Supplemental Table 3: Statistical summary of behavioral data for *Dlx5/6-Mecp2*$^{-/y}$ mice

Behavioral Paradigm	Age (wks)	Measurement	Statistical Test	Comparison	Statistics	df, residual	*p*	Figure
Dlx5/6-Mecp2$^{-/y}$ Grooming	12	percent grooming time (%)	One-way ANOVA	Genotype	F = 1.375	3, 47	0.2619	4b
			Tukey's post hoc	no post tests p > 0.05				
Dlx5/6-Mecp2$^{-/y}$ Holeboard	12	number of holes with 2 or more sequential nosepokes	Kruskal-Wallis		H = 14.92	3	0.0019	4c
			Dunn's post-hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.05	
				Flox vs. CKO			< 0.01	
Dlx5/6-Mecp2$^{-/y}$ Hot Plate	12	time to hindlimb response (sec)	One-way ANOVA	Genotype	F = 2.920	3, 60	0.0413	S11a
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			< 0.05	
Dlx5/6-Mecp2$^{-/y}$ Tail Flick	12	time to tail flick response (sec)	One-way ANOVA	Genotype	F = 1.225	3, 60	0.3084	S11b
			Tukey's post hoc	no post tests *p* > 0.05				
Dlx5/6-Mecp2$^{-/y}$ Open Field Assay: Exploratory Activity	5	total distance traveled (cm)	One-way ANOVA	Genotype	F = 2.325	3, 60	0.0839	S9b
			Tukey's post hoc	no post tests p > 0.05				
	19	total distance traveled (cm)	One-way ANOVA	Genotype	F = 3.100	3, 60	0.0333	4h
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
Dlx5/6-Mecp2$^{-/y}$ Footslip	5	# slips per 100 beam breaks	One-way ANOVA	Genotype	F = 26.20	3, 56	< 0.0001	S9c
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.01	
				Flox vs. CKO			< 0.05	
	22	# slips per 100 beam breaks	One-way ANOVA	Genotype	F = 33.31	3, 60	< 0.0001	4d
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			< 0.001	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.001	
Dlx5/6-Mecp2$^{-/y}$ Wire Hang	9	latency to fall (sec)	One-way ANOVA	Genotype	F = 4.912	3, 60	0.0041	S9d
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.01	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.05	
				Flox vs. CKO			< 0.05	
	19	latency to fall (sec)	One-way ANOVA	Genotype	F = 9.318	3, 60	< 0.0001	4e
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.01	
Dlx5/6-Mecp2$^{-/y}$ Dowel walk	9	number of side touches	One-way ANOVA	Genotype	F = 5.784	3, 60	0.0015	S9e
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			> 0.05	
	19	number of side touches	One-way ANOVA	Genotype	F = 32.91	3, 60	< 0.0001	4f
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.001	
Dlx5/6-Mecp2$^{-/y}$ Accelerating Rotarod	5	latency to fall (sec)	Two-way ANOVA Repeated measure	Genotype	F = 6.070	3	0.0011	S9a
				Trial	F = 95.21	7	< 0.0001	
				Interaction	F = 1.060	21	0.3895	
				Subjects	F = 9.069	60	< 0.0001	
				Residual		308		
			Bonferroni post hoc Trial 1	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	

			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 2	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 3	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 4	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 5	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 6	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 7	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
		Bonferroni post hoc Trial 8	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			> 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
	latency to fall (sec)	One-way ANOVA Trial 1	Genotype	F = 0.4410	3, 60	0.7245
		Tukey's post hoc	no post tests p > 0.05			
	latency to fall (sec)	One-way ANOVA Trial 2	Genotype	F = 3.290	3, 60	0.0266
		Tukey's post hoc	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			< 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
