0.81
Gentle	-0.89	0.09	0.80
Sociable	-0.86	0.36	0.84
Sympathetic	-0.80	0.24	0.67
Aggressive	0.79	0.22	0.69
Dominant	0.77	0.22	0.67
Stingy/greedy	0.76	0.28	0.69
Bullying	0.75	0.20	0.63
Affectionate	-0.75	0.20	0.58
Helpful	-0.74	0.42	0.69
Defiant	0.74	0.30	0.67
Sensitive	-0.74	0.12	0.55
Irritable	0.73	0.16	0.57
Jealous	0.72	0.28	0.62
Individualistic	0.72	-0.31	0.58
Excitable	0.70	0.19	0.54
Protective	-0.69	0.38	0.59
Cool	-0.68	-0.16	0.50
Conventional	-0.68	-0.12	0.48
Erratic	0.68	-0.09	0.46
Impulsive	0.67	0.18	0.50
Stable	-0.67	0.24	0.48
Independent	0.66	-0.19	0.46
Disorganized	0.61	0.19	0.43
Dependent/follower	-0.61	0.21	0.40
Reckless	0.58	0.25	0.42
Submissive	-0.57	-0.35	0.48
Intelligent	-0.50	0.29	0.31
Imitative	-0.49	0.31	0.32
Predictable	-0.47	-0.08	0.23
Thoughtless	0.45	0.29	0.30
Distractible	0.45	0.15	0.23
Active	0.23	0.74	0.63
Lazy	-0.09	-0.70	0.51
Curious	0.07	0.64	0.42
Playful	-0.05	0.64	0.40
Solitary	0.60	-0.62	0.69
Inquisitive	0.06	0.61	0.39
Inventive	-0.05	0.61	0.37
Depressed	0.03	-0.59	0.35
Timid	0.15	-0.47	0.24
Manipulative	0.35	0.46	0.36

Vulnerable	-0.11	-0.44	0.21
Clumsy	0.16	-0.38	0.17
Cautious	-0.15	-0.37	0.17
Unemotional	-0.29	-0.37	0.23
Autistic	0.02	-0.35	0.12
Fearful	0.17	-0.32	0.12
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Proportion of variance	0.34	0.13	

Note. $N = 128$. Factors were not assigned labels. h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold. Factor correlation ($r_{I,II}$) = 0.07.

Table S6
Pattern Matrix from the Factor Analysis of Residualized Ratings

Item	Factor				h^2
	I	II	III	IV	
Independent	-0.83	-0.09	-0.07	0.07	0.62
Helpful	0.81	-0.05	-0.19	0.04	0.75
Individualistic	-0.79	0.02	0.22	0.12	0.69
Dependent/follower	0.78	0.09	0.24	0.14	0.61
Sympathetic	0.78	-0.12	0.00	0.02	0.73
Protective	0.75	-0.04	-0.20	0.01	0.64
Imitative	0.71	0.15	0.07	0.13	0.45
Solitary	-0.70	0.04	0.34	-0.19	0.71
Sociable	0.67	-0.34	-0.13	0.17	0.83
Sensitive	0.63	-0.20	-0.05	-0.09	0.58
Friendly	0.59	-0.45	0.14	0.15	0.84
Affectionate	0.57	-0.29	0.08	0.18	0.60
Gentle	0.55	-0.48	0.14	0.15	0.82
Conventional	0.49	-0.24	0.02	-0.26	0.52
Intelligent	0.42	-0.17	-0.34	-0.06	0.37
Excitable	0.04	0.86	0.03	0.00	0.71
Irritable	-0.07	0.80	-0.19	-0.18	0.71
Impulsive	0.00	0.79	0.22	0.20	0.72
Cool	0.09	-0.69	-0.09	-0.13	0.60
Fearful	0.32	0.62	0.39	-0.38	0.51
Stable	0.20	-0.62	-0.37	0.07	0.64
Disorganized	-0.08	0.60	0.13	0.22	0.52
Unemotional	-0.27	-0.59	0.02	-0.17	0.34
Erratic	-0.21	0.59	0.13	-0.08	0.51
Defiant	-0.25	0.59	-0.40	-0.05	0.75
Jealous	-0.24	0.57	-0.27	0.04	0.64
Aggressive	-0.33	0.57	-0.38	-0.09	0.76
Dominant	-0.32	0.55	-0.36	-0.08	0.73
Bullying	-0.30	0.54	-0.27	-0.02	0.65
Stingy/greedy	-0.33	0.51	-0.24	0.11	0.69
Predictable	0.06	-0.49	-0.02	0.00	0.27
Distractible	-0.08	0.42	0.23	0.30	0.35
Autistic	-0.01	0.05	0.68	0.15	0.41
Timid	0.14	0.41	0.64	-0.22	0.58
Manipulative	-0.04	0.32	-0.63	-0.05	0.53
Vulnerable	-0.01	-0.10	0.61	0.02	0.39
Depressed	-0.25	-0.16	0.51	-0.14	0.40
Submissive	0.32	-0.29	0.48	-0.06	0.58
Clumsy	-0.11	0.12	0.43	-0.09	0.24
Lazy	-0.33	-0.37	0.42	-0.26	0.52
Playful	0.26	0.11	0.04	0.72	0.60
Curious	0.09	0.06	-0.06	0.71	0.57

