

Figure	p, F, np2 stats: Interaction  (Time X Genotype)	p, F, np2 stats: Genotype	Significant time points  from multiple comparison	Multiple comparison Sidak adjusted p value with 95% CI and Hedges' g;  Genotype effect within air exposed animals
Fig 3ac Reg trace training Female	<b>p = 0.040*</b> F(4,815,86.675) = 2.472 np2 = 0.121	<b>p = 0.030*</b> F(1,18) = 5.554 np2 = 0.236	t = 666 s	<b>p = 0.0101*</b> CI = -61.58 to -4.664 g = 1.74
Fig 3eg Reg trace training Male	<b>p = 0.004**</b> F(4,454,80.174) = 2.057 np2 = 0.184	<b>p = 0.0025**</b> F(1,18) = 11.3 np2 = 0.406	t = 666 s	<b>p = 0.0097**</b> CI = -64.37 to -4.996 g = 1.82
			t = 846 s	<b>p = 0.0457*</b> CI = -59.67 to -0.2923 g = 1.40
			t = 888 s	<b>p = 0.0043**</b> CI = -66.63 to -7.258 g = 1.83
			t = 1068 s	<b>p = 0.0002***</b> CI = -74.69 to -15.31 g = 2.02
			t = 1110 s	<b>p = 0.0444*</b> CI = -59.76 to -0.3843 g = 1.04
			t = 1290 s	<b>p = 0.0439*</b> CI = -59.8 to -0.4267 g = 0.94
Fig 3bd Reg trace test Female	<b>p = 0.005**</b> F(4,181,75.265) = 3.982 np2 = 0.181	<b>p = 0.0130*</b> F(1,18) = 7.595 np2 = 0.297	t = 220 s	<b>p &lt; 0.0001****</b> CI = -68.89 to -26.23 g = 1.50
			t = 240 s	<b>p = 0.0088**</b> CI = -46.18 to -3.517 g = 1.13
			t = 340 s	<b>p = 0.0002***</b> CI = -52.5 to -9.837 g = 1.06
			t = 360 s	<b>p = 0.0029**</b> CI = -48.2 to -5.537 g = 1.05
Fig 3fh Reg trace test Male	<b>p = 0.039*</b> F(3,324,59.838) = 2.872 np2 = 0.138	<b>p = 0.0082**</b> F(1,18) = 8.837 np2 = 0.329	t = 200 s	<b>p = 0.0154*</b> CI = -44.56 to -2.402 g = 0.76
			t = 240 s	<b>p = 0.0005***</b> CI = -50.71 to -8.552 g = 0.83
			t = 340 s	<b>p &lt; 0.0001****</b> CI = -54.45 to -12.29 g = 1.00
			t = 360 s	<b>p = 0.0088**</b> CI = -45.64 to -3.482 g = 1.00
Fig 4ac Mod trace training Female	p = 0.788 F(6,394,134.281) = 0.5395 np2 = 0.025	p = 0.9972 F(1,21) < 0.001 np2 < 0.001	None	N/A
Fig 4eg Mod trace training male	p = 0.351 F(19,363) = 1.128 np2 = 0.056	p = 0.0881 F(1,19) = 3.233 np2 = 0.145	5th shock	<b>p = 0.0357*</b> CI = -63.38 to -1.072 g = 0.76
Fig 4bd Mod trace test Female	p = 0.674 F(6,390,134.200) = 0.6819 np2 = 0.031	p = 0.9433 F(1,21) = 0.005 np2 < 0.001	None	N/A
Fig 4fh Mod trace test Male	<b>p &lt; 0.0001****</b> F(6,825,129.671) = 11.33 np2 = 0.374	<b>p = 0.0264*</b> F(1,19) = 5.799 np2 = 0.234	t = 180	<b>p = 0.130*</b> CI = 3.244 to 58.76 g = 1.84
			t = 220	<b>p &lt; 0.0001****</b> CI = -80.73 to -25.22 g = 2.68
			t = 240	<b>p &lt; 0.0001****</b> -74.66 to -19.14 CI = 1.62
			t = 320	<b>p &lt; 0.0001****</b> CI = -81.87 to -26.36 g = 2.11
			t = 340	<b>p = 0.0001***</b> CI = -68.4 to -12.89 g = 1.36
			t = 420	<b>p = 0.0017**</b> CI = -63.14 to -7.625 g = 1.46
			t = 440	<b>p &lt; 0.0001****</b> CI = -90.18 to -34.67 g = 2.79
			t = 520	<b>p = 0.0022**</b> CI = -4.012 to 59.52 g = 1.18
			t = 540	<b>p = 0.0022**</b> CI = -62.62 to -7.103 g = 1.23
			t = 560	<b>p &lt; 0.0001****</b> CI = -79.96 to -24.45 g = 1.76
			t = 660	<b>p &lt; 0.0001****</b> CI = -75.08 to -19.57 g = 1.99
			t = 680	<b>p = 0.0132*</b> CI = -58.72 to -3.212 g = 1.20

**Supplemental Table 4.** Analysis of effects of BDNF genotype in air exposed animals from repeated measures two-way (time X BDNF genotype) ANOVAs from trace fear-conditioning experiments (Figures 3-4). Detailed statistics, including F ratios, p values, and effect sizes as partial eta squared ( $\eta_p^2$ ) are shown for the effects of BDNF genotype, as well as the interaction of BDNF genotype and time point are presented. Planned comparison tests examining the effect of genotype at individual time bins were conducted, and significant Sidak multiplicity adjusted p values with 95% confidence intervals and Hedges' g effect sizes are also presented.