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ABSTRACT

After six weeks of school, classroom teachers rated 95 Negro and 93 white first graders on 24 behavior scales. Mean total ratings did not differentiate the two groups, but variance was significantly higher for the whites. Total ratings predicted promotion for the Negroes, and for both groups were significantly (a) higher for the girls, (b) positively related to Otis IQ's and Metropolitan readiness scores, and (c) among those promoted to grade two predictive of Metropolitan reading scores and scores with IQ controlled. Principle components factor analyses with varimax rotations revealed two group factors ("Good worker," "Friendly") and three more specific factors ("Cries", "Quarrels," "Wanders") common to both racial groups. Additional factors differentiated the races: (a) "Leadership: for the whites; (b) "Docility," "Conformity," "Curiosity" for the Negroes. "Good worker" for the Negroes and "Leadership" for the whites were most predictive of academic success. The findings suggest both commonalities and race-related differences in teacher judgments of first graders' classroom behavior. (Author)

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TEACHER JUDGMENTS OF CLASSROOM BEHAVIOR

OF NEGRO AND WHITE SCHOOL BEGINNERS

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## Teacher Judgments of Classroom Behavior of Negro and White School Beginners

In this study we have investigated teachers' ratings of classroom behavior for black and white school beginners. These ratings were made after six weeks of first grade in a rural Southern community. The study is part of a larger research effort exploring the social and personal correlates of academic success among these children.

Here, as in many earlier studies, such as those of Henig (1949) or Sutton (1955), for example, the ratings predicted reading achievement a year later for both groups. Therefore, it was decided that more detailed item and factor analyses of the ratings would be of interest. These were done separately for each race because it was believed that, as a result of segregation, the two racial groups should be considered separate populations, each with its own characteristics. The purpose of these analyses was to examine in greater detail the relations of the ratings to academic progress and to contrast the two sets of data in order to discover both commonalities and racial differences.

Because of the limitations in the size of the sample (initially 96 blacks and 96 whites), data from the two sexes were pooled in most analyses. It should be noted that since in these communities integration of the schools was just beginning at the time of this study, a large majority of the children (91% of the blacks, 83% of the whites) were taught and rated by teachers of the same race. This study thus provides no information about cross-racial perceptions, or prejudices, but in the main involves black teachers and children contrasted with white.

### Method

#### Subjects.

The initial sample consisted of 96 black and 96 white entering first graders in thirteen schools in two rural Southern counties. Half of each group

were boys, half girls, and half of lower and half of middle class. Before the sample was selected, information about race, sex, and guardian's occupation was collected for all children registered to enter school in County A.

Hollingshead's Occupational Scale was used to categorize the children roughly by class, with levels six and seven (semi-skilled and unskilled laborers) comprising the lower class, and levels one through five, the middle. After the children were classified by race, sex, and class, a random selection was made within each of the eight cells. A dearth of middle class Negroes and lower class whites necessitated the filling of these cells from County B, using the same criteria. The two counties adjoin and are similar in character.

While this method was used in an attempt to control, at least roughly, for socioeconomic class, it was recognized that the continuing effects of the so-called "caste" system in the South prevent a complete separation of race and class, that the middle class Negroes and the lower class whites were minority groups, and that the lower class Negro represented a more disadvantaged group than the lower class whites.

By the middle of the second grade, when the final testing for these analyses was done, one child from the black sample and three children from the white were lost. Three had moved out of the area and one was withdrawn from school. The final sample thus consisted of 95 black and 93 white children.

#### Rating Scales.

After six weeks of school, classroom teachers (12 for the whites, 15 for the blacks) rated all subjects on 24 7-point scales. These were bi-polar dimensions related to classroom behavior, with the positive end of each scale exemplifying behavior considered to be mature. For example, "can work quietly", "follows directions", "is able to play in group", "talks to other children", etc. These scales were partially derived from Medinnus's (1961) First Grade

Adjustment Scale. The twenty-four ratings were summed for certain analyses (split-half reliability was .95) and analysed separately for others. In this report each scale will be labelled with its positive end; it should be understood that the converse kind of behavior ("many quarrels" as opposed to "few quarrels", for example) designated the negative end of each scale for the raters.

### Standardized Tests.

Metropolitan Readiness scores were obtained from school records (and were known to the teachers at the time of the ratings). In the spring, Otis Quick-Scoring Mental Ability Tests were administered to all subjects by one of the experimenters. During the first few months of the next school year, the Metropolitan Reading Test was administered by the experimenters to those subjects (68 blacks and 77 whites) who had been promoted to second grade. It was assumed that those children not promoted could not read.

The black children were significantly lower than the white on readiness test scores, Otis IQ's, and reading scores. In addition, there was a tendency ( $p = .10$ ) for a lower proportion of the blacks to be promoted (see Table 1).

