Racial, sex, and family background differences of ninth- and twelfth-grade students in feelings of individual control over environment were analyzed from the data of the Coleman Report. For the ninth-grade group of black students the situational components of social class level of classmates, racial composition of the classroom, and close friendships were studied. Family background differences and alternative situational factors were statistically controlled to determine their relationship with feelings of destiny control. Each situational component was significantly related to students' feelings of powerlessness, but only classroom racial composition remained significant when the other factors were controlled as well. For the twelfth-grade sample of white and black students the results were interpreted to show that racial and sex differences in feelings of destiny control were explained more by measures of social inferiority than by indicators of class or family structure. (NH)
The research reported herein was performed pursuant to an OEG-2-7-06160-0207 grant with the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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ABSTRACT

The sources for differences which appear between Negro and white students and among groups of Negro students in feelings of efficacy or control of environment are investigated. The data employed for these investigations are taken from the survey Equality of Educational Opportunity conducted in the fall of 1965 (the "Coleman Report"). Separate analyses are reported which were performed on a representative national sample of Negro and white twelfth grade students, and on a sample of ninth grade Negro students in racially segregated and desegregated classes in the Metropolitan Northeast. Data in both studies are analyzed by means of cross-tabulation techniques, with significance tests on Coleman's weighted effect parameters being computed for the interpretations.

In the analysis of ninth grade Negro students, three different components of the classroom situation are examined for effects on differences in individual feelings of mastery over one's environment. These situational components are: the social class level of the fellow students in the classroom; the racial composition of the classroom; and the students' close friends. Each situational factor is examined for relationships with feelings of efficacy after family background differences of individual students are statistically controlled, as well as under conditions where the effects of the other alternative situational factors are held constant. Each of the three situational components was significantly related to student's feelings of efficacy after family background was taken into account, but only the classroom
racial composition remained significant when the other situational factors were controlled as well.

These results are discussed in terms of theories concerning the effects of status distinctions which communicate a social stigma of inferiority. The analyses of the twelfth grade sample pursue this explanation by examining differences in feelings of efficacy between males and females, and between whites and nonwhites. The relationships with efficacy of different measures of family structure (intact family, parents education and interest) are compared to the relationships of measures of inferiority (grade average, peer group status and teacher expectations). The results were interpreted to show that racial and sex differences in efficacy were explained more by measures of social inferiority than by indicators of class or family structure.
INFERIORITY, EFFICACY, AND RACE

One of the most impressive findings uncovered by the famed (and defamed) Coleman et al. (1966) survey was the strong association between feelings of hopelessness and academic achievement. For Negro secondary students, these feelings of hopelessness accounted for more of the variation in achievement than all characteristics of schools or any of the differences in family background measured by the survey. This attitude also had a higher association with achievement than did the measures of self-confidence used in the survey, but only for Negro students, not for white. In fact, the relationship between attitudes about opportunities for success and achievement was three times stronger for Negro students than whites.

Other studies besides Coleman's have also suggested the importance of feelings of powerlessness and their effect on motivation to learn. Crandall and his co-workers (1962) found that among grade school boys, those who felt they controlled their reinforcements received the highest scores on intellectual tests and engaged in more intellectual free-play behavior. Seeman has shown the relationship between learning and feelings of futility in non-school settings. In a hospital study (1962), he found that those tuberculosis patients who had learned the least about their disease were those who felt most hopeless and alienated from their environment. In a reformatory setting he found that the inmates who had learned very little information about parole and behavior which might shorten their confinement were those who had the greatest feelings of powerlessness (Seeman, 1963).
Considering the range and variety of findings relating the sense of control of learning and academic achievement, a natural question would be: what are the sources of these differences in beliefs in efficacy? Coleman et al. (1966) addressed this question only briefly. In a regression of control belief attitude scores, eight background factors accounted for less than ten percent of the variance in control beliefs. Those factors included social class and family structure.

On the other hand, it is clear that ascribed characteristics lead to consistent differences in feelings of control. Racial minorities in the United States (Coleman, 1966), linguistic minorities in Canada (Breton and MacDonald, 1967) and males in both countries are less likely than their counterparts to score high on scales of efficacy. Hence, while feelings of control are especially important for black students, these black students are the very ones least likely to have those feelings of control.

