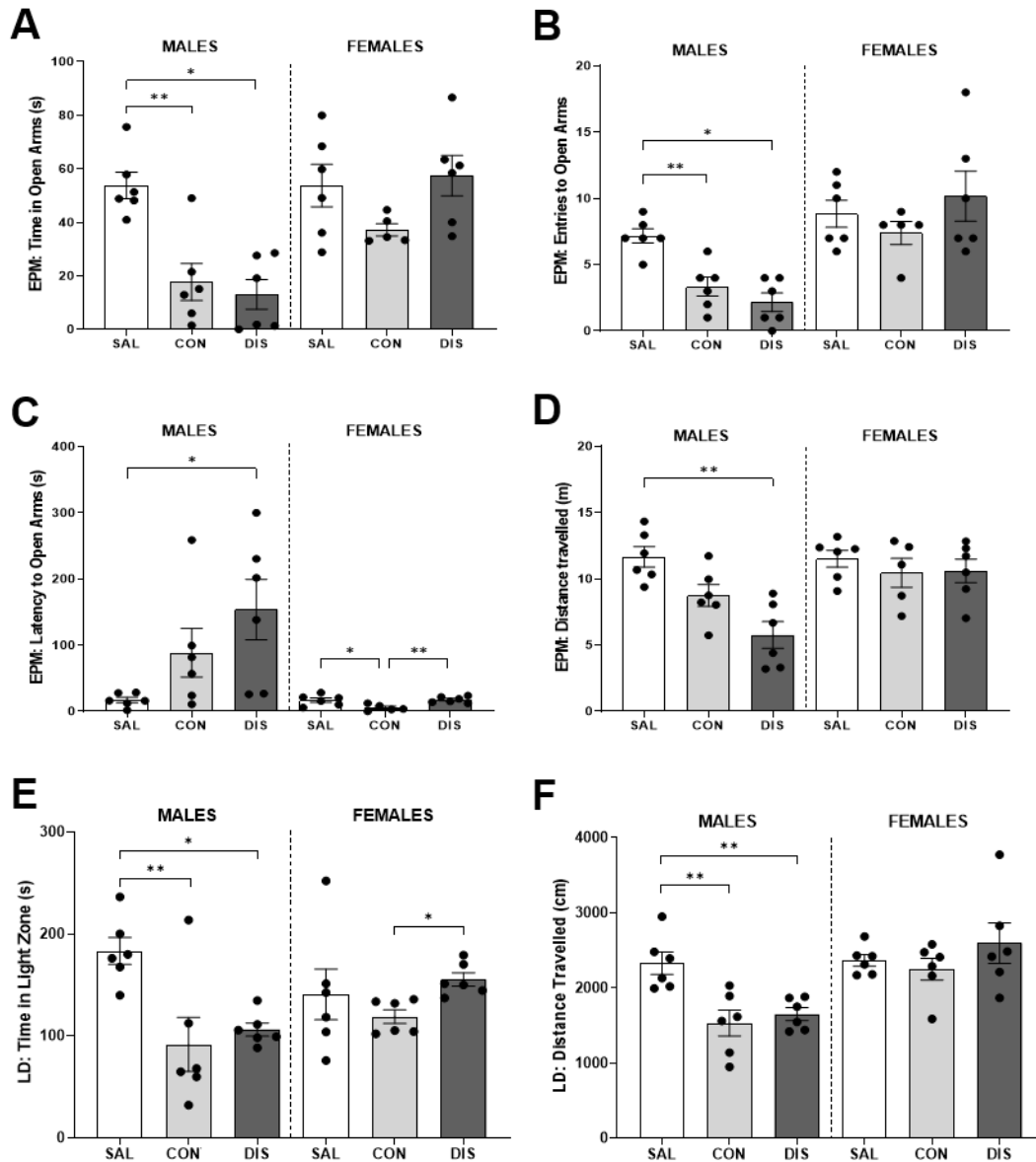


Supplementary information

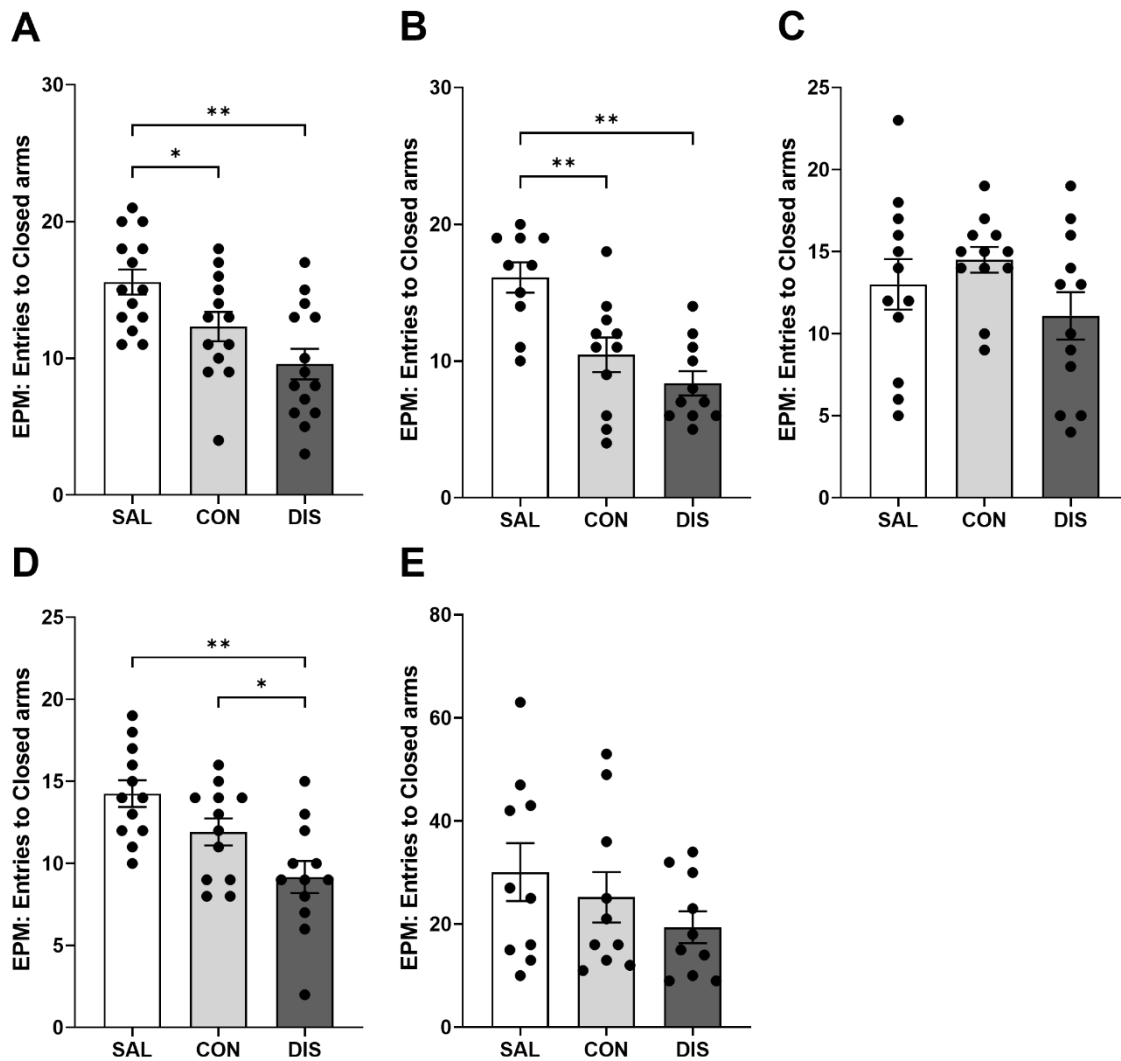
Supplementary Figure 1



Effect of discontinuation from 12 days of once-daily paroxetine treatment in male and female mice on the elevated plus maze (EPM; 300 s) and the light/dark box (LDB; 300 s). Bars represent the mean \pm SEM values for time spent in open arms (males: $p=0.0309$ SAL vs CON, $p=0.0030$ SAL vs DIS) (A), entries to open arms (males: $p=0.0285$ SAL vs CON, $p=0.0009$ SAL vs DIS) (B), latency to enter the open arms (males: $p=0.0157$ SAL vs DIS; females: $p=0.0355$ SAL vs CON, $p=0.0189$ CON vs DIS) (C) and distance travelled (males: $p=0.0001$ SAL vs DIS) (D) on the EPM, and time spent in the light zone (males: $p=0.0058$ SAL vs CON, $p=0.0231$ SAL vs DIS; females: $p=0.00110$ CON vs DIS) (F) and distance travelled (males: $p=0.0069$ SAL vs CON, $p=0.0049$ SAL vs

DIS) (G) on the LDB. SAL, Saline (males n=6, females n=6); CON, Continuation (males n=6, females n=5, one female mouse excluded due to technical issues during testing); DIS, Discontinuation (males n=6, females n=6). Individual values are indicated by dots. Kruskal-Wallis followed by post-hoc Fisher's LSD, * p<0.05, ** p<0.01.

