By-McPartlanci James
THE SEGREGATED STUDENT IN DESEGREGATED SCHOOLS: SOURCES OF INFLUENCE ON NEGRO SECONDARY STUDENTS. FINAL RCPORT.
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Using data on ninth-grade Negro students in the Metropolitan Northeast collected in the Office of Education "Equality of Educational Opportunity Survey" (Coleman Report), this. study investigated (1) the degree to which each of five situational factors distinguishes between segregated and desegregated school situations and (2) the extent to which observed differences between segregated and desegregated Negro students in achievement and in several attitude and personality measures can be explained by these factors. The five situational factors are student environment (standards and norms set by the students), social stigma, level of competition, social integration, and quality of instruction. Each of the situational factors is examined separately to distinguish its effect in the desegregated classroom and in the desegregated school. (EF)

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## THE SEGREGATED STUDENT IN DESEGREGATED SCHOOLS

Sources of Influence on Negro Secondary Students

James McPartland

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# THE SEGREGATED•STUDENT IN DESEGREGATED SCHOOLS Sources of Influence on Negro Secondary Students 

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The Johns Hopkins University Baltimore, Maryland

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## CHAPTER I

## INTRODUCTION

## A Review of Hypotheses and Evidence on the Consequences of School Desegregation <br> for Negro Students

There have been a great many hypotheses, theories, and predictions about the ways in which school desegregation will affect Negro student development. In many cases, the ideas have been based on research studies, but they have largely come from inferences drawn from indirect evidence. This evidence has come from surveys, clinical observations, and experimental research of Negro behavior and attitudes. Some of these research results have been from Negroes in interracial settings, either experimentally contrived or in natural situations outside of schools, such as children's summer camps or interracial housing developments. But, until 1966, no extensive information has been available which allows direct comparisons of Negro students in segregated and desegregated schools. ${ }^{1}$
$1_{\text {Among }}$ published material, the principal exceptions were studies of students in Louisville, Kentucky (Stallings, 1959) and in Washington, D.C. (Hanson, 1960). Both of these studies, however, simply compared system-wide achievement scores before and after desegregation had occurred. In neither case were the scores of the Negro students who remained segregated compared with the desegregated Negro students. As a result, it is impossible to decide whether the observed average differences are due to general improvements in the instructional programs of the systems as a whole, or due to the desegregation of Negro students. Indeed, Katz (1964) reports that in Louisville, the Negro students showing the greatest gain were those who remained in segregated schools. Another early study set in segregated and desegregated schools was done by St. John (1962, 1964) in two New England high schools.

The present study will further investigate some of the possible ways that school desegregation may affect Negro students -- both positively and detrimentally -- making use of an extensive body of information collected in the fall of 1965 on the characteristics of segregated and desegregated Negro students and the schools they attend. This is the data from the U.S. Office of Education survey, Equality of Educational Opportunity (Coleman, et al., 1966). ${ }^{1}$ This survey was not intended primarily to research the effects of desegregation, so there are many shortcomings in these data for the purposes of this study. Also, the data was collected at a single point in time, so that inferences about developmental processes cannot be easily established; and pains must be taken to carefully show that differences between segregated and desegregated Negro students did not merely precede their placement in the schools and classes. Nevertheless, the survey does provide one of the largest factual bases for approaching some of the principal questions concerning Negro students in desegregated schools.

There have been two prominent starting points from which ideas have grown on the possible effects of school desegregation on Negro students. One source is the research dorumenting large differences in the personality structure and attitudes of white students and Negro students. Postulates on the effects of school desegregation for Negroes can be derived from these racial differences if the source of the dis-

[^0]tinctions can be shown to lie in the segregated caste-system which has existed in this country. A second set of hypotheses begins with a list of differences between segregated and desegregated schools, including all the non-racial changes in the learning situation which are likely to accompany desegregation. Hypotheses derived from these points make use of the research evidence on the influence of such a situational factors on the attitudes and behavior of individual students.
$$
\text { 1. } \frac{\text { Hypotheses on individual Negro-white }}{\frac{\text { differences which are affected }}{\text { by school desegregation }}}
$$
'There is a great deal of research evidence on many ways in which Negro Americans differ from majority group members in their personality and attitude structure, and on some of the behavioral consequences of these differences. ${ }^{1}$ Coinciding evidence can be drawn from clinical interviews, small group experiments, and survey research to set down a few major components particularly distinctive of Negroes. Other studies by social scientists provide a basis for locating a major source of these differences in the racial caste system in this country, which defines the Negro to be different and reinforces this definition by imposing separate treatment as in segregated school systems.

Much of the social science evidence brought to bear at the time of the Supreme Court's school desegregation decision in 1954, was to establish that racial segregation caused serious problems in the per-
$1_{\text {Many such studies are reviewed in Dreger and Miller (1960), }}$, Ausubel and Ausubel (1963), and Pettigrew (1964, Part I). See also the bibliographies: Miller (1966), St. John (1967, pp. 19-38), and Weinberg (1965).
sonality development of Negroes. Several personality components and attitudes were referred to in the 1952 social science brief for these cases (Allport, et al., 1956). The discussions made reference to an individuai's view of himself, of his future and of his environment, including his potential dealings with whites. The central point in these arguments was that serious damage could often be detected in the personality structure of Negroes in this country, and that the extent of che damage could only be fully understood and accounted for by the conditions of racial segregation which Negroes have had to endure. Since that time, the same conclusions have been drawn from additional evidence and further analyses (Pettigrew, 1964).

### 1.1 Self-image

Several terms have been used to describe how a person pictures himself: "self-concept," "se1f-image," "self-esteem," "self-respect." Definitions of these terms include both an individual's subjective conception and understanding of what kind of a person he is, and also how satisfied he is with this image he has of himself. ${ }^{1}$ The subjective conception includes not only an individual's perception of himself in terms of his achievements and attributes to date, but also the view he has of his own ability to improve or change. These concepts are thought to be basic components of human personality. ${ }^{2}$
$1_{\text {For a }}$ thorough review of studies on rtudent self-concept, see Wylie (1961).
$2_{\text {For example, see Grambs (1965). The classic treatment of self- }}$ image as a personality component are Cooley (1912), Cottrell (1942), Mead (1934), and Sullivan (1953).

In each of these matters, studies have shown that Negroes frequently display particular difficulties, and that these difficulties can be partially explained by their exposure to racial discrimination and segregation.

In many Negro children, there has been discovered an acute confusion about their personal identity and worth, a self-rejection and self-disparagement of their own ability to do better. One characteristic which has been taken to be evidence of these personality difficulties is the extreme importance that skin color holds for Negro children. Negro children have been found to prefer things identified with the majority whites and to reject things associated with Negroes and even to demonstrate an unwillingness to admit that they themselves are Negro. In the Supreme Court desegregation opinion the pioneering work of the Clarks (1947, 1950) was cited, documenting the racial awareness in very young children and the preferences of Negro children for majority group symbols. Clinical studies and in-depth interviews of Negro youngsters were also cited in the Supreme Court brief which similarly have revealed the frequency and occurrence of these attitudes. Other studies have shown preference among some Negroes for others of their race who have light skin (Warner, 1941; Freeman, et al., 1966).

The crucial step in applying these results to predictions about school desegregation is the argument that these personality aberrations are primarily a function of a prejudicial environment which assigns a stigmatized role to the Negro, treating him with a lack of respect or as an inferior. The argument is that a Negro's confusion of self-
identity and his low level of self-esteem is an internalization of the social definitions of the Negro provided by the environment. In this, importance is attached to the effects of racial segregation on an individual's self-concept, rather than effects which may derive from poverty, underprivileged environments and inferior facilities which accompany the segregated Negro environment. There are several research findings which were used in the Supreme Court brief to make this connection (Allport, et al., 1956). First, there is the general finding that low self-esteem and feelings of inferiority are largely influenced by an awareness of social status differences rather than awareness of other distinctions. Further, by judging the size of possible effects of inequalities in facilities and environment within segregated groups, the conclusion was made in this social science brief that the extensive feelings of personal inadequacy revealed in many Negro students could not be attributed to these factors alone.

It was exactly these personality effects and this argument which the Supreme Court pointed to in its decision to outlaw purposeful school segregation. The well known passage from Chief Justice Warren's opinion reflects this: "To separate (Negro children) of similar age and qualifications solely because of their race, generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone." Separate schooling was seen to be one important way in which a society tells Negroes that they are different from all others and must be treated separately. This different and separate treatment was believed to
carry with it the presumption of inferiority which created a serious burden to the child's development.
dhe "new Negro" of the North. -There are some questions, however, on whether these studies bear as strongly for hypotheses about the effects of de facto school segregation in the North at the present time. Events since 1954, including the Supreme Court decision, the Civil Rights movement, the emergence of new African nations and world leaders, and also the riots in major American cities, surely have had an effect on the racial pride of Negro Americans. Some believe, as a result of these events, they recognize a new and large generational gap between Negroes in this country and that there exists a "new Negro" where the old images of racial personality types are no longer valid (Vander Zanden, 1963; and Pettigrew, 1964). Aside from a content analysis study of Ebony magazine (Rosen, 1966), these pronouncements have been admittedly conjectures which are not based on empirical studies. So, it is open to question whether the indirect social science evidence brought to bear at the time of the Supreme Court's decision outlawing purposeful school segregation are as strongly relevant for postulates about the effects of school segregation in the North, where segregation is largely the result of residential patterns rather than as a consequence of legally required separate schools for Negroes.

Some recent surveys of self-image among NorthernNegro and white students have only revealed small or inconsistent differences between the races or contradictory evidence on this matter. Rosenberg (1965), in a study of self-image among students in ten high schools in New

York State, found a small difference in a composite measure of selfesteem between Negro students and the average student (thirtymine percent of Negroes were high compared to an average percent of fortyfive) even though the Negro students were of a considerably lower economic and social class. A study of delinquent boys conducted by Gordon and his associates (1963) discovered Negroes rating themselves higher on the average of seven dimensions (clean - dirty, good - bad, kind - cruel, fair - unfair, pleasant - unpleasant) than the selfratings of white boys, for each of three groups (gang, lower class, and middle class). Nevertheless, it was suggested that this higher self-evaluation response of Negroes was a defense against low racial self-esteem.

Examination of some of the survey items in the OE Report led the authors to the conclusion "that Negro children report levels of selfesteem as high as whites" (Coleman, et al., 1966). However, inspection of the other items from this survey, with special attention to the pattern of item non-response, opens this generalization to some question. These items were used for the $O E$ Report to gauge self-concept:
(1) How bright do you think you are in comparison with the other students in your grade?
(2) Agree or disagree: I sometimes feel that I just can't learn; and,
(3) Agree or disagree: I would do better in school work if teachers didn't go so fast.

Each of these items is directed at a very specific set of activities: the student's self-confidence in his academic performance in his own school. The fact that the Negro and white students are similar on
these items might simply indicate that the students view the level of competition in their respective schools to be subjectively the same.
'lhere are two survey items which are stated more generally; and although the responses were gathered in a school situation, they may more accurately tap a generalized personality component. Students were asked whether they agree or disagree to the two statements: "If I could change, $I$ would be someone different from myself;" and "I am able to do many things well." Table I. 1 presents the responses of Negro and white students in the Metropolitan Northeast to each of these questions.

There is a special difficulty in making racial comparisons with these items because of the pattern of non-response. Each of these items appeared at the end of the questionnaires, and generally, item nonresponse was a strict function of where an item appeared on the questionnaire. The slower readers were not able to finish the questionnaire, and the last items were left blank by them. Negro students on the average achieved at a considerably lower level than whites on the reading comprehension test which was part of this survey, so their non-response rate to these items was as much as five times greater than the whites. Moreover, the items measuring academic self-confidence and self-esteem were highly correlated with achievement, so the Negro students who were most likely to give negative responses to those items were also most likely to not have completed these items on the questionnaire.

Table I. 1 treats non-response in two ways. First, percentages are calculated on only those students who answered the questions. This

TABLE 1.1
aheasires of self-estelem and academic self-conflitence, FOR STUOENTS IN THF METROPOL.ITAN NORTHEAST, BY RACE AND (;RADE
(Number In parentheses is the value if all non-respondents are astigned to the response glven by poor achievers.)

| Characteristic | Race | GRADE |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 12 | 9 | 6 |
| Percent Agree: <br> if i could change <br> 1 Womld be somerone <br> Dfferent irom Myself | W | 18.0 (19.9) | 20.7 (23.5) | 18.4 (19.7) |
|  | N | 19.9 (30.3) | 28.5 (44.4) | 28.1. (31.8) |
|  | W-N | -1.9(-10.4) | -7.8(-20.9) | -9.7 (-12.1) |
| Percent Agree: <br> I Am Able (o bo Many Things Well | W | 62.9 (61.1) | 61.0 (58.6) | 70.1 (69.1) |
|  | N | 69.4 (59.5) | 64.1 (50.8) | 62.2 (60.4) |
|  | W-N | -6.5(+1.6) | -3.1(+7.8) | +7.9 (+8.7) |
| Percent Agree: <br> 1 Would do Becter in School if reachers DIdn't (o) So fast | W | 22.2 (24.1) | 25.5 (28.3) |  |
|  | $N$ | 24.8 (34.9) | 30.8 (44.5) |  |
|  | W-N | -2.6 (-10.8) | -5.3 (-16.2) |  |
| Percent Agree: Sometimes I Feel That 1 Just Can't learn | W | 39.8 (41.2) | 39.3 (41.5) | 44.9 (46.0) |
|  | $N$ | 33.2 (43.3) | 36.9 (49.2) | 46.9 (49.2) |
|  | W-N | +6.6 (-1.1) | +2.4 (-7.7) | -2.0 (-3.2) |
| Percent Who Rate Thelr Brightnest to Be Above Average In Their sehool | W | 49.2 (48.4) | 46.9 (43.2) |  |
|  | N | 39.5 (36.7) | 42.1 (35.7) |  |
|  | W-N | +9.7 (+11.7) | +4.8(+7.5) |  |

assumes that non-respondents are the same as the respondents and will tend to under-estimate the degree to which Negroes give negative response more often than whites, because of the racial difference in non-response and its correlation with negative responses. So, to give a lower bound on this overestimation, a second percentage is given in parentheses in this table which assigns all non-respondents to the negative category on the item. The true differences are somewhere between these two values.

Of the five items shown in the table, the direction of the difference is clear for three. Negro students would more frequently change to be someone else than would white students. They more often feel that teachers go too fast for them; and they less often rate themselves above average in brightness. The largest differences are for the question about changing to someone else if given the chance, the item which probably best measures generalized self-esteem. So, similar to Rosenberg's study, a case can be made from this table that Negro secondary students have a somewhat lower degree of self-respect than whites (although they may be having no greater learning difficulties in their present schools).