Inquisitive	0.12	0.09	-0.04	0.67	0.52
Cautious	0.45	0.40	0.15	-0.66	0.54
Inventive	0.19	0.05	-0.09	0.60	0.45
Reckless	-0.36	0.24	0.17	0.56	0.61
Active	0.27	0.45	-0.17	0.54	0.68
Thoughtless	-0.16	0.31	0.15	0.47	0.43
Proportion of variance	0.20	0.20	0.09	0.09	

	Factor Correlations			
	I	II	III	IV
I	1.00			
II	-0.52	1.00		
III	0.00	-0.11	1.00	
IV	0.02	0.25	-0.33	1.00

Note. $N = 128$. Factors were not assigned labels. h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S7

Pattern Matrix from the Factor Analysis of Residualized Ratings

Item	Factor					h^2
	Soc	Dom	Imp	Opn	Neg	
Helpful	0.85	0.07	-0.09	0.10	-0.08	0.77
Dependent/follower	0.85	0.02	0.07	0.21	0.34	0.67
Sympathetic	0.84	0.00	-0.13	0.08	0.11	0.77
Protective	0.78	0.08	-0.09	0.06	-0.10	0.66
Individualistic	-0.70	0.13	-0.08	0.15	0.29	0.70
Imitative	0.69	-0.04	0.18	0.14	0.07	0.45
Independent	-0.68	0.31	-0.31	0.14	0.12	0.66
Sensitive	0.64	-0.08	-0.16	-0.05	0.00	0.59
Affectionate	0.63	-0.10	-0.24	0.25	0.18	0.65
Conventional	0.59	0.07	-0.31	-0.17	0.18	0.59
Solitary	-0.57	0.19	-0.13	-0.13	0.46	0.75
Sociable	0.57	-0.35	-0.10	0.13	-0.22	0.84
Intelligent	0.54	0.27	-0.35	0.03	-0.12	0.43
Gentle	0.53	-0.34	-0.26	0.18	0.13	0.83
Jealous	0.02	0.84	0.02	0.16	0.07	0.77
Dominant	-0.11	0.79	0.04	0.01	-0.08	0.79
Stingy/greedy	-0.09	0.78	0.00	0.24	0.08	0.80
Bullying	-0.09	0.75	0.05	0.08	0.01	0.72
Aggressive	-0.15	0.73	0.09	-0.02	-0.14	0.79
Defiant	-0.08	0.73	0.12	0.02	-0.17	0.77
Manipulative	0.12	0.68	-0.11	0.04	-0.36	0.56
Irritable	0.04	0.64	0.38	-0.14	-0.05	0.71
Friendly	0.45	-0.56	-0.07	0.09	-0.04	0.85
Erratic	-0.09	0.47	0.27	-0.03	0.27	0.54
Impulsive	-0.03	0.18	0.68	0.15	0.13	0.72
Cool	0.19	-0.06	-0.67	-0.02	0.08	0.66
Fearful	0.21	-0.07	0.66	-0.48	0.19	0.55
Unemotional	-0.13	0.04	-0.66	-0.05	0.23	0.43
Excitable	0.03	0.34	0.64	-0.04	-0.01	0.71
Stable	0.18	-0.19	-0.47	0.09	-0.34	0.64
Distractible	-0.14	-0.05	0.46	0.24	0.10	0.37
Disorganized	-0.07	0.23	0.46	0.20	0.12	0.52
Predictable	0.12	-0.09	-0.44	0.07	0.08	0.29
Curious	0.17	0.13	-0.01	0.77	0.06	0.61
Inquisitive	0.17	0.08	0.07	0.70	0.03	0.53
Playful	0.23	-0.12	0.22	0.69	0.00	0.59
Inventive	0.30	0.18	-0.06	0.68	0.07	0.51
Cautious	0.44	0.14	0.27	-0.65	0.14	0.54
Active	0.25	0.16	0.38	0.51	-0.18	0.68
Reckless	-0.41	-0.09	0.32	0.50	0.06	0.62
Thoughtless	-0.19	-0.02	0.35	0.43	0.06	0.44
Depressed	-0.10	0.06	-0.25	-0.03	0.68	0.52

Autistic	0.03	-0.16	0.12	0.18	0.67	0.45
Timid	0.15	-0.02	0.39	-0.22	0.59	0.58
Clumsy	0.03	0.18	-0.03	0.00	0.58	0.33
Vulnerable	0.01	-0.23	0.02	0.04	0.58	0.40
Submissive	0.37	-0.21	-0.18	0.01	0.54	0.63
Lazy	-0.24	-0.09	-0.36	-0.18	0.51	0.57
Proportion of variance	0.18	0.15	0.12	0.09	0.08	

