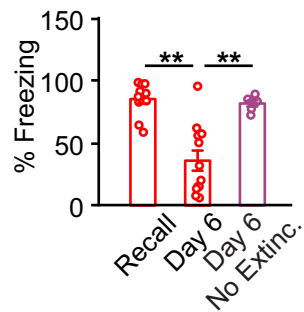
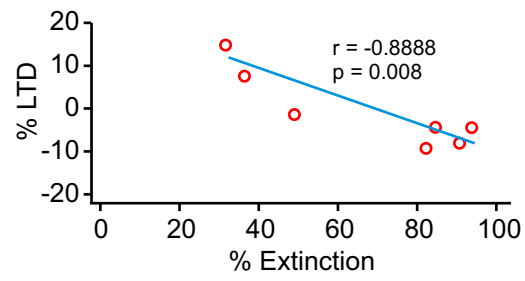


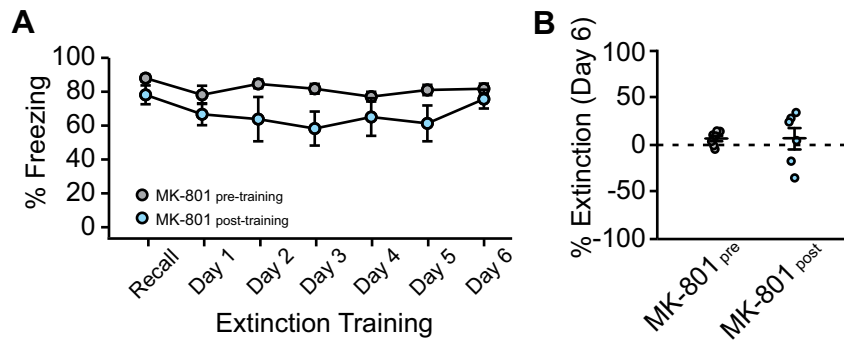
Supplementary Figure 1. No sex differences in olfactory threat learning and extinction. A. Percentage freezing at the time of recall. **B.** Percentage of extinction at the end of the training. F: female; M: male.



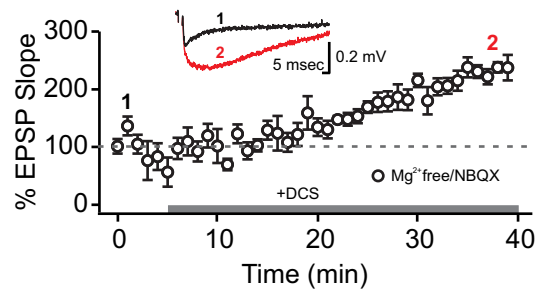
Supplementary Figure 2. Reduced freezing in adult rats that undergo olfactory threat extinction training is not due to forgetting. Comparisons of % Freezing in rats that underwent or did not undergo extinction training. Red indicates the extinction trained group, tested on recall day (24 hrs following the olfactory threat conditioning) and day 6 of the extinction training. Purple indicates the group that did not undergo extinction training, tested 6 days following the olfactory threat conditioning.



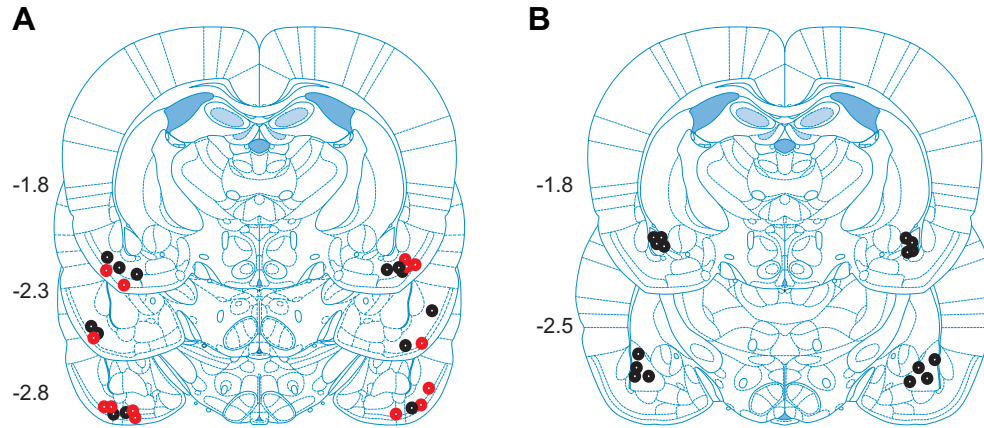
Supplementary Figure 3. The degree of LTD is negatively correlated with the level of extinction in adult rats.



Supplementary Figure 4. MK-801 blockade of olfactory threat extinction in adult rats is not drug-state-dependent. **A.** Percentage of freezing to the conditioned odor in rats with MK-801 injections 30 min pre- or immediately post-extinction training. **B.** Percentage extinction on day 6 in the two groups.



Supplementary Figure 5. D-cycloserine (DCS) enhances NMDAR EPSP



Supplementary Figure 6. Cannula placements for piriform cortex (A) and amygdala (B).

Coronal sections of rats' brains showing the cannula tip locations (red circles: adult; black circles: aged), with distance from Bregma indicated. Atlas plates were taken from Paxinos and Watson (6th edition) (Paxinos and Watson, 2009)

Paxinos G, Watson C (2009) The rat brain in stereotaxic coordinates, Sixth Edition. San Diego, CA: Academic Press.