Table S1. Results of the sensitivity analyses.

Construct	k	r	95%CI	Q	df	I²(%) within-studies	I²(%) between-studies	Removed studies (outcome)
Negative emotionality	28	.134**	0.09/0.17	36.9	27	0	35.2	Clifford et al. 2013 (ASD) Garon et al. 2016 (ASD) Gartstein et al. 2012 (internalising) Lahey et al. 2008 (externalising)
Self-regulation	12	-.195**	-0.27/-0.12	12.6	11	0.0	18.4	Clifford et al. 2013 (ASD) Gartstein et al. 2012 (externalising)
Activity level	10	.075*	0.04/0.11	13.4	9	36.1	0	Bolton et al. 2012 (ASD) Shephard et al. 2019 (ADHD) Sayal et al. 2014 (unspecified psychopathology)
Behavioural inhibition	13	.087*	0.01/0.16	47.3**	12	22.9	61.0	Shepahard et al. 2019 (ASD)
Extraversion/surgency	9	-0.035	-0.12/0.06	6.1	8	0	0	Garon et al. 2016 (ASD) Lahey et al. 2008 (externalising)

k = number of effect sizes after extreme effect sizes were removed, N = sample size, r = correlation coefficient, CI = confidence interval, df = degrees of freedom, Q and I² = indices of heterogeneity.
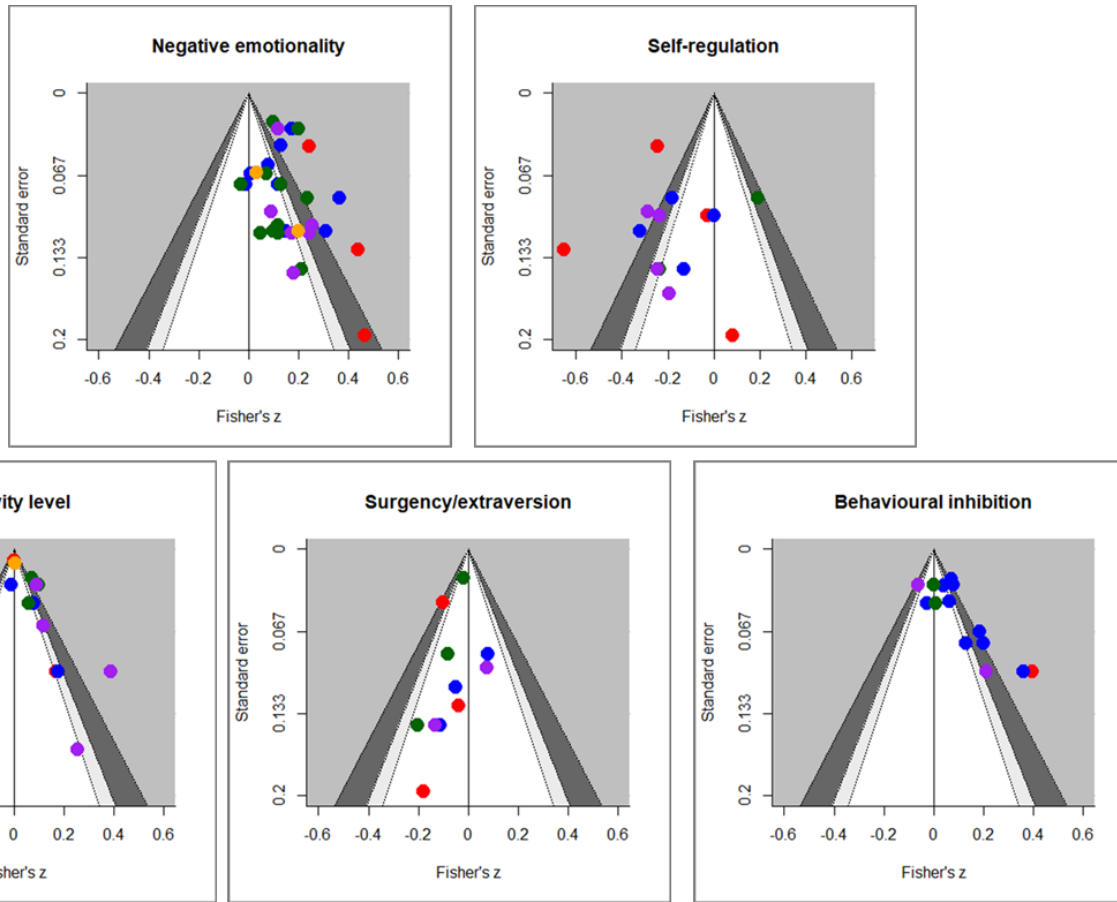
Asterisks indicate * p < .05 and ** p < .001.

Table S2. Results of the moderator analyses for the five temperament constructs.

Moderator	Negative emotionality		Self-regulation		Activity level		Surgency/ extraversion		Behavioural inhibition	
	β	95%CI	β	95%CI	β	95%CI	β	95%CI	β	95%CI
Timing of temperament assessment (early vs. late)	-0.098	-0.22/ 0.03	0.099	-0.29/0.46	-0.175*	-0.31/-0.03	0.111	-0.16/0.37	-0.147	-0.30/0.02
Informant	S: 0.057 O: -0.086	-0.25/0.35 -0.19/0.02	-0.086	-0.41/0.26	0.225*	0.06/0.38	-0.136	-0.38/0.16	0.052	-0.16/0.26
Lag	-0.001	0.00/0.00	0.006	0.00/0.02	0.00	0.00/0.00	0.004	0.00/0.01	0.00	0.00/0.00

β = effect estimate, CI = confidence interval, asterisks indicate, S = self, O = other, * p < .05 and ** p < .001.

Table S3. Results of the comparisons between the magnitudes
of the key correlations.

Construct pair	z-score	p value
Negative emotionality & self-regulation	-1.23	.219
Negative emotionality & activity level	5.61	< .001
Negative emotionality & extraversion/surgency	4.98	< .001
Negative emotionality & behavioural inhibition	3.09	.002
Self-regulation & activity level	3.89	.001
Self-regulation & extraversion/surgency	4.32	< .001
Self-regulation & behavioural inhibition	2.94	.003

Figure S1. Contour-enhanced funnel plots for the five temperament constructs. Effects in the white area have p ≥ .10, effects in the light grey area have p-value

between p = .10 and p = .05, effects in the dark grey are have p-values between p = .05 and p = .001 and effects in the mid-grey area have p-value ≤ .001.

Colours indicate psychopathology domain: red = ASD, blue = internalising, green = externalising, purple = ADHD, orange = unspecified psychopathology.