

An apparatus for the study of classical fear conditioning

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A photograph of an apparatus for the study of classical fear conditioning in rats is presented.

The acquired drive, or classical fear conditioning, apparatus has been described in a previous paper (Goldstein, 1960), but a photograph of it has not previously been published. The apparatus consists of a two-compartment shock box, one compartment having a grid floor and the other a wooden floor. The two compartments are separated by a guillotine-type door. A photograph of the apparatus is shown in Figure 1.

The shock source used to activate the grids consists of a step-up transformer and a 250,000-ohm fixed resistor which is wired in series with the rat. Voltages ranging from 0 to 1,000 V, at relatively low amperages, may be obtained with this shock source.

The apparatus has been used to study the effect of UCS (shock) intensity on classical fear conditioning, backward conditioning (Goldstein, 1960), classical conditioning to background stimuli (Goldstein, 1974), the rat's sensitivity to electric shock (Goldstein, 1968), and the effect of limbic system lesions on acquisition and retention of a classically conditioned fear response (Goldstein, 1965; 1974; 1975). It has also been used to study stimulus compounding and the persistence of UCS intensity effects.

The apparatus has been found most useful, primarily, in parametric studies of the effect of UCS intensity variations on conditioning and in the study of the effects of limbic system lesions on conditioning.

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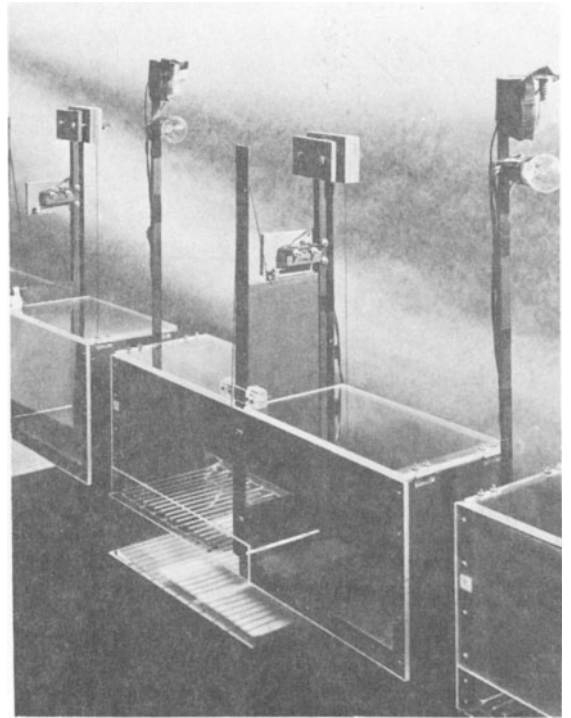


Figure 1. The acquired drive conditioning apparatus.