A STUDY OF SOCIAL ACCEPTANCE ACROSS ABILITY LEVELS IN THE ELEMENTARY SCHOOL*

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Rationale

There is a growing tendency for more and more school districts to place intellectually gifted children in special classes in order to provide them with opportunities for enriched experiences, in both depth and breadth, and to permit these children to stimulate one another.

On the other hand, many educators insist that in a democratic society children of all levels of ability should be placed together in one class for instructional purposes. Only in such classes, it is claimed, are the gifted given the opportunity to learn to get along with others of lesser mental ability, thus permitting all children to learn to understand and show acceptance of each other (8, 9, 16, 19).

Unfortunately, the question as to whether the gifted take the opportunity actually to develop friendships with typical children in regular classes has not received very much attention. This study was therefore designed to assess the extent to which membership in elementary school classes including broad ranges of ability leads to social acceptance across ability levels. An attempt will also be made to ascertain the extent to which the intellectually superior children are aware of their social status among typical children.

Previous Research

During the early development of sociometry, teachers' judgments were used to determine the degree of popularity of school children. However, Moreno's pioneering work (15) as well as a recent study by Gronlund and Whitney (7) disclosed the extreme unreliability of such ratings.

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Social acceptability in the classroom has been studied objectively by many investigators using various criteria with which to arrive at their findings. In general, a positive relationship was found to exist between intelligence and social acceptance.

In 1941 Loeb reported a study of 530 elementary school children who were asked to choose those with whom they would like to associate with respect to a given activity. The results showed a significant relationship between acceptability in the classroom group with academic achievement (12).

Five years later, Flotow reported a study of 135 children in grades four through eight, indicating a definite relationship between acceptability and IQ. A sociogram of 30 eighth graders showed that children who were chosen more than 15 times had an average IQ of 111.5 compared to 86.7 for those chosen less than 5 times (3). In a recent study, Grace and Booth found similar results with 294 children in grades one through six (6).

During the years 1939-1942, Bonney conducted several studies, mostly of primary grade children and reported correlation coefficients ranging from .04 to .46 between IQ and specific choosing situations (2). Both Bonney and Flotow felt that there was usually a higher correlation between IQ's and social status scores when the choosing situations involved some degree of ability such as being a class librarian or acting the part of a doctor in a health project.

Bonney also found a marked tendency for more children to choose those in the upper quartile in status than were chosen by those children in return. This finding is in contradiction to the results noted by Gallagher in a recent study which indicated that, while social popularity was positively related to intellectual status, the children did not significantly discriminate among the IQ groups in choosing friends (5).

Still other results were reported by Mann in a study of 281 children in grades 4 through 6, attending the Colfax School in Pittsburgh, to determine the effects of part-time ability grouping on their friendship patterns. The 67 gifted children attended a workshop for one-half the day and were in a regular classroom for the other half of the day. The study showed that the gifted tended to accept and reject each other more than they did typical children, while the latter also accepted and rejected each other more than they did gifted children (13).

Except for a few studies in socioempathy, there is little in the literature that compares the way in which a child expects to be accepted by his classmates with the way in which he accepts and is accepted by them.

Miller studied a group of 120 children divided into three IQ groups (IQ 60-80, 90-110, 120-140) with 20 in each group at the fourth and sixth grade levels. Each child chose those children he desired as friends on a

five point rating scale. The superior children were most frequently chosen, with the typical children next, while the retarded were chosen least. In predicting their own status within the class at the fourth grade level, the superior children were most accurate and tended to underestimate their status, while the retarded tended to overestimate their status.

In another study of socioempathetic ability, Ausubel, Schiff and Gasser found that 41 fifth grade pupils in two classes gave a coefficient of correlation of .757 between each pupil's separate prediction of how other children would accept him and his sociometric status.

Hypotheses

1. To support the null hypothesis that there is no difference between the friendship patterns of the intellectually superior children as compared with the patterns of their classmates of lesser mental ability in broad range groups (classes including IQ ranges from over 130 to under 100), the following conditions would have to exist:

a. Intellectually superior children (IQ 130+) will receive proportionately the same number of ≠1 choices and rejections as will their classmates of lesser mental ability.

b. Intellectually superior children will give proportionately as many ≠1 choices and rejections to their less gifted classmates as they will give to each other.

c. Intellectually superior children will be as favorably rated as will their less gifted classmates.

d. Intellectually superior children will rate their less gifted classmates as favorably as they will rate each other.

