Data supplement I Summary of heritability analyses using Social and Communication Disorders Checklist data from twins. (Values show proportions of phenotypic variance, with 95% CIs in parentheses; *A*, additive genetic influences; *C*, shared environmental influences; *E*, unique environmental influences)

Model[1]	Females			Males			Female-specific	Male-specific	χ^2	d.f.	P	AIC
	A	*C*	*E*	*A*	*C*	*E*	*A*	*A*				
I	0.68 (0.44, 0.78)	0.05 (0.00, 0.26)	0.27 (0.22, 0.35)	0.55 (0.26, 0.79)	0.19 (0.00, 0.45)	0.26 (0.20, 0.35)			5.34	9	0.80	−12.66
II	0.67 (0.13, 0.78)	0.05 (0.00, 0.26)	0.28 (0.22, 0.35)	0.55 (0.26, 0.79)	0.19 (0.00, 0.79)	0.26 (0.00, 0.45)	0.00 (0.00, 0.43)		5.34	8	0.72	−10.66
III	0.67 (0.44, 0.77)	0.05 (0.00, 0.26)	0.28 (0.22, 0.36)	0.55 (0.10, 0.79)	0.19 (0.00, 0.45)	0.26 (0.19, 0.34)		0.00 (0.00, 0.00)	5.08	8	0.75	−10.90

Model[1]	Males and females			χ^2	d.f.	P	AIC
	A	*C*	*E*				
IV[2]	0.65 (0.46, 0.77)	0.08 (0.00, 0.25)	0.27 (0.22, 0.32)	6.05	11	0.87	−15.95
V	0.74 (0.68, 0.78)		0.26 (0.22, 0.32)	7.09	13	0.90	−18.91

AIC, Akaike's Information Criterion; *K*, scalar multiplier applied to female data.

1. Type of model:
    I: common effects gender limitation model − estimates *ACE* separately for males and females;
    II: general gender limitation model − separate *ACE* for males and females, as well as female-specific additive genetic effects;
    III: general gender limitation model − separate *ACE* for males and females as well as male-specific additive genetic effects;
    IV: scalar gender limitation model − fixes *ACE* same in males and females and includes *K* (a scalar amplification or dampening of phenotypic traits);
    V: fixes *A* and *E* same in males and females and fixes *C* at zero (best fitting model).
2. A scalar multiplier *K*=0.98 was applied to the female data.