	latency to fall (sec)	One-way ANOVA Trial 3	Genotype	F = 7.426	3, 60	0.0003
		Tukey's post hoc	WT vs. Cre			> 0.05
			WT vs. Flox			< 0.05
			WT vs. CKO			< 0.001
			Cre vs. Flox			> 0.05
			Cre vs. CKO			<0.05
			Flox vs. CKO			> 0.05
	latency to fall (sec)	One-way ANOVA Trial 4	Genotype	F = 3.534	3, 60	0.0199
		Tukey's post hoc	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			< 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
	latency to fall (sec)	One-way ANOVA Trial 5	Genotype	F = 3.202	3, 60	0.0295
		Tukey's post hoc	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			< 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
	latency to fall (sec)	One-way ANOVA Trial 6	Genotype	F = 2.917	3, 60	0.0414
		Tukey's post hoc	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			< 0.05
			Cre vs. Flox			> 0.05
			Cre vs. CKO			> 0.05
			Flox vs. CKO			> 0.05
	latency to fall (sec)	One-way ANOVA Trial 7	Genotype	F = 3.137	3, 60	0.0319
		Tukey's post hoc	WT vs. Cre			> 0.05
			WT vs. Flox			> 0.05
			WT vs. CKO			< 0.05
			Cre vs. Flox			> 0.05

			Cre vs. CKO			> 0.05	
			Flox vs. CKO			> 0.05	
	latency to fall (sec)	One-way ANOVA Trial 8	Genotype	F = 7.585	3, 60	0.0002	
		Tukey's post hoc	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			< 0.01	
19	latency to fall (sec)	Two-way ANOVA Repeated measure	Genotype	F = 13.40	3	< 0.0001	4g
			Trial	F = 96.94	7	< 0.0001	
			Interaction	F = 1.454	21	0.0895	
			Subjects	F = 14.26	60	< 0.0001	
			Residual		420		
		Bonferroni post hoc Trial 1	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.05	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			> 0.05	
			Flox vs. CKO			> 0.05	
		Bonferroni post hoc Trial 2	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			> 0.05	
		Bonferroni post hoc Trial 3	WT vs. Cre			> 0.05	
			WT vs. Flox			< 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			> 0.05	
		Bonferroni post hoc Trial 4	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			< 0.01	
		Bonferroni post hoc Trial 5	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			< 0.01	
		Bonferroni post hoc Trial 6	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			< 0.01	
		Bonferroni post hoc Trial 7	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			< 0.01	
		Bonferroni post hoc Trial 8	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.001	
			Flox vs. CKO			< 0.001	
	latency to fall (sec)	One-way ANOVA Trial 1	Genotype	F = 3.812	3, 60	0.0144	
		Tukey's post hoc	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.01	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			> 0.05	
			Flox vs. CKO			> 0.05	
	latency to fall (sec)	One-way ANOVA Trial 2	Genotype	F = 5.815	3, 60	0.0015	
		Tukey's post hoc	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.01	
			Flox vs. CKO			> 0.05	
	latency to fall (sec)	One-way ANOVA Trial 3	Genotype	F = 9.019	3, 60	< 0.0001	
		Tukey's post hoc	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	
			Cre vs. Flox			> 0.05	
			Cre vs. CKO			< 0.01	
			Flox vs. CKO			> 0.05	
	latency to fall (sec)	One-way ANOVA Trial 4	Genotype	F = 10.21	3, 60	< 0.0001	
		Tukey's post hoc	WT vs. Cre			> 0.05	
			WT vs. Flox			> 0.05	
			WT vs. CKO			< 0.001	

				Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 < 0.01 < 0.01	
		latency to fall (sec)	One-way ANOVA Trial 5	Genotype	F = 13.77	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.01	
		latency to fall (sec)	One-way ANOVA Trial 6	Genotype	F = 11.29	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.01	