2. There will be no difference between scale ratings expected by intellectually superior children in broad range classes and those actually received.

Procedures

This study is a part of the research being conducted by the Talented Youth Project of the Horace Mann-Lincoln Institute of School Experimentation into the nature of talent and possible modifications in curriculum and teaching by which schools can improve their educational provisions for the talented. The Talented Youth Project, in cooperation with the New York City Board of Education, made a study of about 3000 elementary school children in middle income neighborhoods in the boroughs of Manhattan, Bronx, Brooklyn, and Queens.

In February, 1957, after these children had been in the fifth grade for half a school year, they were given a modified form of the Ohio Social Acceptance Scale, Advanced Series. This test required ratings of every child in a class by every child on a five point friendship scale, a #1 rating being the most desirable and a #5 rating being a rejection. Each child was also asked to indicate the average rating he expected the class to give him. Using IQ scores obtained with the Otis Quick-Scoring Mental Ability Tests, Beta, the children were classified according to five IQ levels: Group A = IQ 130 and above; Group B = IQ 120-129; Group C = IQ 110-119; Group D = IQ 100-109: Group E = 99 and below.

There were 13 classes which had all five or the four upper IQ groups with a minimum of 3 children in each group. These classes, totaling 350 children, were used as subjects in this study and included 66 pupils in Group A, 90 in Group B, 102 in Group C, 66 in Group D, and 26 in Group E.

Analysis of the Data

In all comparisons, the .05 level of confidence was the lowest limit at which differences were considered significant. Analysis of variance was used as a means of comparing mean social acceptance scale ratings. In analyzing the distribution of #1 choices and rejections, chi-square tests were used to compare the observed frequencies with the frequencies that might have been expected from a chance distribution. All figures given in the chi-square tables for the frequencies expected by chance distribution have been rounded off to the nearest whole numbers.

Distribution of #1 choices

Since the populations of the ability groups were unequal in number and the children were not limited in the number of #1 choices they could give to their classmates, it was impossible to know beforehand how many #1 choices would indicate a satisfactory degree of social acceptance. In order to use the #1 choices to measure any pupil's degree of social acceptability, it was necessary to compare the per cent of the ratings that he received as #1 choices with the per cent of #1 choices that others received. A comparison was therefore made of the #1 choices given by and to the five IQ groups (see Table 1).

Table 1

Comparison Between Per Cents of Scale Ratings Given and Received as ≠1 Choices by Each IQ Group

	IQ Groups					
	A	B	C	D	E	Mean
Per cent of ratings:						
Given as ≠1 choices	14.2	15.0	15.8	14.9	15.7	15.1
Received as ≠1 choices	20.2	15.2	15.6	11.0	10.6	15.1
Difference	-6.0**	-.2	.2	3.9**	5.1**	

None of the t values for differences between per cents of ≠1 choices given to all pupils by each IQ group are significant.

t values for differences between per cents of ≠1 choices received by each IQ group from all pupils are as follows:

$t_{A-B} = 4.17^{**}$ $t_{B-C} = .36$ $t_{C-D} = 4.18^{**}$

$t_{A-C} = 3.83^{**}$ $t_{B-D} = 3.82^{**}$ $t_{C-E} = 3.12^{**}$

$t_{A-D} = 7.08^{**}$ $t_{B-E} = 2.88^{**}$ $t_{D-E} = .29$

$t_{A-E} = 5.65^{**}$

Significant t values for differences between per cents of ≠1 choices given and those received by each IQ group are:

$t_A = 4.61^{**}$ $t_D = 3.55^{**}$ $t_E = 2.83^{**}$

**Significant at .01 level.

Group A pupils received 20.2 per cent of their ratings as ≠1 choices, which is almost twice as high a percentage as that received by Groups D and E. The average for all pupils was 15.1 per cent, which is approximately what Groups B and C received. Except for the difference between Groups B and C and between Groups D and E, all differences in per cents of ≠1 choices received are significant at the .01 level of confidence (see Table 1).

Table 1 also compares the per cents of ratings given by each group as ≠1 choices. There are no significant differences in the per cents of ≠1 choices given by the various groups to classmates. No group deviates from the total mean by more than approximately 1 per cent.

The intellectually superior children (group A) received 6 per cent more choices than they gave, whereas the pupils in Groups D and E gave approximately 4 and 5 per cent more ≠1 choices, respectively, than they received. Groups B and C were in the middle, giving and receiving approximately the same percentage of ≠1 choices.

