

PERFORMANCE AND REMINISCENCE ON A SYMBOL
SUBSTITUTION TASK AS A FUNCTION OF DRIVE

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This experiment continues the series of studies on the effect of drive on performance and reminiscence, references to which have been given in Eysenck and Willett (1962). The present experiment uses high- and low-drive groups of male apprentices, drive being controlled by the suitable placing of the task either within or without a selection battery of tests used for an apprenticeship selection program; details of this method have been given by Eysenck and Maxwell (1961). The task used was a variant of the well-known symbol substitution task, 20 letters and their symbols being placed at the top of each consecutive page, followed by long lines of letters underneath each of which was a space for the appropriate symbol. 30-sec. trials were used, massed practice being achieved by having *S* place a tick after the last completed substitution in each trial period. A short practice period was given to acquaint *S* with the task. Some *Ss* worked for 3 min., rested for 5 min., and worked for another 5 min. (short work group); others worked for 8 min., rested for 5 min. and worked for another 5 min. (long work group). In the short work group there were 48 low-drive *Ss* and 53 high-drive ones; in the long work group *Ns* = 49 and 20, respectively.

There were no significant differences between the high- and low-drive groups with respect to performance; inspection of the plotted performance curves fails to disclose even suggestive differences between the groups. The position is rather different with respect to reminiscence; here the between-group difference in an analysis of variance is significant at the 1% level. The means of

TABLE 1
REMINISCENCE SCORES

Drive group	Short work	Long work	<i>M</i>
Low drive	2.77	4.41	3.60
High drive	1.83	2.85	2.11
<i>M</i>	2.28	3.96	

the four groups are given in Table 1. *t* tests were run between high- and low-drive groups, and between long- and short-work groups; both were significant ($p = .01$). There were no significant interaction effects. It is noteworthy that the high-drive group has a lower reminiscence score than the low-drive

¹We are indebted to the Human Ecology Fund for a grant which made this study possible.

group, contrary to Kimble's (1950) theoretical prediction, and to our own experimental results with the pursuit rotor (Willett & Eysenck, 1962). It seems that results are strongly dependent on the particular test used, a fact which needs to be considered in explaining reminiscence. The larger reminiscence scores of the long-work group, as compared with those of the short-work group, are expected.

Summary.—High-drive and low-drive Ss were not differentiated in their performance on a symbol substitution task but were found to differ very significantly in their reminiscence scores. Low-drive Ss, counter to prediction, had higher reminiscence scores than high-drive Ss.

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Accepted August 31, 1962.