		latency to fall (sec)	One-way ANOVA Trial 7	Genotype	F = 10.41	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.01	
		latency to fall (sec)	One-way ANOVA Trial 8	Genotype	F = 11.78	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.01	
Dlx5/6-Mecp2$^{-/y}$ Nest building	18	nesting score	Two-way ANOVA Repeated measure	Genotype Time Interaction Subjects Residual	F = 20.16 F = 27.83 F = 5.723 F = 3.391	3 2 6 60 120	< 0.0001 < 0.0001 < 0.0001 < 0.0001	4i
			Bonferroni post hoc 24 hours	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.001	
			Bonferroni post hoc 48 hours	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.001	
			Bonferroni post hoc 72 hours	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 > 0.05 > 0.05 > 0.05	
		nesting score	One-way ANOVA 24 hours	Genotype	F = 12.15	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.001	
		nesting score	One-way ANOVA 48 hours	Genotype	F = 26.31	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.001 < 0.001	
		nesting score	One-way ANOVA 72 hours	Genotype	F = 6.818	3, 60	0.0005	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.01 > 0.05 < 0.01 < 0.01	
Dlx5/6-Mecp2$^{-/y}$ Partition test	6	interaction time (sec)	Two-way ANOVA Repeated measure	Genotype Trial Interaction Subjects Residual	F = 0.6453 F = 214.8 F = 2.714 F = 4.634	3 2 6 60 120	0.5890 < 0.0001 0.0166 < 0.0001	S9f
			Bonferroni post hoc Familiar 1st encounter	WT vs. Cre WT vs. Flox WT vs. CKO			> 0.05 > 0.05 > 0.05	

				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
			Bonferroni post hoc	WT vs. Cre			> 0.05	
			Novel	WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
			Bonferroni post hoc	WT vs. Cre			> 0.05	
			Familiar	WT vs. Flox			> 0.05	
			2nd encounter	WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
		interaction time (sec)	One-way ANOVA	Genotype	F = 2.997	3, 60	0.0376	
			1st Familiar					
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			< 0.05	
		interaction time (sec)	One-way ANOVA	Genotype	F = 0.8340	3, 60	0.4807	
			Novel					
			Tukey's post hoc	no post tests p > 0.05				
		interaction time (sec)	One-way ANOVA	Genotype	F = 0.1745	3, 60	0.9133	
			2nd Familiar					
			Tukey's post hoc	no post tests p > 0.05				
	18	interaction time (sec)	Two-way ANOVA	Genotype	F = 11.62	3	< 0.0001	4j
			Repeated measure	Trial	F = 232.5	2	< 0.0001	
				Interaction	F = 3.787	6	0.0017	
				Subjects	F = 3.787	60	< 0.0001	
				Residual		120		
			Bonferroni post hoc	WT vs. Cre			> 0.05	
			Familiar	WT vs. Flox			> 0.05	
			1st encounter	WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
			Bonferroni post hoc	WT vs. Cre			> 0.05	
			Novel	WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.05	
			Bonferroni post hoc	WT vs. Cre			> 0.05	
			Familiar	WT vs. Flox			> 0.05	
			2nd encounter	WT vs. CKO			< 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.05	
				Flox vs. CKO			> 0.05	
		interaction time (sec)	One-way ANOVA	Genotype	F = 5.20	3, 60	0.0029	
			1st Familiar					
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.01	
				Flox vs. CKO			> 0.05	
		interaction time (sec)	One-way ANOVA	Genotype	F = 15.33	3, 60	< 0.0001	
			Novel					
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.05	
		interaction time (sec)	One-way ANOVA	Genotype	F = 5.536	3, 60	0.002	
			2nd Familiar					
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.01	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.05	
				Flox vs. CKO			> 0.05	
Dlx5/6-Mecp2$^{-/y}$								
3-Chamber	30	total time in left chamber (sec)	One-way ANOVA	Genotype	F = 0.2489	3, 28	0.8614	S9g