The question may also be asked at this point, "Did the intellectually superior children give ≠1 choices to each other more often than they gave such choices to their classmates?" The answer is given in the affirmative as shown in Table 2. Not only did the pupils in Group A receive from all the children a greater proportion of ≠1 choices than did the other pupils (see Table 1), they also gave to each other a significantly greater percentage of ≠1 choices than they gave to their classmates in other IQ groups (see Table 2).

Table 2

Comparison Between Per Cent of Ratings Given as ≠1 Choices to Group A and to Total of Four Other Groups (B-E) by Each IQ Group

Group Giving Ratings	Per Cent of ≠1 Choices Received		Difference	t Value
	Group A	Total of Four Other Groups (B-E)		
A	23.0	12.3	10.7	4.88**
B	21.1	13.5	7.6	4.22**
C	20.2	14.8	5.4	2.95**
D	16.2	14.6	1.6	.74
E	20.1	14.6	5.5	1.59
Total Groups (A-E)	20.2	13.9	6.3	6.63**

**Significant at .01 level.

Table 2 compares the proportion of ≠1 choices given by each group to Group A with that given to the other four groups taken together. The differences for Groups D and E do not reach the .05 level of confidence. Thus, Groups D and E did not give Group A a greater proportion of ≠1 choices than they gave to the other groups Groups A, B, and C; however, gave significantly greater proportions of ≠1 choices to Group A than to the rest of the class.

Nevertheless, it is quite obvious from Table 2 that the differences decrease from 10.7 per cent in Group A's ratings of themselves and others to 1.6 per cent difference in Group D's ratings of Group A and the rest of the class. However, the difference in the ≠1 choices given to Group A and the other groups by the total of all five groups is 6.3 per cent which is significant beyond the .01 level of confidence and is sufficient to demonstrate that Group A pupils received more ≠1 choices proportionately than did their lower IQ classmates.

In order to determine whether the observed differences among groups in the distribution of ≠1 choices were significant beyond chance expectation, the ≠1 ratings of and by each group were compared by a chi-square analysis. It was assumed that by chance, the per cent of ≠1 choices that any group would be expected to receive would be proportionate to the incidence of that particular group in the total population. Thus, the number of ≠1 choices (1,384) given by all the children.

Since the chi-square equals 54.11 (Table 3), the number of ≠1 choices received across the five groups was significantly different from expectation. Group A received more than would have been expected, Groups D and E less, and Groups B and C about what would have been expected.

Table 3

Difference Between ≠1 Choices Received and Those Expected in Terms of the Proportion of Each of the Five IQ Groups in the Total Population

	IQ Groups					
	A	B	C	D	E	Total
≠1 choices received	344	354	421	190	75	1,384
≠1 choices expected to be received	261[a]	356	403	261	103	1,384
$(f_o-f_e)^2$ =	26.39	.01	.80	19.31	7.61	
Chi-square =	54.11**					

**Significant at .01 level (P = .01 when x^2=13.28 with 4 d.f.).

[a]All figures given for the number of ≠1 choices expected have been rounded off to the nearest whole numbers in the chi-squares.

Thus, the hypotheses, that the intellectually superior children will receive proportionately the same number of ≠1 choices as will their less gifted classmates and that the intellectually superior children will give proportionately as many ≠1 choices to their less gifted classmates as they will give to each other, are rejected.

Distribution of rejections

The next hypotheses to be tested assert that intellectually superior children will receive proportionately the same number of rejections as will their less gifted classmates, and that the former will reject each other as often as they will reject their less gifted classmates.

After studying the distribution of the ≠1 choices, one is inclined to wonder whether the ≠5 choices, or "rejections" as they shall be referred to, followed a similar pattern, but in reverse. Did the groups which received the most ≠1 choices also receive the least number of rejections? Conversely, was the group receiving the fewest ≠1 choices also the most rejected?

Table 4 provides an answer to these questions. There is no mistaking the fact that Group A, having received about twice as many ≠1 choices proportionately as Group E, had indeed been given less than half the percentage of rejections received by Group E. Of all the ratings received by Group A, 9.2 per cent were rejections compared to 22.8 per cent for Group E.

It will be noted that the proportions of rejections received by the various groups tend to increase steadily as one goes from Group A to E with the exception of Group B. The latter received the same percentage of rejections as Group A. The differences among the groups are all significant at the .01 level of confidence, with the sole exception being Group B, which received the same per cent of rejections as did Group A.

The total number of rejections given by each of the groups does not differ significantly from any other with one exception: the 13.4 per cent rejections given by Group B is significantly greater than the 10.0 per cent given by Group E.