	Factor Correlations				
	Soc	Dom	Imp	Opn	Neg
Soc	1.00				
Dom	-0.56	1.00			
Imp	-0.40	0.50	1.00		
Opn	-0.02	0.21	0.24	1.00	
Neg	-0.17	-0.12	0.07	-0.38	1.00

Note. $N = 128$. Soc = Sociability, Dom = Dominance, Imp = Impulsiveness, Opn = Openness, Neg = Negative Affect, h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S8

Congruence Coefficients for Comparison of Factors from Raw and Residualized Scores

	MR5	MR1	MR4	MR2	MR3
ML1	0.99	-0.16	-0.11	0.09	-0.08
ML4	-0.12	0.98	0.11	0.10	-0.07
ML5	-0.10	0.23	0.98	0.11	-0.04
ML2	0.15	0.07	0.06	0.99	-0.02
ML3	0.03	-0.06	0.04	-0.04	0.98

Table S9
Pattern Matrix from the Factor Analysis of Rater 1's Ratings

Item	Factor					h^2
	Imp	Soc	Dom	Opn	Neg	
Impulsive	0.94	0.06	-0.07	-0.01	0.05	0.77
Excitable	0.91	0.02	-0.10	-0.03	0.01	0.74
Cool	-0.74	0.01	-0.08	0.04	0.03	0.63
Erratic	0.74	0.05	0.15	-0.08	-0.01	0.65
Distractible	0.69	-0.21	-0.07	0.20	0.05	0.62
Stable	-0.68	-0.11	-0.26	0.05	-0.08	0.61
Unemotional	-0.67	0.10	-0.02	-0.06	0.27	0.67
Disorganized	0.65	-0.19	-0.01	0.09	0.07	0.58
Predictable	-0.64	0.21	0.15	-0.28	0.03	0.53
Reckless	0.64	-0.33	-0.03	0.22	0.03	0.72
Fearful	0.60	0.26	0.02	-0.30	0.25	0.47
Irritable	0.58	0.14	0.36	-0.18	-0.26	0.69
Thoughtless	0.57	-0.19	0.02	0.28	0.06	0.50
Timid	0.54	0.08	0.16	-0.06	0.42	0.51
Clumsy	0.32	-0.02	-0.11	-0.09	0.30	0.20
Protective	0.20	0.87	-0.13	0.07	-0.35	0.77
Helpful	0.00	0.85	-0.03	0.11	-0.24	0.81
Intelligent	-0.12	0.78	0.15	-0.09	-0.12	0.58
Sympathetic	-0.03	0.76	-0.15	0.03	-0.17	0.75
Affectionate	0.00	0.63	-0.19	0.18	-0.12	0.65
Sensitive	-0.24	0.61	0.04	0.13	0.24	0.72
Dependent/follower	-0.02	0.57	-0.07	0.39	0.20	0.65
Independent	0.13	-0.54	0.13	0.07	-0.01	0.50
Individualistic	0.24	-0.48	0.23	0.15	0.18	0.61
Imitative	-0.15	0.46	0.11	0.33	0.25	0.46
Gentle	-0.28	0.45	-0.29	0.13	0.08	0.83
Cautious	0.29	0.45	-0.03	-0.34	0.28	0.40
Solitary	0.21	-0.42	0.16	-0.22	0.26	0.61
Conventional	-0.38	0.41	0.03	-0.10	0.36	0.67
Sociable	-0.25	0.40	-0.38	0.19	-0.06	0.82
Bullying	0.02	0.01	0.91	0.05	-0.02	0.84
Aggressive	0.03	-0.05	0.86	-0.01	-0.11	0.88
Jealous	-0.03	-0.07	0.86	0.21	0.13	0.76
Dominant	-0.01	-0.05	0.85	0.03	-0.09	0.80
Stingy/greedy	0.04	-0.21	0.78	0.23	0.20	0.82
Defiant	0.07	0.02	0.78	0.02	-0.13	0.70
Manipulative	-0.17	0.47	0.51	0.23	-0.21	0.42
Friendly	-0.30	0.23	-0.42	0.25	0.22	0.83
Curious	0.09	0.10	0.07	0.80	0.07	0.61
Inquisitive	-0.01	0.11	0.03	0.78	0.02	0.64
Inventive	-0.04	0.14	0.12	0.76	0.15	0.57
Playful	0.16	0.12	-0.05	0.76	0.01	0.58

Active	0.36	0.01	0.14	0.69	-0.03	0.59
Autistic	0.06	-0.09	-0.07	0.39	0.66	0.41
Vulnerable	0.03	-0.19	-0.04	0.01	0.51	0.27
Submissive	-0.14	0.31	-0.14	0.06	0.47	0.54
Lazy	-0.30	-0.06	-0.02	-0.19	0.43	0.34
Depressed	-0.18	-0.21	0.27	-0.12	0.43	0.29
Proportion of variance	0.19	0.16	0.13	0.09	0.05	

