18 msec. Although a variety of visual parameters can affect the absolute duration at which 50% recognition occurs, it is not obvious why such differences between the present study and previous studies would affect within-age and between-age variability. (In fairness, it should be noted that it was not the primary purpose of earlier studies to establish time and recognition-accuracy relationships.) It is quite possible that the recognition values in the Ghent (1960), Ghent & Bernstein (1961), and Munsinger (1965) studies, because of the nature of the tasks and of the visually more complex materials they employed, reflected primarily cognitive differences (such as the relative degree of sophistication used in inferring the stimuli from partial cues) between Ss, whereas the present findings primarily reflected perceptual differences.

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NOTES

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2. The mean accuracy scores were corrected for chance guessing by subtracting $1/10 (1 - \text{Observed})$ from the raw mean score.

Effects of knowledge of results on schematic concept formation with linguaform patterns¹

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It was reported, in an earlier study, that knowledge of results (KR) did not aid learning in an oddity task with linguaform patterns. In the present study KR was found to aid learning. In fact, performance was not significantly above chance when KR was not provided. It was concluded that further analysis of the role of KR in schema learning tasks is badly needed.

The findings of studies comparing the effects of knowledge of results (KR) and no knowledge of results (NKR) on schema learning tasks have been inconsistent. Some have found KR to have no effect (e.g., Hollier & Evans, 1967), some have found it to have a negative effect (e.g., Brown, Walker, & Evans, 1968). Still others have found KR to have a positive effect (e.g., Pearre & Jones, 1968).

Hollier & Evans (1967), employing computer-generated linguaforms in an oddity task, found no significant differences between Ss provided with KR or NKR. The present study represents an attempt to replicate the essential features of their study. In the present case, however, it was hypothesized that KR would facilitate performance.

METHOD

The Ss were 20 experimentally naive students enrolled in an introductory psychology course. They were randomly assigned to two groups of 10 Ss.

The linguaforms were constructed in the same manner as those employed by Hollier & Evans (1967) except that the odd sentences were always 0% redundant. A total of 20 sets of three sentences were used. The experimental procedure differed from that of Hollier and Evans only in the following ways: KR was provided the KR group by a sheet following each set of sentences upon which the number of the odd sentence was printed; the booklets used by the NKR group were identical

except the page was blank. The Ss were given 30 sec in which to mark their answers and to look at the KR page (or the blank page). Blackened sheets were inserted behind each set of sentences to prevent Ss from viewing the KR sheets, and Ss were not allowed to turn to previous pages in the booklets. The most probable sequence was PA, HA, RO, GE, KO, ME, LA.

RESULTS AND DISCUSSION

The data indicated that the KR group's performance was superior to that of the NKR group. The mean number of correct responses was 10.5 for the KR group and 7.5 for the NKR group. This difference was statistically significant ($t = 1.77$, $df = 18$, $p < .05$) and in the predicted direction. Moreover, the NKR group failed to perform significantly better than chance ($p > .10$), whereas the KR group did ($p < .05$). The results indicate that KR does have a positive effect on the present task. However, the effects do not appear to be very powerful.

Pearre & Jones (1968) have briefly summarized some factors that may determine the effectiveness of KR in some schema tasks. However, much more consideration must be given to this problem. In general, the trend of research suggests that KR aids in the learning of schemata, although KR may not be necessary in order for schema learning to occur.

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NOTES

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