Habituation phase			Tukey's post hoc	no post tests p > 0.05				
		total time in center chamber (sec)	One-way ANOVA	Genotype	F = 1.440	3, 28	0.2521	S9g
			Tukey's post hoc	no post tests p > 0.05				
		total time in right chamber (sec)	One-way ANOVA	Genotype	F = 0.5298	3, 28	0.6655	S9g
			Tukey's post hoc	no post tests p > 0.05				
		interaction time inanimate left cage (sec)	One-way ANOVA	Genotype	F = 1.148	3, 28	0.3468	S9h
			Tukey's post hoc	no post tests p > 0.05				
		interaction time inanimate right cage (sec)	One-way ANOVA	Genotype	F = 1.384	3, 28	0.2682	S9h
			Tukey's post hoc	no post tests p > 0.05				

Dlx5/6-Mecp2$^{-/y}$ 3-Chamber Social phase	30	total time in chamber with inanimate empty cage (sec)	One-way ANOVA	Genotype	F = 2.161	3, 28	0.1150	S9i
			Tukey's post hoc	no post tests p > 0.05				
		total time in center chamber (sec)	One-way ANOVA	Genotype	F = 0.7285	3, 28	0.5436	S9i
			Tukey's post hoc	no post tests p > 0.05				
		total time in chamber with stranger mouse (sec)	One-way ANOVA	Genotype	F = 1.841	3, 28	0.1626	S9i
			Tukey's post hoc	no post tests p > 0.05				
		interaction time with inanimate empty cage (sec)	One-way ANOVA	Genotype	F = 0.4299	3, 28	0.7332	4k
			Tukey's post hoc	no post tests p > 0.05				
		interaction time with stranger mouse(sec)	One-way ANOVA	Genotype	F = 9.229	3, 28	0.0002	4k
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.01	
Dlx5/6-Mecp2$^{-/y}$ Resident-intruder	32	total aggressive behavior time (sec)	One-way ANOVA	Genotype	F = 0.9589	3, 28	0.4258	4l
			Tukey's post hoc	no post tests *p* > 0.05				
Dlx5/6-Mecp2$^{-/y}$ Prepulse inhibition (PPI)	7	maximum response to 120 dB (A.U.)	One-way ANOVA	Genotype	F = 26.12	3,60	< 0.0001	4m
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			< 0.01	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.001	
		% prepulse inhibition	Two-way ANOVA	Genotype	F = 1.473	3	0.2235	4n
				Prepulse level	F = 40.15	2	< 0.0001	
				Interaction	F = 0.3914	6	0.8839	
				Residual		180		
			Bonferroni post hoc 74 (+4) dB	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
			Bonferroni post hoc 78 (+8) dB	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
			Bonferroni post hoc 82 (+12) dB	WT vs. Cre			> 0.05	
				WT vs. Flox			> 0.05	
				WT vs. CKO			> 0.05	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	
		% prepulse inhibition	One-way ANOVA 74 (+4) dB	Genotype	F = 0.1384	3, 60	0.9366	
			Tukey's post hoc	no post tests *p* > 0.05				
		% prepulse inhibition	One-way ANOVA 78 (+8) dB	Genotype	F = 0.3024	3, 60	0.8235	
			Tukey's post hoc	no post tests *p* > 0.05				
		% prepulse inhibition	One-way ANOVA 82 (+12) dB	Genotype	F = 1.842	3, 60	0.1493	
			Tukey's post hoc	no post tests *p* > 0.05				
	24	maximum response to 120 dB (A.U.)	One-way ANOVA	Genotype	F = 10.68	3,60	< 0.0001	S9j
			Tukey's post hoc	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.001	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			< 0.01	
				Cre vs. CKO			< 0.05	
				Flox vs. CKO			> 0.05	
		% prepulse inhibition	Two-way ANOVA	Genotype	F = 28.90	3	< 0.0001	S9k
				Prepulse level	F = 185.1	2	< 0.0001	
				Interaction	F = 1.837	6	0.0942	
				Residual		180		
			Bonferroni post hoc 74 (+4) dB	WT vs. Cre			< 0.01	
				WT vs. Flox			> 0.05	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.001	
				Flox vs. CKO			< 0.001	
			Bonferroni post hoc 78 (+8) dB	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.01	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			< 0.05	