	Factor Correlations				
	Imp	Soc	Dom	Opn	Neg
Imp	1.00				
Soc	-0.62	1.00			
Dom	0.51	-0.55	1.00		
Opn	-0.15	0.18	-0.08	1.00	
Neg	-0.04	0.15	-0.17	-0.34	1.00

Note. $N = 128$. Imp = Impulsiveness, Soc = Sociability, Dom = Dominance, Opn = Openness, Neg = Negative Affect, h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S10
Pattern Matrix from Second-Order Factor Analysis from Rater 1's Ratings

First-order Factor	Second-order Factor		h^2
	I	II	
Sociability	-0.82	0.03	0.68
Impulsiveness	0.76	0.07	0.57
Dominance	0.66	-0.07	0.45
Openness	-0.02	< 1.00 ¹	1.00
Negative Affect	-0.25	-0.38	0.18
Proportion of variance	0.35	0.23	

Note. $N = 128$. I = Pro-sociality (reversed), II = Boldness, h^2 = communalities. ¹ When rounded to three decimal places, this loading was equal to 0.995. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold. Factor correlation ($r_{I, II}$) = -0.13.

Table S11
Pattern Matrix from the Factor Analysis of Rater 2's Ratings

Item	Factor				h^2
	I	II	III	IV	
Aggressive	0.82	0.30	-0.19	-0.16	0.64
Irritable	0.80	-0.01	0.10	-0.08	0.59
Excitable	0.79	0.17	0.08	-0.09	0.56
Dominant	0.79	0.33	-0.28	-0.13	0.67
Defiant	0.75	0.24	-0.09	-0.15	0.51
Gentle	-0.73	0.31	0.07	0.12	0.71
Manipulative	0.72	0.40	-0.13	-0.10	0.54
Submissive	-0.70	-0.13	0.03	-0.02	0.49
Affectionate	-0.64	0.33	0.13	0.07	0.66
Friendly	-0.58	0.20	0.38	0.11	0.70
Vulnerable	-0.54	-0.10	-0.08	-0.10	0.34
Bullying	0.53	0.01	-0.17	0.03	0.36
Sympathetic	-0.52	0.18	0.35	-0.04	0.59
Stingy/greedy	0.51	-0.04	-0.20	0.16	0.43
Jealous	0.48	0.01	-0.16	0.08	0.31
Lazy	-0.48	-0.43	-0.28	-0.21	0.62
Impulsive	0.48	-0.29	0.16	0.27	0.47
Depressed	-0.46	-0.39	-0.24	-0.13	0.47
Cool	-0.45	0.39	-0.21	-0.29	0.52
Helpful	-0.40	0.30	0.38	-0.03	0.59
Predictable	-0.31	0.02	-0.13	0.30	0.11
Conventional	-0.31	0.25	0.13	-0.25	0.33
Intelligent	0.20	0.73	-0.07	-0.01	0.49
Timid	-0.38	-0.64	0.08	-0.21	0.58
Sensitive	-0.16	0.62	0.04	-0.18	0.49
Stable	-0.10	0.57	0.15	-0.07	0.45
Clumsy	-0.25	-0.54	-0.08	0.06	0.32
Sociable	-0.34	0.43	0.37	0.09	0.68
Protective	-0.37	0.42	0.33	0.01	0.63
Inventive	0.05	0.41	-0.01	0.16	0.21
Erratic	0.26	-0.34	0.04	-0.09	0.21
Autistic	-0.14	-0.30	-0.06	-0.02	0.11
Disorganized	0.20	-0.27	0.18	0.19	0.16
Independent	0.07	0.10	-0.85	0.08	0.69
Individualistic	0.06	-0.04	-0.84	0.08	0.75
Imitative	-0.15	-0.05	0.70	-0.07	0.53
Solitary	0.05	-0.28	-0.61	-0.05	0.63
Dependent/follower	-0.42	-0.12	0.49	-0.12	0.48
Unemotional	0.02	-0.06	-0.31	-0.11	0.14
Reckless	-0.06	-0.06	-0.07	0.83	0.63
Thoughtless	-0.01	-0.02	0.00	0.74	0.54
Curious	0.10	0.28	-0.06	0.72	0.70

Playful	-0.02	0.20	0.17	0.66	0.60
Cautious	0.29	0.01	0.15	-0.65	0.35
Inquisitive	0.09	0.05	0.06	0.46	0.27
Fearful	0.13	-0.42	0.26	-0.44	0.35
Active	0.37	0.26	0.31	0.40	0.61
Distractible	0.04	-0.07	0.04	0.38	0.15
Proportion of variance	0.19	0.10	0.10	0.09	

	Factor Correlations			
	I	II	III	IV
I	1.00			
II	-0.17	1.00		
III	-0.19	0.40	1.00	
IV	0.36	0.16	0.14	1.00