It is quite natural, also, to find that there are significant differences between the proportions of rejections given and received by each group, except for Group C which gave and received about the same percentage of rejections. Groups A and C both gave many more rejections than they received, while Groups D and E received many more than they gave, with the latter group receiving the lion's share.

A comparison of the distribution by the total IQ groups of ≠1 choices and rejections shows that Group B received about the same proportions of ≠1 choices as the mean for all groups but moved up to Group A and away

Table 4

Comparison between Per Cents of Scale Ratings Given and Received as Rejections by Each IQ Group in Broad Range Classes

Per cent of ratings:						
Given as rejections	12.0	13.4	12.2	12.0	10.0	12.3
Received as rejections	9.2	9.2	12.1	15.4	22.8	12.3
Difference	2.8*	4.2**	.1	-3.4**	-12.8**	

t values for differences between per cents of rejections given by each IQ group to all pupils are not significant except $t_{B-E} = 2.27*$.

Significant t values for differences between per cents of rejections received by each IQ group from all pupils are as follows:

$t_{A-C} = 2.90**$	$t_{B-C} = 2.90**$	$t_{C-D} = 3.00**$
$t_{A-D} = 5.64**$	$t_{B-D} = 5.64**$	$t_{C-E} = 6.69**$
$t_{A-E} = 9.07**$	$t_{B-E} = 9.07**$	$t_{D-E} = 4.35**$

Significant t values for differences between per cents of rejections given and received by each IQ group are as follows:

$t_A = 2.55*$	$t_D = 2.83**$
$t_B = 4.67**$	$t_E = 6.40**$

*Significant at .05 level.

**Significant at .01 level.

from the mean in the number of rejections received. At the same time Table 4 shoes that Groups A and D came a little closer together in the number of rejections received than in the number of ≠1 choices received. Of the first four groups, A to D, none was more than about 3 per cent removed from the total mean of 12.3 per cent. This compares with the distribution of ≠1 choices in which all five groups were within 5 per cent of the mean of 15.1 per cent.

The comparison between the rejections of Group A pupils and those given to other pupils is clearly shown in Table 5. The neat pattern of decreasing differences in ≠1 choices seen in Table 2 is not evident among the differences in rejections in Table 5. The only group that gave a significantly smaller proportion of rejections to Group A than to the other groups was Group B. While each of the groups gave Group A a smaller proportion of rejections than to the total of Groups B to E, most of the differences were not statistically significant (Table 5). However, when all the rejections given to Group A were compared with all the rejections given to Group B to E taken together, the difference reached significance. This means that the intellectually superior children received fewer rejections than did their classmates but gave to the latter no more rejections than they gave to each other.

Table 5

Comparison Between Per Cent of Ratings Given as Rejections to Group A and to Total of Four Other Groups (B-E) by Each IQ Group

Group Giving Ratings	Per Cent of Rejections Received		Difference	t value
	Group A	Total of Four Other Groups (B-E)		
A	9.0	12.7	3.7	1.81
B	8.8	14.5	5.7	3.35**
C	10.0	12.7	2.7	1.65
D	9.2	12.7	3.5	1.77
E	8.2	10.4	2.2	.75
Total Groups(A-E)	9.2	13.0	3.8	4.37**

**Significant at .01 level.

Table 6 compares the number of rejections all of the pupils gave to each group with what would have been expected by chance. Groups A and B received less rejections than they would have expected by chance, whereas Groups D and E experienced the reverse. In fact, Group E actually received almost twice as many rejections as they would have expected by chance. Group C received just about what they would have expected. The excessive deviations from chance expectancy resulted in a chi-square of 119.43 which is significant well beyond the .01 level of confidence.

Table 6

Difference Between Rejections Received and Those Expected in Terms of the Proportion of Each of the Five IQ Groups in the Total Population

	IQ Groups					
	A	B	C	D	E	Total
Rejections received	157	215	325	266	162	1,125
Rejections expected to be received	212	289	328	212	84	1,125
$\frac{(f_o-f_e)^2}{f_e}$ =	14.27	18.95	.03	13.75	72.43	
Chi-square =	119.43**					

**Significant at .01 level.

Thus, the hypothesis, that the intellectually superior children will receive proportionately the same number of rejections as will their less gifted classmates, is rejected. However, the hypothesis, that the intellectually superior children will reject each other as often as they will reject their less gifted classmates, is sustained.