### Results

The findings will first be reported for total rating scores. These were slightly, but not significantly, higher for the whites. Within each racial group, total ratings were significantly higher for girls than for boys. Variance of the total scores was significantly higher for whites ( $F = 1.44$   $df = 95/95$ ;  $p = .05$ ). For blacks, but not for whites, total ratings predicted promotion (blacks,  $r = +.42$ ; whites,  $r = +.14$ ). For both groups, total ratings were positively and significantly related to Otis IQ's ( $r = +.36$  for blacks;  $r = +.26$  for whites) and to Metropolitan Readiness scores ( $r = +.33$  for blacks;  $r = +.48$  for whites). Among both groups for those children promoted to second grade (68 blacks, 77 whites), total ratings were positively and significantly related to all subtest and total Metropolitan Reading scores. These correlations ranged

from +.25 to +.33 for the blacks, and from +.40 to +.45 for the whites. Positive and significant relations were also found in each group between total ratings and total reading with IQ controlled (partial  $r$ 's were +.27 for the blacks, +.31 for the whites).

#### Item analyses.

The findings for item analyses will next be reported. These analyses were directed toward (a) a comparison of the two groups on each item, and (b) the relation of each item to a crude index of academic progress (one point for those not promoted, two points for promoted but not scoring above chance levels on the reading test, and three points for those able to read).

When the two groups were contrasted on each item, only four significant differences were found, with the whites higher in each case: (1) follows directions, (2) completes tasks, (3) few quarrels, (4) accepts teacher's authority.

For 19 of the 24 items, variance was higher for whites. This proportion is significant at the .003 level with the sign test. In only four instances, however, were differences in variance for particular items large enough to be significant. These were (1) completes tasks, (2) obeys rules, and (3) talks to other children, for which the whites were higher, and (4) few quarrels where variance was higher for blacks.

Of the 24 items, 16 were positively and significantly correlated with the crude index of academic success among the blacks. The six highest of these in order of magnitude were (1) contributes to discussion, (2) follows directions, (3) works independently, (4) is reliable, (5) welcomes leadership, and (6) explores experiences eagerly. For the whites, only 8 items were significantly related to this index. The six highest of these were (1) explores experiences eagerly, (2) welcomes leadership, (3) contributes to discussion, (4) welcomes change, (5) is reliable, (6) completes tasks. It should be noted that four of the highest six items were the same for both groups. Moreover, the rank order correlation

between the two groups for the item-success coefficients was .84.

### Factor analyses.

For each group separately, the 24 items plus the index of success were factor analysed, using a principal components solution with a varimax rotation.<sup>1</sup> Findings will be reported only for those factors which accounted for at least 5% of the variance. Among the blacks, 8 such factors accounted for 56% of the variance, while among the whites, 6 factors accounted for 59%. Coefficients of concordance (Harmon, 1967) were computed between those factors which by inspection were similar for the two groups.

These analyses revealed two group factors and three more specific factors which are largely common to both. The factor accounting for the largest amount of variance in each group (26% for the whites, 15% for the blacks, concordance, .88) has tentatively been labelled "good worker". For the whites, 16 items loaded over .30 on this factor. Those items with highest loadings (all over .60) in order of magnitude were (1) can work independently, (2) follows directions, (3) can work quietly, (4) completes tasks, (5) good listener, (6) when working is self-sufficient, (7) is reliable, (8) obeys rules.

For the blacks, nine items loaded over .30 on this factor. Items loading over .60 were (1) follows directions, (2) works independently, (3) completes tasks, and (4) contributes to discussion.

A second common group factor (concordance .93) accounting for 10% of the variance for blacks and 7% for whites was termed "friendly". For both races items with highest loadings were (1) friendly to teacher, and (2) friendly to other children (with the opposite pole labelled "shy" in each case). "Welcomes leadership" and "talks to other children" loaded on this factor for the blacks, but not the whites.

Three more specific factors, each accounting for about 5% of the variance in each group (with concordance coefficients of .90, .94 and .73, respectively)

were related to "crying", "wandering", and "quarreling". For the last of these, the items for both "temper" and "quarreling" were involved, with "temper" having the higher loading for the blacks and "quarreling" for the whites.

In contrast to these five factors which showed appreciable commonality across groups, certain other factors differentiated the race. Among the whites, one such factor termed "leadership" accounted for 11% of the variance and involved the items (1) welcome leadership, (2) contributes to discussion, (3) explores experiences eagerly, and (4) talks to other children.

For the blacks, three additional factors were found, each accounting for about 5% of the variance. These were termed "docility" (works quietly, is self-sufficient), "conformity" (fits into group), and "curiosity" (welcomes change).

Low but significant loadings for success were found for the blacks on the first factor ("good worker") and for the whites on the sixth described above, which was the second in size ("leadership").

#### Discussion

Since the findings reported above are somewhat complex, specific implications will first be discussed for each set of analyses. Finally, a few general conclusions will be drawn from the study as a whole.

