which they were required to alternate the right and left levers after every 10 responses. In the second phase they were required to follow the cue light which alternated from one lever to the other after the variable interval of 16 sec.

Results

Total daily responses on the left and the right lever by one of the experimental rats are illustrated in Fig. 1. The other rat showed similar behavior. It is seen that after six daily sessions of the insoluble problem the rat chose to press left lever consistently. The responses on the left lever were emitted irrespective of the position of the cue light which alternated randomly after every response and despite the fact that they were punished half of the time. This behavior was irreversible in that the stereotyped responses persisted during subsequent soluble problem sessions. The adaptation during the insoluble problem was considered fixated (irreversible) only when the response stereotypy was practiced without variation during at least 10 sessions of the soluble problem following the last session of the insoluble problem schedule. The control rats trained to follow the position of the lever acquired their new preference of following the cue light within three sessions. Although these rats may have not constituted the proper controls because the experimental conditions were not identical they showed that an animal not confronted with a conflictful insoluble problem could learn to follow

a new cue rather rapidly. In contrast, the fixated rats did not learn to solve the problem to their advantage.

Discussion

The results of this experiment demonstrated that the behavioral fixation similar to the one reported by Maier can be achieved through operant conditioning using lever pressing as a response. This procedure offers several theoretical and practical advantages. It permits to vary the stimulus and reinforcement characteristics and therefore more precise analysis of the fixated behavior is possible. Whenever required, the frequency of the responses can be altered and measured as a dependent variable. Since the animal is always free to respond, the method interacts minimally with the behavior. The high environmental control in the Skinner box and automatic, direct and continuous recording of the emitted responses are easily achieved.

References

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Note

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Errata

Smith, E. Effects of extreme heat stress on retention in the white rat. *Psychon. Sci.*, 1966, 6 (3) 127-128.—The 6th line, left column, page 128, should read "ture of 43.5°C at a chamber temperature of 50.0°C, one half of the rats under 250 gm died."

Corson, J. A., & Enesco, Hildegard E. Some effects of injections of ribonucleic acid. *Psychon. Sci.*, 1966, 5 (5), 217-218.—The first reference to the use of RNA in the introduction should have been to Cameron, D. E., *Amer. J. Psychiat.*, 1958, 114, 943, rather than to Camerson et al (1961).