

Biochem.Pharmacol. 12, Suppl., p.28 (1963).

(2nd International Pharmacological Meeting,
Prague, 20-23 August 1963)

**The Carried Extinction as a Tool to Discriminate
the Effects of Some Psychotropic Drugs on the
Learning Processes. E. BECCARI and L.
MOLINENGO (Italy).**

Rats were conditioned in a double-lever Skinner box to obtain reinforcements at a fixed ratio schedule from one lever only; then reinforcements were disconnected from the lever the rats had been trained to operate on and connected to the other lever. Extinction for the first lever appears to be "carried" on by reconditioning for the second one; complete reconditioning occurs in 4-5 sessions, after which a new "inversion" can be performed.

The results obtained by this test indicate the action of morphine to be dependent on the position of the levers in the cage (near or far from the food tray): the food motivation seems to have a minor importance.

Results indicating a discrimination impairment between left and right lever or an incapability to adapt to the new experimental situation were observed with pentobarbital (5 mg/kg), urethane (250 mg/kg) and reserpine (0.3 mg/kg), when the lever far from the food tray became reinforced; on the contrary LSD-25 (0.15 mg/kg) gave this same effect only when the other lever was reinforced.

A reduction in the number of reinforced responses, pointing out a decrease in the food motivation, was observed with reserpine and LSD-25 while an increase was obtained with urethane.

Statistical analysis was employed when possible to assess the reliability of the results.