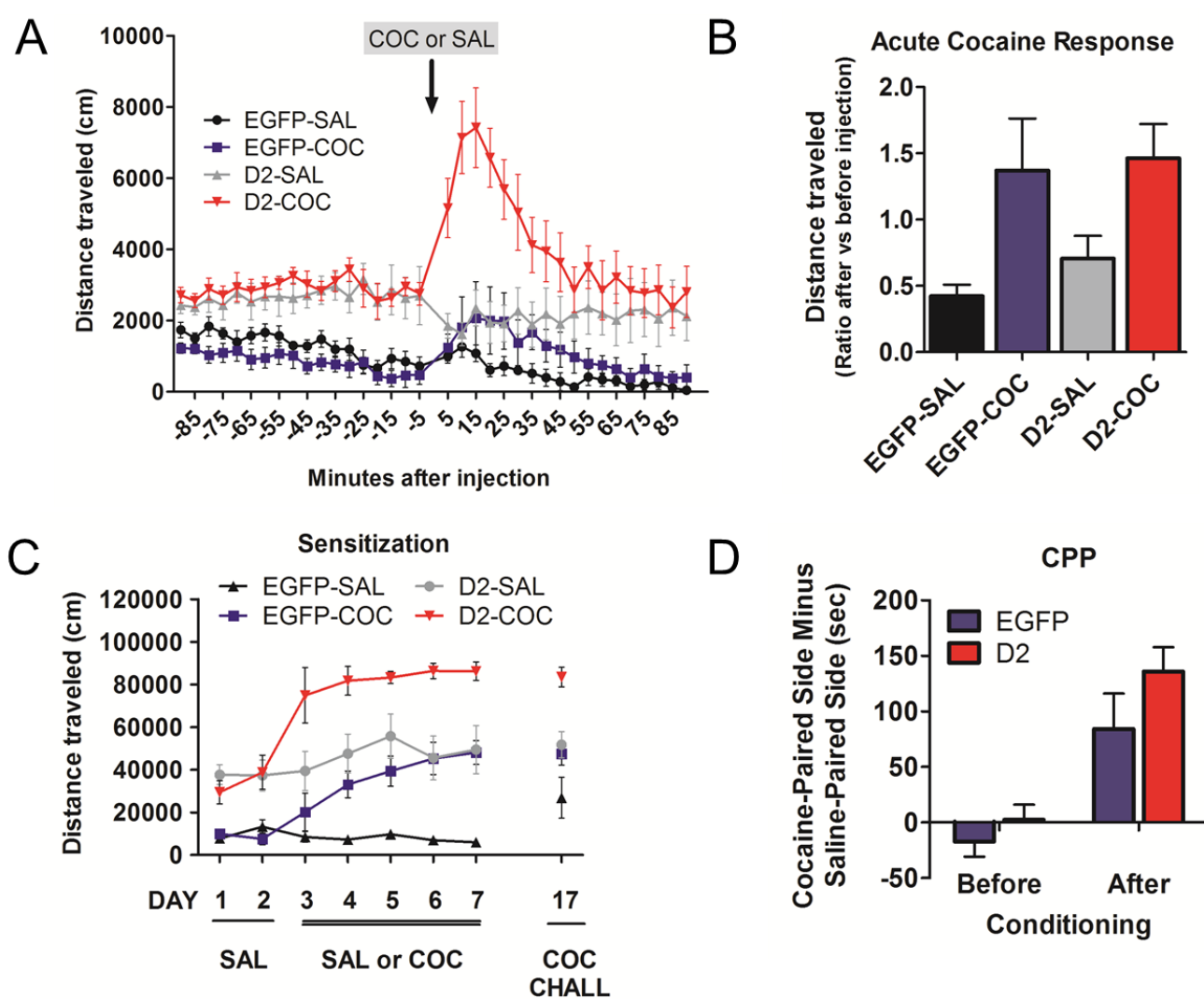


**Figure S4**

**Figure S4.** D2R upregulation does not reduce cocaine-related behaviors. **A.** Distance traveled in 5-min bins 90 min before and after acute cocaine injection. **B.** Ratio of total distance traveled in 90 min after injection over total distance traveled 90 min before injection shows that acute locomotor response to 15mg/kg cocaine is not affected by D2R overexpression (n=5-6 mice/group). **C.** EGFP-expressing mice develop sensitization to 15mg/kg cocaine injections over 5 days and this locomotor response is maintained after a challenge dose 10 days later. D2R-overexpressing mice reach near-maximum levels of locomotor activity following cocaine injection on the first day, an effect which is maintained over the next 4 days and after a challenge on Day 17 (n=5-6 mice/group). **D.** Conditioned place preference (CPP) for cocaine (10mg/kg, i.p.) was developed by cocaine injections over 3 days. CPP score [time spent in the cocaine-paired chamber minus time spent in the saline-paired side] increased after conditioning, but there was no genotype effect (p=0.14, two-way ANOVA, n=14 mice/group).