The next four tables show the regional variation in this pattern. Percentage distributions for the four questions are given for white and Negro students in each of eight regions. These percentage distributions were calculated after eliminating the non-respondents, so the size of the racial differences will be underestimated, as pointed out earlier. (The frequency of non-response is shown in parentheses for each group.)
TABLE I .2
PERCENTAGE DISTRIBLTION OF REPLIES TO THE QUESTION
(Number in parentheses is percentage oi non-response.:

| REGION | RACE | URADE |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  | 6 |  |  |  |
|  |  | Agree | $\begin{aligned} & \text { Sot } \\ & \text { Sure } \\ & \hline \end{aligned}$ | Disagree | IR | Agree | $\begin{aligned} & \text { Yot } \\ & \text { Sure } \\ & \hline \end{aligned}$ | Disagree | SR | Yes | \% | $\begin{aligned} & \text { Yot } \\ & \text { Sure } \\ & \hline \end{aligned}$ | SR |
| Metro | W | 18.0 | 21.7- | 00.0 | (2.3) | 20.: | 24.4 | 54.9 | (3.5) | 18.4 | 5i.i | 27.5 | (1.) |
| N.E. | N | 19.9 | 19.0 | 61.1 | (13.0) | 28.5 | 22.7 | 48.8 | (19.i) | 28.1 | 39.8 | 32.1 | (3.8) |
|  | W-N | -1.9 | +2.4 | -0.5 | -10.7 | -7.8 | +1. $=$ | +6.1 | -15.9 | -9.7 | +14.3 | -4.5 | -2.2 |
| Metro | w | 19.0 | 22.2 | 58.8 | (2.2) | 21.8 | 25.8 | 52.4 | (3.2) | 20.7 | 51.6 | 27.- | (1.i) |
| M.N. | N | 19.8 | 17.3 | 62.9 ' | (9.0) | 27.0 | 23.2 | 49.8 | (11.4) | 30.1 | 36.7 | 33.2 | (2.j) |
|  | W-N | -0.8 | +4.9 | -3.5 | -6.8 | -5.2 | +2.6 | +2.6 | -8.2 | -9.4 | +14.9 | -5.5 | -1.3 |
| Metro | $\mathfrak{}$ | 14.9 | 17.6 | 67.6 | (3.1) | 22.7 | 21.0 | 56.3 | (5.2) | 20.1 | 54.9 | 25.0 | (1.9) |
| S.E. | N | 23.4 | 18.8 | 57.8 | (22.9) | 34.5 | 24.6 | 40.9 | (17.2) | 32.7 | 34.0 | 33.2 | 2." |
|  | W-N | -8.5 | -1.2 | +9. 8 | -19.8 | -11.8 | -3.6 | +15.4 | -12.0 | -12.6 | +20.9 | -8.2 | -0.8 |
| Metro | W | 14.0 | 18.4 | 67.5 | (4.6) | 21.0 | 25.4 | 53.6 | (5.6) | 22.9 | 30.5 | 26.0 | (1.5) |
| S.W. | $N$ | 22.5 | 17.9 | 59.6 | (15.2) | 33.8 | 20.8 | 45.4 | (19.3) | 30.0 | 38.3 | 31.7 | [2.8; |
|  | W-N | -8.5 | +0. 5 | +7.9 | -10.6 | -12.8 | +4.6 | +8.2 | -13.7 | -7.1 | $-12.2$ | -5.1 | -1.3 |
| Metro | w | 17.2 | 22.3 | 60.5 | (5.1) | 22.4 | 24.7 | 52.8 | (4.3) | 18.4 | 55.8 | 25.7 | , 1." |
| i | N | 20.7 | 19.0 | 60.2 | (21.8) | 29.2 | 27.1 | 43.7 | (16.5) | 25.0 | 44.3 | 30.7 | (4.8) |
|  | W-S | -3.5 | +3.3 | +0.3 | $-16.7$ | -6.8 | -2.4 | +9.1 | -12.2 | -6.0 | +11.5 | -5.0 | -3.1 |

TABEE I.2
(continued)

| REGION | RACE | GR-DE |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  | 6 |  |  |  |
|  |  | Agree | Not Sure | Disagree | NR | Agree | Not <br> Sure | Disagree | YR | Yes | No | Sot Sure | MR |
| Yon-Metrb | W | 16.2 | 17.6 | 66.2 | (2.2) | 22.6 | 22.6 | 54.7 | (2.9) | 20.4 | 52.5 | 27.2 | (1.3) |
| S.E. | N | 23.2 | 20.6 | 56.2 | (13.5) | 35.2 | 25.6 | 39.1 | (15.8) | 31.2 | 35.5 | 33.3 | (4.4) |
|  | W-N | -7.0 | -3.0 | +10.0 | -11.3 | -12.6 | -3.0 | +15.6 | -12.9 | -10.8 | +17.0 | -6.1 | -3.1 |
| Non-Metro | W | 14.2 | 18.0 | 67.8 | (3.6) | 19.0 | 23.3 | 57.7 | (4.8) | 19.7 | 54.1 | 26.2 | (1.6) |
| S.w. | N | 26.0 | 19.7 | 54.3 | (14.8) | 35.0 | 25.3 | 39.7 | (11.9) | 30.8 | 37.9 | 31.3 | (3.3) |
|  | W-N | -11.8 | -1.7 | +13.5 | -11.2 | -16.0 | -2.0 | +18.0 | -7.1 | -11.1 | +16.2 | -5.1 | -1.7 |
| Son-Metro | W | 17.7 | 20.3 | 62.0 | (2.3) | 21.7 | 24.9 | 53.4 | (2.8) | 20.0 | 51.7 | 28.3 | (0.8) |
| $\mathrm{N} \& \mathrm{~h}$ | $N$ | -7.1 | 20.2 | 55.0 | (6.1) | 34.7 | 23.8 | 41.4 | (5.6) | 30.1 | 37.8 | 32.0 | (2.0) |
|  | W-N |  |  |  | -3.8 | -13.0 | +0.1 | +12.0 | -2.8 | -10.1 | +13.9 |  |  |

table i .3
＂I AY ABLE To Do MANY THINGS NELL，＂BY REGOON，RACE AD CRADE

| REGION | RaCE | CR：DE |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  | 5 |  |  |  |
|  |  | igree | $\begin{aligned} & \text { Moz } \\ & \text { Sure } \end{aligned}$ | Disagree | KR | Agree | Not Sure | Disagree | SR | Yes | No | $\begin{aligned} & \text { list } \\ & \text { Sure } \end{aligned}$ | 3 |
| Metro | $\cdots$ | 62.9 | 20．； | 10． 5 | （2．8） | 61.0 | 29.0 | 10.0 | （－1） | －0．2 | 3.7 | 21.4 | ， 5 5： |
| Х．E． | $\cdots$ | 69.4 | 21.4 | 9.2 | （14．4） | 64.1 | 24.7 | 11.2 | （20．7） | 62.5 | 10.3 | こ－．： | ．2．－ |
|  | ：－8 | －6．5 | ＋5．3 | ＋1．2 | －11．6 | －3．1 | －4．3 | －1．2 | －16．6 | －－． | －1．9 | －5．－ | －2． 2 |
| Metro | W | 61.3 | 28.5 | 10.2 | （2．5） | 59.4 | 30.6 | 10.0 | （3．7） | 60.5 | $9 .-$ | 23.8 | 1．： |
| М．に． | $\cdots$ | 67.6 | 22.4 | 9.9 | （10．3） | 62.9 | 25.8 | 11.3 | （12．4） | 61.6 | 10．${ }^{-}$ | 2－．－ | $\pm .5$ |
|  | h－3 | －6．3 | ＋6．1 | ＋0．3 | －7．8 | －3．5 | $\div 4.8$ | －1．3 | －8．7 | ＋4．9 | －0．8 | －3．9 | －－． |
| Metro | is | 63.6 | 26.3 | 10.1 | （4．0） | 59.4 | 29.3 | 11.3 | （0．1） | 64.6 | 10.0 | 25.3 | 12．2） |
| S．E． | ． | 74.6 | 18.7 | 6.7 | （25．0） | 75.0 | 25.0 | 10.1 | （18．5） | 62.3 | 9.9 | 28.0 | （2．3） |
|  | i－3 | －11．0 | ＋7． 6 | ＋3．4 | -21.0 $\ddots$ | －15．6 | ＋4．3 | ＋1．2 | －12．4 | ＋2．3 | ＋0．1 | －2．－ | －0．i |
| 乌etroS.W. | ii | 64.1 | 24.8 | 11.1 | （5．3） | 54.8 | 33.4 | 11.8 | （5．7） | 65.7 | 10.1 | 24.1 | （1．，） |
|  | $\cdots$ | 74.0 | 19.5 | 6.4 | （16．0） | 63.3 | 23.2 | 13.5 | （19．8） | 03.2 | 9.2 | 2\％．0 | （2．5） |
|  | h－S | －9．9 | ＋5．3 | ＋4． 7 | －10．7 | －8．5 | ＋10．2 | －1．7 | －13．1 | ＋2．5 | －0．9 | －3．5 | －1．4 |
| Metro | $\stackrel{\square}{ }$ | 62.8 | 27.3 | 9.8 | （5．5） | 57.3 | 31.2 | 11.5 | （4．4） | 66.4 | 9.6 | 24．5 | （1．E） |
| － | $\cdots$ | 66.1 | 25.1 | 8.8 | （23．8） | 58.2 | 28.7 | 13.1 | （17．8） | 61.2 | 11.6 | 27．1 | （i．6） |
|  | K－3 | －3．3 | ＋2．2 | ＋1．0 | －18．3 | －0．9 | ＋2．5 | ＋1．6 | －13．7 | ＋5．2 | －2．0 | －2．6 | －2．s |



| REGION | Race | GR+DE |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  | 0 |  |  |  |
|  |  | Agree | $\begin{aligned} & \text { Not } \\ & \text { Sure } \\ & \hline \end{aligned}$ | Disagree | VR | Agree | $\begin{aligned} & \text { Not } \\ & \text { Sure } \\ & \hline \end{aligned}$ | Disagree | NR | Yes | No | Not <br> Sure | NR |
| Non-Metro | W | 62.8 | 27.1 | 10.2 | (2.6) | 60.2 | 29.7 | 9.9 | (3.3) | 64.1 | 10.4 | 25.5 | (1.2) |
| S.E. | N | 74.8 | 18.7 | 6.5 | (15.0) | 65.3 | 24.9 | 0.8 | (17.0) | 64.0 | 10.5 | 25.5 | (4.4) |
|  | W-N | -12.0 | +8.4 | +3.7 | -12.4 | -5.1 | 4.8 | +0.1 | -13.7 | +0.1 | -0.1 | 0.0 | -3.2 |
| Non-Metro | w | 61.4 | 27.8 | 10.8 | (4.0) | 62.1 | 27.4 | 10.3 | (5.2) | 63.1 | 11.4 | 25.5 | (1.1) |
| S.w. | N | 70.7 | 20.0 | 9.4 | (15.8) | 67.7 | 23.8 | 8.7 | (12.6) | 63.2 | 11.2 | 25.6 | (2.6) |
|  | W-N | -9.3 | +7.8 | +1.4 | -11.8 | -5.6 | +3.6 | +1.6 | -7.4 | -0.1 | +0.2 | -0.1 | -i.5 |
| Non-Metro | W | 61.3 | 28.4 | 10.4 | (2.7) | 57.2 | 32.4 | 10.3 | (3.2) | 63.9 | 10.7 | 25.4 | (0.7) |
| N \& W | N | 64.8 | 25.0 | 10.1 | (6.4) | 53.2 | 25.7 | 11.1 | (6.0) | 56.8 | 15.8 | 27.4 | (2.6) |
|  | W-N | -3.5 | +3.4 | +0.3 | -3.7 | +6.0 | +6.? | -0.8 | -2.3 | + . 1 | -5.1 | -2.0 | -1.9 |

TABIEE 1.4

PERCENTAGE DISTRIBUTION OF REPLIES TO THE QUESTION 'I WOULD DO BETTEH IN SCHOOI, WORK IF TEACHERS DIDN'T GO SO FAST," BY REGION, RACE, AND GRADF:


Again, there is evidence the white students have greater selfrespect than Negroes. But, this statement can be made most strongly for students in the Southeast and Southwest. In both the metropolitan and non-metropolitan areas of these regions, Negro students show the lowest self-esteem, and the racial differences are the largest. Outside of these regions, the differences are consistent but often small. Por these tables, it is again important to make a distinction between the questions which inquire about self-respect in general terms, and those which probably tap academic self-confidence. For, together with the lower self-esteem, there is no corresponding evidence that Negro students feel more learning difficulties in thej.r schools than do the white students.

Just as with the indirect social science data which was marshalled in 1954, to support the Supreme Court school desegregation opinions, the evidence today is very meager on whether racial differences in self-respect have been affected by events since that time. With the available information, the picture emerges of a narrow difference in the North, with significant gaps in self-respect between Negro and white students in the South.

Desegregation and self-esteem. - Whatever the facts about present racial differences in self-esteem, hypotheses dealing with the effects of school desegregation require evidence on the changes which may result from interracial encounters. Evidence is mixed on whether particular experiences with whites have a generally beneficial effect on Negro student self-image. For example, a study of Negro students
table I. 5
percentage distribution of replies to the question
"I sotetimes feel that i rist can't Iedrn,

| REGION | RACE | GRADE |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  | 6 |  |  |
|  |  | Agree | Not Sure | Disagree | NR | Agree | $\begin{aligned} & \text { Not } \\ & \text { Sure } \\ & \hline \end{aligned}$ | Disagree | SR | Yes | No | YR |
| Metro | W | 39.8 | 15.7 | 44.5 | (2.3) | 39.3 | 19.2 | 41.5 | (3.6) | 44.9 | 55.1 | (2.0) |
| S.E. | $N$ | 33.2 | 16.8 | 49.9 | (13.2) | 36.9 | 19.0 | 44.1 | (19.5) | 46.9 | 53.1 | (4.3) |
|  | W-N | +6.6 | +1.1 | -5.4 | -10.9 | +2.4 | +0.2 | -2.6 | -15.9 | -2.0 | +2.0 | -2.3 |
| Metro | W | 40.9 | 16.7 | 42.2 | (2.2) | 39.7 | 20.5 | 39.8 | (3.3) | 50.7 | 49.3 | (1.4) |
| M.L. | N | 37.4 | 16.0 | 46.6 | (9.1) | 37.4 | 20.0 | 42.6 | (11.6) | 46.7 | 53.3 | (2.6) |
|  | W-N | +3.5 | +0.7 | -4.4 | -6.9 | +2.3 | +0.5 | -2.8 | -8.3 | +4.0 | -4.0 | -1.2 |
| Setro | W | 37.7 | 14.1 | 48.2 | (3.2) | 44.5 | 16.5 | 39.0 | (5.4) | 52.5 | 47.5 | (2.5) |
| S.E. | N | 30.3 | 14.4 | 55.2 | (23.2) | 33.8 | 18.5 | 47.6 | (17.5) | 46.9 | 53.1 | (3.0) |
|  | $\mathrm{H}-\mathrm{N}$ | +7.4 | -0.3 | -7.0 | -20.0 | +10.7 | -2.0 | -8.6 | -12.1 | +5.6. | -5.6 | -0.5 |
| Metro | W | 40.4 | 13.1 | 46.5 | (4.7) | 43.9 | 19.2 | 36.9 | (6.3) | 54.5 | 45.5 | (1.7) |
| S.W. | N | 29.6 | 15.4 | S5.0 | (14.8) | 35.0 | 22.7 | 42.2 | (19.9) | 44.9 | 55.1 | (2.8) |
|  | W-N | +10.8 | -2.3 | -8.5 | -10.1 | +8.9 | -3.5 | -5.4 | -13.6 | +9.6 | -9.6 | -1.1 |
| Metro | W | 39.6 | 16.8 | 43.7 | (5.2) | 40.4 | 19.6 | 40.0 | (4.2) | 48.1 | 51.7 | (2.1) |
| k | N | 35.1 | 18.5 | 46.4 | (21.7) | 35.5 | 24.1 | 40.4 | (17.0) | 47.6 | 52.4 | (5.7) |
|  | W-N | +4.5 | -1.7 | -2.7 | -16.5 | +4.9 | -4.5 | -0.4 | -12.8 | +0.5 | -0.5 | -3.E |

r.siE I .5
(continued)