Comparison between acceptance and rejection of IQ groups

If it were true, according to the hypothesis, that the intellectually superior children would receive proportionately the same number of ≠1 choices and of rejections as would their less gifted classmates, then it should be equally true that the difference between the proportionate number of ≠1 choices and of rejections received by each IQ group should be the same for all groups.

After examining the distribution of both the ≠1 choices and rejections, one may wonder just what the relationship may be between the two measures. When the comparison is made between the proportions of ≠1 choices and rejections given to each group by all the children (see Table 7), there definitely appears to be a positive relationship between IQ and social acceptability.

Table 7

Comparison Between Per Cents of Scale Ratings Given by Total Population as ≠1 Choices and as Rejections to Each IQ Group

IQ Group	Per Cent of Ratings Received as ≠1 Choices	Per Cent of Ratings Received as Rejections	Difference	t Value
A	20.2	9.2	11.0	8.94**
B	15.2	9.2	6.0	6.52**
C	15.6	12.1	3.5	3.61**
D	11.0	15.4	-4.4	3.93**
E	10.6	22.8	-12.2	5.98**
Total Groups	15.1	12.3	2.8	5.60**

**Significant at .01 level.

Group A received 11 per cent more ≠1 choices than rejections and this difference decreases as you go from one group to the next until Group D is reached. The latter has received an excess of rejections over ≠1 choices so that the difference becomes a negative one and increases on the minus side for Group E. The differences for all groups are significant at the .01 level of confidence.

For the total population there were almost 3 per cent more ≠1 choices distributed than rejections. The major portion of the ≠1 choices, however, was received by Group A while Groups D and E, representing about one-fourth of the pupils, received almost two-fifths of the rejections.

Distribution of scale ratings

It was hypothesized that intellectually superior children will be as favorably rated as will their less gifted classmates and that the former will rate the latter as favorably as gifted children will rate each other.

The examination of the distribution of ≠1 choices and rejections has indicated that there are distinct differences in the way pupils selected and rejected each other However, the ratings so far discussed represent only 27.4 per cent of the total number of ratings. How were the remaining ratings distributed? A ≠2 rating on the social acceptance scale represents a degree of acceptance, although not to the same extent as a ≠1 choice, while a ≠4 rating means a lack of acceptance if not a rejection.

The distribution of numbers 2, 3 and 4 choices on the social acceptance scale represented almost three-fourths of the total ratings, and their inclusion in the analysis, together with the ≠1 and ≠5 ratings, provided another way of looking at the status of pupils in various ability categories.

Table 8 indicates that the results of an analysis of mean scale ratings actually reinforced the previous findings. Mean ratings given by all the pupils ranged from 2.60 for Group A to 3.18 for Group E. Differences between mean ratings given by all pupils to each group are significant at the .01 level of confidence as indicated by the Scheffe test (17) except for the differences between the ratings of Groups A and B, Groups B and C, and between Groups D and E. The Scheffe test was substituted for the t test as a more exacting test of significance which would prevent the rejection of the null hypothesis when true.

Of 50 differences between mean ratings given by each group to each of the other groups, the Scheffe test indicates that 30 are significant at the .01 level of confidence, 3 at the .05 level, and 17 are not significant.

For a difference between mean ratings to be significant, the Scheffe test requires a difference of .17 between ratings of Groups A, B, C and D for significance at the .05 level and a difference of .21 for the .01 level. Differences between ratings of Group E and any other group must be at least .25 to be significant at the .05 level and .32 for the .01 level. These limits apply only to differences across the columns since differences across the rows were found to be generally nonsignificant.

Table 8

Mean Scale Ratings Given and Received by Each of Five IQ Groups in Broad Range Classes and analysis of Variance of Means

Group Giving Ratings	Ratings Received by Each Group					
	A	B	C	D	E	Mean
A	2.51	2.78	2.95	3.25	3.40	2.88
B	2.50	2.66	2.87	3.09	3.29	2.82
C	2.60	2.73	2.68	2.97	3.17	2.74
D	2.72	2.70	2.78	3.00	3.07	2.74
E	2.68	2.81	2.58	2.91	2.80	2.75
Total Groups	2.60	2.75	2.81	3.05	3.18	2.79

Analysis of Variance

Source	d.f.	S.S.	Mean Square	S.D.	F	F	
Between rows	4	.13	.03	.17		1.05	F.95=3.01 with 4/16 d.f.
Between columns	4	1.03	.26	.51		13.0**	F.99=4.77 with 4/16 d.f.
Interaction	16	.28	.02	.14	10.0**		F.99=1.99 with 16/1570 d.f.
Interaction error[a]	1570	3.14	.002	.04			

**Significant at .01 level.

[a] For explanations of estimation of error and computation of sums of squares when frequencies in sub-classes are unequal, see Helen M. Walker and J. Lev, Statistical Inference, New York: H. Holt and Co., 1953, pp. 358-60, 381-82.

