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The Effect of Different Training Regimens on Improved Sound Frequency Discrimination in Wistar Rats

Sam Cain
Valparaiso University

Elizabeth Grigoletti
Valparaiso University

Erin Walsh
Valparaiso University

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The Effect of Different Training Regimens on Improved Sound Frequency Discrimination in Wistar Rats

Sam Cain, Elizabeth Grigoletti, Erin Walsh

Departmental Affiliation: Psychology
College of Arts and Sciences

Rat subjects were randomly assigned to one of three groups. The rats were presented with differing patterns of target and non-target frequencies, with the target remaining constant between groups while the non-target varied between groups. The rats were rewarded with food for successful bar presses while the target tone was playing, and no reinforcement was delivered for presses that occurred during the non-target tone. The groups were labeled as Control, Rapid, and Gradual. The control group experienced a silence in the place of non-target tone, while the rapid and gradual groups received the same tone in the beginning, but the rate of tone change differed throughout the training process. The test phase involved all three groups experiencing a multitude of different tones, with correct versus incorrect responses monitored. Researchers hypothesized that the rats that received the intensive training provided by the gradual method would exhibit a greater attunement in discriminative ability when compared to both the rapid and control groups.

Information about the Authors:

Sam and Elizabeth are junior psychology majors, and Erin is a senior psychology major. The group became interested in working with lab rats because Sam and Elizabeth are the animal caretakers for the Psychology Department, and they convinced Erin to work with them. All three took the learning lab concurrently with the beginning of the project and plan on pursuing post-graduate work in psychology.

Faculty Sponsor: Dr. Angie Vernon

Student Contact: samuel.cain@valpo.edu