This paper is a report on further analysis of the Coleman data, with special emphasis upon the reasons for differences between racial groups with beliefs in opportunity. Two different analyses are reported which approach the question from separate directions. One analysis focused on ninth grade black students alone, looking at components of school situations for possible explanation. The other investigation uses a national sample of twelfth graders for more detailed scrutiny of the racial differences in attitude. In spite of these differences in the initial approaches to the problem, the results of the two studies converge so as to suggest a theoretical explanation of the sources of control beliefs.
Methodology

The data from the school surveys for the Coleman study were based on a stratified probability sample of the public schools in the United States. Stratification was required in order to obtain sufficient numbers of nonwhite students to compare with white students from the same region. All students within a selected school were surveyed at several grade levels (1,3,6,9,12).

Several questionnaire items from the survey were used to measure a student's feeling that he could control his own fate. These items were intended to distinguish students who took a defeatist attitude about their ability to achieve success through their own efforts from those with a strong feeling of personal control over their own destinies.

Among the items used to guage these feelings of control were these:

Agree or disagree . . .

1. Good luck is more important than hard work for success.
2. Every time I try to get ahead, something or somebody stops me.
3. People like me don't have much chance to be successful in life.

The study of Negro students reported here used the first of these items, and in the twelfth grade analysis sense of control was a summated scale of responses to these three items. As data in Table 2 (the twelfth grade sample) show, there were large differences between the responses of white and black students on these items. These differences indicate that black students much more frequently believed it was futile to strive to get ahead. Rather, success for blacks is perceived to be distributed to them in a capricious way from a fickle environment.
The variety of independent variables discussed in these two studies are from other close-ended, self-reported questionnaire items. Most measures are based simply on the responses to a single item. In many cases, such as social class, family structure, or parental expectation variables, it was possible to use multiple indicators to check the reliability of the findings.

Data in both studies were analyzed by means of cross-tabulation techniques. Coleman's \( a \) (or effect parameter) and its corresponding significance test were computed for statistical analysis. (Coleman, 1964). Effect parameters show the average of percentage differences between successive categories of an independent variable for fixed values of the combinations of all the other variables being held constant. A weighting procedure used to combine values based on different sample sizes is described in Boyle (1967).

The Ninth Grade Study

The first analysis of sources of efficacy is part of a larger study of the effects of desegregated schooling. (McPartland, 1968). The sample consisted of all ninth grade Negro students in the Metropolitan Northeast who responded to the Coleman questionnaire. The major question guiding the analysis was: how do school social characteristics contribute to the development of control beliefs.

Table 1 shows the effects of five different variables on the sense of control of environment. Three of these five variables measure situational characteristics of the classrooms which the students attend. The
first variable is a measure of the social-class composition of each student's classroom, which is the average educational level of the parents of his fellow students. The second variable is the racial composition of each student's class measured by the student's report of the proportion of his classmates who are white. The third variable is a measure of the racial integration of each student's friendship groups, from each individual's indication of whether any of his close friends are white.

The fourth variable is a six-category indicator of the family background of each student. This measure combines the values on an index of the material possessions of the family and the average educational level attained by the student's parents. Finally, there is a fifth variable to distinguish the boys and the girls. These last two variables are used in the analysis for control purposes. The intention is to discover the effects of the three classroom situational variables on the sense of fate control when the influence of the student's own background is held constant. The dependent variable in these analyses, the sense of control of environment, is measured by the proportion of students who disagree with the statement "Good luck is more important than hard work for success."

The first value in Table 1 shows that there is no significant difference between boys and girls in the sample on the control of environment measure. However, the student's own family background is strongly related to this attitude. The value .150 of the parameter for effects due to family background is statistically significant
beyond the .01 level, which means that family background must be first held constant before the independent effect of other variables can be detected. Also, it is clear that social status may be a major source of efficacy within this sample. Each of the three classroom situation measures has a significant effect on the student's attitude about their environment when the individual family background differences are held constant. Line 3 of the Table shows that classroom social context has an impact of .032 on feelings of control. A somewhat larger parameter is shown on Line 5 for the effect of having white friends. Here the value is .052. The largest effect under the same control conditions is due to the racial composition of the classroom, which has a value of .098. (All values are significant for at least the .05 level.)