| REGION | RACE | GRiDE |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  | 5 |  |  |
|  |  | Agree | $\begin{aligned} & \text { Not } \\ & \text { Sure } \end{aligned}$ | Disagree | YR | Agree | $\begin{aligned} & \text { Not } \\ & \text { Sure } \end{aligned}$ | Disagree | SR | Yes | No | \R |
| Non-Metro | w | 38.2 | 15.3 | 46.4 | (2.2) | 45.1 | 17.8 | 37.2 | (3.1) | 55.0 | 45.0 | (1.4) |
| S.E. | N | 28.0 | 15.4 | 56.6 | (13.9) | 34.4 | 20.0 | 45.6 | (16.0) | 48.4 | 51.6 | (5.2) |
|  | W-N | +10.2 | -0.1 | -10.2 | -11.7 | +10.7 | -2.2 | -8.4 | -12.9 | -6.0 | -6.6 | -3.8 |
| Non-Merro | W | 36.2 | 14.9 | 48.9 | (3.9) | 42.3 | 16.6 | 41.1 | (4.9) | 54.6 | 45.4 | (1.3) |
| S.i. | N | 24.4 | 17.3 | 58.3 | (15.1) | 32.2 | 18.0 | 49.7 | (11.3) | 48.6 | 51.4 | (3.3) |
|  | W- ${ }^{\text {- }}$ | +11.8 | -2.4 | -9.4 | -11.2 | +10.1 | -1.4 | -8.6 | -0.4 | +6.0 | -6.0 | -2.0 |
| Non-Metro | W | 39.9 | 16.1 | 44.0 | (2.4) | 41.1 | 20.3 | 38.6 | (3.0) | 51.5 | 48.5 | (1.2) |
| . \& w | , | 32.6 | 16.5 | 50.9 | (6.3) | 39.7 | 19.6 | 40.7 | (5.7) | 46.3 | 53.7 | (3.-) |
|  | W-N | +7.3 | -0.4 | -6.9 | -3.9 | +1.4 | -0.7 | -2.1 | -2.7 | +5.2 | -5.2 | -2.5 |

in an integrated summer camp found indications that this experience had significant positive effects on the self-perceptions of Negro children (Campbell and Yarrow, 1958). Similar evidence is to be found in a recent national survey of the attitudes of Negro adults, which showed that those adults who had attended desegregated schools had higher self-esteem than the others, and the difference persisted when several other background characteristics were held constant (U.S. Commission on Civil Rights, 1967). On the other hand, Fishman (1961), has conducted studies which suggest that Negroes growing up in segregated communities and attending segregated schools tended to have a higher appraisal of Negroes in general than those from integrated environments. The controversy has been aired among some psychiatrists, who hold opposite conjectures on the effects of segregated and desegregated schools on Negro students' conception of themselves (Armstrong and Gregor, 1964; Holland, 1964). Rosenberg's study (1965) of self-esteem among adolescents also gives some indirect basis for hypotheses that Negro students will have higher self-esteem when attending segregated schools.

Rosenberg studied the self-image of students from different religious backgrounds, comparing those who were raised in neighborhoods where they were in the majority with others who were in the minority in their neighborhood. For students from each of the religious groups -- Catholics, Protestants, and Jews -- the picture was the same: students raised in neighborhoods where their religious group was at least half the total were more likely to have high self-esteem than those who grew up in localities where their group was the minority. Rosenberg concluded that it was the difference in the values held by
the students and the dominant group which made the existence of social support from other group members important. He made much of the fact that little difference could be found among the self-esteem of students where their group was about half the neighborhood population compared to where their group was the vast majority in the neighborhood. Apparently, the social support which was necessary to bolster deviant values was only lacking when a student was one of a distinct minority in the neighborhood.

In translating Rosenberg's analysis into hypotheses about Negro students in racially different schools, the group disparities concerning definitions of racial roles takes the place of the cleavages in religious values in the Rosenberg study. If Rosenberg is correct that the social support which comes with majority representation in a group is necessary to maintain self-esteem in the face of value differences among members of the group, then one would hypothesize that Negro students would have lower self-esteem in schools where they were in the minority. Later in this chapter, the role which hostility between the races may play in desegregated schools, will be discussed further.

Thus, some basis can be found in the research literature for opposite hypotheses on the way school desegregation may affect Negro students' self-concept. Studies such as the Civil Rights Commission Report suggest a positive effect, and Rosenberg's or Fishman's are grounds for opposite postulates.

### 1.2 Attitudes about interracial contact

Several studies have shown the differences between Negroes and
whites in the racial situations they prefer. Both groups are ethnocentric, with a significant fraction of Negroes preferring situations which are predominantly Negro, and with whites rejecting these circumstances and preferring all white contacts. Lundberg and Dickson (1952) studied two West Coast high schools in 1948 , and showed that for each of five groups of students (Jews, Japanese, Chinese, Negroes, and nonJewish whites) preference for association with members of the same group was expressed for each of several kinds of relationships. St. John (1964) found similar ethnocentric choices among Negro and white students in two desegregated New England high schools. Studies by Mann (1959) of college students, and Webster (1960) of secondary students, showed the same pattern.

Table I. 6 using information for the Metropolitan Northeast from the OE Survey, shows this on three questions about students racial preferences. Students were asked: "If you could have anyone you wanted for your close friends, how many would be white?", and "If you could be in the school you wanted, how many of the students would you want to be white?", and "If you could be in the school you wanted, how many of the teachers would you want to be white?" About ten percent of the Negro students chose all Negro situations (the range is $5.6 \%$ to $14.7 \%$ ) and thirty percent of whites chose all white circumstances (range $22.2 \%$ to $34.0 \%$ ). In-group preferences were greater for whites than Negroes in each case, with more than twice as many whites as Negroes preferring associations with only members of their own race. For both cases, in-group preferences were more frequent for friendship choices than for the choices of either classmates or teachers. This

TABLE 1.6

Plircentace distribution of racial preferences
OF NEGRO AND WHLTE STUDENTS, BY GRADE, FOR METROPOLITAN NORTHEAST.

is similar to other studies which showed Negro self-preference ranked from high to low according to whether the relationship was friendship, work, or leadership (St. John, 1964; Lundberg and Dickson, 1952). Also, it appears that in-group choices are more characteristic of younger children than older ones: there is a regular trend for both races of preference for associations with members of their own race as the grade in school increases. Dentler and Elkins (1967) also found an upward trend in school children's acceptance of minority groups as the grade level increased.

This pattern of ethnocentrism raises several questions which are important for this study. More can be said about some of the underlying dispositions which may be held by students who reject associations with the other race, and about some of the behavioral consequences of these attitudes. For developing hypotheses on the possible effects of school desegregation on these matters, there is a tradition of research. on the effect of interracial contact on the predispositions of white and Negro students toward each other, and on patterns of behavior in interracial situations.

Among Negro students, studies have shown that ethnocentric attitudes often manifest themselves in particular patterns of behavior in the presence of whites. Katz and his associates (1960, 1964) have conducted experiments among Negro college students in the South where they discovered that a lower level of Negro assertiveness was shown in tasks which are undertaken with whites, with, the inclination of Negroes to withdraw or underachieve when they believe their actions will be compared with whites. Counselors in Negro high schools re-
count the frequent experience they have had with student job applicants who more often fail to appear for prearranged job interviews when the employers are white. ${ }^{1}$

At least two kinds of apprehensions may underlie these tendencies for Negroes to avoid interracial situations or to behave in a submissive or passive manner in these cases. Both are reactions by Negroes to the roles which are defined by a segregated society. ${ }^{2}$

First, Negroes may expect to arouse hostility from whites if they act forcefully. The socially defined role which relegates Negroes to a low social status, also requires that he behave as a subordinate. Part of what the caste system teaches is that a Negro student should accept white influence and defer to white autonomy. In many situations, a Negro student may have learned to expect strong reactions from majority group members if he fails to act in a way which is submissive or compliant.

These attitudes are often grounded in the reality of an environment where Negroes will frequently find hostility and rejection. But at the same time, it may be the case that many Negroes are hypersensitive and over-anxious about their relations with whites. Some may approach bi-racial situations with unrealistic fears, seeing hostility, rejection, and ridicule where they may not exist. That is, although few Negroes will be able to avoid tasting the discomfort and legrada-

[^1]tions of a prejudicial environment, individuals may consistently approach interracial situations with a distorted sense of the social reality. Not only mistrusting whites, they will overanticipate the punishments or humiliation they will receive from whites for stepping out of a deferent role, and for exhibiting autonomy and assertiveness in interracial settings (Allport, et al., 1956).

Just as with self-esteem, where recent events may have altered the racial differences among students in this country, very little is known about how the behavioral consequences of the traditional racial roles and statuses may have changed in recent years. The submissive Negro, lacking in initiative in the company of whites, may be muin less typical today after the experiences and events since 1954. Some tabulations from the $O E$ Survey suggest that differences which may have existed between the races in terms of complacency and lack of initiative are not so much the case today in the urban North.

As with the tabulations for self-esteem, the survey responses on items measuring autonomy and self-reliance have serious problems of non-response. And the meanings and connotations which respondents may have assigned to the four survey questions here are not all clear. But the picture which emergis in the Metropolitan Northeast is not one where Negro students show less initiative and assertiveness than whites.

The four items shown in Table I. 7 are: Agree or disagree: (1) I would make any sacrifice to get ahead in the world; (2) The tougher the job the harder I work; (3) If a person is not successful in life, it is his own fault; and (4) People who accept their condition in life are happier than those who try to change things. As in Table I.l, non-
response is treated in two ways to provide a range of possible racial differences. Except for the first item, the differences in responses between white and Negro students are not large or consistent. For this first item, Negro students express more willingness than whites to make sacrifices in order to get ahead. As pointed out by Vander Zanden (1963), sacrifices and suffering have been a keystone of the non-violent resistance movement. The willingness to sacrifice for success is negatively related to achievement for both racial groups (the poorest achievers most often agreed with the statement), so perhaps this question actually measures the perceived need to make sacrifices rather than a differential purposefulness or initiative. On the other hand, Negroes are less likely to disagree than whites that accepting one's present condition is more satisfying than trying to change shings, although the differences are small, especially in the twelfth grade. The other items are inconsistent in the direction of differences, when grades are comparec or when non-response is treated in different ways.

Maling comparisons across regions does not clear up these matters. The next four tables (I.8-I.11) present tabulations separately for eight regions of the country. As with measures of self-confidence and self-respect, there are important regional variations. But only one item fits the hypothesis of racial and regional differences which favor whites and the North. In every region, a smailer percentage of Negro than white students disagree that people are happier who accert their condition in life. For this question, both the percent of Negro students who agree with this statement and the racial differences are largest in the South. However, for the other three items, the pattern

TABLE I. 7

MEASURES OF SELI-RELIANCE FOR NEGRO AND WIIITE S'UDENTS, BY GRADE, FOR METROPOLITAN NORTHEAST
(Number in parentheses is value if all non-respondents are assigned to category associated with low achievement.)

| Characteristic | Race | GRADE |  |
| :---: | :---: | :---: | :---: |
|  |  | 12 | 9 |
|  | W | 22.1 (24.0) | 29.5 (32.0) |
| I Would Make Any Sacrifice to Get Ahead | N | 38.7 (46.4) | 44.6 (55.0) |
| in the World (NEG) | W-N | -16.6 (-22.4) | -15.1 (-23.0) |
| Parcent Agree: <br> The Tougher the Job, the Harder I Work (POS) | W | 60.9 (59.3) | 58.4 (56.4) |
|  | N | 66.2 (57.0) | 65.3 (52.0) |
|  | W-N | -5.3(+2.3) | -6.9(+4.4) |
| Percent Agree: <br> If a Person Is Not Successful in Life, is His Own Fault (NEG) | W | 33.7 (35.0) | 37.6 (39.6) |
|  | N | 32.1 (40.2) | 40.5 (51.1) |
|  | W-N | +1.6 (-5.1) | -2.9 (-11.5) |
| Percent Disagree: | W | 46.5 (31.7) | 27.4 (49.0) |
| People Who Accept Their Condition in Life Are Happier Than Those Who |  |  |  |
|  | N | 43.3 (29.4) | 20.6 (39.4) |
|  |  |  |  |
| Try to Change Things (NEG) | W-N | +3.2 (+2.3) | +6.8 (+9.6) |

TABA.: 1.8

 WIO TRY TO CHAN(FF 'LHINGS," BY REGION, RAC:E ANI) (:RADE:


## TABL.E 1.9

PFRCENTA(BE IISTRIHURION OF RISSPONSES TO THE QUESTION If A PIRSON IS NOT SUCCLSSBUL IN LIHEE, IT IS HIS OWN FAUI,T," bY REGION, RACI, AND GRADE:

| REGION | RACH: | CRADE |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  |
|  |  | Agree | Not Sure | Disagree | NR | Agree | Not Sure | Disagzec | NR |
| Metro | W | 33.7 | 28.1 | 38.1 | (1.9) | 37.6 | 27.7 | 34.6 | (3.1) |
| N.t. | N | 32.1 | 28.9 | 39.0 | (11.9) | 40.5 | 28.3 | 31.2 | (17.7) |
|  | $\mathrm{W}-\mathrm{N}$ | +1.6 | -0.8 | -0.9 | -10.0 | -2.9 | -0.6 | +3.4 | -14.6 |
| Metro | W | 38.2 | 29.2 | 32.6 | (1.9) | 31.0 | 28.8 | 34.2 | (2.7) |
| M.W. | $N$ | 34.2 | 31.3 | 34.5 | (8.3) | 37.9 | 31.9 | 30.2 | (10.6) |
|  | W-N | $+4.0$ | -2.1 | -1.9 | -6.4 | -0.9 | -3.1 | +4.0 | -7.9 |
| Metro | W | 40.6 | 28.0 | 31.4 | (2.7) | 39.8 | 28.6 | 31.6 | (4.9) |
| S.E. | N | 38.6 | 29.4 | 32.0 | (20.9) | 45.4 | 27.7 | 26.9 | (15.9) |
|  | W-N | +2.0 | -1.4 | -0.6 | -18.2 | -5.3 | +0.9 | +4.7 | -11.0 |
| Metro | W | 38.8 | 31.6 | 29.6 | (3,8) | 43.1 | 27.7 | 29.2 | (5.3) |
| S.W. | $N$ | 45.9 | 28.0 | 26.1 | (13.5) | 48.7 | 28.0 | 23.4 | (17.8) |
|  | W-N | -7.1 | +3.6 | +3.5 | -9.7 | -5.6 | -0.3 | +5.8 | -12.5 |
| Metro | W | 35.7 | 28.3 | 36.0 | (4.7) | 39.7 | 28.3 | 32.0 | (3.8) |
| W | $N$ | 36.5 | 28.5 | 35.0 | (20.6) | 42.8 | 30.9 | 26.2 | (16.6) |
|  | W-N | -0.8 | -0.2 | +1.0 | -15.9 | -3.1 | -2.6 | +5.8 | -12.8 |
| Non-Metro | W | 38.8 | 31.0 | 30.1 | (1.8) | 42.8 | 28.0 | 29.2 | (2.6) |
| S.E. | $N$ | 41.4 | 30.2 | 28.3 | (12.4) | 48.4 | 30.0 | 21.6 | (15.1) |
|  | W-N | -2.6 | +0.8 | +1.8 | -10.6 | -5.6 | -2.0 | +7.6 | -12.5 |
| Non-Metro | W | 42.0 | 28.8 | 29.2 | (3.2) | 41.6 | 29.0 | 29.4 | (4.5) |
| S.W. | N | 44.4 | 29.3 | 26.3 | (12.1) | 53.1 | 27.4 | 19.6 | (10.6) |
|  | W-N | -2.4 | -0.5 | +2.9 | -8.9 | -11. 5 | +1.6 | +9.8 | -6.1 |
| Non-Metro | W | 39.8 | 28.2 | 32.0 | (2.1) | 39.1 | 29.2 | 31.7 | (2.5) |
|  | $N$ | 35.6 | 27.1 | 37.3 | (6.1) | 40.6 | 30.8 | 28.7 | (4.5) |
| N $8 \times \mathrm{W}$ | W-N | $+4.2$ | +1.1 | -5.3 | -4.0 | -1.5 | -1.6 | +3.0 | -2.0 |