Note: Of 60 differences among mean ratings between columns, 37 were found to be significant at the .01 level, 3 at the .05 level, and 30 have no significance according to the Scheffe test.

The interaction among the group ratings, found to be significant in Table 8, is also demonstrated in figure 1. It might be well to explain at this point that extreme variability among the ratings received by each group is demonstrated by diagonal lines. The closer these lines come together, the less variability is shown among the ratings received by any group. As long as these lines remain parallel to each other, there is no indication of interaction. On the other hand, an extreme case of interaction would be demonstrated by having ratings given to Group A at extreme ends of the ratings scale connected to ratings given to Group E at diametrically opposite ends of the scale.

Although Figure 1 does not indicate such an extreme case of interaction as has just been described, it shows that the ratings given by Groups A and B are uppermost among those given to Group A and are represented by fairly straight diagonal lines to the lowest positions among the ratings given to Groups D and E. On the other hand, the ratings given by Groups D and E are the lowest among those given to Group A, cross over the paths of ratings given by other groups, and end up above all the others given to Group E. The figure indicates that, in general, the best ratings received by each group were given by children who were very close in IQ to those to whom ratings were given.

The F ratio for mean ratings between columns is significant well beyond the .01 level, indicating that the extent to which the pupils in any group were accepted by all the children is related to the IQ group the former were in.

The fact that the interaction factor is significant would indicate that the degree to which any IQ group was accepted depended upon both the group which was doing the rating as well as the group receiving the rating. For example, Group A was given significantly better ratings by Groups A and B than by Groups C, D and E. Group B was rated better by Groups B, C and D than by Groups A and E. Groups C and D were rated more satisfactorily by Groups C, D and E than by Groups A and B. Group E fared better with Groups D and E than with Groups A, B anc C. The level of an acceptability rating thus depended not only on the nature of the IQ group receiving the rating, but also on the nature of the group giving the rating, and the closer givers and receivers were in ability, the more favorable are the ratings received.

Another interesting feature of the manner in which the ratings were distributed is that between any two IQ groups, the one with the higher IQ received a more favorable rating than did the lower IQ group.

It should also be noted that, among the ratings which the pupils of each group gave to each other, the mean rating for Group A is the most desirable and the ratings tend to become less desirable from group to group except for the reversal between Groups D and E. The difference between the mean within group ratings of Groups B and C does not reach significance but is still in the same direction of more favorable ratings for higher IQ groups.