Supplementary Figure 2



Effect of discontinuation from paroxetine or citalopram treatment in male mice on the closes arm entries on the elevated plus maze (EPM; 300 s). Bars represent the mean \pm SEM values for number of entries to the closed arms following discontinuation from 12-days once-daily paroxetine ($p=0.0336$ SAL vs CON, $p=0.0002$ SAL vs DIS) (A), 28-days of once-daily paroxetine ($p=0.0012$ SAL vs CON, $p<0.0001$ SAL vs DIS) (B), 7-days once-daily paroxetine (C), 12-days twice-daily paroxetine ($p=0.0002$ SAL vs DIS, $p=0.0331$ CON vs DIS) (D) and 12-days twice-daily citalopram (E). SAL, Saline (n=10-14); CON, Continuation (n=10-14); DIS, Discontinuation (n=10-14). Individual values are indicated by dots. One-way ANOVA followed by post-hoc Fisher's LSD, * $p<0.05$, ** $p<0.01$.

Supplementary Table 1

Effect of Saline (SAL), Continuation (CON) or Discontinuation (DIS) treatments with 12-days once-daily paroxetine in male and female mice. LMA, locomotor activity (60 min); AOF, aversive open field (600 s). Each value is a mean \pm S.E.M.

Parameter	Kruskal Wallis	MALES (n=6/group)			Kruskal Wallis	FEMALES (n=6/group)		
		Group (mean \pm SEM)				Group (mean \pm SEM)		
		SAL	CON	DIS		SAL	CON	DIS
<i>LMA</i>								
Total beam breaks	H(2)=1.906 p=0.408	2325 \pm 239	1974 \pm 163	1857 \pm 147	H(2)=4.433 p=0.108	2677 \pm 140	2314 \pm 181	3274 \pm 461
Total rearings	H(2)=2.854 p=0.251	175 \pm 17	165 \pm 10	191 \pm 5	H(2)=1.556 p=0.484	162 \pm 19	179 \pm 14	196 \pm 13
<i>AOF</i>								
Time in centre (s)	H(2)=0.737 p=0.715	13.7 \pm 2.5	24.2 \pm 9.3	11.2 \pm 3.0	H(2)=0.924 p=0.652	11.1 \pm 1.5	14.9 \pm 4.6	22.3 \pm 7.5
Distance travelled (m)	H(2)=3.591 p=0.170	50.1 \pm 4.5	40.3 \pm 5.1	45.5 \pm 3.7	H(2)=0.947 p=0.640	58.8 \pm 3.7	54.0 \pm 6.6	74.5 \pm 16.2

Supplementary Table 2

Effect of Saline (SAL), Continuation (CON) or Discontinuation (DIS) treatments with 28-day once-daily paroxetine in male mice. LMA, locomotor activity (60 min); AOF, aversive open field (600 s); LDB, light/dark box (600 s). 1 mouse excluded from the LMA onwards due to receiving the wrong injection the night before; 1 mouse excluded from the LMA due to issues with the photobeam box during testing. Each value is a mean \pm S.E.M., and the statistical outcomes of pairwise comparisons were: SAL vs DIS * $p < 0.05$; SAL vs CON † $p < 0.05$, †† $p < 0.01$.

	ANOVA/ Kruskal Wallis	Paroxetine (n=12/group)		
		SAL	CON Group (mean \pm SEM)	DIS
<i>LMA</i>				
Total beam breaks	$F_{(2,31)}=3.872$ $p=0.032$	2522 \pm 154	2061 \pm 148 †	2044 \pm 110 *
Total rearings	$F_{(2,31)}=0.336$ $p=0.717$	167.2 \pm 14.5	181.5 \pm 8.7	169.3 \pm 15.5
<i>AOF</i>				
Time in centre (s)	$F_{(2,32)}=2.327$ $p=0.114$	11.9 \pm 1.0	8.5 \pm 1.6	7.8 \pm 1.7
Distance travelled (m)	$F_{(2,32)}=10.01$ $p < 0.001$	64.6 \pm 4.7	40.1 \pm 3.0 ††	49.8 \pm 4.0 *