TABI.E 1.10
mercientage distribution of repi.ies to the question
 BY REGION, RA(FF ANI) (GRNJIE:

| Rris! ${ }^{\text {ON }}$ | racie | grade |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  |
|  |  | Agree | Not Sure | Dinagree | NR | Agree | Not Sure | Disagree | NK |
| Metro | w | 60.9 | 28.5 | 10.6 | (2.6) | 62.7 | 26.3 | 10.9 | (3.9) |
| N.E. | N | 66.2 | 23.5 | 10.3 | (13.8) | 65.3 | 23.1 | 11.6 | (20.4) |
|  | W-N | -5.3 | +5.0 | +0.3 | -11.2 | -2.6 | +3.2 | -0.7 | -16.5 |
| Metro | w | 59.0 | 31.4 | 9.6 | (2.4) | 58.4 | 30.2 | 11.3 | (3.5) |
| M.W. | $N$ | 66.8 | 23.1 | 10.0 | (10.5) | 65.9 | 23.8 | 10.3 | (12.3) |
|  | W-N | -7.8 | +8.3 | -0.4 | -8.1 | -7.5 | +6.4 | +1.0 | -9.0 |
| Metro | W | 66.0 | 24.8 | 9.3 | (3.9) | 62. | 26.4 | 11.3 | (6.0) |
| S.E. | $N$ | 72.0 | 18.4 | 9.5 | (24.6) | 60.8 | 22.2 | 9.6 | (18.5) |
|  | W-N | -6.0 | +6.4 | -0.2 | -20.7 | +1.5 | +4.2 | +1.7 | -12.5 |
| Metro | W | 65.6 | 26.2 | 8.2 | (5.0) | 58.1 | 28.8 | 13.1 | (6.9) |
| S.W. | N | 74.4 | 16.7 | 8.8 | (15.3) | 67.4 | 22.3 | 12.9 | (19.4) |
|  | W-N | -8.8 | +9.5 | -0.6 | -10.3 | -9.3 | +6.5 | +0.2 | -12.5 |
| Metro | W | 56.9 | 29.7 | 13.4 | (5.3) | 57.4 | 28.9 | 13.7 | (4.6) |
| W | $N$ | 62.5 | 23.8 | 13.6 | (23.1) | 58.3 | 28.8 | 12.9 | (17.7) |
|  | W-N | -5.6 | +5.9 | -0.2 | -17.8 | -0.9 | +0.1 | +0.8 | -13.1 |
| Non-Metro | W | 65.8 | 25.7 | 8.5 | (2.3) | 63.3 | 26.4 | 10.3 | (3.3) |
| S.E. | N | 71.5 | 19.5 | 9.0 | (14.5) | 65.6 | 23.1 | 11.8 | (16.7) |
|  | W-N | -5.7 | +6.2 | -0.5 | -12.2 | -2.3 | +3.3 | -1.5 | -13.4 |
| Non-Metro | W | 64.5 | 26.2 | 9.3 | (4.0) | 64.4 | 26.2 | 9.4 | (5.2) |
| S.W. | N | 71.7 | 18.5 | 9.8 | (15.2) | 67.1 | 21.1 | 11.8 | (11.8) |
|  | W-N | -7.2 | +7.7 | -0.5 | -11.2 | -2.7 | +5.2 | -2.4 | -6.6 |
| Non-Metro | W | 61.6 | 29.0 | 9.3 | (2.6) | 59.5 | 29.4 | 11.0 | (3.2) |
|  | $N$ | 62.0 | 23.3 | 9.7 | (6.5) | 63.1 | 26.2 | 10.8 | (5.2) |
| N \& W | W-N | -0.4 | +5.7 | -0.4 | -3.9 | -3.6 | +3.2 | +0.2 | -2.0 |

TABBE: 1.11

 by refigion, raci: and grade:

| RF: $: 10 \mathrm{OH}$ | bacte | (:RAD) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 12 |  |  |  | 9 |  |  |  |
|  |  | Agree | Not Siure | Misagree | HK | Agree | Not <br> Sure | Disagree | : R |
| netro | W | 22.1 | 38.9 | 38.9 | (2.4) | 29.5 | 40.6 | 29.8 | (3.5) |
| II.E. | $N$ | 38.1 | 37.1 | 19.7 | (12.6) | 44.6 | 32.3 | 23.0 | (18.7) |
|  | W-H | -16.6 | +1.8 | 119.2 | -10.2 | -15.1 | +8. 3 | +6.8 | -15.2 |
| Metros | W | 20.9 | 40.4 | 39.6 | (2,1) | 26. 2 | 43.1 | 30.7 | (3.3) |
| M.W. | H | 37.4 | 31.1 | 25.' | (9.3) | 39.6 | 36.9 | 23.4 | (10.9) |
|  | W-N | -16.5 | 13.3 | +14.1 | -7.2 | -12.4 | +6. 2 | +7.3 | -7.6 |
| Metro | W | 20.8 | 34.6 | 44.6 | (3.1) | 25.1 | 37.1 | 37.1 | (5.5) |
| S.E. | $N$ | 48.6 | 31.7 | 19.7 | (22.8) | 51.8 | 29.6 | 18.6 | (16.6) |
|  | W-N | -27.8 | +2.9 | +24.9 | -19.7 | -26.1 | +7.5 | +18.5 | -11.1 |
| Metro | w | 17.8 | 34.0 | 48.3 | (4.2) | 23.2 | 40.2 | 34.5 | (5.6) |
| S.W. | $N$ | 46.2 | 31.7 | 22.1 | (14.1) | 46.3 | 32.8 | 20.9 | (18.8) |
|  | W-N | -28.4 | +2.3 | +26.2 | -9.9 | -21.1 | +7.4 | +13.6 | -13.2 |
| Metro | W | 19.2 | 37.2 | 43.7 | (5.1) | 26.3 | 39.7 | 34.0 | (4.1) |
| W | N | 35.6 | 39.0 | 25.5 | (21.3) | 41.2 | 34.2 | 24.6 | (16.6) |
|  | W-N | -16.4 | -1.8 | +18.2 | -16.2 | -14.9 | +5.5 | \$9.4 | -12.5 |
| Non-Metro | W | 21.8 | 36.1 | 42.1 | (2.2) | 27.7 | 38.3 | 34.0 | (2.9) |
| ¢.1. | N | 41.4 | 32.6 | 20.0 | (13.2) | 46.8 | 33.6 | 19.5 | (15.5) |
|  | W-N | -25.6 | +3. 5 | +22.1 | -11.0 | -19.1 | +4.7 | $+14.5$ | -12.6 |
| Non-Metro | W | 19.7 | 35.9 | 44.4 | (3.6) | 24.9 | 38.0 | 37.1 | (4.1) |
| s.w. | N | 49.8 | 31.9 | 18.3 | (13.7) | 49.7 | 31.3 | 18.9 | (11.3) |
|  | W-N | -30.1 | +4.0) | +26.1 | -10.1 | $-24.8$ | +6.7 | +18.2 | -6.6 |
| Non-Metro | W | 23.1 | 38.8 | 38.2 | (2.4) | 27.1 | 41.6 | 30.1 | (2.8) |
| N\&w | N | 4).4 | 30.6 | 23.9 | (6.1) | 44.0 | 35.2 | 20.8 | (5.4) |
|  | W-N | -22.3 | +8. 2 | +14.3 | -3.7 | -16.3 | +6.4 | +9.9 | -2.6 |

is opposite. More Negroes than whites would make sacrifices, work harder on tougher jobs and refuse to blame themselves if they failed to succeed. And these tendencies are largest in the Southeast and Southwest regions. Perhaps the correct reading of the responses to these items is that they reveal a feeling of the necessity to exert enormous effort to achieve significant successes, instead of the determination totake such initiative. Although this evidence is weak and indirect, there can be found little indication here that Negroes are more likely than whites to lack self-reliance or initiative. Of course, these attitudes are not posed in the context of interracial situations, and may not accurately reflect behavior.

A second kind of Negro apprehension about contact with whites may arise not so much in terms of anticipated punishments from whites for behaving outside of a subservient role, as from a fear that one's own behavior might justify continued low status for all Negroes. Because of poor training in middle class etiquette (the vocabulary and behavior styles of the white middle class) a Negro student may lack confidence that his behavior will be judged favorably by whites. ${ }^{1}$ But interracial situations may contain more than the potential discomfort any person might feel when approaching a relationship with others who are better equipped with talents called forth by the particular circumstances. What is different is that the reactions of whites to a Negro student's behavior may be perceived by him to reflect not only on himself but on

[^2]his race in general. A Negro student may feel that he acts as a representative of his race, and that in encounters with whites his behavior serves as a testing ground for racial stereotypes. Only observational studies serve to justify this distinction. One factor which has been mentioned in such research is the concern and attention Negroes express toward the behavior of other Negroes in interracial settings (Yarrow, 1958). The feeling comes through that the Negro students perceive all members of their race are in the spotlight when they themselves behave in interracial settings and are particularly anxious that no Negro reveal himself unfavorably to whites.

Again, there is reason to conjecture that some Negroes may be oversensitive about white reactions. They may too frequently believe that their own cultural or linguistic differences will be taken by whites to justify a stereotype of Negro inferiority and they will avoid encounters with whites as a consequence.

Finally, of course, the ethnocentrism of Negro students could be explained even if no doubts or fears existed about the humiliation or rejection which might occur from association with whites. Individuals can be expected to prefer what is familiar to what is unfamiliar, and to choose situations where the styles of behavior are similar to their own. Whatever the predispositions which underlie Negro student reluctance to associate with whites, and their initial passiveness in interracial situations, there is evidence that experience with certain encounters with whites are likely to create changes.

Desegregation and racial attitudes. - A series of small group experi~ ments conducted by Irwin Katz and his associates (1962) with Negro subjects in bi-racial situations has pointed up the potential effect of certain interracial experiences on these attitudes. Biracial pairs of students were given problems to solve cooperatively, where the partners had to agree on a single answer. When the rules did not require that each person propose openly an answer to each problem, Negroes tended to acquiesce to the white partner's suggestions. This was true even when the Negro subject was given more information for the problem's solution, or when the white member was given an insoluble version of the problem. Another group of pairs approached the same tasks, except that on every problem, each of the two partners was required to read aloud the answers he had worked out to the problem at a previous private session. After being forced to express opinions sometimes at variance with their white co-workers, the Negroes showed more influence in solving subsequent problems, and the tendencies to defer to the white companion's solutions were now evident only when he had shown superior accuracy on previous tasks. Katz takes this as experimental evidence that Negro fears of white reprisals for assertiveness or Negro anticipation of degrading consequences can be overcome by experience in certain cooperative interracial ventures. The particular factors within desegregated schools which may determine whether Negro student attitudes and behavior will change in the predicted manner are to be discussed later in this chapter. At this point, the potential is noted in the interracial contact of desegregated schools for change in Negro attitudes about
interracial encounters.
Studics of Negro adults also demonstrates this promise. A recent national survey of Negro adults, conducted by the National Opinion Research Center for the U.S. Commission on Civil Rights (1967), showed that contact with whites in school when the adults were children, influenced their later attitudes about associations with whites. Negro adults who had attended desegregated schoolswere more likely to reject the statement about not trusting a white man as much as another Negro, to express a desire that their own children attend a desegregated school, and to express a greater willingness to live in an interracial neighborhood. These attitudes were also reflected in the behavior of those Negro adults who had attended desegregated schools. They more often lived in a desegregated neighborhood, sent their children to desegregated schools and were members of interracial friendship groups. These differences between Negro adults who had attended segregated and desegregated schools maintained when controls were applied for social class and other childhood experiences. An additional study conducted for the Civil Rights Commission (1967, Appendix C4) of recent high school graduates in Oakland, California, revealed the same pattern of differences about attitudes toward associations with whites. The Negro students who had attended desegregated schools were more likely to trust whites, to have their own children attend desegregated schools, and to have cstablished close friendships with whites.

Some other studies of interracial contact in schools on the racial choices of students are not as conclusive as these. With information on the racial characteristics of the elementary schools attended by
students in two New England high schools, St. John (1964) tested the hypothesis that the choices of those Negro students who had attended school with whites in the early grades would be less ethnocentric than the others. This hypothesis could only be accepted with the several important exceptions of high social class students and students who were children of Southern immigrants who themselves had migrated from the South. This study, however, was not able to compare students in segregated and desegregated high schools. Mann (1959) in an interracial experiment with college students found that intergroup contact reduced the tendency of Negroes to use race as a sociometric friendship criterion. Webster's (1960) study of interracial contact in a newly integrated San Francisco junior high school resulted in inconclusive findings in the case of Negro subjects, but did tend to indicate that change was greater in the direction of more acceptance of whites.

### 1.3 Attitudes about the environment

In contrast to the inconsistent and relatively small differences between white and Negro students in their academic self-confidence and self-esteem, there is one attitude measured by the OE Survey where the racial differences were dramatic. This was the belief of students that they had an opportunity to achieve success through diligent personal effort. Several questionnaire items from the $O E$ 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 and those with a strong feeling of personal efficacy and mastery over
their own destiny.
There wore large differences between the responses of white and Negro students on these items, indicating that Negro students much more frequently belicved it was futile to plan and strive to get ahead. Many Negro students appeared to believe that success was distributed to people like them in a capricious way by a fickle environment. Planning was uscless to these students for these efforts were seen to be rarcly rewarded.

Among the items used to gauge a student's feeling of control of his environment and opportunities for success were statements to which students were directed to 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 of a chance to be successful in life.

Table I. 12 shows the responses of ninth grade Negro and white students to these questions. The overall differences between the races are shown in the "total" columns, and values are shown separately for groups of students who had similar test scores on a test of verbal achievement. For all of the items, the overall differences between white and Negro students are large. Even when Negro and white students are matched on their achievement scores, differences remain on the first item.

Desegregation and control of environment. - The OE Report also gave some clues that school desegregation might increase the feeling of
tabie I. 12



Negro students that their environment is not immune to thej $f$ plans and efforts to control their own future. While the differences in the objective characteristics of schools explained aimost none of the variations in these attitudes, and family background accounted for only a small fraction of the variance, differences in the percent white enrolled in the school was related to these attitudes (Coleman, et al., 1966). The Negro students who were in majority white schools more often expressed feelings that they could effectively determine their own future. This difference between segregated and desegregated Negro students was particularly marked when those who had attended desegregated schools beginning in their early grades were compared to others (U.S. Commission on Civil Rights, 1967).

### 1.4 Plans for the future and knowledge of strategies

After seeing the degree to which Negro students believe more than whites that they exist in a hostile environment which will not respond to their efforts, it would not be surprising to find that Negro students hold very low ambitions and plans for the future compared to whites. But such is not the casc. The striking Einding which comes from studies of Negro aspirants, is that in spite of the hostility and rejection that they have encountered, they have not rejected the goals and values of the majority group nor resigned themselves to the lower positions in society, but instead hold aspirations and plans which are very ambitious. ${ }^{1}$ Indeed, nany of these studies have shown both the
$1_{\text {Studies on }}$ this topic include Colenan, et al. (1966); Gist and Bennett (1963); Holloway and Berreman (1959); Stephenson (1957); Antonovsky and Lerner (1959); Reiss and Rhodes (1959); Wilson (1959); Bell (1965); and Keller (1963).
desires and plans for the future of Negro students and Negro parents to be considerably higher than those of comparable whites from the same social class or with the same qualifications.