The overall similarity in mean total ratings for the two groups and the similar sex differences found in each suggest that the two sets of teachers were viewing the children in about the same way. The higher variance in total scores for the whites may indicate firmer opinion for the teachers in this group--that is, perceptions of individual differences among the children were more clearly expressed. One way of explaining this difference is to hypothesize for the whites a greater "halo" effect--that is, a greater tendency to categorize a child as "good" or "bad", and thus to rate him similarly on all scales.

The greater variance on the individual items for the whites probably contributed to the higher variance on the total score and again suggests that the

white teachers expressed firmer opinions. The black teachers may have felt less comfortable doing the ratings and may therefore have responded more cautiously.

Despite the greater variance in the total ratings of the whites, these scores predicted readiness scores, IQ, and reading scores about equally well for each group. For both groups of children, the total rating score predicted reading as well as did IQ. For the whites, the total ratings predicted reading also as well as did readiness test scores. For the blacks, on the other hand, ratings were significantly better than readiness scores in predicted reading, inasmuch as readiness scores failed to predict reading scores and in fact showed low negative relations to them (see Table 2).

Ratings predicted promotion for the blacks but not the whites. This difference may be partially attributed to the higher proportion of blacks not promoted--that is, the variance in promotion was greater for the blacks. Other than this explanation, which is not entirely satisfactory, the reasons for this difference are obscure.

The items differentiating the groups (follows directions, completes tasks, few quarrels, and accepts teacher's authority) seem to indicate a greater tendency for the teachers of the white children to perceive them in a conventional pupil role, or, alternatively, a greater tendency for the children themselves to adopt such a role. The findings for the "few quarrels" item for which the blacks had both lower scores and higher variance, would suggest that for some of these children, behavior in school was less inhibited than it was for the whites, or alternatively, that the black teachers were more sensitive to such disruptive behavior.

In contrast to these differences, items related most strongly to academic success were quite similar for the two groups. These findings suggest that attention and conformity are important, but that it is also true that the active, exploring child (just as the "rat-psychologists" have shown to be the case for the active, exploring rat) is more likely to learn.

The factor analyses, too, produced considerable commonalities between the two groups, with dimensions related to work habits and friendliness prominent and similar in both. In the same way, crying, wandering, and quarreling appear to be disruptive discontinuities in behavior noticed by teachers in both groups. These behaviors thus emerge as rather specific factors.

The chief differences found in these analyses involve a "leadership" factor for the whites, and three minor factors for the blacks, two suggesting passivity as the "good" end of the dimension, and the third a contrasting orientation, favorable to change.

Why success is associated with a "worker" factor for blacks and a "leadership" factor for whites is not entirely clear, but may involve different values and patterns of reinforcement in the two groups, or different social expectancies associated with the different positions of the two races in the rural South. It should be noted that the item "contributes to discussion" in each case is associated with the factor related to success. This suggests that being both willing and able to speak in class is predictive of success in first grade.

Altogether, in this study the similarities found between the two groups appear more striking than the differences. The results for total ratings provide positive evidence of their predictive power for achievement. If further research with independent samples perhaps comprised separately for sex as well as race were to confirm the differential utility of the various items, the construction of shorter scales with greater predictive power would seem feasible. The present findings suggest that such scales would be somewhat, but not very, different for the two races in this particular setting.

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## Footnotes

1. The Cooley-Lohnes programs (John Wiley & Sons, Inc., publishers) were used for these analyses. The authors are grateful to Dr. Jon Magoon, University of Delaware, for his help with these analyses.

Table 1. Mean scores and tests of significance for Metropolitan Readiness, Otis IQ, and Metropolitan Reading and per cent promoted for black and white subjects.

	Blacks (N = 95)	Whites (N = 93)	Tests of Significance
Metropolitan Readiness	51.0	70.4	t = 7.67****
Otis IQ	98.1	105.8m	t = 4.10****
Total Ratings	103.6	105.8	ns
Per cent Promoted	71%	84%	$\chi^2 = 3.01^*$
Metropolitan Reading <sup>1</sup>			
Word knowledge	35.1	39.7	t = 3.31***
Word discrimination	38.0	40.9	t = 2.16**
Reading	35.2	39.0	t = 2.84***
Total score	113.3	121.3	t = 2.69***

1. administered only to those promoted (68 blacks, 77 whites).

\* significant at .10 level

\*\* significant at .05 level

\*\*\* significant at .01 level

\*\*\*\* significant at .001 level

Table 2. Correlations between Metropolitan Reading test scores and Otis IQ's, Metropolitan Readiness scores and total ratings for all subjects promoted to grade two (68 blacks and 77 whites).

		Metropolitan Reading				Total corrected for IQ (1)
		Word Knowledge	Word Discrimination	Reading	Total	
Otis IQ's	Blacks	.28	.20	.29	.26	
	Whites	.42	.43	.37	.41	
Metropolitan Readiness	Blacks	-.08	-.09	-.15	-.18	-.22
	Whites	.35	.41	.40	.46	.28
Total Ratings	Blacks	.31	.32	.25	.33	.27
	Whites	.40	.41	.44	.45	.31

1. partial r's.