This report describes two measuring instruments for determining social awareness and racial attitudes among primary grade children. The proximity test is based upon inferring the cognitive and affective distinctions and judgments which a child makes concerning people from how close together he clusters representational drawings of himself and of Negro and white teachers and peers. The Classroom Preference Test is an instrument designed to measure children's preference for white or Negro classmates and teachers. The results of analyses of data gathered are held to provide preliminary evidence of the validity of the proximity test as a measure of social awareness and racial attitudes in primary grade children. (KG)
The Measurement of Schoolchildren's Racial Attitudes: A Validity Study

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The goal of the research project within which the present study was conducted has been the development of instruments which can be used to gauge racial attitudes among primary grade children in the public schools.

The measurement of racial awareness and preference in children has interested social and child psychologists over a period of some 30 years. Recently, educational and social pressures to bring about racial integration in the public schools have rearoused interest in children's racial attitudes and have resulted in special interest in the relationships between these attitudes and the extent and type of school integration which children experience.

Valid group measurement of racial attitudes among young children has proved difficult however, both because of the tendency of children to give socially desired responses if their attitudes are questioned directly, and because of the linguistic and conceptual limitations encountered with primary grade children if attitude tests are disguised in traditional ways.

Our approach to the problem of developing measures of racial attitudes among primary grade schoolchildren has been governed by the following constraints:

1) First, that the measures be situationally relevant for children in school settings.
2) Second, that they be simple enough for first graders.

3) Third, that they be group administrable with a minimum of verbal instruction and no reading requirements and

4) Fourth, that they be sufficiently disguised or unobtrusive to minimize the likelihood of eliciting socially desirable responses.

This paper reports the development and preliminary validation of one quasi-disguised and quasi-structured instrument which we have been working on, and which is referred to as the proximity test. The proximity test is based upon inferring the cognitive and affective distinctions and judgments which a child makes concerning people from how close together he clusters representational drawings of himself and others.

The method essentially requires subjects to differentiate between social stimuli who vary along dimensions of sex, age, and race, by making appropriate proximity judgments. We are attempting to show that in making the proximity judgments the subject transforms into geometric distances the cognitive and affective distinctions which he has learned to draw between people.

Procedure. Subjects received a test booklet containing nine stimulus figures organized into a set of paired comparisons. These nine figures varied along three dimensions: age, sex, and race. The figures showed a white female teacher, a Negro female teacher, a white male teacher, a Negro male teacher, a white girl, a Negro girl, a white boy, a Negro boy, and a raceless, sexless, self-figure. Each paired comparison was presented on a separate page in a 36 page booklet.

The booklet pages themselves were specially designed for this task. Each page had, extending from the right-hand side, a detachable, perforated tab with a gummed back. For any paired
comparison (page in the booklet) one figure was printed on the non-gummed (upper) side of this tab and the other figure was printed toward the left side of the large sheet which constituted the test page. Figures appearing in either the fixed or movable position were counterbalances for race, sex, and age.

Subjects. Subjects were 429 first grade and third grade white and Negro children in the public schools of a large eastern city. Subjects were drawn from four schools, with an attempt made to match as closely as possible on socio-economic factors. The schools included an all white school, an all Negro school, a racially mixed school with whites in the majority and a racially mixed school with Negroes in the majority. Two classes per grade were randomly selected at each school.

Administration. The tests were group administered by white and Negro females. White administrators gave the tests in the all white school and in the racially mixed school which was predominantly white; Negro administrators gave the test in the all Negro school and in the racially mixed school which was predominantly Negro. Within schools, administrator assignment to classrooms was random.

Subjects were told that they were playing a game in which they would paste a picture of one person on a page with another person. They were directed to study the two figures on the page and paste the movable figure any place they chose in relation to the target figure.

The booklet was scored by measuring in centimeters the distance placed between each pair of figures.

We were concerned with the validity of the measure in two respects, one more cognitive, the other more affective. Cognitively, we were concerned with whether the placements of
the figures actually reflected the dimensions along which the figures varied. That is, did subjects organize the figures using the dimensions of age, sex, and race in any consistent or systematic way? To answer this question whether subjects' placement of the figures reflected awareness of the three dimensions built into the stimuli, Kruskal's multi-dimensional scaling procedure was applied to the data. This analysis showed that satisfactory stress levels of .05 or less were usually reached at three dimensions, indicating that from subjects' placements of the figures it was possible to recover the three-dimensional character of the set of stimuli employed in the task. Moreover, three-dimensional slides of the solutions have been produced which show clearly that subjects were responding to the task in terms of fairly clear and discernible sex, age, and race dimensions.

Apart from the ability of the task to reflect the social distinctions which subjects may make between people, we were concerned with its more affective components, that is the extent to which the proximity placements reflected social attitudes.

To determine whether the proximity test results were validly reflecting racial attitudes, two groups were chosen from among the sample on the basis of extreme scores on a criterion measure which all Ss had taken. The criterion measure was the Classroom Preference Test, another test which we have developed.

Briefly, the Classroom Preference Test is an instrument designed to measure children's preference for white or Negro classmates and white or Negro teachers. The materials used in the test were pen and ink sketches of classroom scenes. These were sketches of three classes, in each of which a different type of activity was pictured. At the same time, the racial
composition of each class was varied in six different ways, ranging from an all white class with a white teacher to an all black class with a black teacher. Thus, the 18 sketches differed simultaneously in activity and racial composition.

The sketches were arranged three to a page in a booklet according to the restrictions of a random incomplete block design. The stimuli were arranged so that on any page three of the six racial compositions appeared, one embedded in each of the three different class activities. On each page subjects indicated which class they would most like to be in and which class they would least like to be in. The number of times that any stimulus was chosen over any other was computed, and average choice values were calculated. The maximum number of times a stimulus could be chosen was six.

To learn whether the proximity judgments were related to racial attitudes as expressed on the Classroom Preference Test, an analysis of proximities was carried out for 101 subjects who had showed strongly pro-white or strongly pro-black attitudes on the Classroom Preference Test. These extreme subjects included 63 pro-whites who chose the white teacher-white children stimulus 5 or more times, and 38 pro-black subjects who chose the black teacher-black children stimulus five or more times.

The proximity data which were analyzed were the distances placed between the self figure and the white girl, the self-figure and the black girl, the self figure and the white boy, and the self-figure and the black boy. The analysis used was a nested four way analysis of variance, with school, grade, sex, and type of extremeness (pro-white or pro-black) as factors in the design.

The results showed that proximity judgments were related to racial attitudes. Pro-whites place significantly less
distance between the self figure and the white girl than did pro-whites (F=7.60, 1/df, p < .01). Similarly, pro-blacks placed significantly less distance between the self figure and the black girl than did pro-whites (F=8.50, 1/df, p < .01). Corresponding trends appeared for male stimuli, although they failed to reach significance.

**Discussion.** The results of the multi-dimensional scaling analysis and the results of the analysis of variance of the proximity data for the extreme criterion groups provide preliminary evidence of the validity of the proximity test as a measure of social awareness and racial attitudes in primary grade children.
Footnotes


2. This research was supported by PHS grants #HD02227 and HD03961 from NICHD.