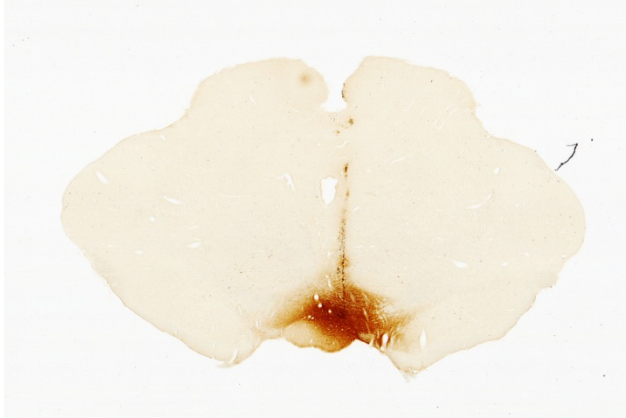
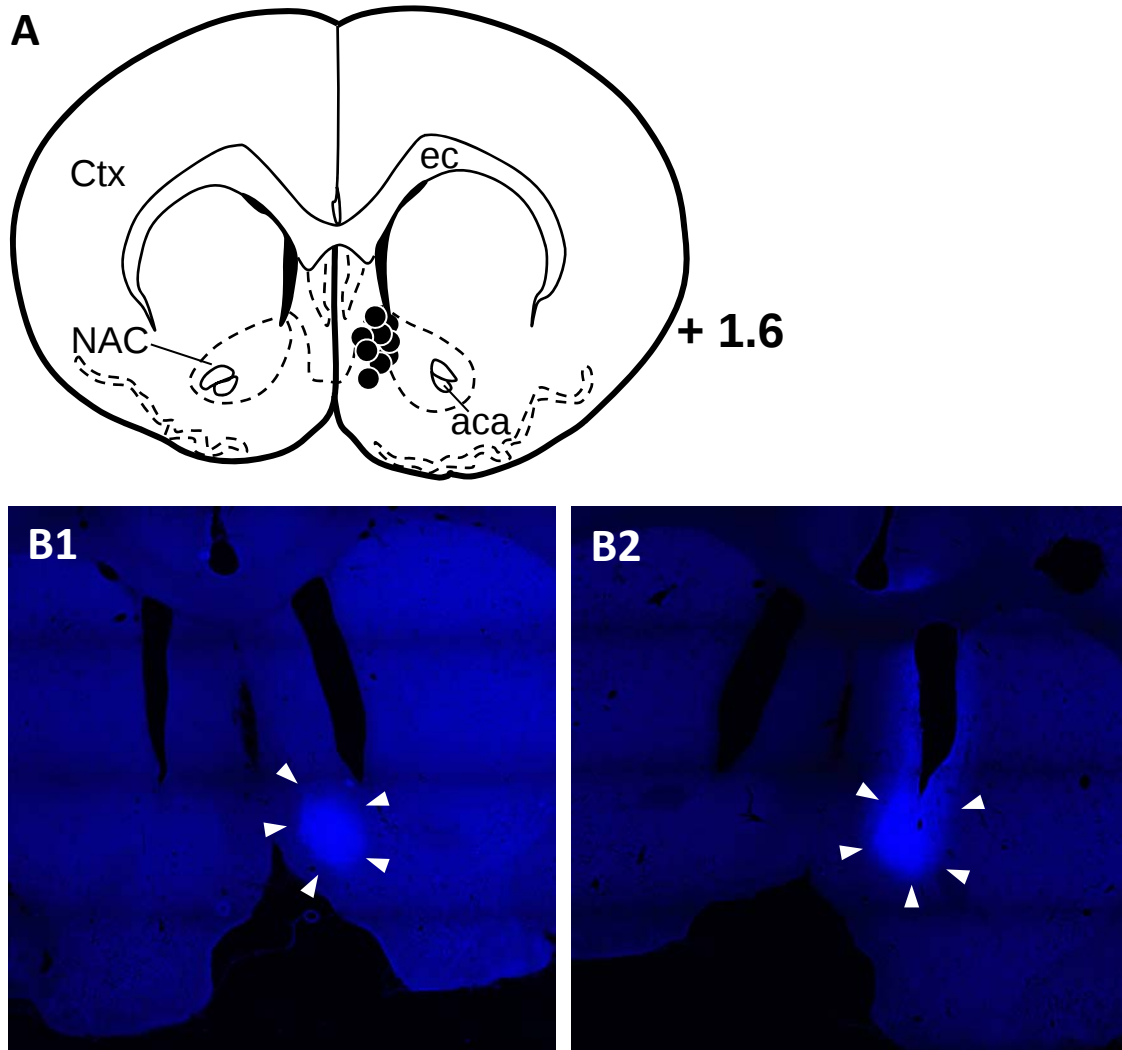


