Effects of a fixed-interval schedule of token reinforcement on exercise with obese and non-obese boys.

de Luca, Rayleen V; Holborn, Stephen W.

AB Examined the effect of an FI schedule of reinforcement on exercising in 2 obese and 2 nonobese 5th-grade boys. Ss were tested 3 times weekly on a stationary exercise bicycle. After a 10-session baseline, the 10-session FI 1-min schedule of reinforcement was implemented, followed by a 5-session return to baseline. During the contingent reinforcement phase, a bell and a red light were programmed to activate simultaneously upon a response after each 1-min interval, thereby constituting 1 token. Tokens could be accumulated and traded in for prizes later. The introduction of the FI schedule of reinforcement produced immediate, substantial increases in the duration of exercise for all Ss. The rate of exercise, as measured by the speed of bike pedaling, which was not reinforced, rapidly declined for only the obese Ss; the rate of exercise for the nonobese Ss remained high and at a constant rate. It is suggested that the differential rates of pedaling for obese and nonobese boys are consistent with a hypothesis implicating differential past histories of reinforcement with respect to exercise.