The relative sizes of the three effect parameters suggest the situational factors which are most important for changing Negro students' feeling of fatalism to a sense of opportunity. These values indicate that the racial desegregation of the classroom has the most impact, with being accepted into interracial friendship groups and attending class with fellow students from higher social class backgrounds having less influence. But the special importance of classroom racial composition per se becomes more clear when the three classroom factors are made to compete with one another in the analysis.

The other values in Table 1 show the effects of each of the situational factors when both the students' family background and one additional situational factor are held constant. Looking first at the
social class composition of the classroom (lines 3 and 4), the
effect parameter which is significant when only family background is
held constant, reduces by half to a non-significant value when the
classroom racial composition is imposed as an additional control
variable. The situation is the same for the measures of effect due
to the race of close friends (lines 5 and 6). The addition of the
classroom racial composition measure as a control variable reduces
by half the effect parameter, which was significant when only family
background was held constant. In short, the effects of both the class-
room social context and the race of close friends disappear to non-
significance when the classroom racial composition is taken into
account. This finding suggests that their initial effects appeared
only because both factors were related to the degree of classroom
racial desegregation, which is the situational component with impact.

This argument is made more secure when the effects of class-
room desegregation are examined with each of the other two situational
variables held constant (lines 7, 8 and 9). The value .098 for the
effect of classroom desegregation when family background is held con-
stant, does not change in significance when either classroom social
context or having white friends is imposed as an additional control
variable. The value .091 of the effect of classroom racial composi-
tion given family background and classroom social context, and the
value .093 showing the effect after family background and white friends
are taken into account, are both significant at the .01 level.
Taken together, these values give strong support to the argument that the racial composition of the classroom has a strong impact on Negro students' sense of opportunity. Only this factor (along with family background)\textsuperscript{2} was found to have a large effect on Negro students' feelings of fate control - the racial composition of classmates \textit{per se}, independent of either the classroom social context or the race of friends. Neither the social class context nor the race of informal friendship groups had a similar independent effect.

The Twelfth-Grade Study

In order to answer the question, why are nonwhites and males less sure of their control over their own destinies, a national probability sample of twelfth graders (N = 13,606) was drawn from the Coleman data.\textsuperscript{3} Table 2 presents race and sex differences in control beliefs for this sample. Almost a third of nonwhite males score low on efficacy, in contrast to only eleven percent of white females. Race accounts for twice as much variance as sex. Two alternative explanations were developed to guide further analysis of the sources of these differences.

One theory was that the race-sex differential reflects underlying structural variations. Three relevant hypotheses were testable within the limits of the data available: First, that differences by race are caused by class differences. Second, that differences by race are caused by less stable family structure among nonwhites. Third, that differences by sex are caused by variations in parental press toward school performance and further education. Table 3 demonstrates
that there are significant race and sex differences along the three sets of variables: class, family structure, and parental press.

An alternative explanation was suggested from the symbolic interactionist position. According to this hypothesis, race and sex influence one's feelings of efficacy because of the way they affect one's social interactions with persons outside one's own peer group. More specifically, a nonwhite interacting with whites perceives that whites often expect him to act as though he were inferior. This perception of one's own status as inferior leads to an attitude of fatalism. And, according to the hypothesis, the same is true of adolescent boys (but not as true of adolescent girls) in their interactions with adults. Several measures of inferior status were available from the survey: grade average, report of teachers' encouragement with future plans, perceived status of one's peer group within the school's informal social organization. As the remaining data in Table 3 show, this set of variables does not exhibit any consistent pattern by race and sex.

To summarize the problem in methodological terms, if structural variations are sources of control beliefs, then controlling for these structural variations should diminish or remove the effects of race or sex membership. If the interactionist explanation is valid, then variables measuring inferiority should similarly diminish the effects of race or sex.

For the next stage in the analysis, each of the independent variables was run in turn, along with race and sex, to test its effect
on control beliefs. For simplicity, the effect parameters (Coleman's weighted a, standardized to dichotomy) for each of the three-variable runs are presented in Table 4.4

The conclusions are as follows:

First, social class measures fail to explain the difference in control beliefs by race. Furthermore, father's education is not even related to variations in attitude. Mother's education does have a minor effect, such that the higher the mother's education, the greater the sense of control. Certainly, social class differences cannot be considered a major source of variation in efficacy.

Second, differences between racial groups are not diminished when family differences are accounted for. Presence of the original father is not related to control beliefs, although presence of the original mother is.

