THE RELATIONSHIPS OF THREE PERSONALITY CONCEPTS, DIFFERENTIATION, ESTEEM, AND INDIVIDUALISM, TO READING ACHIEVEMENT AND DISABILITY WERE EXPLORED. THIRTY-TWO BOYS AND 16 GIRLS, AGE 7 TO 14 WITH 1 TO 6 YEARS READING RETARDATION AT THE UNIVERSITY OF DELAWARE READING STUDY CENTER WERE MATCHED WITH SUCCESSFUL READERS OF THE SAME AGE AND SEX. THE SCHOOL AND COLLEGE ABILITY TEST AND THE SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS WERE USED TO MATCH THE GROUPS. ALL SUBJECTS WERE TESTED INDIVIDUALLY WITH A NONVERBAL TEST INVOLVING FOUR TASKS TO DETERMINE THE EXTENT OF DIFFERENTIATION, ESTEEM, AND INDIVIDUALISM IN THEIR CONCEPTS. ACHIEVEMENT ON EACH TASK BY THE TWO GROUPS IS REPORTED AND DISCUSSED. RETARDED READERS WERE CHARACTERIZED BY A RELATIVELY HIGH DEGREE OF DEPENDENCY. SUGGESTIONS ARE MADE FOR REMEDIAL TREATMENT EMphasizing INDIVIDUAL EFFORT. REFERENCES ARE GIVEN. THIS ARTICLE IS PUBLISHED IN "THE READING TEACHER," * VOLUME 19, NOVEMBER 1965. (LS)
This study has explored certain personality correlates of reading disability.* Attention was focused upon differentiation, esteem, and individualism as components of the self-concept. It was hypothesized that years of failure and derogation by authority figures and peers would affect the disabled reader's perception of himself.

The relationship between reading disability and personality maladjustment has been widely studied (2). Findings vary considerably, but in general indicate that a prolonged failure in learning to read is associated with a variety of adjustment problems, chiefly characterized by degrees of aggression or withdrawal. It is usually noted, however, that children with reading problems vary greatly in their degree of emotional maladjustment; in addition, there exists no objective criterion for categorizing a child as maladjusted.

Because of these shortcomings, it seemed advisable to disregard the value-laden dichotomy of adjustment-maladjustment, and to focus upon more specific and objective aspects of personality in relation to reading disability. One such area which has been little explored is the self-concept of the nonreader.

Many investigations of the self-concept of children have been hampered by the utilization of verbal techniques of measurement. Not only are such instruments as rating scales and Q sorts highly visible to the child, but they also seem particularly inappropriate for populations varying widely in age, intelligence, and reading achievement (as in this study). In addition, as Kelly (3) has suggested, a person (and we may add, especially a child) “is not necessarily articulate about the construction he places upon his world.” In view of these arguments, the measures developed for this study, derived in part from those used in an earlier study (5), were largely nonverbal.

A basic tenet of a self-social theory of personality is that social experiences serve to define the self (4). As a child develops, the self is necessarily perceived in relation to important persons in the immediate social environment. Although the self is ordinarily experienced as an integrated whole, it is possible to separate for purposes of analysis various components of self-other comparisons. Three such components are considered in this study: differentiation, esteem, and individualism.

Differentiation is here conceptualized as the degree to which the self is distinguished or discriminated in the social field. This component is measu...
ured in this study by the choice of a symbol to represent the self which is "different" rather than "like" symbols representing other children.

Esteem is considered to be a generalized evaluative component of the self which is derived from a lifelong series of comparisons with other people. The measure of esteem in this study is based upon a cultural norm which associates prominence or ascendancy with a position to the left in a row of symbols. Accordingly, the position in which the self is placed in a line of symbols representing the self and others is recorded, with higher esteem associated with a position to the left.

Individualism here denotes a perception of the self as occupying a position separate from, rather than within, a group of others. Two measures of this component were included. In the first, the subject was presented with a paper on which symbols depicting parents, teacher, and other children were arranged in a triangle. Placement of a symbol representing the self without, rather than within, the triangular area was assumed to indicate individualism. In the second measure of individualism, the subject was asked whether he would prefer to journey through space (a) alone or (b) with others. The choice of the "alone" condition was assumed to indicate individualism.

Method

Subjects. Thirty-two boys and sixteen girls, age seven to fourteen, who had applied to the Reading Study Center, University of Delaware, for corrective training, were used as non-achievers. Intelligence was estimated by a test of hearing comprehension (1). Retardation in reading (the difference between present achievement level and that predicted by the capacity measure) ranged from one to six years, with a median of two years.

For each subject in the nonachieving group a successful reader in the public schools of the same age and sex was selected. Scores on the School and CollegeAbility Tests (SCAT) were used to effect a match for general level of intelligence. For all subjects in the achieving group STEP reading scores (Sequential Tests of Educational Progress) were higher than SCAT scores.