Note. $N = 128$. Factors were not assigned labels. h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S12
Pattern Matrix from the Factor Analysis of Rater 3's Ratings

Item	Factor			h^2
	I	II	III	
Aggressive	-0.89	-0.08	-0.05	0.76
Gentle	0.82	0.15	-0.03	0.69
Dominant	-0.82	0.02	0.04	0.68
Bullying	-0.80	0.03	0.00	0.65
Defiant	-0.80	0.06	-0.02	0.65
Stingy/greedy	-0.80	0.11	-0.05	0.65
Friendly	0.78	0.19	0.08	0.60
Affectionate	0.72	0.19	0.07	0.51
Irritable	-0.71	-0.05	0.20	0.61
Submissive	0.68	-0.11	0.25	0.47
Jealous	-0.66	0.12	0.17	0.54
Cautious	0.58	-0.19	0.01	0.39
Sociable	0.58	0.39	-0.18	0.54
Intelligent	0.55	0.07	0.00	0.31
Sympathetic	0.55	0.49	0.14	0.48
Reckless	-0.52	0.02	0.17	0.34
Excitable	-0.52	-0.01	0.48	0.61
Manipulative	-0.49	0.16	-0.18	0.27
Cool	0.47	-0.19	-0.46	0.58
Protective	0.47	0.36	0.00	0.32
Autistic	0.46	-0.18	0.34	0.30
Sensitive	0.46	0.19	0.00	0.23
Erratic	-0.45	-0.04	0.14	0.25
Disorganized	-0.43	0.09	0.08	0.22
Conventional	0.40	0.03	-0.24	0.27
Thoughtless	-0.39	0.25	0.20	0.31
Solitary	-0.16	-0.70	0.14	0.53
Active	-0.32	0.59	0.09	0.51
Depressed	0.24	-0.58	0.33	0.50
Lazy	0.21	-0.54	-0.18	0.41
Helpful	0.46	0.52	0.04	0.43
Imitative	0.17	0.51	0.04	0.28
Playful	0.15	0.50	0.07	0.26
Inquisitive	-0.15	0.45	-0.15	0.25
Independent	-0.33	-0.41	-0.16	0.25
Curious	-0.07	0.35	0.13	0.15
Clumsy	0.14	-0.30	0.27	0.17
Dependent/follower	0.10	0.24	0.02	0.06
Inventive	-0.10	0.18	-0.01	0.04
Timid	0.20	-0.12	0.72	0.51
Stable	0.06	0.04	-0.64	0.43
Impulsive	-0.19	0.15	0.62	0.50

Unemotional	0.32	-0.25	-0.61	0.64
Vulnerable	0.35	-0.22	0.57	0.42
Predictable	0.30	-0.08	-0.47	0.39
Fearful	0.05	0.00	0.42	0.17
Distractible	-0.08	0.23	0.39	0.23
Individualistic	-0.22	-0.14	0.30	0.19
Proportion of variance	0.24	0.08	0.08	

	Factor Correlations		
	I	II	III
I	1.00	-0.08	-0.24
II	-0.08	1.00	-0.02
III	-0.24	-0.02	1.00

Note. $N = 81$. Factors were not assigned labels. $h^2 =$ communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S13

Pattern Matrix from the Factor Analysis of The Weighted Correlation Matrix (P_w)

Item	Factor			h^2
	Pro-sociality	Impulsiveness	Boldness	
Friendly	0.82	-0.06	-0.01	0.71
Aggressive	-0.79	0.01	0.40	0.72
Dominant	-0.78	-0.02	0.42	0.69
Gentle	0.75	-0.19	-0.01	0.71
Sociable	0.73	-0.10	0.26	0.70
Bullying	-0.70	0.04	0.32	0.57
Affectionate	0.70	-0.08	0.06	0.56
Sympathetic	0.70	-0.05	0.11	0.55
Stingy/greedy	-0.66	0.13	0.29	0.58
Defiant	-0.66	0.06	0.39	0.57
Helpful	0.65	-0.05	0.26	0.56
Protective	0.64	-0.01	0.25	0.51
Jealous	-0.59	0.12	0.30	0.48
Independent	-0.58	-0.06	-0.10	0.33
Dependent/follower	0.56	0.03	0.05	0.31
Solitary	-0.55	-0.03	-0.45	0.55
Irritable	-0.54	0.30	0.20	0.55
Submissive	0.54	-0.09	-0.35	0.42
Imitative	0.51	0.08	0.20	0.30
Individualistic	-0.50	0.14	-0.20	0.39
Sensitive	0.45	-0.25	0.20	0.41
Impulsive	-0.12	0.68	-0.09	0.54
Reckless	-0.11	0.63	0.06	0.47
Cool	0.23	-0.61	0.01	0.55
Thoughtless	-0.01	0.61	0.13	0.41
Distractible	0.02	0.60	-0.03	0.34
Unemotional	-0.04	-0.59	-0.04	0.33
Disorganized	-0.16	0.47	-0.05	0.31
Excitable	-0.33	0.47	0.08	0.48
Stable	0.23	-0.45	0.33	0.44
Predictable	0.10	-0.45	0.07	0.24
Conventional	0.35	-0.37	-0.02	0.38
Erratic	-0.31	0.36	-0.15	0.35
Manipulative	-0.37	-0.21	0.60	0.39
Timid	0.06	0.33	-0.58	0.38
Active	0.10	0.51	0.52	0.56
Depressed	-0.12	-0.12	-0.51	0.31
Curious	0.18	0.31	0.49	0.37
Lazy	-0.04	-0.36	-0.48	0.40
Vulnerable	0.22	0.10	-0.45	0.21
Playful	0.39	0.40	0.43	0.44
Clumsy	-0.01	0.12	-0.42	0.18