**Supplementary Figure 1:
Phaseolus vulgaris-leucoagglutinin (PHA-L) injection site**



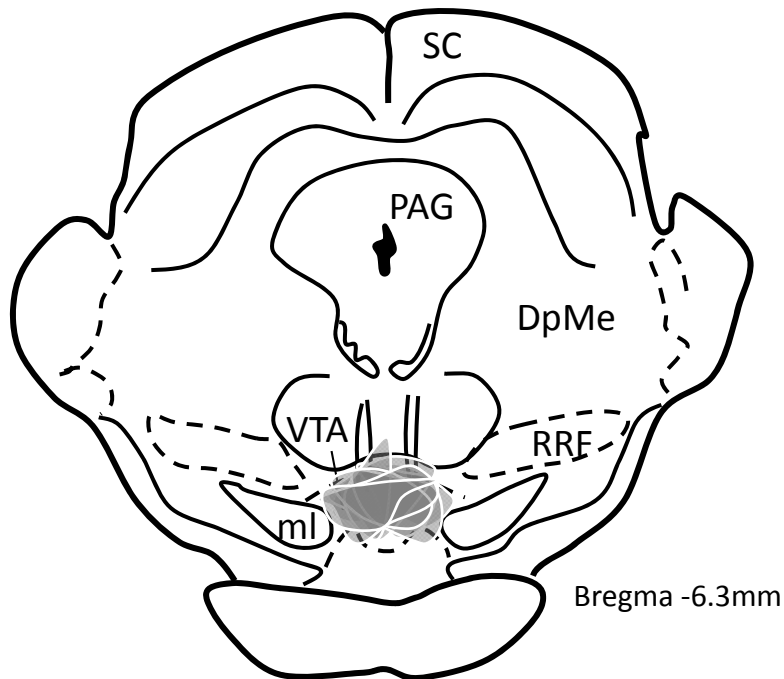
Representative photomicrographs depicting the PHA-L injection sites in the pmVTA.

