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# Eye Movements of Good Readers

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#### ABSTRACTS

fants were examined in an experimental cabinet which allowed control of factors other than the one being studied. Activity was measured by means of the stabilimeter-polygraph technique.

The experiment has revealed a significant difference in the amount of activity of the infants in the three situations: activity was greatest in the minimal situation, and least in the moderate situation. The effect of the stimuli was not maximal until the third to fourth minute following presentation of the stimuli. Differences in amount of activity between situations seemed to be related to differences in strength of stimuli between the situations. The differential reactions were greatest when the infants were awake and moderately full, and greater after the third day of age than before. Amount of crying revealed the same trends as noted above, being significantly less under moderate than under minimal light.

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A CRITICAL ANALYSIS OF READING TEST SCORES

FRANCIS P. ROBINSON AND FRIEDA H. MCCOLLOM

Since most reading tests have time limits, their scores are due both to comprehensive ability and to speed of reading. In this experiment a time limit test and a no time limit test are analyzed to determine the relative importance of each of these variables. Although the usual clinician or teacher uses a reading test score primarily as a measure of comprehensive ability, a critical analysis indicates that speed of reading determines these scores more than comprehensive ability. The length of the test as a fatigue factor was also found to determine the type of reading a person does.

STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA.

#### EYE-MOVEMENTS OF GOOD READERS

## ROBERT Y. WALKER

Simultaneous binocular records of the vertical and horizontal eye-movements were obtained by photographic technique for fifty students ranking in the top decile in the *Iowa Silent Reading Test* and the *University of Iowa Qualifying Examination*. Norms of 200 IOWA ACADEMY OF SCIENCE [Vol. XL

seven measures of eye-movements were established on reading material moderate in difficulty and requirement of comprehension. Varying difficulties of reading material and requirements of comprehension gave significant differences in eye-movements for duration of fixation, size of fixation, and rate of reading; mode of duration and extent of forward shift remained fairly constant.

STATE UNIVERSITY OF IOWA,

Iowa City, Iowa.

## A LABORATORY INVESTIGATION OF PROBLEM SOLVING IN PLANE GEOMETRY

## Lyle K. Henry

In investigating the mental processes involved in geometry problem solving the present study attempted to eliminate some of the inadequacies of paper and pencil analyses by the following procedure:

- 1. The stimuli were arranged according to increasing degrees of elaboration and presented to subjects, individually, through an exposure apparatus for a timed interval.
- 2. The subject expressed his ideas verbally, as they occurred, and these were recorded by a microphone-dictaphone unit.
- 3. The meanings of the responses were ascertained by cross reference and by use of a controlled set of questions.

The data obtained throw light on the status of insight and meaning in this field of subject matter.

STATE UNIVERSITY OF IOWA,

IOWA CITY, IOWA.

## A PRELIMINARY REPORT OF A NEW DEPARTURE IN MENTAL MEASUREMENTS AND SOME OF ITS PRACTICAL APPLICATIONS

#### D. D. Feder

The field of mental measurements has been dominated by a theory sterile in its contributions to systematized psychology. Moreover, most traditional types of objective examinations do not adequately test anything more than amount of discrete information compiled.

This technique goes beyond mere information, getting into the