Poster Presentation P28

IS COMPETITIVE BEHAVIOR CONTROLLED BY ITS CONSEQUENCES? THE EFFECTS OF OMISSION TRAINING ON COMPETITIVE BEHAVIOR IN RATS

Melinda Mallory and James Dougan*
Psychology Department, Illinois Wesleyan University

Recent research has examined competitive behavior in rats. When multiple rats are placed in an open field with a single feeder delivering pellets on a Variable Time Schedule, the rats typically engage in a competitive wrestling response near the feeder tube. This response has been observed in several different experiments, but little is know about its specific nature. One possibility is that the response is a traditional operant. Although there is no explicit contingency with reinforcement, rats that do not engage in the response are unlikely to consume pellets. Alternatively, the competitive response might represent a species-specific foraging mode, controlled by the competitive foraging environment but not controlled by its consequences. The present experiments utilize an omission procedure, in which engaging in competitive responses cancels delivery of reinforcement. In experiment one there was no difference in the rate of competitive response during the omission phase when compared to a baseline phase. Although it would be tempting to conclude from these results that the behavior is not subject to its consequences, additional explanations must first be ruled out. The second experiment was aimed at eliminating any possible variables that may have affected these results in order to work toward elimination of any possible alternate explanation. The results have implications for various biologically-oriented models of foraging.