Inquisitive	0.19	0.23	0.42	0.27
Fearful	-0.02	0.23	-0.38	0.19
Inventive	0.20	0.13	0.38	0.21
Autistic	0.17	0.09	-0.33	0.11
Intelligent	0.27	-0.22	0.32	0.29
Cautious	0.05	-0.20	-0.25	0.12
Proportion of variance	0.22	0.11	0.10	

	Factor Correlations		
	Pro-sociality	Impulsiveness	Boldness
Pro-sociality	1.00		
Impulsiveness	-0.44	1.00	
Boldness	0.11	0.11	1.00

Note. $N = 128$. $h^2 =$ communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to |0.4| are in bold.

Table S14

Pattern Matrix from the Factor Analysis of the Weighted Correlation Matrix (P_w)

Item	Factor					h^2
	Soc	Imp	Dom	Opn	Neg	
Helpful	0.85	0.02	0.08	0.01	0.00	0.66
Sympathetic	0.78	0.01	-0.03	0.01	0.10	0.62
Protective	0.76	0.05	0.00	0.03	-0.05	0.57
Affectionate	0.65	-0.12	-0.07	0.13	0.18	0.61
Dependent/follower	0.63	0.03	0.03	0.08	0.21	0.38
Independent	-0.63	-0.21	0.19	0.15	0.16	0.42
Solitary	-0.62	-0.08	0.07	-0.10	0.33	0.59
Sociable	0.60	-0.13	-0.18	0.16	-0.11	0.70
Imitative	0.59	0.09	0.01	0.10	0.02	0.32
Sensitive	0.57	-0.24	0.10	0.03	0.05	0.44
Gentle	0.56	-0.27	-0.16	0.15	0.22	0.75
Friendly	0.56	-0.09	-0.32	0.11	0.08	0.70
Individualistic	-0.54	0.00	0.17	0.18	0.31	0.48
Conventional	0.50	-0.32	0.13	-0.17	0.17	0.46
Intelligent	0.43	-0.20	0.13	0.04	-0.12	0.29
Impulsive	-0.02	0.75	-0.03	0.00	0.03	0.56
Cool	0.09	-0.71	-0.01	0.03	0.09	0.58
Unemotional	-0.19	-0.67	-0.01	-0.02	0.01	0.37
Excitable	0.03	0.62	0.22	-0.13	-0.09	0.55
Distractible	-0.03	0.54	-0.05	0.22	0.11	0.34
Predictable	0.02	-0.51	0.03	0.04	0.01	0.26
Fearful	0.22	0.49	0.01	-0.47	0.18	0.40
Stable	0.11	-0.48	-0.11	0.05	-0.37	0.50
Thoughtless	-0.13	0.47	-0.05	0.43	0.05	0.47
Reckless	-0.29	0.47	-0.09	0.45	0.08	0.56
Irritable	-0.04	0.47	0.40	-0.18	-0.17	0.63
Disorganized	-0.12	0.46	0.01	0.09	0.05	0.31
Active	0.23	0.45	0.10	0.39	-0.24	0.56
Erratic	-0.16	0.44	0.09	-0.13	0.05	0.36
Jealous	0.00	0.06	0.79	0.17	0.23	0.66
Dominant	-0.16	0.01	0.74	0.02	-0.08	0.73
Bullying	-0.12	0.03	0.73	0.06	0.06	0.65
Stingy/greedy	-0.17	0.04	0.71	0.20	0.16	0.70
Aggressive	-0.15	0.07	0.70	-0.04	-0.13	0.74
Manipulative	0.18	-0.18	0.61	0.05	-0.22	0.40
Defiant	-0.13	0.12	0.56	-0.02	-0.17	0.58
Curious	0.18	0.06	0.20	0.69	0.08	0.54
Playful	0.28	0.21	-0.03	0.62	-0.01	0.53
Inquisitive	0.12	0.04	0.05	0.53	-0.06	0.35
Cautious	0.34	0.04	0.11	-0.52	0.10	0.32
Inventive	0.18	-0.05	0.13	0.49	0.05	0.28
Vulnerable	0.14	0.05	-0.01	0.01	0.60	0.35