Supplementary Figure 2: Fluorogold (FG) injection sites



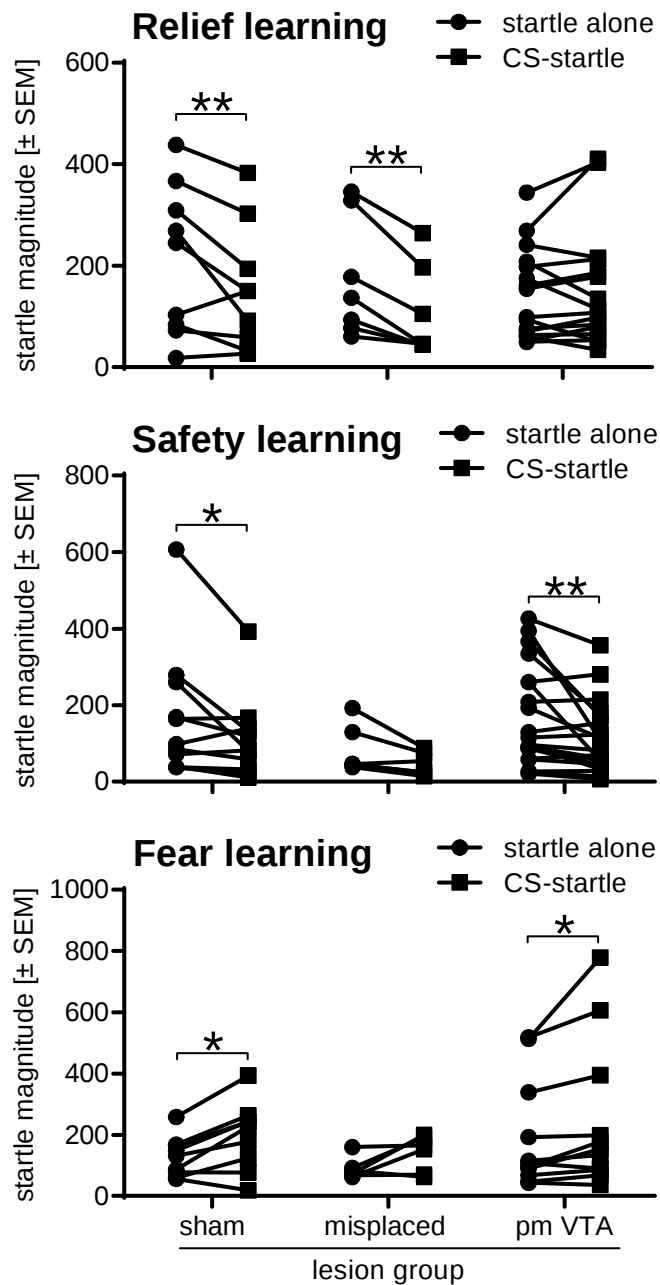
(A) Coronal brain section representing all fluorogold injection sites. (B1-2) Representative photomicrographs depicting native fluorogold expression at the AcbSh injection sites (arrow heads). Abbreviations: aca, anterior part of the anterior commissure; Ctx, cortex; ec, external capsule; NAC, nucleus accumbens.

