The effect of signaled response-independent and response-dependent reinforcers on responding maintained by a variable-interval schedule.

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AB In a study with 23 male Holtzman albino rats, a light was correlated with either a fixed-time (FT) 10-sec or an FI 10-sec schedule. With FT the light was terminated after 10 sec an a response-independent food pellet was presented. With FI the 1st response emitted after 10 sec produced a food pellet. These schedules were presented intermittently while operant leverpressing by Ss was maintained on a VI schedule in the absence of the light. The probability that the termination of the light was correlated with a reinforcer and the likelihood that variable interval reinforcers could be obtained during the light were manipulated. The level of responding during the light was most likely to exceed the level of responding in the absence of the light when VI reinforcers occurred during the light or when an FI 10-sec schedule was in effect. The level of responding was not affected significantly when no VI reinforcers occurred during the light and the light was correlated with FT 10-sec. Data suggest tht facilitation of responding during the light was caused by a contingency between responding and the reinforcer correlated with the light's termination.