Table I. 13 shows the replies of ninth grade Negro and white students to several $O E$ Survey questions regarding their desires and plans for the future. Percentages are shown separately for boys and girls and for gruips of students who have similar scores on a test of verbal achievement. While it is true that on the average a higher proportion of white students desire to go to college, and have definite plans for attending college (see "total" columns), the picture is different from when students who are at the same level of achievement are compared. (Even in terms of the overall frequencies, large racial differences only appear for boys and not girls.) When students with similar scores on the test of verbal achievement are compared, Negro girls have more ambitious educational desires and plans than white girls, and all except the highest achieving Negro boys more frequently plan college than comparable whites. This may be an example of the frequently uncovered finding that the aspirations of Negroes are less related to social class standing than are the aspirations of whites. For example, Wilson (1967), in his study of Richmond, California, found that lowachieving Negro students were particularly more likely than whites to aspire to go to college. He shows that the racial difference in college plans cannot simply be explained by students' self-conception of their ability. Even a significant frequency of the Negro students who do no believe that they can get better than $C, D$, or $F$ grades say they
aspire to college.
Similarly, with the students' desires to excel in school, Negroes more frequently than whites want to be one of the best students in their class. Table I. 13 shows this to be generally true, and also in every case where comparisons are made between Negroes and whites at fixed achievement levels.

There is evidence that the difference in college plans between Negro and white students occurs because the Negro students are more often expressing their desires rather than their intentions. Two different questions were asked in the 0 E Survey about college plans, one inquiring about a student's desires and the other about his plans. The last two rows of Table I. 13 show separately for whites and Negroes the differences in the percent of students who said they desired to go to college and those who replied they definitely planned college. Among the girls and the low-achieving boys, Negroes less frequently made a strong distinction between desires and plans than whites.

Survey data from twelfth grade students suggests another reason for these racial differences. In this grade, questions were also asked about some of the concrete steps which are usually taken to gain admission to college. Each student was asked whether he had read a college catalogue and whether he had communicated with a college offj.. cial. The differences between Negroes and white were exactly opposite for these responses as they were on college plans. The Negro students who more frequently planned college than comparable whites had less frequently taken any concrete steps to investigate particular colleges. (See Table I.14.) Again, this may reveal the difference between desire
TASLE I. 13
ASPIRATIONS OE NISTH GRADE TEGRO ALD WEITE SFIDENS


TABLE I. 14
COILEGE PLANS AND RELATED ACTIVITIES OF TWELFTH GRADE STUDENTS, BY RACE AND SEX, FOR METROPOLITAN NORTHEAST

|  | Boys |  |  | Girls |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Negro | W-N | White | Negro | W-N |
| Percent of those students who are definitely plannin to go to college who have read a college catalog | $\begin{gathered} 92.5 \\ (4068) \end{gathered}$ | $\begin{aligned} & 80.7 \\ & (548) \end{aligned}$ | +11.8 | $\begin{gathered} 95.1 \\ (3666) \end{gathered}$ | $\begin{aligned} & 86.4 \\ & (777) \end{aligned}$ | +8.7 |
| Percent of those students who are planning probably to go to college who have read a college catalog | $\begin{gathered} 72.1 \\ (2230) \end{gathered}$ | $\begin{aligned} & 67.1 \\ & (639) \end{aligned}$ | +5.0 | $\begin{gathered} 79.0 \\ (1636) \end{gathered}$ | $\begin{aligned} & 63.0 \\ & (748) \end{aligned}$ | +16.0 |
| Percent of those students who are definitely planining to go to college who have contacted a college official | $\begin{gathered} 69.2 \\ (4077) \end{gathered}$ | $\begin{aligned} & 55.3 \\ & (548) \end{aligned}$ | +13.9 | $\begin{gathered} 79.0 \\ (3669) \end{gathered}$ | $\begin{aligned} & 62.4 \\ & (780) \end{aligned}$ | +16.6 |
| Percent of those studenis who are planning probably to go to college who have contacted a college official. | $\begin{gathered} 34.5 \\ (2238) \end{gathered}$ | $\begin{aligned} & 30.2 \\ & (642) \end{aligned}$ | +4.3 | $\begin{gathered} 45.0 \\ (1640) \end{gathered}$ | $\begin{aligned} & 31.0 \\ & (749) \end{aligned}$ | $+14.0$ |

and plans. But it also suggests another factor which might underlie unrealistic plans for the future. Negro students may not kave taken steps to gain admission to a particular college because they were less well informed about the measures usually followed by college bound students. The Negro students have less access to advice and clues on strategies for following through with particular plans. Along this line, Wilson (1967), reports some interview materials showing Negro students' lack of knowledge of the prerequisites for college entrance.

Desegregation and plans for the future. - Again, the published research fails to provide a simple picture of how school desegregation may affect Negro students' attitudes, in this case their plans for the future. The study of St. John (1966) of two northern high schools did not show that Negro students' educational plans were in any way related to the racial composition of the schools they had attended in the elementary grades. Tabulations have been reported from the OE Survey which investigate the influence on clder Negro students of the racial composition of their present school.

These tabulations suggest that desegregation may operate on Negro student aspiration levels in a complex manner. Controlling only on the family background of students, Negro students in desegregated classes exhibited a higher frequency of plans to attend college. High school seniors also more frequently reported having read a college catalogue and having contacted a college official. (U.S. Commission on Civil Rights, 1967, Appendix C-2.) However, when the achievement level of students is controlled as well, the picture is different. Armour (1967)
analyzed differences in college plans for Negro students, where comparisons were made separately for boys and girls grouped according to their achievement level as well as their family background and the average social class of students in the school. Among these separate groups, the only one which showed a positive effect of desegregation on college plans were the Negro boys with high achievement who came from lower class familics and attended lower social class schools. Armour interprets his results to say that only the Negro male students who have managed to develop high academic ability but yet come from deprived surroundings will raise their aspirations as a result of going to school with whites. Later sections of this chapter will more fully discuss situational components within desegregated schools which might create some aspects of the pattern he describes. For the moment, we note that treatments of the effects of desegregation on Negro aspirations does not present a simple picture of causality.

### 1.5 Academic achievement

One of the reasons interest is expressed in the effect of school desegregation on racial differences in personality development is that particular personality and attitude somponents are thought to play an important role in the learning process and affect later life behavior. For example, the Civil Rights Commission report (1967) showed that Negro students' experiencer in desegregated schools had an influence which was reflected in later life where Negro adults who had attended desegregated schools were more willing than others to value associations with whites and to send their own children to desegregated schools. But, also, certain student personality elements and attitudes are re-
lated to academic achievement in school. Because of these relationships, it may be expected that improvements in academic achievement as a result of school desegregation will be conditioned by the effects of desegregation on attitudes and personality development.

Sclf-concept and academic achievement. - Several studies have documented the relationship between students' self-image and their achievement in school (Wylie, 1961; Lavin, 1966; Coleman, et al., 1966). The simple relationship between seif-image and achievement does not tell the direction in which a process of change might have occurred: whether self-csteem served as a pre-requisite for achievement or whether changes in these attitudes followed improvements in academic performance. Ordinarily, a causal model of repeated feedback is thought to exist, where changes in either characteristic will often result in modifications in the other. One study suggests that Negro academic performance is more impaired than white by low self-esteem and confidence (Rosen, 1960). But, because of this relationship, some educators are proposing school programs to improve Negro student achievement which operate directly on self-image (such as courses emphasizing the Negro contribution to American history or class room materials which include Negro subjects).

For the present study, this relationship between self-image and achievement could be the basis for postulating that, to the extent that school desegregation improves the self-imase of Negro students, the academic performance level of these students will increase. And, conversely, if desegregation reduces the self-respect of Negroes and weakens
their academic self-confidence, their rate of academic development would be expected to decrease as a result. Preliminary analysis for the Office of Education report suggests that matters may not te this simple or direct.

In the office of Education report, it was suggested that improvemonts in Negro academic achievement might result from desegregation even though self-concept may not be positively affected (Coleman, et al., 1966). It was stated there that Negroes in desegregated schools may reveal a lower degree of academic self-confidence without this adversely affecting their level of learning. Again the measures used in this analysis probably reflect the ease with which students feel they can rank among the best students in their school rather than a generalized self-concept which includes beliefs about their own inherent potential and self-worth. But, " the possibility is introduced that lower levels of self-confidence in the desegregated situations may sustain and accompany higher academic performance.

Control of environment and achievement. - The strong asscciation between feclings of hopelessness and academic achievement is evident in Table I.12, and was revealed in the $O E$ Report as well. Indeed, for Negro secondary students, these attitudes 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 (Coleman, et al., 1966). In contrast to white students, this attitude had a.higher association with achievement than did the measures of self-confidence used in the survey. Indeed, the relationship between attitudes about opportunities for success
and achievement were three times stronger for Negro students than whites. Other studies have also suggested the importance of feelings of powerlessness and the motivation to learn. Crandall and his coworkers (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 feelings of futility and learning 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 helpless and alienated from their environment. In a reformatory setting 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).

The racial achievement gap and desegregation. - While the developmental processes that accompany academic growth are still poorly explained, the $O E$ Survey did document the large differences in academic achievement between Negro and white students. The average Negro and white student begin school with an achievement gap of one standard deviation. And this gap is not reduced as the average students progress through twelve years of school. Indeed, in the South, the gap grows to 1.5 standard deviation units by the twelfth grade. In terms of grade level equivalents of achievement, the picture of a widening racial gap exists in every region. In the Metropolitan Northeast, the average sixth grade Negro student is
1.3 years behind the level of the average white. This gap grows to 2.4 yoars difference in the ninth grade, and to 3.3 in the twelfth grade.

Published tabulations of the OE Survey data also indicate that the gap is reduced by school desegregation. For ninth grade Negro students in the Metropolitan Northeast who have attended desegregated schools since the early elementary grades, the racial. gap is half the si\%e which exists in the region as a whole (Coleman, Ct al., 1966; U.S. Commission on Civil Rights, 1967). These tabulations, however, do not make clear whether the influence of desegregation is the same for Negro students with different backgrounds and home environments. Moreover, only beginning efforts are made to detail the way in which different elements of desegregated schooling may act as positive or negative influences on Negro student achievement. Both of these will be areas to be discussed in later chapters.

The next scction of this chapter will outline some of the situatiorial components of schools which may conditic. the way desegregated schools infiuence Negro students.


#### Abstract

1.6 Summary

The previous research on differences between Negro and white students does not provide a strong basis for developing hypotheses on the effects of school desegregation on Negro students. This section reviewed studies dealing with racial differences in selfconcept, attitudes abuut interracial contacts, attitudes about


the environment and plans for the future. Some of the work which has shown links between these factors and academic achievement'in school were discussed. But there were two major shortcomings in this literature for deriving postulates about the effects of school desegregation.

First, there was only a weak evidential basis for deciding whether several of the racial differences in attitudes and personality which existed before 1954 are as true at the present time, and whether they persist when comparisons are made in the North. Tabulations from the OE Survey suggest that important differences may remain in some of these areas. The pattern of large racial differences was clearest in two respects. Negro students have a considerably less optomistic view of their opportunities for success. And, there is certainly a large gap in the level of academic achievement between the average Negro and white student.

The second shortcoming was the absence of clear evidence on the way student experiences in desegregated situations may affect racial differences. For measures of self-concept, aspiration level and racial attitudes, the existing studies were contradictory in their findings or implications. With measures of control of the environment and academic achievement, it is principally the analyses of the $O E$ Survey data which suggest that desegregation has a positive effect on the average Negro student. However, only indirect clues are available on the extent to which the effect of desegregation is similar förr Negro students from different backgrounds and what
alements in desegregated schools are the factors encouraging academic growth and which features of these schools dampen it.

The next section will outline several situational components which are thought to distinguish segregated and desegregated schools. Where it is available, research evidence will be cited which shows these components to have an influence on student development.

## 2. Hypotheses on the Situational Differences Between Segregated and Desegregated Schools Affecting Negro Student Development

There are at least five ways in which desegregated schools may be consistently different from segregated schools in a manner which may affect the development of Negro students. Some previous evidence can be found to argue both that rhese differences will be typical of segregated and desegregated schools, and that these factors have important consequences for students. Both of these issues will be taken as problematic for this study, and will be the principal questions addressed in later chapters. Evidence will first be reviewed from earlier studies which suggests five situational factors about which hypotheses and questions can be drawn.

### 2.1 Social. stigma

The arguments reviewed in the previous section that school desegregation may diminish certain personality differences between Negro and white students is based on the assumption that one particular characteristic of schools will be modified through desegregation.

This is Negro students' perceptions of the attitudes of others about his school. The notion is that the segregated Negro schools are "stigmatized" as being inferior and not due the same respect and expectations as other schools. The argument is that teachers and students in an all Negro school will be aware of an unfavorable attitude with which the community views their school, and it will color their own opinion of the quality of the school and their own expectations of what results the school can produce.

The students and teachers in a school could perceive an unfavorable community attitude toward their school under different circumstances and for different reasons. Such a perception could be held even when it is not justified. That is, the general reputation of a school may be no different from any other school in a locality; yet if the members of the school typically misread the community attitudes, the school is stigmatized as far as it might affect their behavior. Also, there are various reasons that a school may be judged inadequate by outsiders as well as by the students and the teachers in the school. The appearance of the facilities and physical plant of a school may affect its general reputation and the perception of its reputation by its members. Or, a school's past record of accomplishment compared to others in the system may be the principal basis for its reputation. But, some arguments rest on the assumption that the perception of a school's reputation is affected by its racial composition over and above any other differences which may set the school apart from other schools. It
is implied that mostly Negro schools are seen by their members to be stigmatized as capable of providing only an inferior education. The Supreme Court maintained that segregation by law did stigmatize the Negro schools as inferior and not due the same community expectations of performance. As detailed above, these perceptions of community attitudes were seen as damaging to the personality development of the students in the school. The question is whether the same community attitudes are perceived by Negro students in the North for schools which are segregated not because of law but as a result of residential. patterns in the community. That is, do the students and teachers in mostly Negro schools. believe their school has a poor reputation and a poor prospect for providing a good education? And, can such perceptions, if they exist, be explained by the racial composition of the school alone rather than the quality of the instructional program in the school?

Stigma, then, is one situational factor which may differ between segregated and desegregated schools. The Negro students and the Leachers in segregated schools may believe that the community sees their school as inferior and holds a low expectation for the educational outcomes in their school, even as compared to other schools which are similar except for their racial enrollments. Just because a school is desegregated, these perceptions may be different.

The previous section discussed how perceived social status distinctions may prove damaging to Negro student personality development. But the fact that the teachers in a stigmatized school may adopt
these community evaluations is another potential reasor why. school desegregation may affect the learning process. Kenneth Clark (1965) argues that low expectations of Negro student performance is a major reason to account for the poor rate of academic growth in the schools in Negro ghettoes. Research is very difficult in studying the effects of teacher expectations, because it is necessary to distinguish evaluations which follow differences in student performance from expectations which precede these differences. One of the few studies which have attempted to do this is Rosenthal's work in experimentally contrived situations (1966). Among primary grade children, Rosenthal found that manipulating teachers' expectations of particular students affected the rate of learning. The rate of growth improved markedly for those students whose teachers had been told they were high ability students. So, no matter whether the students themselves internalize some sọcial stigma which may be attached to their school, if their teachers do, the students may then adjust to what they see as their teachers' expectations.

### 2.2 Student environment

By student environment is meant the standards, norms and values set by the students to influence behavior in their school. A growing litarature of careful research has demonstrated that schools can differ widely in the interest and standards adopted by the student body, and that individual students are strongly influenced by the characteristics and viewpoints of their fellow students.