Supplementary Figure 3: 6-OHDA-induced lesions



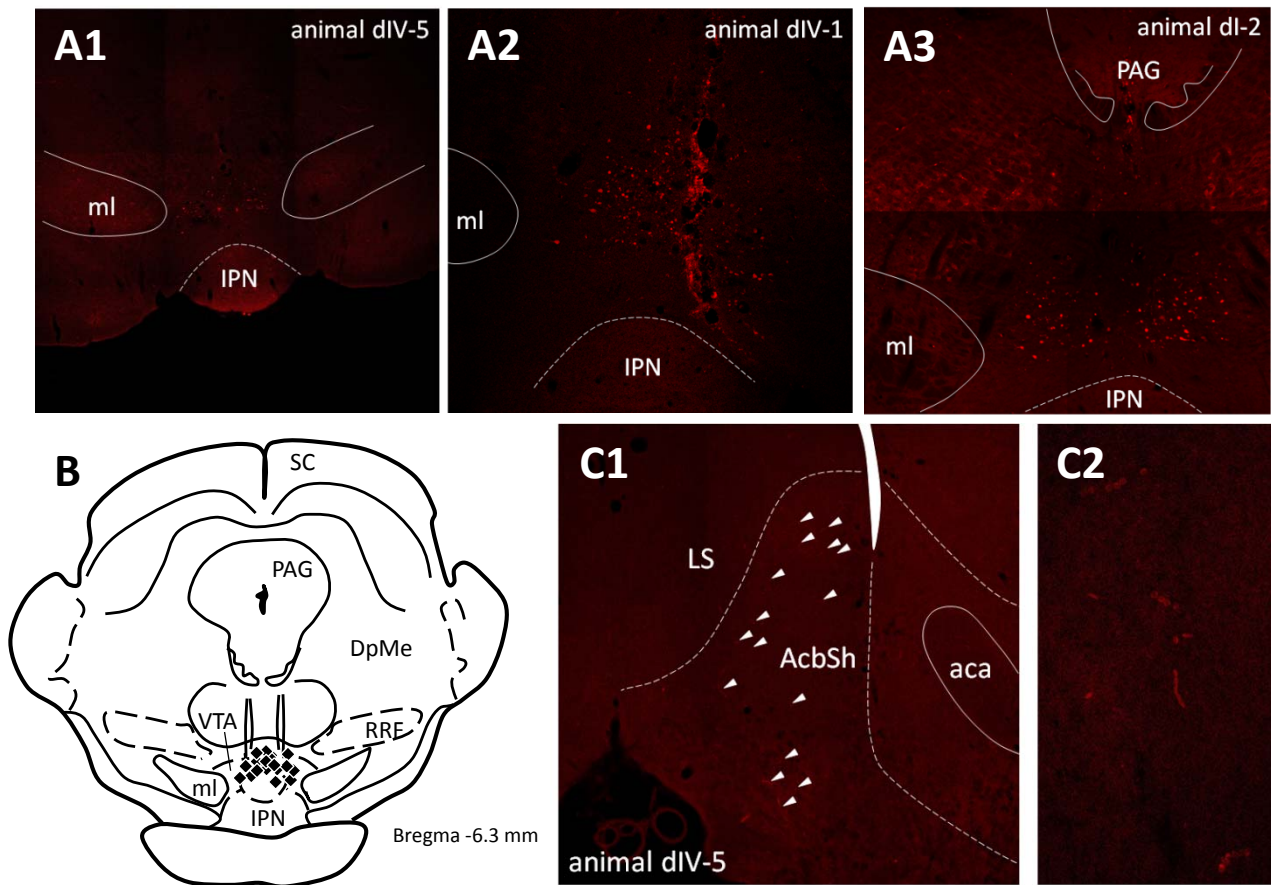
Coronal brain section showing the 6-OHDA-induced lesions in the pmVTA. The indicated areas represent the areas without TH-immunoreactivity. Abbreviations: DpMe, deep mesencephalic nuclei; ml, medial lemniscus; PAG, periaqueductal gray; RRF, retrorubral field; SC, superior colliculus; VTA, ventral tegmental area.

Supplementary Figure 4: 6-OHDA-induced lesions → individual startle magnitudes



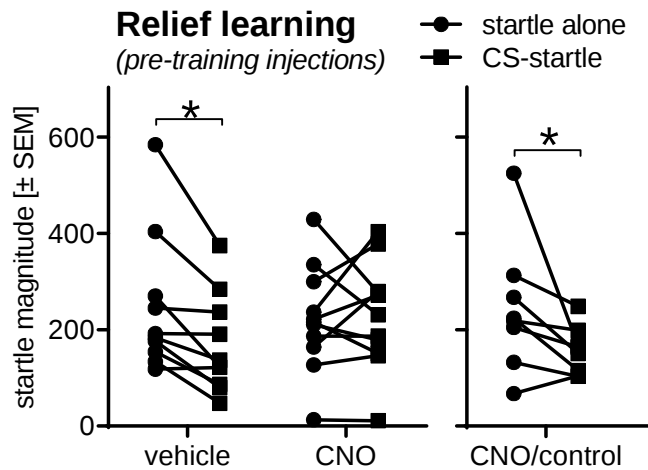
Individual startle magnitudes of the experiment shown in Figure 2. The diagrams depict the individual startle magnitudes in the absence (●) and presence (■) of the CS. The lines connect the magnitudes of the same individual rat. ** $p < 0.01$, * $p < 0.05$, post-hoc Sydak's multiple comparisons startle alone vs. CS-startle.