Experimental tasks. All subjects were tested individually and were assured that there were no "right" responses to the tasks. The experimental tasks were as follows:

1. Circle task. A paper containing a single centered circle (either plain or crosshatched at random, but always designated as representing other children) was presented. Subjects were then given four circles, two plain, two crosshatched. They were told to select one circle to represent themselves and to paste it on the paper. Choice of the "different" rather than the "like" circle was interpreted as differentiation.

2. Line task. Subjects were given a paper containing a horizontal line. They were then given in random order six circles with pictures (representing self, friend, and a smart, dumb, funny and bad classmate)
and told to paste them in a row on the line. The principal score for this task was the position of the self. A position to the left was interpreted as esteem. The line task was performed three times with different sets. The second set included self, friend, mother, father, teacher, and neighbor; the third included self, book, home, school, game, and pencil.

3. Triangle task. Subjects were given a paper on which three circles were drawn to form a triangle. The circles were labeled P, C, T to signify parents, other children, and teacher. Subjects were then handed a plain circle to represent themselves and told to paste it on the paper with the others. Placement of the self outside the triangular area was considered a measure of individualism.

4. Space trip. Each subject was asked: "If you had a chance to go on a space trip, like John Glenn, would you go by yourself, or take someone with you?" The choice of a solo trip was interpreted as indicating individualism.

Results

Circle task. No significant differences were found between achievers and nonachievers on the differentiation scores from this task.

Line task. No significant differences in the Line task were found between achievers and nonachievers in regard to the placement of the self (esteem). Cognizance was taken, however, of the placement of all circles, in order to test the validity of the assumption of a left-right hierarchy. Such an evaluation was possible because two of the stimuli in the first array had clear negative implications (dumb, bad) and one a clear positive connotation (smart). Although these data were ordinal, it was decided to employ an analysis of variance because of the power and versatility of this statistic. Three such analyses were completed, one for each Line task. A significant effect was found for stimulus circle in each case (F's = 14.6, 31.8, 14.9, respectively; p = .001 in all cases). Subjects were thus consistent in their placement of the circles.

Although in general, achievers and nonachievers did not differ in their performance in the Line task, several minor differences were noted. The difference between the self and the "dumb" and the self and the "funny" child were significantly greater for the nonachievers than for the achievers (t = 2.25, 2.38, respectively; p = .05 in both cases). In addition, when subjects were categorized as to whether they placed the self closer to mother or closer to father (those equidistant from both parents were eliminated), a significantly higher proportion of nonachievers were found in the "mother" category ($\chi^2$=4.04, p=.05).

Triangle task. Of the nonachievers, 60 per cent, compared to 23 per cent of the achievers placed the self within the triangle of others ($\chi^2$ = 11.69, p = .01). Achievers thus exhibited a higher degree of individualism. In order to determine how the self was placed in relation to each of the other people (parents, teacher, other children) in this task, the dis-
tance from the self to each of these was measured, and achievers and nonachievers contrasted on each measure. Achievers placed themselves significantly farther than nonachievers from both parents \( t = 2.54, p = .02 \) and teacher \( t = 3.00, p = .01 \). No significant differences were found between achievers and nonachievers in relation to distance from children.

*Space trip.* Only 21 per cent of the nonachievers, compared to 46 per cent of the achievers chose to go on a space trip alone \( \chi^2 = 6.6, p = .01 \). Achievers thus again exhibited significantly more individualism than did the nonachievers.

**Discussion**

On the Line task, the stimulus circle was a significant variable in each array. Since the “dumb” and “bad” child were placed farthest to the right, and the “smart” child farthest left, the validity of the left-right hierarchy was supported. It is interesting to note that in the second set, mother and father were placed farthest left, and neighbor and teacher farthest right. In the third set, home and school occupied the left position, while pencil and game, the right. In each case, the objects or persons to the left appear to be more important than those placed to the right.

Although no significant differences were found in the placement of the self in the Line task between achievers and nonachievers, the retarded readers placed themselves significantly farther from both the “funny” and the “dumb” child. This finding suggests a defensive reaction in which the disabled reader is seeking to remove himself from these negative conditions. It is also of interest to note that the left-right hierarchy applied with equal force to the achieving and nonachieving readers. This finding suggests the potency of the left-right hierarchy in our culture, and casts some doubt upon a reversal of this response as a predictor of reading difficulty.

The principal conclusion that may be drawn from this study, however, is that retarded readers are characterized by a relatively high degree of dependency. This generalization is supported by three separate findings: (a) comparative closeness to mother rather than to father, (b) preference for space travel with others, and (c) placement of the self within the triangle of others and closer to parents and teacher.

No evidence is here provided regarding causality, nor is an interpretation which equates dependency with maladjustment required. (The nonachieving sample were all well enough adjusted to work in groups in the corrective reading classes.) It would appear, however, that dependency in itself would be disruptive to reading achievement for the reason that the information search, evaluation, decision-making, and other cognitive processes involved in the reading process are so clearly an individual act.

Clinical practice is in harmony with this idea. Paced instruction designed to insure success as a reward for individual effort is a prominent
characteristic of most corrective programs. It is possible that a major effect of these techniques is a gradual development of a new self-reliance, which releases the child from a dependence upon others and permits him to deal more effectively with the printed page.

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