Supplementary Table 3

Effect of Saline (SAL), Continuation (CON) or Discontinuation (DIS) treatments with 12-days twice-daily paroxetine in male mice. LMA, locomotor activity (60 min); AOF, aversive open field (600 s); FC, fear conditioning; CS, conditioned stimulus. 1 SAL and 1 CON mouse excluded due to technological issues on training day. Each value is a mean \pm S.E.M., and the statistical outcomes of pairwise comparisons were: SAL vs DIS * $p < 0.01$; SAL vs CON † $p < 0.05$.

	ANOVA/ Kruskal Wallis	Paroxetine (n=11-12/group)		
		SAL	CON Group (mean \pm SEM)	DIS
<i>LMA</i>				
Total beam breaks	$F_{(2,33)}=0.073$, $p=0.929$	1913.7 \pm 161.7	1906.8 \pm 137.4	1839.5 \pm 134.3
Total rearings	$F_{(2,33)}=1.293$, $p=0.288$	190.4 \pm 10.4	170 \pm 10.4	173.1 \pm 6.3
<i>AOF</i>				
Time in centre (s)	$F_{(2,32)}=2.167$, $p=0.1306$	6.6 \pm 0.9	3.8 \pm 1.0	5.7 \pm 1.0
Distance travelled (m)	$F_{(2,33)}=5.560$, $p=0.0083$	28.3 \pm 1.8	21.6 \pm 1.7 †	21.4 \pm 1.5 *
<i>FC</i>				
Training day				
Δ Freezing (%)	$F_{(2,31)}=2.549$, $p=0.0944$	5.6 \pm 1.8	-0.6 \pm 1.8	2.4 \pm 2.1
Test day				
Pre-CS freezing (%)	$F_{(2,31)}=0.2451$, $p=0.7842$	19.2 \pm 6.6	25.6 \pm 8.1	22.4 \pm 4.0
Post-CS freezing (%)	$F_{(2,31)}=0.1248$, $p=0.8831$	39.3 \pm 7.5	38.2 \pm 8.9	43.1 \pm 5.6
Δ Freezing (%)	$F_{(2,31)}=0.3106$, $p=0.7353$	19.9 \pm 5.9	14.6 \pm 4.5	19.03 \pm 4.6

Supplementary Table 4

Effect of Saline (SAL), Continuation (CON) or Discontinuation (DIS) treatments with 12-days twice-daily citalopram in male mice. LMA, locomotor activity (60 min); AOF, aversive open field (600 s); FC, fear conditioning. Each value is a mean \pm S.E.M.

	ANOVA/ Kruskal Wallis	Citalopram (n=10/group)		
		SAL	Group (mean \pm SEM)	
			CON	DIS
<i>LMA</i>				
Total beam breaks	$F_{(2,27)}=0.7999, p=0.4598$	2491.0 \pm 131.1	2190.0 \pm 261.5	2298.0 \pm 260.4
Total rearings	$F_{(2,27)}=1.6710, p=0.0276$	202.3 \pm 6.6	156.1 \pm 16.2	171.4 \pm 10.0
<i>AOF</i>				
Time in centre (s)	$F_{(2,27)}=0.4738, p=0.6279$	9.1 \pm 1.2	9.3 \pm 1.0	8.9 \pm 1.0
Distance travelled (m)	$F_{(2,27)}=0.6227, p=0.5440$	37.4 \pm 3.0	32.3 \pm 2.3	32.3 \pm 3.1
<i>FC</i>				
Training day				
Δ Freezing (%)	$F_{(2,27)}=0.9676, p=0.3928$	6.8 \pm 2.4	12.8 \pm 3.1	8.0 \pm 4.0
Test day				
Pre-CS freezing (%)	$F_{(2,27)}=2.247, p=0.1073$	17.0 \pm 5.2	43.5 \pm 9.0	26.3 \pm 9.9
Post-CS freezing (%)	$F_{(2,27)}=2.932, p=0.0704$	60.5 \pm 6.0	75.8 \pm 5.3	53.3 \pm 26.6
Δ Freezing (%)	$F_{(2,27)}=1.215, p=0.3124$	43.5 \pm 6.5	33.3 \pm 7.1	27.0 \pm 8.9