Supplementary Figure 5. pAAV8-CaMKIIa-hM4D(Gi)-mCherry injections



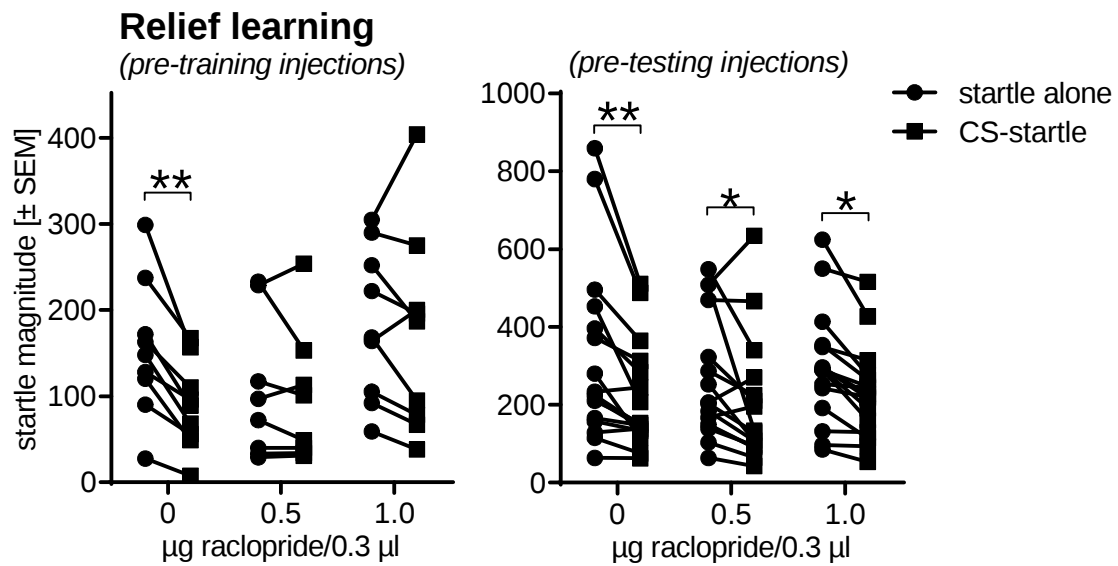
(A1-3) Photomicrographs depicting native mCherry expression in the pmVTA, two weeks after local injections of pAAV8-CaMKIIa-hM4D(Gi)-mCherry, in three different representative rats. (B) Coronal brain section representing all pAAV8-CaMKIIa-hM4D(Gi)-mCherry injection sites. (C1-2) Representative photomicrographs demonstrating fibers in the mCherry-positive AcbSh after pmVTA injections of pAAV8-CaMKIIa-hM4D(Gi)-mCherry; overview AcbSh area (C1) and close-up (C2). Abbreviations: aca, anterior part of the anterior commissure; AcbSh, nucleus accumbens shell; DpMe, deep mesencephalic nuclei; IPN, interpeduncular nucleus; ml, medial lemniscus; PAG, periaqueductal gray; RRF, retrobulbar field; SC, superior colliculus; VTA, ventral tegmental area.

Supplementary Figure 6:
pAAV8-CaMKIIa-hM4D(Gi)-mCherry injections
→ individual startle magnitudes



Individual startle magnitudes of the experiment shown in Figure 3b. The diagrams depict the individual startle magnitudes in the absence (●) and presence (■) of the CS. The lines connect the magnitudes of the same individual rat. * $p < 0.05$, post-hoc Sydak's multiple comparisons startle alone vs. CS-startle.

Supplementary Figure 7:
Accumbal dopamine D2/3 receptor blockade
→ individual startle magnitudes



Individual startle magnitudes of the experiment shown in Figure 4c/d. The diagrams depict the individual startle magnitudes in the absence (●) and presence (■) of the CS. The lines connect the magnitudes of the same individual rat. ** $p < 0.01$, * $p < 0.05$, post-hoc Sydak's multiple comparisons startle alone vs. CS-startle.