				Flox vs. CKO			> 0.05	
			Bonferroni post hoc 82 (+12) dB	WT vs. Cre			> 0.05	
				WT vs. Flox			< 0.001	
				WT vs. CKO			< 0.001	
				Cre vs. Flox			> 0.05	
				Cre vs. CKO			> 0.05	
				Flox vs. CKO			> 0.05	

		% prepulse inhibition	One-way ANOVA 74 (+4) dB	Genotype	F = 10.56	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.001 > 0.05 < 0.05 < 0.01	
		% prepulse inhibition	One-way ANOVA 78 (+8) dB	Genotype	F = 8.131	3, 60	0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 < 0.05 < 0.001 > 0.05 < 0.05 > 0.05	
		% prepulse inhibition	One-way ANOVA 82 (+12) dB	Genotype	F = 19.02	3, 60	< 0.0001	
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			< 0.01 < 0.001 < 0.001 < 0.05 < 0.01 > 0.05	
Dlx5/6-Mecp2$^{-/y}$ Light-dark	5	time in light side (sec)	One-way ANOVA	Genotype	F = 5.242	3, 60	0.0028	S10a
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 < 0.05 > 0.05 < 0.01 > 0.05	
		number of entries into light side	One-way ANOVA	Genotype	F = 3.930	3,60	0.0126	S10b
			Tukey's post hoc	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 < 0.05 < 0.05 > 0.05	
	14	time in light side (sec)	One-way ANOVA	Genotype	F = 0.9938	3, 60	0.4020	S10c
			Tukey's post hoc	no post tests $p > 0.05$				
		number of entries into light side	One-way ANOVA	Genotype	F = 2.161	3, 60	0.1020	S10d
			Tukey's post hoc	no post tests $p > 0.05$				
Dlx5/6-Mecp2$^{-/y}$ Open field assay	5	center distance (cm)	One-way ANOVA	Genotype	F = 1.614	3, 60	0.1956	S10e
			Tukey's post hoc	no post tests $p > 0.05$				
		ratio center to total distance	One-way ANOVA	Genotype	F =1.862	3, 60	0.1457	S10f
			Tukey's post hoc	no post tests $p > 0.05$				
	16	center distance (cm)	One-way ANOVA	Genotype	F = 2.421	3, 60	0.0747	S10g
			Tukey's post hoc	no post tests $p > 0.05$				
		ratio center to total distance	One-way ANOVA	Genotype	F = 2.490	3, 60	0.0689	S10h
			Tukey's post hoc	no post tests $p > 0.05$				
Dlx5/6-Mecp2$^{-/y}$ Olfactory recognition	11	sniffing time (s)	Two-way ANOVA Repeated measure	Genotype Trial Interaction Subjects Residual	F = 1.434 F = 93.80 F = 0.9710 F = 1.782	3 2 6 60 120	0.2418 < 0.0001 0.4479 0.0038	S7c
			Bonferroni post hoc Mock	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 > 0.05 > 0.05 > 0.05	
			Bonferroni post hoc Vanilla	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 > 0.05 > 0.05 > 0.05	
			Bonferroni post hoc Water	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 > 0.05 > 0.05 > 0.05	
		sniffing time (s)	One-way ANOVA Mock	Genotype	F = 0.1940	3, 60	0.9001	
			Tukey's post hoc	no post tests p > 0.05				
		sniffing time (s)	One-way ANOVA Vanilla	Genotype	F = 1.176	3, 60	0.3263	
			Tukey's post hoc	no post tests p > 0.05				
		sniffing time (s)	One-way ANOVA Water	Genotype	F = 1.859	3, 60	0.1462	
			Tukey's post hoc	no post tests p > 0.05				
Dlx5/6-Mecp2$^{-/y}$ Olfactory habituation	11	sniffing time (s)	Two-way ANOVA Repeated measure	Genotype Trial Interaction Subjects Residual	F = 1.179 F = 90.92 F = 1.006 F = 1.122	3 1 3 60 60	0.3252 < 0.0001 0.3965 0.3289	S7d
			Bonferroni post hoc	WT vs. Cre			> 0.05	

			Day 1	WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 > 0.05 > 0.05
			Bonferroni post hoc Day 2	WT vs. Cre WT vs. Flox WT vs. CKO Cre vs. Flox Cre vs. CKO Flox vs. CKO			> 0.05 > 0.05 > 0.05 > 0.05 > 0.05 > 0.05
		sniffing time (s)	One-way ANOVA Day 1	Genotype	F = 1.176	3, 60	0.3263
			Tukey's post hoc	no post tests p > 0.05			
		sniffing time (s)	One-way ANOVA Day 2	Genotype	F = 0.07456	3, 60	0.9734
			Tukey's post hoc	no post tests p > 0.05			