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The Effects of Three Schedules of Reinforcement on Stimulus Generalization

John L. Sanders
University of Texas Permian Basin

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ON STIMULUS GENERALIZATION

APPROVED BY SUPERVISORY COMMITTEE:

Chairman

James M. Moore

Allen Marks

Robert Rothstein

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by

JOHN L. SANDERS

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Abstract

The effects of three schedules of reinforcement on stimulus generalization in rats were investigated. In the presence of a 2000 hz tone the subjects were trained to bar press on one of three schedules: CRF, VR 25, or VR 50. Three animals started in each condition. After tone/no-tone discrimination training they were tested for generalization. Generalization took place over six 31.5 minute sessions. This tested the subjects' response rate to each of seven tones: 250 hz, 500 hz, 1000 hz, 2000 hz, 4000 hz, 8000 hz, and 16000 hz. During a 31.5 minute generalization test every tone was presented randomly nine times for 30 seconds each. The VR 25 group produced a much steeper generalization gradient than the VR 50 group. The CRF group produced inconsistent generalization without a clearcut generalization gradient around the training stimulus. Generalization gradients were steepest early in generalization testing and tended to become flatter as extinction continued. The results indicate that, similar to VI schedules, VR schedules produce more stimulus generalization as density of reinforcement decreases.