Third, the parental press variables do not account for variation by sex or race. However, for all four measures of parental press, low parental expectations are directly related to a low sense of control over environment.5

Fourth, controlling for one measure of inferiority, grade average, slightly reduces the effects of both race and sex. Substantial race differences remain, though. Also, teacher encouragement and perceived peer group status remain directly related to control beliefs.

Fifth, the ninth grade results which showed that attendance at schools where the majority of students are nonwhite is related to a low sense of efficacy for blacks, raised the question whether this
is true also for white students. (Recall that the ninth-grade sample was all black.) Furthermore, as with grade average, controlling for the racial composition of the classroom slightly reduces the differences in control beliefs by race.

Thus the evidence overall more strongly and consistently supported the interactionist approach. The various measures of inferiority added to the explanation. The racial differences were not explained by class or family structure or by inferiority measures. One further step in the analysis seemed necessary.

The analysis to this point had verified Coleman's failure to identify class and family variables as powerful predictors of efficacy. It seemed curious, then, that parental expectations, which are highly correlated with class and family structure, would have a direct effect on the development of control beliefs. Or, in other words, are the inferiority variables sufficiently powerful to eliminate the effects of family variables altogether? To what extent do the most direct sources of efficacy originate in a child's interactions outside the family?

The first equations in Chart 1 show that the effects of parental press are totally removed once a student's position on the inferiority measures is controlled. (The effect parameters reduce from .09 to .01.) One family variable, the presence of the original mother in the family, does retain its predictive power, yet the relevance of this variable is unclear. Does the mother herself provide a basis for development of efficacy, and if so, how? Or, does the fact of not
having one's original mother represent some stigma, a sign of inferiority in settings outside one's own family?

The final equation shows that the full set of inferiority measures -- race, grade average, teacher encouragement, perceived peer status, classroom racial context -- all retain independent effects when taken in combination. Most noteworthy is that the race difference remains to be the best predictor of control beliefs.

Discussion

Let us now examine the results of each study taken together in an attempt to piece together some general model concerning the sources of control beliefs. It will become clear that these two studies, while uncovering a range of relationships, are merely exploratory. In addition to raising theoretical issues, the findings also provoke questions for applied sociology.

First to be considered is a major discrepancy in the findings, namely, the importance of social class or family background. While this variable forms a major predictor of ninth-graders' sense of efficacy, it is relatively unimportant, compared to other variables, for prediction of twelfth-graders' sense of efficacy. The most intriguing interpretation for further investigation is a developmental one. Two hypotheses are suggested: first, that social class and family background set a basic level of efficacy. Secondly, that influences outside the family become more relevant as the child matures.

Turning now to the inferiority measures, questions concerning best interpretation of the data arise. In the ninth-grade study, segregated classes
were interpreted to be stigma-producing. Accordingly this variable, along with sex, race, grade average, peer status, and teacher encouragement, were viewed as signs of inferiority for twelfth-graders. The real meaning of these variables is less certain in retrospect.

Consider the effect on control beliefs of attending a segregated school. Does this mean that the student is located within a substructure of limited opportunities for mobility? Or does it mean rather that the student perceives himself to be unworthy of a better life? In other words, both objective and subjective inferiority underlie this measure.

Similarly, the other inferiority measures can be translated into both objective and subjective dimensions. Possibly there occurs some type of feedback process whereby objective inferior status and limited opportunities induce a self-definition of impotence.

Some theorists may not find the issue of objective versus subjective inferiority critical, being satisfied simply that inferior status in some way contributes to low sense of control. From the perspective of applied sociology, however, the issue remains relevant. Can one increase efficacy by means of cognitive manipulations alone, or, must one establish general structural changes in society? This is of course a basic question plaguing poverty workers today. The Supreme Court decision of 1954 is based upon the latter premise, that segregation stigmatizes the Negro schools with possible deleterious consequences for the personality development of students.
What promise have the findings here for the elimination of fatalism, particularly among black students, for whom its consequences are especially negative? Clearly some signs of ranking, among peers or with regard to teachers, will always be present. The question for change agents becomes, how can one train teachers to be less particularistic toward students or break down the informal status distinctions among high school peer groups? If someone objectively has a low grade average, how can he be made to feel efficacious in spite of the actual limits upon his opportunity to succeed? (Indeed, should there be a wholesale attempt to develop sense of control for students with genuine limitations?)