There are a number of ways in which the characteristics and values of one's fellow students are likely to affect an individual's own intel lectual growth. First, the standards set by the fellow students in the school present a strong attraction and model to the individual students in the school. It is particularly in the secondary grades that the student peer group is thought to operate as an important reference point for the individuals in. the school, and where the rewards for adapting to the norms of this group are especially strong and valued (McDill and Coleman, 1965). Secondly, there is a good deal of learning which may be the direct consequence of the stimulation provided by the behavior of fellow students who are highly qualified and energetic. This learning may include many things beyond the formal subject material offered in the classroom, such as knowledge of the prerequisites necessary for admission to college, styles of thinking and expression as well as strategies and techniques for approaching learning tasks. The OE Survey suggests that it is in matters and skills not usually contained in the formal syllabus of courses where the differences in school quality show most clearly (Coleman, et. al., 1966). Third, teachers may often gear their instruction to the general level of student development in their classes. Students in classes with high achieving fellow students may often be exposed to materials at a different rate and at a different-leve1.

Some recent analyses have strongly suggested that the student environment in desegregated schools will frequently be different from
segregated ones, and that these differences have strong implications for the academic development of the Negro students in the desegregated schools. It was shown in the $O E$ Report that of all the characteristics of schools measured by the survey, including the kinds of programs and facilities available in the school and a large number of attributes of the teaching staff, it was the characteristics of the other students in the school which most clearly differentiated majority white schools from majority Negro ones (Coleman, et. al., 1966). Comnared to the classmates of the average white student, the fellow students of the average Negro student came from poorer homes which were less equipped to give educational stimulation to the children. In the Northeast, fewer of the classmates of Negro students planned to go to college, and the average achievement level of the fellow students was lower than for the peers of the average white student. What undoubtedly underlies much of this is the difference in the average social class level of the schools attended by white and Negro students. Although important exceptions can be found (McDill, et. al., 1966), it can be assumed that the schools where the average student is from an upper class family background with college educated parentis will have a student environment which sets and meets higher standards of academic achievement than a school which enrolls mostly students from disadvantaged homes. Racial segregation of schools usually also means the social class segregation of schools: Negro students are likely to have fellow classmates who are from well-to-do families only if they attend
desegregated schools. So whether a Negro will be attending a school with a student body which is high achieving and college bound is also highly related to whether his school is segregated or desegregated.

The OE Report not only documented the differences in student environment in the schools attended by Negro and white students, but showed the importance of this factor for the educational development of Negro students. In the regression analyses reported there, the characteristics of the fellow students accounted for more of the variation in individual achievement than either differences in facilities or programs in schools or in attributes of the faculty. This was true after differences in the family background of the individual students was taken into account. Other studies have produced similar findings, and also shown the importance of student environment for influencing the college plans of students i (Wilson, 1959, 1967).

There is also evidence to show that Negro students are particularly influenced by the peer group in their school. The OE Report regressions showed that the achievement of Negro students was more sensitive to differences in the student environment in their schools than was white students' achievement. A recent study by Wilson in Richmond, California (1967) also found a greater proportion of variation in Negro student achievement was explained by differences in student environment than was the case for white students. This is consistent with evidence pointed to by Katz in a recent review of some motivational factors which may affect racial differences in academic achievement (1967). He lists studies which suggest that lower
social class and minority group children are inclined to be highly dependent on external'rewards, such as the approval from significant others in situations that demand performance, rather than drawing upon internal standards and criteria for satisfaction. This conclusion also implies that Negro children will be particularly susceptible and influenced by the standards and rewards established by their student peers.

Improvements in the student environment provided for Negro students is a second situational factor which might be expected to accompany school desegregation. This is not because desegregated Negro students will be attending school with fellow students who are white, but because their fellow students will come from more advantaged backgrounds than would be the case in segregated schools. Simply because they bring with them the high expectations and academic advantages which are more typical of higher social class families, the fellow students in desegregated $\cdot$ schools will provide a student environment which is more stimulating and'challenging.

## 2. 3 Level of competition and relative standing in class

There is reason to suppose that an increase in the standards for academic achievement in the school holds the seeds for detrimental influences as well as positive effects, at least for some students. Whenever the achievement and standards of the fellow students in a school increase, the level of competition which a given student must face in the school also increases. So, for example, if a particular Negro student had attended a school where the parents of most of
his fellow students had at most a high school education, and then transferred to one where the average student in the school had college educated parents, both the student environment of the school would improve but also individual students' own preparation for work would be less adequate relative to the other students in the school. A given student who in one case would be near the school average in the advantages for learning he brings from home and in his current level of achievement, might be well below the school average in a different school. Just what effect a student's competitive standing in the school, or his "relative preparedness" might have for his prospects of academic growth and personality development is an important question. There is some research evidence to indicate that a student with poor relative standing in his own classes suffers strain which may affect his personal development. Indeed, practices of educators such as ability grouping and tracking are often directed to mitigate the initial differences betiween a student and his fellow classmates. And some of the desegregation plans which have been developed recently propose placing previously segregated Negro students in those racially mixed schools where his relative standing will not be greatly.altered (Lang).

Notions on how the characteristics of the fellow students in a school may act as a separate force in two opposite directions can be derived from Kelley's (1952) distinction of the two functions a reference group may play: the comparison function and the normative function. In the previous section, the charactertistics of the fellow students in a school were discussed as they might act as a
reference group serving the normative function, as "sources and reinforcers of standards". Here, the characteristics of fellow students will be discussed in terms of a reference group providing a comparison function, as "a comparison point against which the person can evaluate himself and others".

Some research evidence is available to suppori both hypotheses that the relative standing in a school will of itself influence a student's attitudes and personality structure, as well as predictions that the level of competition in the school will detrimentally affect the academic performance of some students.

James $A^{\circ}$. Davis (1966), in a large study of the aspirations of college men, found that career choice showed stronger correlations with the grades received in school and with a measure of the average intellectual competence of the students in the school. His interpretation was that students tend to use their relative achievement level in their own school as a criteria for evaluating their own ability rather than using some absolute standard which would take into account school differences. Tabulations using items measuring attitudes about academic success generally supported this explanation. Because segregated Negro students often have very high aspirations, a similar and perhaps pronounced reduction in the level of their planning for the future may be expected after desegregation.

Irwin Katz has deve loped a model of the situational determinants of Negro performance in desegregated schools (1964), from which this chapter draws heavily. One principal element in his model is the
student's "subjective probability of success", the individual's perception of the odds he faces for achieving certain goals. Katz has reviewed a series of experiments where Negro college students tended to underperform on intellectual tasks when whites were present. On the same digit-symbol task, Negro subjects.performed poorer when they were told their performance would be compared with whites than when the comparison was to be made with Negroes. In other experiments, the presence of a white tester (and presumably "white standards") was shown to lower the performance of Negro students on several tests, as compared to the performance level achịeved with a Negro tester (and "Negro standards") present. Katz uses Atkinson's theory to interpret these experimental results. Atkinson maintains that the optimal "subjective probability of success" is neither very low nor very high, but an intermediate probability (close to . 50). When the probability of success is seen as very high, according to Atkinson, the incentive to put forth serious effort is weak. When the expectation of failure is high (and the probability of success is perceived as low) there also is a motivation to withdraw effort from the task.

### 2.4 Social integration

Besides the level of competition in mostly white schools, another possible factor which is thought to create serious strains for Negro students is rejection and exclusion by the whites in a school. Some believe that Negro students' worries about school work in
desegregated schools are not as important as their concerns about the prejudice of the white children in the school. However, there is little information available on how frequently white hostility toward Negro students will be found in desegregated sčhools; but there is a good deal of research which suggests it may have a strong influence on how Negro students fair in desegregated schools. The evidence is that the ocial relations with white students which Negro students experience in desegregated schools can be ej.ther a source of benefit for their personal growth or a detrimental influence, depending on whether they experience social approval or rejection. This evidence will be reviewed here; but in contrast to other situational factors, no firm predictions can be made or how segregated and desegregated schools will typically differ in the extent to which Negro students are integrated into the social relations of the school. This factor, then, can be viewed as one which may more often distinguish one desegregated school from another, rather than differentiating segregated and desegregated schools.

By social integration we mean the degree to which Negro students are included and welcomed into the affairs of the school. One group of students can be kept separate from the others in many ways, ranging from the formal activities of the school to the informal friendship groups which arise in the school. For example, a particular Negro student in a desegregated school may nevertheless only have Negro students in his class, participate. in extra-curricular activities only when Negroes are the dominant group in the activities,
and only count Negroes among his close friends. Another may attend classes with whites, but outside of these formal contacts, only associate with Negro students in the Iunchroom, in other nonclassroom activities within the school and in his friendship groups. Or, another may be included in formal and informal groups which include students of both races.

There is evidence that the degree of social integration -- both . the structural and interpersonal arrangements -- which a Negro student may experience in a desegregated school can have an important influence on him. Some studies suggest that by itself, the degree of rejection or social approval which is offered from white students may affect the personality development as well as the academic performance of Negro students. But also, the degree of social integration experienced by a particular student may mitigate or facilitate the influence of other situational factors.

Racial hostility as a direct influence. - Earlier in this chapter, some arguments were cited that Negro student personalities are damaged by the status distinctions and role definitions which are established and enforced by racial segregation. The possible ways which school desegregation could alter this pattern were described at length. But it is wrong to think that these factors need be any weaker if the races are simply in close proximity to one another in racially mixed schools. The region of the country where the racial caste system was most completely developed and the Negro personatity aberrations most widespread was where the races were in most coristant contact. So,
racially mixed schools in the North where white students operate to maintain the most invidious distinctions may create greater problems Cor Negro students than if he were attending a mostly Negro school instead. The confusion about one's self-image and the lack of selfrespect may be exacerbated. Certainly, the willingness to associate with whites will not be increased if a Negro student finds his prior anticipations of white rejection and hostility to be justified. And the feelings of futility about advancing oneself through diligent efforts may be oníy increased if such efforts are thwarted by an immediate hostile environment.

Katz suggests that the white students in schools where they are in the majority may reduce Negro students' efforts to excel academically. Through their "coercive power" to isolate and show resentment to Negroes, those Negro students who choose to strive for academic excellence may be punished.

But, even if Negro students are able to insulate themselves from any threats to theîr personaliṭy structure created by hostile white students (by rejecting white threats of retaliation and seeking social support and sustenance from other Negro students in the school, for ${ }^{2}$ example), there is evidence that strain and discomfort in such efforts may be an impediment to their academic growth.

Katz, in his review of experimental research of stress and performance, suggests that racial tension in a school will be an important distraction in the learning process (1967). The studies which he reviews of learning in experimentally induced stress situations are
not performed wi.th Negro subjects in interracial groups, but are general investigations of the relationship between stress and various kinds of learning. In summarizing this review, Katz reports "there is a considerable amount of experimental evidence that types of stress which may be present in desegregation : . . impair certain kinds of verbal and perceptual motor learning."

Racial hostility as a facilitating influence. - Perhaps the most important way the degrec of social interaction in a school may have an influence on Negro students will be i•direct. Some other studies reviewed by Katz suggest that the way Negro students react to other situational factors which are likely to accompany school desegregation may be conditioned by their acceptance by the whites of the school.

Already reasons have been given why Negro students may be particularly receptive to the student norms and standards established in desegregated schools. Disadvantaged and minority children appear to be especially sensitive to the rewards which are received from their student peers. But Katzargues that because the student peers are white students in the mostly white schools, this creates an additional incentive for Negro students. The acceptance by white teachers and white peers is seen by Katz to have special prestige value and attraction for many Negro students.

Whether the Negro students in a desegregated school adopt the norms and standards of the whites in their school may depend on the social acceptance they receive from the majority group. An experiment
by Dittes and Kelley with white college students showed that the adoption of group standards was greatest among those who experienced acceptance by the group and desired even more complete acceptance, and those who nad not been accepted by the group did not adopt the standards. This is indirect evidence that except when Negroes experience isolation and rejection by whites, they will be influenced by the majority student environment in mostly white schools.

Katz also cites studies reviewed by Bovard (1959) which show that social approval and social integration may intervene on the influence of the level of competition on Negro students in desegregated schools. From separate studies of animal behavior, humans i:l crises situations and from some anatomical investigations, Katz concluded that "an organism's vulnerability to stress depends upon the nature of its social environment." Applying this to school desegregation, he states "the extreme social isolation that is often experienced by Negroes in predominantly white environment would weaken their resistence to other stress conditions, such as might arise from the inherent difficulty of academic work, time pressure, financial problems, etc."

Finally, the fact that a Negro school may be stigmatized and a mostly white one hold a high reputation may be offset as a positive influence if the desegregated Negro students remain isolated in the school. Although Negro students are attending a school with a good reputation in the community and among the teachers for its educational. program, if they are treated separately, a stigma may remain in their
classes. For example, if most of the Negro students are assigned to Jow ability group programs and low track classes, they may remain sligmatized within a school which maintains a good community image. Their teachers may have low expectations of their ability to learn, and the students may continue to feel stigmatized as far as their educational prospects are concerned.

Desegregation and white hostility. - The question remains of how frequently Negro students in desegregated schools will face sustained hostility from most of the white students. Some interview studies on the interracial climate in desegregated schools have begun to appear, for both Northern and Southern desegregated schools (Becker, 1.967; Chesler, 1967). It will be important in planning for new school desegregation and for the administration of existing ones to discover from additional studies if there are factors which usually differentiate schools with extreme and infrequent racial tensions.

There are research studies which suggest that the initial racial attitudes of white students may become modified through attendance at desegregated schools. As with studies of racial attitude change among Negro subjects this tradition of research has often yialded opposite results. As least three studies of white students -- Webster's (1960) in a California junior high school; C'ampbells' (1958) study of a sample of seventh, ninth, and eleventh graders in a Southern city; and Lombardi's (1963) in a Maryland high school,found either no change in white student tolerance or a smaller frequency of acceptance of Negroes after experiences in deseg-
regated classes. On the other hand, Mann's (1959) experiments with college students in the North showed that interracial contact reduced the tendency of whites to use race as a criteria for friendship choices. Earlier tabulations of the OE Survey data showed that white students were less likely to choose only whites for classmates and close. friends if they had attended interracial schools. And the white students who least frequently rejected Negroes in these choices were those who had attended desegregated schools in the early grades. This suggests that extended contact in interracial situations may encourage change in white student attitudes. A national study of white adults conducted for the U.S. Commission on Civil Rights (1967) showed that whites who had attended desegregated schools as children are more willing than other white adults to have regular contact with Negroes, less frequently adhere to racial stereotypes, and more frequently live in desegregated neighborhoods, send their children to desegregated schools and have close Negro friends.

Several studies of the effect of interracial contact on the reduction of white prejudice have been conducted in settings other than desegregated schools. Studies showing a reduction in white hostility have been made among union members (Brophy, 1946); residents in interracial housing projects (Deutsch and Collins, 1951); Wilner and Cook, 1952; and Jahoda and West, 1951), soldiers in interracial combat units (Stouffer, et. al., 1949; MacKinzie, 1948), and among chịldren in a racially mixed summer camp (Yarrow, et. al., 1958). Al.fport (1954), in reviewing some of these studies, has concluded
that the character of the interracial contact is the important factor in determining whether white prejudice will increase or diminish. He concludes that sustained acquaintance will often encourage tolerant and friendly attitudes, but only casual contact may increase racial stereotypes and prejudice. Moreover, he surmises that contact where the races are accorded equal status is mostly likely to increase acceptance. Finally, he concludes that if the contact is sanctioned by institutional supports, such as authorities or local atmosphere, and activities of the two groups are directed toward a common goal, the reduction of the rejection of the other group is most likely.

