It is clear in Fig. 1 that the Ss for which the vibratory CS was positive showed substantial differential responding as training progressed. For these Ss, the negative CS's response rate showed no increase over the 5 days. For the Ss that had reinforcement paired with the visual CS an increase in responding was associated with both CSs, but no difference between them appeared. Analysis of variance of these data indicated that the Reinforcement $\times$ Conditions interaction was significant, $F(1/18) = 19.45$, reflecting the fact that differential responding occurred only in the vibration positive-light negative condition. A significant effect of Days, $F(4/18) = 4.99$, resulted from the fact that all Ss showed an increase in total responding. Error variance for these tests was 17.0 (pooled within error).

Discussion

Assuming that the vibratory CS was more similar to the shock UCS than was the visual CS, the results of this study suggest that differential responding to the 2 CSs in the vibrator-reinforced group may have been the consequence of generalization of excitation from the shock to the vibrator with which it was paired. Yet, when the visual CS was positive, some tendency for an increase in its response production was observed, albeit no greater than occurred for the negative vibratory CS. Oddly enough, the increase in response production associated with the visual CS when it was

positive may be the best "evidence" that a genuine associative phenomenon occurred, even though differential responding appropriate to the differential reinforcement occurred only in the other condition, when the vibratory CS was positive.

What appears to be needed is a study involving 2 CSs whose unconditioned response producing properties are more equivalent than existed in this study. It is likely that the present light was "weaker" than the vibrator, since its intensity was deliberately selected to minimize unconditioned responding known to occur to visual stimuli. Thus, while the differential responding that was found adds some support to the argument that conditioning *does* occur in the planarian, the possibility that sensitization and/or generalization were significantly involved cannot be ruled out.

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Abstract

WILLIAMSEN, J. A., JOHNSON, H. J., & ERIKSEN, C. W. (U. Illinois). Some characteristics of posthypnotic amnesia. *J. abnorm. Psychol.*, in press.—Ss were 60 females, 30 who scored high on hypnotic susceptibility (HS) and 30 who scored low (LS). 10 high and 10 low scoring Ss were assigned to each of 3 treatments. Ss in hypnosis treatment were presented 6 words while under hypnosis and given suggestions for posthypnotic amnesia. Ss in simulation treatment pretended they had been hypnotized and given these words with instructions for posthypnotic amnesia. Control Ss were given the words with instructions only to remember them. In the second immediately-following session a second E (who was unaware of the treatment S had received) administered recall, recognition, and associative tests.

Relative to the controls the hypnotized HS group recalled and recognized significantly less. They differed from the simulating Ss in that the simulators overplayed their amnesic role. Even the LS hypnotized group showed impairment on the recall measure. The suggested amnesia had no effect upon the availability of the words as associative responses in either hypnotized group. However, simulating Ss relative to controls showed impaired performance on the associative tests. There was no difference in recall of hypnotized Ss after the posthypnotic amnesia was removed. A second experiment ruled out an explanation in terms of differences in original learning between the hypnotized and control groups. (Pre-publication copies available from the authors).