Perhaps more relevant for the change agent are the sources of efficacy these studies have failed to expose. Notable here is the fact that the race differences were not explained by the variety of independent variables included in the twelfth grade study. Race remained to be the most powerful predictor of control beliefs, regardless of class, family background, and many school experiences. The implication is that structural differences at the broader societal level may be responsible. The multitude of discriminatory patterns yet existing in the community economic, social, political, and leisure life may compose the residual effects of race on efficacy.

Given the role efficacy plays in learning and aspirations, the questions raised during this discussion cannot be dismissed as trivial. When individuals feel helpless, they respond to the environment apathetically or capriciously. In a society based upon individual achievement values, the results are potentially disastrous to the society as well as the individual.
FOOTNOTES

1 These factors are presence of father in the home, number of siblings, length of residence in an urban area, parents' education level, economic level of home, reading material in the home, parental interest in child's schooling, and parental desire for child's further education.

2 For example, family background without any controls had an effect parameter value of .150; when white friends was controlled, the value was .148. With both classroom social context and proportion white classmates controlled, the family background parameter was .125.

3 Jimmer Leonard drew up the sample so as to correct for the weighting procedures of the original sample.

4 The tables were also examined internally for signs of non-additivity. In fact, the findings presented here fit an additive model remarkably well.

5 Data are shown only for the parental expectations of the student's performance. The two additional items, concerning parental press toward college, produce virtually identical results.
<table>
<thead>
<tr>
<th>Effect Variable and Control Conditions</th>
<th>Standardized Effect Parameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex, given family background</td>
<td>- .002 (b)</td>
</tr>
<tr>
<td>2. Family background, given sex</td>
<td>.150</td>
</tr>
<tr>
<td>3. Classroom social context, given family background</td>
<td>.032</td>
</tr>
<tr>
<td>4. Classroom social context, given family background and proportion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>white classmates</td>
</tr>
<tr>
<td>5. White friends, given family background</td>
<td>.052</td>
</tr>
<tr>
<td>6. White friends, given family background</td>
<td>.025</td>
</tr>
<tr>
<td>7. Proportion white classmates, given family background</td>
<td>.098</td>
</tr>
<tr>
<td>8. Proportion white classmates, given family background and classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>social context</td>
</tr>
<tr>
<td>9. Proportion white classmates, given family background and white friends</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Values significant at .05 level are underlined, those significant at .01 level are underlined twice.

(b) A negative value indicates that boys are higher than girls.
Table 2

Belief in Efficacy by Sex and Race

Per cent who score low on efficacy scale:

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonwhite</td>
<td>31.8</td>
<td>24.2</td>
</tr>
<tr>
<td></td>
<td>(651)</td>
<td>(843)</td>
</tr>
<tr>
<td>White</td>
<td>16.3</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>(5066)</td>
<td>(5177)</td>
</tr>
</tbody>
</table>

Weighted $a_1$ (effect of sex) = .053 **
Weighted $a_2$ (effect of race) = .140 **

** significant at .01 level
TABLE 3
SELECTED SOCIAL CHARACTERISTICS OF NATIONAL 12th GRADE SAMPLE BY SEX, RACE

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Weighted $a_1$ (sex)</th>
<th>Weighted $a_2$ (race)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negro</td>
<td>White</td>
<td>Negro</td>
<td>White</td>
</tr>
<tr>
<td><strong>Family Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acting father other than natural</td>
<td>41</td>
<td>16</td>
<td>39</td>
<td>16</td>
</tr>
<tr>
<td>Acting mother other than natural</td>
<td>14</td>
<td>6</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Major support other than father</td>
<td>37</td>
<td>15</td>
<td>42</td>
<td>17</td>
</tr>
<tr>
<td><strong>Social Class</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother works</td>
<td>74</td>
<td>53</td>
<td>73</td>
<td>53</td>
</tr>
<tr>
<td>Father has H S degree or better</td>
<td>41</td>
<td>57</td>
<td>36</td>
<td>57</td>
</tr>
<tr>
<td>Mother has H S degree or better</td>
<td>42</td>
<td>31</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td><strong>Parental Press</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother expects one of best students</td>
<td>63</td>
<td>48</td>
<td>63</td>
<td>40</td>
</tr>
<tr>
<td>Father expects one of best students</td>
<td>59</td>
<td>49</td>
<td>58</td>
<td>43</td>
</tr>
<tr>
<td>Mother expects college</td>
<td>66</td>
<td>69</td>
<td>49</td>
<td>45</td>
</tr>
<tr>
<td>Father expects college</td>
<td>62</td>
<td>67</td>
<td>48</td>
<td>46</td>
</tr>
<tr>
<td><strong>School Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H S grade average: A or B</td>
<td>31</td>
<td>40</td>
<td>44</td>
<td>52</td>
</tr>
<tr>
<td>Teacher encourages college plans</td>
<td>55</td>
<td>58</td>
<td>53</td>
<td>49</td>
</tr>
<tr>
<td>Friends are among top group in school</td>
<td>64</td>
<td>56</td>
<td>57</td>
<td>51</td>
</tr>
</tbody>
</table>
### TABLE 4