Depressed	-0.17	-0.17	0.08	-0.10	0.57	0.43
Timid	0.09	0.41	-0.03	-0.21	0.55	0.53
Autistic	0.04	0.00	-0.02	0.12	0.50	0.22
Lazy	-0.19	-0.43	-0.01	-0.13	0.47	0.48
Submissive	0.37	-0.12	-0.15	-0.02	0.45	0.51
Clumsy	-0.07	0.12	-0.03	-0.10	0.38	0.22
Proportion of variance	0.16	0.12	0.10	0.06	0.06	

	Factor Correlations				
	Soc	Imp	Dom	Opn	Neg
Soc	1.00				
Imp	-0.51	1.00			
Dom	-0.49	0.48	1.00		
Opn	0.15	0.10	0.09	1.00	
Neg	-0.10	-0.03	-0.26	-0.39	1.00

Note. $N = 128$. Soc = Sociability, Dom = Dominance, Imp = Impulsiveness, Opn = Openness, Neg = Negative Affect, h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold.

Table S15

Pattern Matrix from Second-Order Factor Analysis from the Weighted Correlation Matrix (P_w)

First-order factor	Second-order factor		
	Pro-sociality (reversed)	Boldness	h^2
Sociability	-0.79	0.25	0.66
Impulsiveness	0.66	0.01	0.44
Dominance	0.70	0.24	0.57
Openness	-0.03	0.53	0.28
Negative Affect	-0.04	-0.74	0.56
Proportion of variance	0.31	0.19	

Note. $N = 128$. h^2 = communalities. Factors extracted using a maximum likelihood estimation and rotated using the promax procedure. Factor loadings greater than or equal to $|0.4|$ are in bold. Factor correlation ($r_{I,II}$) = 0.08.

Table S16
Effects of G840C Genotype on Personality Domains

	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Sociability				
Intercept	0.85	0.30	2.81	0.01
Male vs. Female	-0.75	0.22	-3.49	< 0.001
Age	-0.01	0.03	-0.34	0.74
GC vs. CC	-0.22	0.23	-0.95	0.35
GG vs. CC	-0.33	0.27	-1.21	0.23
Dominance				
Intercept	-0.94	0.30	-3.08	0.00
Male vs. Female	0.70	0.22	3.23	0.00
Age	-0.01	0.03	-0.20	0.84
GC vs. CC	0.51	0.23	2.19	0.03
GG vs. CC	0.58	0.27	2.12	0.04
Impulsiveness				
Intercept	-0.59	0.30	-1.96	0.05
Male vs. Female	0.65	0.22	3.01	0.00
Age	-0.02	0.03	-0.68	0.50
GC vs. CC	0.17	0.23	0.73	0.47
GG vs. CC	0.37	0.27	1.35	0.18
Openness				
Intercept	-0.08	0.30	-0.26	0.80
Male vs. Female	0.45	0.22	2.08	0.04
Age	-0.05	0.03	-1.41	0.16
GC vs. CC	-0.03	0.23	-0.12	0.91
GG vs. CC	-0.09	0.27	-0.31	0.75
Negative Affect				
Intercept	0.47	0.32	1.49	0.14
Male vs. Female	-0.14	0.23	-0.61	0.54
Age	-0.06	0.03	-1.59	0.11
GC vs. CC	-0.10	0.24	-0.41	0.69
GG vs. CC	-0.16	0.29	-0.55	0.58
Pro-sociality				
Intercept	0.94	0.30	3.16	0.00
Male vs. Female	-0.81	0.21	-3.83	< 0.001
Age	0.01	0.03	0.18	0.86
GC vs. CC	-0.37	0.23	-1.63	0.11
GG vs. CC	-0.51	0.27	-1.90	0.06
Boldness				
Intercept	-0.31	0.31	-1.01	0.32
Male vs. Female	0.36	0.22	1.62	0.11
Age	0.00	0.03	0.05	0.96
GC vs. CC	0.04	0.24	0.16	0.87
GG vs. CC	0.03	0.28	0.12	0.90

Note. *N* = 122.

