ELECTRICAL STIMULATION OF THE HYPOTHALAMUS USED AS A REWARD IN SIMPLE MAZE LEARNING

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by

Wayne G. Tanner

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Two groups of rats were compared as to differences between the mean number of trials, number of errors, and time elapsed in relation to the acquisition of the maze habit. One group of subjects received food as a reward upon completion of the three-choice maze; the other group received EBS from electrodes placed in the hypothalamic region of the brain. Both groups were deprived of food 18 to 24 hours prior to the trial. The electrical stimulation was administered by the experimenter and took the form of a single train, consisting of a .5 second pulse duration every three seconds for a total of fifteen seconds. The current intensity of 60 micro/amps was an arbitrary level and no previous intensity thresholds were determined.

Typical effects and procedures are described and a statistical analysis comparing the two groups concluded, given the criteria set forth in the experiment, that there is no significant difference between the two groups in relation to the number of trials, number of errors, and time elapsed in relation to the acquisition of the simple maze habit.