Effect Parameters of Selected Variables, 
Given Sex and Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Sex</th>
<th>Added Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>.14</td>
<td>.05</td>
<td>Presence of father</td>
</tr>
<tr>
<td>.13</td>
<td>.05</td>
<td>- .03</td>
</tr>
<tr>
<td>.13</td>
<td>.05</td>
<td>Mother present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mother's education</td>
</tr>
<tr>
<td>.15</td>
<td>.05</td>
<td>- .01</td>
</tr>
<tr>
<td>.13</td>
<td>.05</td>
<td>- .03</td>
</tr>
<tr>
<td>.15</td>
<td>.07</td>
<td>Father press</td>
</tr>
<tr>
<td>.14</td>
<td>.07</td>
<td>Mother press</td>
</tr>
<tr>
<td>.11</td>
<td>.04</td>
<td>Grade average</td>
</tr>
<tr>
<td>.14</td>
<td>.06</td>
<td>Peer group status</td>
</tr>
<tr>
<td>.14</td>
<td>.06</td>
<td>Teacher interest</td>
</tr>
<tr>
<td>.11</td>
<td>.05</td>
<td>Classmates white</td>
</tr>
</tbody>
</table>

a. Positive means white has a higher sense of control than nonwhite.
b. Positive means that female scores higher than male.
c. Positive means those having parent present score higher.
d. Positive means those with parents of high educational background score higher.
e. Positive means high parental press score higher.
f. Positive means superior status score higher.
g. Positive means students in majority white classes score higher.
CHART 1

Search for the Best Predictors

NOTE: The presentation here shows results of multivariate runs. Effect parameters under each variable indicate the strength of prediction, holding constant all other variables included in the run. For detailed interpretation of each variable.

A positive on race = white

Sex = female

Grade average = B or higher

Peer status = among the better groups

Teacher press = has received encouragement toward further education

Mother press = encourages to be better-than-average student

Father press = encourages to be better-than-average student

Racial context = majority white classmates

Original mother = real mother is present in home

1. Are inferiority measures more directly relevant than parental press?

<table>
<thead>
<tr>
<th>Model</th>
<th>Effect Parameters</th>
<th>Race</th>
<th>Sex</th>
<th>Mother press</th>
<th>Grade average</th>
<th>Peer status</th>
<th>Teacher press</th>
<th>Father press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race + Sex + Mother press</td>
<td></td>
<td>.14</td>
<td>.05</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race + Grade average + Peer status + Teacher press + Mother press</td>
<td></td>
<td>.14</td>
<td>.09</td>
<td>.04</td>
<td>.06</td>
<td>.01</td>
<td></td>
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</tr>
<tr>
<td>Race + Sex + Father press</td>
<td></td>
<td>.15</td>
<td>.07</td>
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</tr>
<tr>
<td>Race + Grade average + Peer status + Teacher press + Father press</td>
<td></td>
<td>.13</td>
<td>.09</td>
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</tr>
</tbody>
</table>
2. Are inferiority measures more directly relevant than presence of original mother in the family?

Race + Sex + Original mother

.13 .05 .06

Race + Grade average + Peer status + Teacher press + Original mother

.13 .09 .04 .07 .04

3. Two "best" predictor sets: inferiority measures only

Race + Grade average + Peer status + Teacher press + Racial context

.13 .09 .04 .07 .04

Race + Sex + Grade average + Peer status + Teacher press

.14 .05 .08 .04 .07


McPartland, James, The Segregated Student in Desegregated Schools, Center for the Study of Social Organization of Schools, The Johns Hopkins University, Baltimore, Maryland, (1968), Report No. 21.