### 2.5 Quality of school program and instructional staff

Finally, there is some evidence that the character of the school's program and its instructional staff is related to the racial composition of the student enrollment. There is a widespread belief thät mostly Negro schools have inferior facilities, offer a sub-standard program of instruction and have faculties who are poorly trained and equipped. Moreover, many of the allocations of resources for schools are based on the assumption that even modest improvements in the facilities and teaching staffs of a school will have important consequences for the achievement of students in the school. The OE Report contradicts both these beliefs. Although some differences were found in the kiad of school programs and facilities available in segregated and desegregated schools, and in the quality of the instructional staffs in the two cases these differences were not great within most regions. Secondly, differences in the quality of
a school's instructional program by itself explained only very little of the variation in individual student achievement. Neither characteristics of the schools or attributes of the teachers accounted for differences $i$ i, student achievement to the same extent as did the characteristics of the other students in the school, the student environment of the school.

### 2.6. Summary

Both this section and the previous section have demonstrated the uneven and often contradictory nature of research evidence which migh suggest how school desegregation will affect Negro students. But, it seems to be possible to come closer to firm hypotheses on these effects by drawing on the studies of situational determinants of behavior than by appealing to evidence of differences between Negro and white students. The previous section showed that for the present Negro student i; the North, existing research does not give a clear picture of the character of racial differences on many personality and attitude variables, much less provide evidence on whether school desegregation will eliminate such differences as may exist. While, ${ }^{\text {at }}$ the same time, the research reviewed in this section may not provide the basis for strong predictions about the average effects of school desegregation on Negro students, it does highlight factors which may create differential effects.

Of the five situational factors discussed, two appeared to hold the promise of generally beneficial results, two others were cited as potentially disruptive forces for Negro student development, and one
was seen to have inconsequential effects on Negro students. Both the differences in stude it environment and social stigma which were thought to distinguish segregáted and desegregated schools were scen as positive influences on Negro students. The likely changes in the level of competition faced by many Negro students who switch from segregated to desegregated schools, and the threat of racial hostility in desegregated schools were seen as detrimental factors. Drawing on the OE Report, the factor of the quality of a school's program was not seen to vary sufficiently between segregated and desegregated schools nor to be an important factor which distinguishes more effective schools.

The factor of potential racial hostility, which was just cited as a possible detrimental factor following from school desegregation, might more correctly be seen as a variable which may have its most important effects as an indirect rather than a direct influence. The degree to which a Negro student is socially accepted into a desegregated school was described in terms of the way it might facilitiate the operation of the other situational factors in a desegregated school. In these terms, the possibility was discussed that the strength and direction of influence of the student environment, the level of competition, and the school's stigma is related to the degree to which a Negro student is "socially integrated" in his school.

Each of these five factors will provide the principal basis for the present study.

## 3. Outline of the present study

Focusing on the five situational factors outlined in the previous section, this study will use the OE Survey to investigate the degree to which each of these factors truly distinguishes the segregated and desegregated situation, and whether an important source of influence -either positive or negative -- can be generally located in each of these factors.

Because the social integration of Negro students within desegregated schools was suggested as an important variable which interacted with the potential influence of each of the other factors, one measure of the internal conditions of desegregated schools will be used throughout when examining each of the five situational factors. The distinction to be made throughout the following chapters is between the degree of classroom desegregation within desegregated schools. At each point, the Negro student who is attending classes where the racial composition is different from the enrollment in his school at large will be singled out for special attention. The influence of each of the five situational factors will be examined separately for Negro students in racially different situations.

Chapter II will examine the first of the general questions posid above. To what extent are segregated and desegregated situations different on measures of the five situational components discussed in this chapter? Heavy emphasis will be given to the differences in the degree of segregation a Negro student experiences within his classroom and within his school. The succeeding chapters will
examine the influence of different situational faciors on Negro student achievement and attitudes, resuming the school and classroom distinction at each point. Chapter III will begin this investigation by examining the differences in the dependent variables -- achievement and attitudes -- between segregated and desegregated Negro students, with attempts to carefully control variables which contaminate the investigation of school situational determinants of student behavior. Chapter IV will treat the effects of the level of competition. Chapter $V$ examines both instructional quality and student environment. Finally, Chapter VI will analyze measures of social acceptance and stigma.

The OE Survey. - The principal reason which makes the OE Survey a promising source of information on the effects of school desegregation is the coverage of students which the sample provides. Under the sample design, selection was made so as to assure that both Negro and white students would be represented in large numbers, and that both segregated and desegregated schools would be available to allow reliable estimates of variable characteristics of both kinds of schools. In spite of serious problems of nonresponse, the final sample does provide a large number of Negro students in the desegregated schools of the North, and is a unique body of information in this regard. The decision was made to focus particularly on the ninth grade students in the region where desegregated schools were most numerous ard where the non-response was
least severe: the Metropolitan Northeast. ${ }^{1}$ The ninth graders were chosen because they are the secondary students in the sample who are not likely to be affected by differential drop-out rates.

The population of interest, then, for what follows are the older Negro public school students in the Metropolitan Northeast. The other limitations of the survey for the purposes of this study derive from the fact that observations were only collected at one point in time, and the original survey was not primarily intended to study desegregation effects. The cross-sectional design makes it necessary to take great care in the analysis to control all influences outside of school before relationships can be examined between school factors and student behavior. Of course, all comments on causality which are drawn from carefully established relationships, must be read with the usual understandings. When no time sequence of changes can be established, as is true in most instances of a survey such as the present one, only suggestions of causality rather than proofs of the direction of changes can be made. Finally, because the survey was designed for different purposes than the present study, means that only the indicators of the variables of interest which are available are even more indirect and crude than the usually rough measures which are used in surveys of this kind.

Each of these limitations will be discussed as they arise in the chapters that follow. The final chapter will summarize these limitations and their consequences for this study.

[^3]CHAPTER II

## SITUATIONAL CORRELATES OF CLASSROOM

AND SCHOOL RACIAL COMPOSITION

The previous chapter listed five ways in which the situation facing a Negro student is thought to be different in a desegregated rather than a segregated school. This chapter will examine these assertions with the $O E$ Survey data, both to check how typical these differences may be, and to measure the magnitude of the differences.

In making comparisons between Negro students in situations where the proportion of white students is different, there are at least two ways in which this proportion can be calculated. We can speak of either the proportion white students enrolled in the school attended by a Negro student, or the proportion white students in the classes attended by a Negro student. The next section will show that while the racial composition of the school and classes attended by a given Negro student are often very similar, there are a good number of instances when this is not the case. The following section will show some administrative practices which affect the classroom arrangements: Finally, the implications of school and classroom racial arrangements on the situational factors, outlined in Chapter $I$, will be discussed.

## 1. A comparison of school and classroom racial composition

The OE Survey provides information on both the racial composition of the school and of the classes attended by each student in the sample. The racial composition of the school can be obtained from either the Principal's report of the proportion white in his school, or by calculating the percentage directly from the frequencies of student responses to the questionnaire where they report their race. The second of thesc (which actually gives the percent white in a particular grade of the school) is what will be used throughout this study. The racial composition of each student's classes is obtained from each individual's response to the question: "In your classes last year, how many students were white? None, Less than half, About half, More than half, A11." In making comparisons between the racial composition of the school and of the classrooms attended by students, a time discrepancy had to be resolved which was created by the fact that the school percent is calculated for the present year and the classroom item inquires about the racial proportions "last year". Whenever the analysis uses both the racial proportions in the school and in the classroom, those students are eliminated who had not been enrolled in their present school in the previous year. In the ninth grade, this means that students were eliminated who reported they had changed schools in the last year. Also, the schools were dropped where the ninth was the lowest grade, since ninth grade students could not have attended these schools in their previous year.

An additional source of information about the racial composition of classes within each school is drawn from certain questionnaire responses given by the teachers in the school. Each teacher in a school was asked: "About what percentage of the students you teach or counsel this year are white? None, 1 to $9 \%, 10$ to $24 \%, 25$ to $49 \%, 50$ to $74 \%, 75$ to $89 \%, 90$ to $99 \%$, All." One difficulty here is that a given teacher may instruct several classes, each with widely different racial compositions, and the average over thes classes would not reflect this. For example, a teacher with two classes where one was all Negro and one was all white, would answer that $50 \%$ of the students in his or her classes are white. This response, if taken as evidence for racially mixed classrooms in that school, would be highly misleading. So, the teacher's item can only provide conservative evidence of the degree of racial mixing within a school. It will only be an accurate reflection of the racial composition of classes within a school to the extent that all the classes taught by an individual teacher are similar in their racial percentages.

Tabulations from both the student and teacher reports support the following statements.

1. In a probability sense, the racial enrollments in a student's school has a strong effect on the chance that he will be found in a classroom with a particular racial composition. However, by no means do the classrooms match the overall racial proportions in a given school.
2. The pattern of deviations from racially random classroom assignments is distinct. The direction of the deviations of the classroom and the school racial percentages depends upon whether the school is mostly Negro or mostly winite. In the mostly Negro schools, a greater proportion of the students are in majority white classes than would be expected by chance (i.e., very few majority white classes would be expected by chance). On the other hand, in the majority whitc schools the reverse holds, and a smaller frequency of students are in mostly white classes than would be expected through random assignment of students.
3. Underlying this pattern is the tendency for students to be in classes where their own race is in the majority. Even when whites are in the distinct minority in the school, some majority white classes are frequently found. Similarly, majority Negro classes are often found in schools which are mostly white. But given comparable positions as a minority or majority in the school, whites will be found more frequently than Negroes to be in separate classes where their own race predominates. Conversely, Negro students are more likely to be assigned to classes where they are in the minority than will be white students given a similar position as racial minority or majority in the school.

### 1.1 The existence of classroom segregation

Table II. 1 gives the percentage distribution of the race of the classmates of all ninth grade students, both white and nonwhite.

This distribution is shown separately for groups of students in racially similar schools ranging from less than 10 percent white to more than 90 percent white. A number of things are to be noticed from this table.

First, the relationship between the percent white in a student's school, and the proportion of his classmates who are white is very strong. A coefficient reflecting this association is Goodman and Kruskal's $\Gamma$, which is equal to .80 for this table. This means that a person would do 80 percent better than chance in predicting classroom racial composition if he knew the school racial enrollments. So, a student's chance of being found in a mostly white class is very highly dependent on the racial enrollment of his school.

One factor which preconditions this high correlation is the size of the schools themselves. Unless the schools which are predominantly white or predominantly Negro have a large overall enrollment, it is impossible to keep the minority group in classes which are all of one race. For example, if a school was only 10 percent Negro, in order to organize an all-Negro class, there would have to be enough Negro students to constitute an entire class. If the classes were to have 25 students in them, for this example that would mean each grade would have to enroll 250 students or some multiple of 250 in order to allow complete classroom segregation of Negroes.

If there were many fewer or many more (but less than 500) enrolled in the school, some Negro students would have to be placed in desegregated classes.

TABAE IL. 1
PFRC:ENTACR: DISTRIBUTION of RACIAL COMPOSITTION OF GiASsES For nintil grade s'rubents by percent wilite in the school

| Percent Whose <br> Classmates Are: |  | Percent White Enrolled in the School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-9 | 10-29 | 30-49 | 50-59 | 60-69 | 70-79 | 80-89 | 90-100 |
| 1) | All Negro | 46.7 | 9.3 | 13.5 | 10.4 | 4.5 | 1.4 | 2.2 | 2.0 |
| 2) | More than half Negro | 42.8 | 35.5 | 27.0 | 22.7 | 13.5 | 9.4 | 5.3 | 1.1 |
| 3) | About half Negro, half white | 6.3 | 20.9 | 19.0 | 23.9 | 18.6 | 10.7 | 2.8 | 0.3 |
| 4) | More than half white | 2.7 | 29.2 | 34.2 | 37.8 | 56.4 | 56.2 | 58.1 | 12.6 |
| 5) | All while | 1.6 | 5.0 | 6.4 | 5.1 | 7.0 | 22.3 | 31.5 | 83.9 |
| 6) | . Total | $\begin{aligned} & 100.1 \\ & (2514) \end{aligned}$ | $\begin{gathered} 99.9 \\ (2528) \end{gathered}$ | $\begin{aligned} & 100.1 \\ & (2374) \end{aligned}$ | $\begin{aligned} & 99.9 \\ & (952) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (1407) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (2656) \end{aligned}$ | $\begin{gathered} 99.9 \\ (1644) \end{gathered}$ | $\begin{gathered} 99.9 \\ (6792) \end{gathered}$ |
| 7) | P | 3.51 | 19.02 | 40.46 | 51.69 | 61.17 | 74.77 | 85.91 | 95.33 |
| 8) | $\begin{aligned} A= & \% \text { mostly Negro } \\ & =1+2+3 \end{aligned}$ | 95.8 | 65.7 | 59.5 | 57.0 | 36.6 | 21.5 | 10.3 | 3.4 |
| 9) | $F=\operatorname{Pr}\left\{\frac{1}{n} \leq .5\right\}$ | 100.0 | 99.9 | 85.0 | 30.0 | 6.0 | 0.2 | 0 | 0 |
| 10) | A - E | -4.2 | -34.2 | -25.5 | +27.0 | +30.6 | +21.3 | +10.3 | +3.4 |

But the high correlation found in Table II. 1 is not to say that the fluctuations in class room composition are merely random departures Erom the school racial patterns. The next to last row of Table II.l gives an estimate of probability that a class of 25 students drawn at random would be composed of more than half Negro students. ${ }^{1}$ This estimate is shown for the eight groups of students categorized by their school racial enrollments. Viewing this probability as the expected (E) percent of students from each group of schools who would be in mostly Negro classes, this value is compared with the actual (A) percent of students in such classes -- Rows 8 and 9 of the Table. The difference between these values is large, demonstrating the nonrandom nature of classroom racial organization. For example, in schools with between 60 and 70 percent white students enrolled, the chance that students would be randomly assigned to a majority Negro class is less than . 10 , yet more than 35 percent of the students in these schools report they are in such classes. In schools with 70 to 89 percent white enrollment, there is almost no chance that a
$1_{\text {There }}$ are several probability models which could be used for this estimate. The estimate in Table II.l is based on the normal approximation to the binomial distribution, which assumes a large population in each school. This estimate is more conservative (gives a higher probability of racially different classrooms) than other distributions assuming finite populations, such as the binomial or hypergeometric distributions, but in this case differs very slightly from them. The estimate of the probability is obtained by entering the table of the cumulative normal distribution with the value $\mathrm{p}-.5 / \sqrt{\mathrm{pq} / 25}$ where p is the average percent white for the particular group of schools, as shown in row 7 of the Table.
randomly arranged classroom would be majority Negro, but yet more than 20 percent of the students in schools which are 70 to 79 percent white, and more than one tenth of the students in 80 to 89 percent white schools have less than half white classmates.

A way of juxtaposing the high correlation between classroom and school racial composition and deviations from this relationship is to consider two hypothetical possibilities: the greatest degree of classroom racial mix possible in a given school, and the greatest degree of classroom segregation possible. For the first, we will take as our standard that every classroom has exactly the same racial proportions as the enrollment in the school. The second is that there exist completely separate classes for each race. The degree to which it is possible to keep the races completely isolated within a school depends on both the racial percentages in the school and on the size of the school; that is, it depends on the absolute number of minority pupils enrolled in the school. Even a school with a very small percent of a minority group could arrange to keep these students in a separate class if there were enough of them to comprise a class by themselves.