Table S17
Effects of G840C Genotype on Personality Domains

	Genotype							
	C Present vs. Absent				G Present vs. Absent			
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Sociability								
Intercept	0.49	0.28	1.76	0.08	0.86	0.30	2.87	0.01
Male vs. Female	-0.74	0.21	-3.43	< 0.001	-0.75	0.21	-3.50	< 0.001
Age	-0.01	0.03	-0.23	0.82	-0.01	0.03	-0.40	0.69
Genotype	0.17	0.21	0.79	0.43	-0.25	0.22	-1.13	0.26
Impulsiveness								
Intercept	-0.28	0.29	-1.00	0.32	-0.94	0.30	-3.12	0.00
Male vs. Female	0.66	0.22	3.02	0.00	0.70	0.22	3.24	0.00
Age	-0.01	0.03	-0.44	0.66	-0.01	0.03	-0.16	0.87
Genotype	-0.20	0.21	-0.93	0.36	0.53	0.22	2.37	0.02
Dominance								
Intercept	-0.20	0.28	-0.72	0.47	-0.61	0.30	-2.03	0.04
Male vs. Female	0.64	0.21	2.97	0.00	0.65	0.22	3.01	0.00
Age	-0.03	0.03	-0.77	0.44	-0.02	0.03	-0.57	0.57
Genotype	-0.24	0.21	-1.16	0.25	0.23	0.22	1.01	0.31
Openness								
Intercept	-0.17	0.28	-0.60	0.55	-0.07	0.30	-0.24	0.81
Male vs. Female	0.45	0.21	2.10	0.04	0.45	0.22	2.09	0.04
Age	-0.05	0.03	-1.41	0.16	-0.05	0.03	-1.46	0.15
Genotype	0.07	0.21	0.31	0.76	-0.04	0.22	-0.20	0.84
Negative Affect								
Intercept	0.30	0.29	1.03	0.31	0.48	0.32	1.52	0.13
Male vs. Female	-0.13	0.23	-0.58	0.56	-0.14	0.23	-0.61	0.54
Age	-0.05	0.03	-1.56	0.12	-0.06	0.03	-1.64	0.10
Genotype	0.08	0.22	0.38	0.70	-0.12	0.23	-0.49	0.62
Pro-sociality								
Intercept	0.38	0.28	1.38	0.17	0.96	0.30	3.22	0.00
Male vs. Female	-0.79	0.21	-3.69	< 0.001	-0.81	0.21	-3.84	< 0.001
Age	0.01	0.03	0.37	0.72	0.00	0.03	0.10	0.92
Genotype	0.23	0.21	1.11	0.27	-0.41	0.22	-1.87	0.06
Boldness								
Intercept	-0.28	0.29	-0.96	0.34	-0.31	0.31	-1.01	0.31
Male vs. Female	0.36	0.22	1.62	0.11	0.36	0.22	1.63	0.11
Age	0.00	0.03	0.03	0.98	0.00	0.03	0.05	0.96
Genotype	-0.01	0.22	-0.03	0.98	0.04	0.23	0.16	0.87

Note. *N* = 122.

Table S18
Effects of T901A Genotype on Personality Domains

	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Sociability				
Intercept	0.73	0.24	3.12	0.00
Male vs. Female	-0.72	0.21	-3.43	< 0.001
Age	0.01	0.03	0.17	0.87
T allele present	-0.26	0.19	-1.39	0.17
Impulsiveness				
Intercept	-0.59	0.23	-2.50	0.01
Male vs. Female	0.64	0.21	3.07	0.00
Age	-0.03	0.03	-0.89	0.38
T allele present	0.29	0.19	1.54	0.13
Dominance				
Intercept	-0.37	0.23	-1.58	0.12
Male vs. Female	0.64	0.21	3.07	0.00
Age	-0.04	0.03	-1.19	0.24
T allele present	0.05	0.19	0.27	0.79
Openness				
Intercept	-0.09	0.25	-0.36	0.72
Male vs. Female	0.59	0.22	2.67	0.01
Age	-0.05	0.03	-1.34	0.18
T allele present	-0.20	0.20	-0.99	0.32
Negative Affect				
Intercept	0.35	0.25	1.42	0.16
Male vs. Female	-0.15	0.22	-0.66	0.51
Age	-0.05	0.03	-1.49	0.14
T allele present	0.02	0.20	0.10	0.92
Pro-sociality				
Intercept	0.67	0.23	2.92	0.00
Male vs. Female	-0.77	0.20	-3.79	< 0.001
Age	0.03	0.03	0.87	0.39
T allele present	-0.25	0.19	-1.36	0.18
Boldness				
Intercept	-0.25	0.25	-1.02	0.31
Male vs. Female	0.45	0.22	2.03	0.05
Age	0.00	0.03	0.00	> 0.99
T allele present	-0.14	0.20	-0.67	0.50

Note. *N* = 123

References

- Inoue-Murayama, M., Yokoyama, C., Yamanashi, Y., & Weiss, A. (2018). Common marmoset (*Callithrix jacchus*) personality, subjective well-being, hair cortisol level, and *AVPR1a*, *OPRM1*, and *DAT* genotypes. *Scientific Reports*, *8*, Article 10255. <https://doi.org/10.1038/s41598-018-28112-7>
- Iwanicki, S., & Lehmann, J. (2015). Behavioral and trait rating assessments of personality in common marmosets (*Callithrix jacchus*). *Journal of Comparative Psychology*, *129*(3), 205-217. <https://doi.org/10.1037/a0039318>
- Koski, S. E., Buchanan-Smith, H., Ash, H., Burkart, J., Bugnyar, T., & Weiss, A. (2017). Common marmoset (*Callithrix jacchus*) personality. *Journal of Comparative Psychology*, *131*(4), 326-336. <https://doi.org/10.1037/com0000089>