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The Influence of the Size of Retinal Image and of Perspective upon the Visual Perception of Distance: A Comparative Study

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(c) The approximately equal chances for X's and Ox's to get into the top third; and the similar equal chances for the Y's and the Oy's to do the same.

V. General Conclusions. —

1. Intelligence being held constant and instruction nearly so, the differences in achievement between segregated and unsegregated classes are not so very impressive.

2. Fewer of the segregated Z's fall into the low third in achievement than is true of the Oz's.

3. The brightest pupils seem to profit most from segregation.

4. In both the low and the middle ability groups, the chances for the segregated and the unsegregated getting into the top third in achievement are about equal.

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THE INFLUENCE OF THE SIZE OF RETINAL IMAGE
AND OF PERSPECTIVE UPON THE VISUAL PER-
CEPTION OF DISTANCE: A COMPARATIVE
STUDY

RUTH UPDEGRAFF

Upon the assumption that visual perceptions are integrated in character and that some kind of an empirical basis is presupposed in their formation, we have attempted to segregate, for experimental purposes, two of the more commonly acknowledged factors in the estimation of relative distances. Both of these factors may be said to be functions of the stimulus, rather than of the response. A comparison of their relative influence in the distance perceptions of young children and adults, as well as a study of acuity in these perceptions, is the object of this investigation.

The experiment is being carried on with children of the Iowa Child Welfare Research Station, aged two to six years, and with members of the staff. The apparatus extends the length of a thirty-foot dark room, being so constructed that the stimuli, illuminated circular fields which vary in size and distance, may be presented to the observer anywhere within a range of thirty feet. The subject, whose position is held constant, views the stimuli with both eyes and judges which of a pair is the nearer; the response is a motor, not a verbal reaction, being one which gives both visual and auditory satisfaction to the child.

According to the method of constant stimuli, a large number of judgments is required on a few selected distances. The standard stimulus is an illuminated circular area twelve centimeters in diameter at a distance of five meters from the eye. Two hundred fifty judgments, fifty each for five distances both above and below the standard, are required for the determination of each of the seven limens which are to be compared. The series are as follows: Series 1 — the determination of the distance limen at five meters, using two stimuli of equal size, the standard size; Series 2 — the determination of the distance limen at five meters, the standard circle always being compared with another of slightly different size, 11.5 cm. and 12.5 cm. respectively; Series 3 — the determination of the distance limen at five meters, the stimuli being of the standard size, but one of each pair being presented slightly off-center, above and below, toward the center, and away from it; Series 4 — the determination of the limen for size at a distance of five meters.

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A PRELIMINARY STUDY OF THE TEMPOS USED BY
PRESCHOOL CHILDREN IN THE THREE RHYTHMS
— WALKING, RUNNING, AND SKIPPING

EVA LEAH HULSON

A preliminary study was undertaken to find out at what tempos young children from four to five years of age are best able to walk, run, and skip in concert with music — in this case appropriate music played on the piano. It was carried on with a group of about twenty children from four to five years old from the Iowa Child Welfare Research Station. It was performed under group conditions — all of the children being present during the testing periods. For this study, sixteen measures of music — chosen because of its suggestiveness as well as for its simplicity — were played by an adult at designated tempos while a second adult observed a group of three or four children as they responded to the music. Eight consecutive steps were arbitrarily chosen as being the minimum upon which a child could be judged as being able to keep the rhythm. Three methods were used for gathering the data for this study, (1) without instruction in order to get the children's first response to the music, followed by (2) verbal in-