

press response sequence, was a competing response during the test phase. The control group, without this competing response, was unhindered. The data support our analysis that instrumental response mediators may be part of a necessary response sequence and enhance or detract from performance.

As for the data from the entire test phase, the decrease in the mean latency from Day 1 to Day 2 for the experimental group (see Figure 2) appeared to be reflecting two processes. First, the animals continued to acquire the responses of pressing the bar and approaching the food cup, each one tending to elicit the other. As this learning occurred, the FCAR entered into a functional sequence. Second, the prolonged "head-in-the-cup" behavior extinguished, as in Experiment 1. The barpress response sequence to the food reinforcer also became established for the control animals, but attending to the tone and the FCAR to the tone had not been learned. Thus, their improvement was not as great. This is consistent with the behavioral observation made in Experiment 1, in which time between tone onset and the FCAR was very variable for the control group during the entire test phase.

The present analysis was not designed to deal with questions concerning any noninstrumental response-mediator effect. The point is that the data suggest that the experimental procedure used here, and similar ones, cannot be employed to answer unambiguously any questions related to the mediator characteristics. Thus, although Trapold and Overmier (1972) assert that "something else gets learned during the pairing stage of transfer experiments over and above any peripheral operants" (p. 437), such an assertion does not appear justified in the appetitive transfer experiment. Because transfer experiments have not controlled for the occurrence of various instrumental responses previously learned by the experimental but not the control animals, it is not possible thereby to infer the presence of a noninstrumental response mediator. It is evident that a better experimental procedure is needed before one can start to answer questions about the mediator characteristics. Moreover, more generally, the results suggest that animal learning situations may require more detailed behavioral analysis than is sometimes accorded them and that observations of behavior other than that of a simple criterion response may be informative con-

cerning the process involved. Centrally, the more detailed analysis of the transfer situation suggests on a theoretical level that negative transfer can occur, and the present results give support to that expectation.

REFERENCE NOTE

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ERRATUM

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