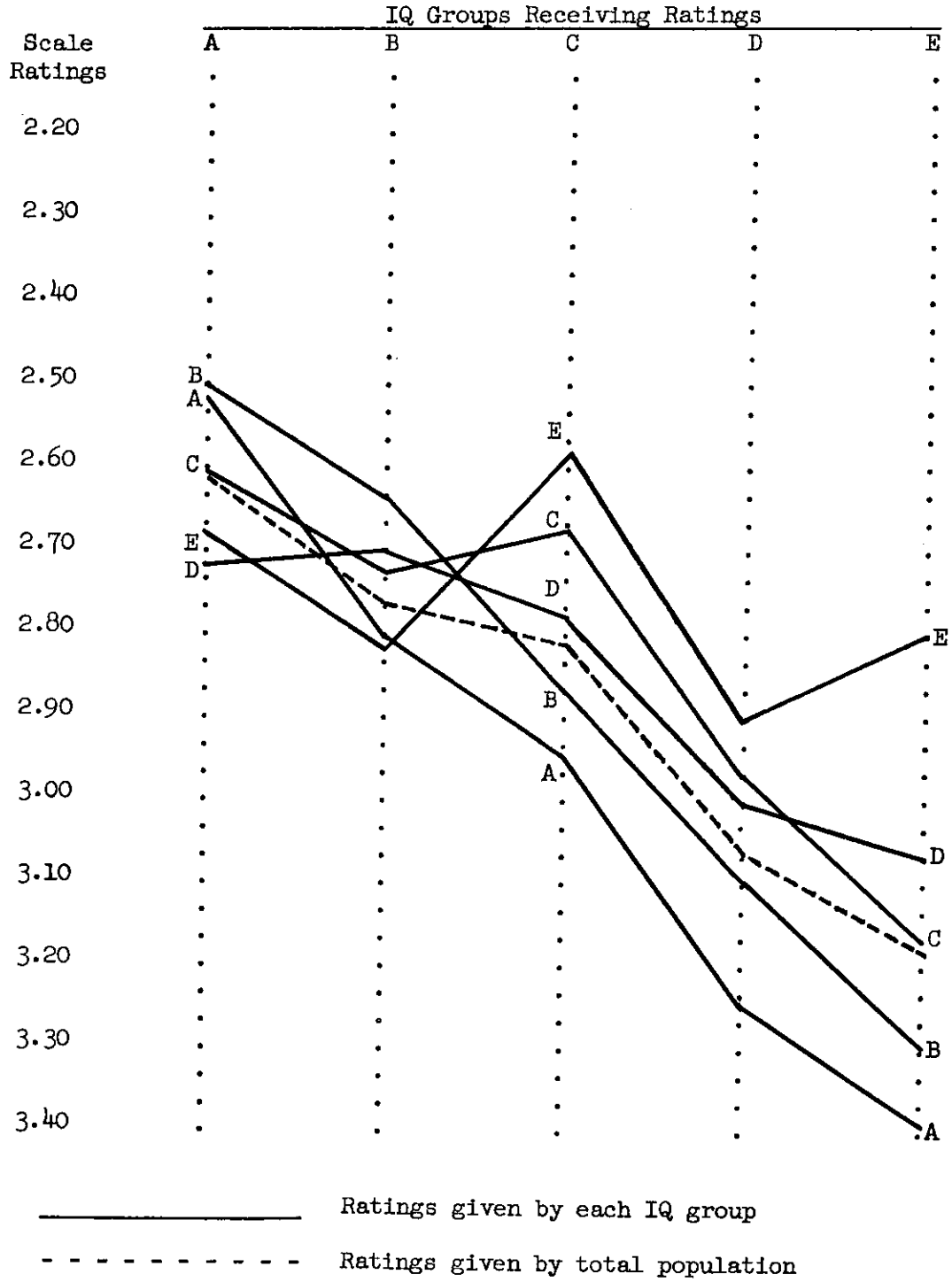

Figure 1

Interaction Among Groups Shown by Straight Lines Connecting Mean Scale Ratings Received by Each IQ Group From Each Group and From Total Population

In view of these findings, the hypotheses, that intellectually superior children will be as favorably rated as will their less gifted classmates and that the former will rate the latter as favorably as gifted children will rate each other, are rejected.

Comparison between predicted and actual ratings

It has been proposed that no difference will be found between the scale ratings expected by intellectually superior children and the ratings they actually receive.

Each pupil in this study was asked to predict the average rating he thought all the other pupils would give him. The mean predicted rating of the pupils in each of the groups is shown in Table 9. It can be plainly seen that there are no real differences among these ratings from one group to another as demonstrated by the nonsignificant F ratio.

Table 9

Mean Predicted Ratings of the Five IQ Groups
and Analysis of Variance of Means

	IQ Groups					
	A	B	C	D	E	Mean
Mean predicted ratings	2.12	2.22	2.03	2.26	2.04	2.14

Analysis of Variance

Source	df	SS	MS	SD	F
Among means	4	3.06	.76		F = 1.19 (N.S.)
Within groups	345	222.08	.64	.8	$F._{95}$=2.41 with 4/345 df

When a comparison is made between the mean predicted rating and the mean rating actually received by each group (see Table 10), it becomes clear that in no instance did any group estimate accorately the rating received. Differences between predicted ratings and ratings received vary from .48 for Group A to 1.14 for Group E, with a mean difference of .65, all of which are significant at the .01 level.

Table 10

Comparison Between Mean Predicted Rating and the Mean Rating Received by Each IQ Group from the Total Population

IQ Group	Mean Scale Rating		Difference	t Value
	Received	Predicted		
A	2.60	2.12	.48	4.80**
B	2.75	2.22	.53	5.89**
C	2.81	2.03	.78	9.75**
D	3.05	2.26	.79	7.90**
E	3.18	2.04	1.14	7.12**
Total Groups	2.79	2.14	.65	16.25**

**Significant at .01 level.

All children predicted approximately the same rating and for each IQ group the mean predicted rating was much more favorable than the mean rating actually received. The results would appear to reflect a desire, equally strong in all children, to be well accepted by others.

