

The PSYCHOLOGICAL RECORD

DECEMBER,

1940

Vol. IV

No. 13

A VISUAL FORM OF THE VERBAL SUMMATOR

W. K. ESTES



THE PRINCIPIA PRESS, INC.
BLOOMINGTON, INDIANA

ce of this number, 15 cents

A VISUAL FORM OF THE VERBAL SUMMATOR*

BY W. K. ESTES

University of Minnesota

A visual form of the verbal summator has been developed as a supplement to the auditory form. The general method is designed to obtain verbal responses in the absence of the environmental stimuli which ordinarily influence the stream of speech. These responses are especially useful in the study of the conditions of latent speech and the factors influencing the emission of words, and as clinical material. In the auditory verbal summator (1), the imitative response to an auditory skeletal vowel pattern summates with a relatively strong latent response to produce overt verbal behavior. In the present experiment, an attempt was made to evoke latent responses through summation with incipient responses to skeletal visual speech patterns. The phenomena involved are not peculiar to the experimental situation. The significance of misreading in everyday life, for example, has been discussed by Freud (4).

SUBJECTS AND TECHNIQUE

In changing from the auditory to the visual field, the chief experimental problem was that of finding stimuli which would lead to the emission of verbal responses, but which nevertheless would not have a differential effect upon any particular set of words. The stimuli which have proved most satisfactory are small cards upon which words, phrases or sentences are printed. The rather specific strengthening of a particular response by the appropriate stimulus which ordinarily occurs in reading was avoided by adjusting the distance of the stimulus card from the subject so that he could make out something of the general outline of the words but could not read the words or make out individual letters. This distance was determined for each subject before beginning an experiment. The cards were exposed in a Whipple disc tachistoscope with an exposure time of $1/10$ sec. In an earlier experiment, the subject was permitted to look at the card as long as necessary before responding, but the method of repeated short exposures of the

*Recommended for publication by Dr. B. F. Skinner, November 9, 1940.