Yoked comparisons of instrumental-avoidance and classical conditioning of the rabbit nictitating membrane response as a function of interstimulus interval and number of trials per day


The present study was designed to evaluate the effectiveness of the avoidance-yoked (A-Y) paradigm and to test for the effects of interstimulus interval (ISI) and number of trials on the classical conditioning of the rabbit nictitating membrane (NMC) response. The paradigm was a modification of the classical yoked conditioning procedure, in which one subject (A) receives the conditioned stimulus (CS) and the unconditioned stimulus (US) in a yoked manner, and the other subject (Y) receives the CS and the US in a non-yoked manner. The primary goal was to determine if the A-Y paradigm could be used to study classical conditioning in rabbits.

The animals were divided into two groups: the A group and the Y group. The A group received the CS-US pairing, while the Y group received a non-reinforced CS-US pairing. The interstimulus interval (ISI) was varied between 15 and 120 seconds, and the number of trials per day was varied between 30 and 120 trials. The results indicated that the A-Y paradigm could be used to study classical conditioning in rabbits, and that the ISI had a significant effect on the conditioning process.

The data from the present study suggest that the A-Y paradigm can be used to study classical conditioning in rabbits. However, further research is needed to determine the optimal conditions for this type of conditioning in rabbits.
Fig. 1. Mean percentage of CRs for the 20-day and 50-day SRs as a function of days with an HR in the punished group.

Fig. 2. Mean percentage of CRs for the first 75 trials as a function of the number of trials per day with US in the punished group.

Fig. 3. Mean percentage of CRs as a function of acquisition day with trials/day as the parameter.

REFERENCES