Since the actual ratings were not alike, it is only natural that the more favorable among them would be closer to the predicted ratings than the actual ratings that were less favorable. Thus, it could be mere chance rather than keener insight that placed the ratings received by the gifted children closer to their predicted ratings than was the case with other IQ groups.

Summary of Findings Pertaining to Hypotheses

1. The null hypothesis pertaining to the friendship patterns of the intellectually superior children (IQ 130+) as compared with the patterns of their classmates of lesser mental ability in broad range classes was largely unsubstantiated by the evidence in this study.

a. Intellectually superior children received proportionately more ≠1 choices and more favorable scale ratings from each other as well as from their less gifted classmates; thus, the intellectually superior children are more socially acceptable to each other and to their classmates of lesser mental ability than are the latter.

b. The intellectually superior children gave to each other proportionately as many rejections as they gave to their less gifted classmates but received fewer rejections from the total population than did their classmates of lesser mental ability; thus, the intellectually superior children did not reject their less gifted classmates any more than they rejected each other whereas the children of lesser mental ability rejected each other to a greater extent than they rejected the intellectually superior children.

2. The hypothesis, that there is no difference between the scale ratings expected by intellectually superior children, and those actually received, is rejected. The data indicate that all children expected to be more favorably accepted than they actually were.

Discussion

The data tend to indicate a positive relationship between social acceptance and intelligence. This finding is in accord with results generally found in previous studies. The intellectually gifted children were the most accepted and least rejected of all children.

Nevertheless, this study shows that children at all levels of ability did indeed show acceptance of each other as evidenced by ≠1 choices given and received by all ability groups. However, the results also show that the acceptance was not equally given to all ability groups.

The fact that the intellectually superior children gave more than 70 per cent of their ≠1 choices to their less gifted classmates demonstrates that the former did not act like a group within the broad range classes. The ≠1 choices which the superior children gave to each other, however, represented 50 per cent more than they would have expected by chance along while they gave about 50 per cent less than expected to those at the other extreme of the IQ scale.

The results indicate that despite the opportunities that may be present in broad range classes for children of all levels of ability to show acceptance of each other, such interability levels of acceptance have not developed to the extent expected by advocates of interability grouping. The opportunity alone, apparently, does not bring about satisfactory levels of social acceptance. Placing all kinds of children together in one class does not necessarily result in their equal acceptance of each other.

If the principal purpose for keeping gifted children in broad range classes is to give such children an opportunity to learn to get along with others of lesser mental ability, so that all children learn to understand and show acceptance of each other, then this study shows that merely placing the gifted in broad range classes per se does not carry out such purpose.

Is there anything that can be done within the framework of broad range grouping that can fulfill the aforementioned purpose? Jennings listed three factors promoting social development in the classroom to a significant extent as reflected in a sociometric structure. These are "(1) the warmth of the teacher, (2) activities which permit a high degree of interaction, and (3) use of democratic methods (10). "The importance of such factors was demonstrated by Kinney (11) in 1953 and by Forlano and Wrightstone (4) two years later. Both of these studies revealed that by dividing classes into small flexible groups or committees for learning purposes, it was possible to increase the total social acceptability for these classes, while classes which had not been so divided experienced a decrease in social acceptability during the same period of testing.

Why any classes should have had a decrease in social acceptability is not explained. However, the positive results would tend to point out the direction for needed improvement where such is desired. Unfortunately, these studies do not reveal the extent to which the low acceptees benefited from the program as compared with the high acceptees. Does the gap between them remain the same, or perhaps even widen? Further research is needed in this area to show just what can be done to raise the acceptance level of the low acceptees to the point where the gap between the latter and the high acceptees will have become significantly smaller.

Conclusion

All children must have a feeling of belonging, of being accepted members of a group. The effectiveness of the child's role as a student depends upon his sense of security, which is based on the nature of the group's acceptance or rejection. The educator is thus confronted with the responsibility of placing school children in an environment most conducive to a high degree of acceptance for the greatest number of children.

The belief that a broad range class encourages the social acceptance of children across ability levels is not supported by the results of this study. While grouping may offer an opportunity for learning, grouping of itself does not produce learning.

It is not enough simply to place children together in a classroom and expect them to learn to accept each other. Whatever it is the children must learn it is to the curriculum that one must look for the necessary catalyst to bring about the desired reaction. If the present curriculum is lacking in certain essentials necessary for developing desired learnings, then further study is needed to point out existing inadequacies and the proper direction in which change in social acceptance and democratic values must take place.

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