ABSTRACT

The purpose of this research was to assess the effects of manipulating reinforcer delay and probability over the choices in simple concurrent schedules and if these effects suggest similarities between these two reinforcer parameters. Two experiments were conducted with three college students in each experiment. Experiments 1 and 2 involved choice trials between simple concurrent schedules with the manipulation of reinforcer magnitude and delay (Experiment 1) and reinforcer magnitude and probability (Experiment 2). Initially, participants were selected, through continuous concurrent reinforcement schedules, after emitting more responses on the component with a smaller and less delayed reinforcer (or smaller and certain reinforcer) than on the component with a larger and more delayed reinforcer (or larger and less probable reinforcer). Then the participants went through a condition with concurrent schedules, with the manipulation of reinforcer magnitude and delay (Experiment 1) and reinforcer magnitude and probability (Experiment 2), in which the responses were reinforced in concurrent FR / FR schedules (with a ratio that could vary from 10 to 80), in which choice reversals were assessed. The data suggests that the choice reversal occurred for all the participants of Experiment 1 who chose more the component with larger and more delayed reinforcers and for two participants from Experiment 2 who chose more the component with larger and less probable reinforcers. These data suggest similarities between reinforcer delay and probability in simple concurrent schedules. In both Experiments other conditions with different schedules of reinforcement were conducted (continuous reinforcement, FR with blackout of the computer screen and FI) in which changes in the response pattern generated by the FR / FR condition, with more responses on the component with the smaller and less delayed reinforcer (Experiment 1) or smaller and more probable reinforcer (Experiment 2), were assessed. The data showed that the change of the response pattern only occurred for two of the participants from Experiment 2 who had previously reverted their choices in a way similar to a research conducted with pigeons as subjects.

*Keywords***:** Choice, self-control, choice reversal, reinforcer delay, reinforcer probability