

Supporting Information:

Table S1. Complete assessment schedule for the monkey infants whose social testing is presented in the current research report.

Table S2. Monoamine metabolites in CSF of 4-month old rhesus monkey infants

Table S3. [¹¹C]-Raclopride binding potentials from PET imaging evaluating of DRD2 in striatum of 12-month old infants.

Table S4. Definition of temperament descriptors for ratings of temperament of 3-4 month old infants.

Table S1. Complete Assessment Schedule

Age	Sessions	Assessment	<u>Apical variable</u>
Day of birth	1	CBC, blood samples for iron status and lymphocyte assay, morphometrics	<u>Body weight, hemoglobin</u>
2-5 weeks	1/week	Oral iron supplement/placebo	
3-4 months	1 day	Biobehavioral assessment Home cage behavior Cortisol response Novel object contact Human Intruder Adult nonsocial/aggression video Temperament rating	<u>Not reported</u> <u>Not reported</u> <u>Not reported</u> <u>Not reported</u> <u>Time looking at nonsocial and aggressive video segments</u> <u>Rating on 16 temperamen scales</u>
4 months	1	CSF sample	<u>5HIAA, HVA</u>
6 months	1	CBC, blood samples for iron status, morphometrics	<u>Body weight, hemoglobin</u>
4-6 months	1	Weaning	
4-8 months	3/week	WGTA training	
7-8 months	2	Social buffering	<u>Change in plasma cortisol</u>
8-12 months	1-2/week	Social dyadic interaction	<u>Affiliation behavior</u>
8-11 months	3-5/week	Reward devaluation (WGTA)	<u>Not reported</u>
11 months	3	Reward delay (WGTA)	<u>Not reported</u>
11-12 months	2	Social intruder	<u>Proximity to intruder</u>
12 months	1	CBC, blood samples for iron status, morphometrics	<u>Body weight, hemoglobin</u>
12 months	2 days	Home cage activity monitoring	<u>Not reported</u>
12-14 months	3	Picture-elicited aggression	<u>Fear, aggressive behavior</u>
14-18 month	5/week	Fixed Interval and Continuous Performance Test (operant training to criteria and drug response)	<u>Not reported</u>
16-18 months	5/week	Cognitive puzzles and mazes	<u>Not reported</u>
18 months	5/week	Reward discounting	<u>Not reported</u>
18-24 months	1	PET scan	<u>Binding potential</u>
22.5 months	1	CBC, blood samples for iron status, morphometrics	<u>Body weight, hemoglobin</u>
22.5 months	2 days	Home cage activity monitoring	<u>Not reported</u>

TABLE S2. CSF monoamine metabolites at 4 months of age

	hi-MAOA ID n=5	hi-MAOA IS n=4	low-MAOA ID n=4	low-MAOA IS n=4
5HIAA (ng/mL)	103.98 ± 12.28 ¹	101.22 ± 11.64	100.84 ± 11.29	98.80 ± 8.41
HVA (ng/mL)	469.73 ± 23.60	448.16 ± 63.81	451.25 ± 22.70	437.44 ± 56.15
HVA/5HIAA	4.65 ± 0.28	4.38 ± 0.22	4.65 ± 0.61	4.39 ± 0.27

¹ Mean ± SEM, no statistical group differences by two-way ANOVA.

TABLE S3. Binding potentials for dopamine D2 receptors during PET

Location	hi-MAOA ID n=5	hi-MAOA IS n=4	low-MAOA ID n=4	low-MAOA IS n=4
Left caudate	4.93 ± 0.42	5.64 ± 0.25	4.68 ± 0.49	4.22 ± 0.60
Right caudate	4.97 ± 0.35	5.66 ± 0.17	4.57 ± 0.44	4.21 ± 0.58
Left putamen	5.33 ± 0.41 ¹	5.85 ± 0.14	5.01 ± 0.47	4.40 ± 0.51
Right putamen	5.37 ± 0.37	6.08 ± 0.13	5.15 ± 0.45	4.37 ± 0.48

¹ Mean ± SEM, no group difference in two-way ANOVA at each site

Table S4. Temperament Ratings

At the end of the 25-hr assessment, each animal was rated on a 1-7 scale for each of 16 traits. Here are variable names (the capitalized variable is the name of the trait) and definitions.

Active, energetic: Moves about a lot, distance traveled by walking, running, climbing, or jumping. Not lethargic.

Aggressive: High frequency of displays, threats.

Bold: fearless; Is daring, not restrained or tentative. Not timid, shy, or coy.

Calm, equable: Reacts in an even, calm way; is not easily disturbed. Not agitated. Restful, peaceful.

Confident: Behaves in a positive, assured manner, not restrained or tentative.

Curious, exploratory, inquisitive: Readily explores new situations, seeking out or investigating novel situation.

Depressed: Subject appears isolated, withdrawn, sullen, brooding, and has reduced activity.

Fearful: Fear grins; retreats readily from others or from outside disturbances.

Flexible, not rigid: Adapts to situations. Is able to accommodate new ways of doing things.

Gentle: Subject responds to technicians in an easy-going, kind, and considerate manner. Subject is not rough or threatening.

Nervous, anxious, not calm: Jittery, anxious, seems to be anxious about everything.

Playful: Engages in self-play (hanging, swinging, jumping), or object play.

Slow: Moves and sits in a relaxed manner; moves slowly and deliberately, not easily hurried.

Tense: Shows restraint in posture and movement; carries the body stiffly, which suggests a shrinking tendency, as if trying to pull back and be less conspicuous.

Timid: Subject is easily alarmed and is hesitant to venture into new situations.

Vigilant, alert: Ready, attentive, watchful, notices with special attention. Not oblivious to surroundings.

