

Figure	p, F, np2 stats: Interaction (Time X Exposure)	p, F, np2 stats: Exposure	Significant Exposure effects at specific time points from multiple comparisons	Multiple comparison Sidak adjusted p value with 95% CI and Hedges' g : Exposure effect within genotype
Fig 3a Reg trace training Female Val/Val	p = 0.807 F(4,633,83.391) = 0.439 np2 = 0.024	p = 0.7472 F(1,18) = 0.1072 np2 = 0.006	None	No significant effects
Fig 3b Reg trace test Female Val/Val	p = 0.289 F(2,578,46.401) = 1.289 np2 = 0.067	p = 0.1862 F(1,18) = 1.889 np2 = 0.095	340s	<b>p = 0.0027**</b> CI = 5.144 to 43.74 g = 0.69
Fig 3c Reg trace training Female Met/Met	p = 0.512 F(5,976,107.564) = 0.88 np2 = 0.047	p = 0.7485 F(1,18) = 0.106 np2 = 0.006	None	No significant effects
Fig 3d Reg trace test Female Met/Met	<b>p = 0.037*</b> F(4,449,80.074) = 2.605 np2 = 0.126	p = 0.0976 F(1,18) = 3.053 np2 = 0.145	220s	<b>p = 0.0010**</b> CI = 7.778 to 53.07 g = 0.91
			340s	<b>p = 0.0013**</b> CI = 7.303 to 52.6 g = 1.18
			360s	<b>p = 0.0082**</b> 3.878 to 49.17 g = 1.08
Fig 3e Reg trace training Male Val/Val	p = 0.635 F(4,755,85.584) = 0.676 np2 = 0.036	p = 0.3908 F(1,18) = 0.7733 np2 = 0.041	None	No significant effects
Fig 3f Reg trace test Male Val/Val	p = 0.866 F(1,713,30.84) = 0.111 np2 = 0.006	p = 0.7646 F(1,18) = 0.09244 np2 = 0.005	None	No significant effects
Fig 3g Reg trace training Male Met/Met	p = 0.107 F(4,443,79.975) = 1.928 np2 = 0.097	<b>p = 0.0139*</b> F(1,28) = 7.42 np2 = 0.292	4th intertone	<b>p = 0.0033**</b> CI = 6.796 to 57.61 g = 2.05
Fig 3h Reg trace test Male met/met	<b>p = 0.028*</b> F(3,409,61.364) = 3.081 np2 = 0.146	<b>p = 0.0451*</b> F(1,18) = 4.638 np2 = 0.205	200s	<b>p = 0.0011**</b> CI = 6.817 to 47.21 g = 1.07
			220s	<b>p = 0.0002***</b> CI = 9.422 to 49.82 g = 0.82
			340s	<b>p &lt; 0.0001****</b> CI = 10.56 to 50.95 g = 1.02
Fig 4a Mod trace training Female Val/Val	p = 0.822 F(6,262,150.279) = 0.49 np2 = 0.02	p = 0.9354 F(1,24) = 0.006705 np2 < 0.001	None	No significant effects
Fig 4b Mod trace test Female Val/Val	p = 0.307 F(5,25,126.01) = 1.212 np2 = 0.048	p = 0.5817 F(1,24) = 0.3119 np2 = 0.013	None	No significant effects
Fig 4c Mod trace training Female Met/Met	p = 0.764 F(6,521,163.02) = 0.574 np2 = 0.022	<b>p = 0.0433*</b> F(1,25) = 4.531 np2 = 0.153	None	No significant effects
Fig 4d Mod trace test Female Met/Met	p = 0.498 F(7,132,178.296) = 0.914 np2 = 0.035	p = 0.4189 F(1,25) = 0.6756 np2 = 0.026	None	No significant effects
Fig 4e Mod trace training Male Val/Val	p = 0.341 F(5,525,143.639) = 1.143 np2 = 0.042	p = 0.3687 F(1,26) = 0.8363 np2 = 0.031	None	No significant effects
Fig 4f Mod trace test Male Val/Val	<b>p = 0.043*</b> F(5,777,150.195) = 3.253 np2 = 0.080	p = 0.8166 F(1,26) = 0.05491 np2 = 0.002	200s	<b>p = 0.0167*</b> CI = 1.992 to 43.68 g = 0.75
Fig 4g Mod trace training Male Met/Met	p = 0.72 F(5,589,111.787) = 0.598 np2 = 0.029	p = 0.1080 F(1,20) = 2.83 np2 = 0.124	None	No significant effects
Fig 4h Mod trace test Male Met/Met	p = 0.137 F(5,666,113.327) = 1.675 np2 = 0.077	p = 0.0716 F(1,20) = 3.619 np2 = 0.153	440s	<b>p = 0.0022**</b> CI = 7.856 to 69.88 g = 1.13
			560s	<b>p = 0.0141*</b> CI = 3.406 to 65.43 g = 1.05

**Supplemental Table 3.** Detailed statistics from repeated measures two-way (time X exposure) ANOVAs from trace fear-conditioning experiments (Figures 3-4). F ratios, p values, and effect sizes as partial eta squared ( $\eta_p^2$ ) for effect of exposure, as well as for the interaction between time and exposure are shown. Significant individual time points discovered from planned comparison analyses of exposure effect within genotype, as well as Sidak multiplicity adjusted p values, 95% confidence intervals, and Hedges' g effect sizes are also presented.