Returning to Table II.1, it is clear that the actual situation is closer to the mixed rather than the isolated pole. Dealing only with schools between 30 and 70 percent white (where it usually would be possible to construct classes all of one race), isolated classes are much less frequent than classes similar to the overall racial enrollments in the school. In schools between 30 and 50 percent
white, about 20 percent have classmates all of one race, and at least 27 percent are in classes which match the school composition. In schools between 50 and 70 percent white, the comparable figures are 13 and 49 percent.

Table II. 2 presents a similar tabulation separately for Negro and white students. It is simply a mathematical truism that a higher frequency of Negro students than whites will be found in majority Negro classes for each group of schools; and that whites will most frequently be in majority white classes. But, looking at the races separately, the deviations from random classroom organization and the racial matching in classes becomes even clearer. Fully a quarter of the Negro students from schools which enroll 60 to 69 percent white students are in majority Negro classes and 13 percent reported having no white classmates at all. In schools which are 50 to 59 percent white, 22 percent of the Negro students reported that all of their classmates are Negro. In the mostly Negro schools ranging from 10 to 29 percent white enrollment, 44 percent of the white students report they are in classes where their own race predominates. In schools between 30 and 50 percent white, 63 percent of the white students are in mostly white classes.

The pattern of teachers' responses presents a similar picture.
Table II. 3 shows the distribution of secondary school teachers according to the percent white students in their classes. This distribution is presented separately for teachers grouped by the racial enrollments in their school. Again the correlation between school and
table II. 2
PERCENT OF NINTH GRADE STLDENTS IN MOSTLY WHITE CLASSES, AND PERCENT IN MOSTLY
MEGRO CLASSES, BY STUDEMTS' RACE

| Characteristic <br> Tabulated: | Students' <br> Race | Percent White Enrolled in the Sciool |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-9 | 10-29 | 30-49 | 50-59 |  | 60-69 |  | 70-79 |  | 80-100 |
| Percent | White | 9.9 (81) | 44.0 (523) | 62.6 (1004) | 57.7 | (522) | 68.8 | (936) | 82.6 | (2048) | 95.9 (8107) |
| in |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ | . | V |
| mostly | Total | 4.3 (2514) | 34.2 (2528) | 53.2 (2374) | 42.9 | (952) | '63.4 | (1407) | 78.5 | (2656) | 95.2 (8436) |
| white |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| class | Negro | 2.8 (1997) | 16.5 (885) | 19.7 (919) | 23.6 | (368) | 46.7 | (345) | 63.6 | (371) | 79.4 (189) |
| Percent | White | 85.1 (81) | 36.9 (523) | 22.6 (1004) | 19.2 | (522) | 14.3 | (936) | 8.8 | (2048) | 3.6. (8107) |
| in |  | $\wedge$ | $\wedge$ | $\wedge$ | $\wedge$ |  | $\wedge$ |  | $\wedge$ |  | $\wedge$ |
| mostly | Total | 89.5 (2514) | 45.8 (2528) | 40.5 (2374) | 43.1 | (952) | 18.0 | (1407) | 10.8 | (2656) | 4.0 (8436) |
| Negro |  | $\wedge$ | $\wedge$ | $\wedge$ | $\wedge$ |  | $\wedge$ |  | $\wedge$ |  | $\wedge$ |
| class | Negro | 93.5 (1997) | 67.1 (885) | 58.3 (919) | 50.2 | (368) | 28.4 | (345) | 15.9 | (371) | 13.3 (189) |

7ABII: 11.3



| Per:ent Whlte <br> ?ludents Tanght | Percent White Student Enroldment fin the School |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-9 | 10-19 | 20-2.9 | 30-4,9 | 50-69 | 7)-79 | 80-89 | $90-100$ |
| Nome | 26.1 | 2.8 | 1.2 | 13.2 | 0.2 | 0.2 | 0.2 | 2.8 |
| 1-9\% | 62.5 | 45.2 | 11.4 | 8.4 | 1.8 | 3.1 | 5.8 | 3.6 |
| 10-26\% | 7.1 | 31.0 | 22.9 | $1 / .2$ | 8.4 | 8.4 | 2.9 | 0.4 |
| 25-49\% | 3.4 | 14.2 | 35.1 | 24.0 | 30.0 | 11.9 | 2.2 | 0.1 |
| 50-74\% | 0.2 | 3.7 | 22.0 | 19.0 | 41.1 | 33.7 | 3.6 | 0.1 |
| 75-89\% | 0.2 | 1.9 | 6.9 | 14.8 | 14.5 | 29.8 | 29.6 | 1.2 |
| 90-99\% | 0.2 | 1.2 | 0.4 | 3.4 | 3.9 | 12.7 | 47.7 | 41.3 |
| 111 | 0.2 |  |  |  | 0.2 | 0.2 | 0.8 | 50.4 |
| Tota! | $\begin{gathered} 99.7 \\ (406) \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (323) \end{aligned}$ | $\begin{gathered} 99.9 \\ (245) \end{gathered}$ | $\begin{aligned} & 100.0 \\ & (379) \end{aligned}$ | $\begin{aligned} & 100.1 \\ & (560) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (437) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (415) \end{aligned}$ | $\begin{gathered} 99.9 \\ (1445) \end{gathered}$ |
| 1.ess than $25 \%$ | 95.7 | 79.0 | 35.5 | 38.8 | 10.4 | 11.7 | 8.9 | 6.8 |
| $75 \%$ or more | 0.6 | 3.1 | 7.3 | 18.2 | 18.6 | 42.7 | 85.3 | 94.9 |
| Average of midpolinta | 6.3 | 17.8 | 37.1 | 39.4 | 55.7 | 63.6 | 81.4 | 91.0 |

classroom racial composition is strong ( $\Gamma=.80$ ), but the instances of classes which depart from the racial enrollment of the school can be seen. For example, twelve percent of the teachers in schools with 70 to 80 percent white enrollment report less than one quarter of the students they teach are white. Such majority Negro classes would not occur with such frequency by chance classroom arrangements. Even less likely are such $=1$ asses in schools which are 80 to 90 percent white, yet 9 percent of the teachers report that more than 75 percent of their students are non-white. In majority Negro schools, the classroom deviations from overall school enrollments are also seen. In schools where only 30 to 50 percent of the students are white, 18 percent of the teachers report that their classes are more than three quarters white students. Seven percent of the teachers report such classes in schools with 20 to 30 percent white enrollments.

### 1.2 The pattern of racial matching

The signs of the differences between the actual and expected classroom frequencies in Table II. 1 (row 11) show the pattern of racial matching in classroom arrangements. In mostly Negro schools, students are more frequently found in majority Negro classes than if class assignments were made at random. The signs show that certain-. ly the deviations are not in the direction of greater racial mixing than might occur by random arrangements. Even in schools which enroll mostly Negroes, majority white classes can be found. And in schools
which are majority white, classes where Negroes predominate are not infrequent. It is in schools which are close to 50 percent white where classes in which the minority predominates seem to exceed the chance probabilities most frequently. Some evidence can be drawn from the preceding tables which suggests that the forces operating to create mostly white classes are greater than the factors influencing the organization of mostly Negro classes.

The values in Table II. 1 can be rearranged to ask the following question: Given a comparable position as the racial minority or majority in a school, are mostly white classes more frequent than mostly Nogro classes? In particular, when whites are the minority in a school, do predominantly white classes occur more frequently than the mostly Negro classes found in schools where Negroes are the minority.

Table II. 4 compares the frequency of predominantly white classes and predominantly Negro ${ }^{1}$ classes, when whites and Negroes are in a comparable position as the racial minority or majority in the school. For example, the frequency of majority white classes in $0-10$ percent white schools can be compared with the frequency of majority Negro classes in 0-10 percent Negro schools (90-100 white schools). In this table, six comparisons of the percent in mostly white classes and the percent in mostly Negro classes can be made, holding constant the degree

[^4]TABLE II. 4

PERCENT OF NINTH GRADE STUDENTS IN MOSTLY WHITE CLASSES, AND PERCENT IN MOSTLY NON-WHITE CLASSES, BY SCHOOL RACIAL COMPOSTTION

| Percent White in School | $0-10$ | $10-30$ | $30-50$ | $50-70$ | $70-90$ | $90-100$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I. Percent in | 4.3 | 34.2 | 40.6 | 73.3 | 82.7 | 96.5 |  |
| Mostly White | $(2514)$ | $(2528)$ | $(2374)$ | $(2359)$ | $(4300)$ | $(6792)$ |  |
| Classes |  | $0-10$ | $10-30$ | $30-50$ | $50-70$ | $70-90$ | $90-100$ |
| Percent Non-White in <br> School |  |  |  |  |  |  |  |
| II. Percent in | $(6792)$ | $(4300)$ | $(2359)$ | $(2374)$ | $(2528)$ | $(2514)$ |  |
| Mostly Non- |  |  |  |  |  |  |  |
| White Classes |  |  |  |  |  |  |  |

Lo which whites and Negro students are a comparable minority or majority in the school.

In every case where the racial minority or majority position is held constant, predominantly white classes are more frequent than majority Negro classes. ${ }^{1}$ Predominantly white classes are found more frequently in schools where whites are the racial minority, than predominantly Negro classes are found when Negroes are in a similar minority position in their school. For example, 34.2 percent of the students are in mostly white classes in schools enrolling 10 to 30 percent white, but only 11.9 percent of the students are in mostly nonwhite classes when the schools enroll a corresponding 10 to 30 percent of nonwhites. At the same time, mostly white classes in majority white schools are more frequent than mostly Negro classes in majority Negro schools.

Table II. 5 shows the same comparisons for white and Negro students separately. Evidence can be drawn from this table on whether white students are more frequently in classes with students of their own race than are Negro students, given a comparable position as racial minority or majority in the school. The pattern in the same as in Table II.4. White students are more likely than Negroes to be found in classes where fellow students of their own race are in the majority,
$1_{\text {Actually, the }}$ racial predominance categories favor a difference opposite to what was found. The empirical midpoints for the categories of percent white in school and percent nonwhite in school are 3.5, $19.0,40.5,57.3,79.0,95.3$, and $4.7,21.0,42.7,59.5,81.0$, and 96.5, respectively. In each case, the percent nonwhite is greater than the corresponding percent white, creating a bias opposite to the finding described.

TABLE II. 5

PERCENT OF NINTH GRADE STUDENTS IN MOSTLY WHITE CLASSES, And PERCENT IN MOSTLY NON-WHITE CLASSES, by Students' race and school racial composition

| Percent White in School | $0-30$ | $30-50$ | $50-70$ | $70-90$ | $90-100$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of White |  |  |  |  |  |
| Students in | 39.4 | 62.6 | 64.8 | 86.4 | 97.0 |
| Mostly White | $(604)$ | $(1004)$ | $(1458)$ | $(3634)$ | $(6521)$ |
| Classes |  |  |  |  |  |
| Percent Non-White in <br> School | $0-30$ | $30-50$ | $50-70$ | $70-90$ | $90-100$ |
| Percent of Negro <br> Students in | 15.0 | 40.0 | 58.3 | 67.1 | 93.5 |
| Mostly Non-White | $(560)$ | $(713)$ | $(919)$ | $(885)$ | $(1997)$ |
| Classes |  |  |  |  |  |

siven their position as racial majority or minority in the school. Ihis particularly seems true when the students are a distinct racial minority in the school. That is, the largest differences are between the frequency with which whites are in majority white classes in minority white schools and the proportion of Negroes in predominantly Negro classes of minority Negro schools.

These conclusions must be stated tentatively, because a similar pattern of differences would occur if the reports of classroom racial composition were biased. A significant tendency for students to overcstimate the proportion white in their classes would create a similar picture of differences as described here.

But taking the conclusions as valid, apparently there are stronger factors in racially mixed schools for arranging separate classes for whites than separate classes for Negroes. That is, holding constant their position in the school, Negroes are more likely to be placed in classes where they are the minority than are whites. This is not to say these factors can be located in the intention of school administrators to keep students in separate classes simply because of their race. Indeed, the next section will show that the nature of the instructional programs in schools goes a long way in explajing how students in racially mixed schools will often find themselves in classes where their own race is in the majority.

## 2. The instructional programs of students in racially different classes

The next few tables provide information about the course of instruction for students in racially different schools and classes. They show that the students most likely to be in predominantly white classes are those enrolled in academically oriented programs and in classes organized for the advanced students in the school.

There are several different administrative combinations which allow placement of students in classes according to their current achievement level of career interests. The different existing alternatives, and possible innovations in these administrative arrangements are important for discussions of the opportunities and constraints which may be provided for Negro students in desegregated schools. The last chapter of this study will discuss some potential educational policies and practices centering on this issue. At this point, however, the survey data will be examined for the ways Negro students may differ in terms of their placement in programs, courses and tracks within the school.

In secondary schools, administrative placement of students can be accomplished on two levels. First, there are alternative programs of study within a school, each program including a set of course offerings and requirements separate from the other programs. Some familiar titles for programs are : College preparatory, Commerical or Business, Vocational, Industrial arts. All the courses in one program may be exclusively taken by students in the program; or, only
some of the courses may not be this way, having students from several programs enrolled. There may also be school-wide, or non-program courses offered, which are either a requirement under several programs, or an optional selection for students from more than one program. The second layer of organization is found in the several levels of difíiculty at which classes in the same course are organized. For example, there might be three levels of the ninth grade English course offered in a school: high track or advanced, medi-im track or general, and low track or remedial. Students may be classified into a single track level for all the courses they take -- which is the same as program differentiation and may be acknowledged as such with program distinctions between "General and College Preparatory" or "College Preparatory" and "Advanced Placement". Or, students may take one course at a particular track level and another at a different level. For example, a student may be in high track math and low track Eng1ish. Moreover, the methods through which a student may find himself in a particular course or program can vary from administrative fiat, through satisfying prerequisites for admission, to free personal choice with advice of counselors.

The information collected from students in the survey did not tap all these possibilities. Data was only collected on the students' program of study, the particular courses in which students were enrolled, and the track level they were assigned to in their English classes.

Table II. 6 gives the percent of ninth grade students in majority

TABLE II. 6

PERCENT OF NINTH GRADE STUDENTS IN MAJORITY WHITE CLASSES, BY RACE, PROGRAM OF STUDY, AND PERCENT WIIITE ENROLLMENT IN THEIR SCHOOL

white classes, for students in different programs of study in their school. For schools with similar racial enrollments, comparisons can be made between students in college preparatory programs, general academic programs, and several non-academic programs (vocational, industrial arts, commercial or business). Percentages are shown separately for all the students in the school and for the Negro students alone. Of course, the strongest factor affecting the racial composition of a students' classes is the racial composition of his school. But from this table it is clear that within schools of similar racial compositions the program of study in which a student is enrolled has a strong influence on the chance that he will be in a majority white class. Except for schools where less than 10 percent of their student enrollment is white, it is those students in the college preparatory curriculum who are most likely to be in classes which are more than half white students. Those in vocational, commercial, or industrial arts programs are least likely to have mostiy white classmates. For example, among the Negro students in schools with more than seventy percent white enrollments, eighty-eight percent of those in the college preparatory program are in majority white classes, compared to seventy percent of those in non-academic programs. More than twice as many of the Negro students in the college preparatory program of schools with thirty to fifty percent white enrollment are in majority white classes compared to those in the other specified programs.

The schools which are exceptions to this pattern are those where only a small fraction of the student body is white. From these schools
can be found the exceptions to many of the generalizations about classroom factors which will be drawn in this study. The reason is that in contrast to most other schools, the white students in many of these predominantly Negro schools are among the poorest students in the school.

Figure II. 1 is a graph of the difference in average achievement of ninth grade white and Negro students in each school in this study, plotted against the percent white enrolled in the school. The two regions where there are schools in which the average Negro student is achieving at a higher level than the average white student are where there are only a few students in the school from cre of the races: schools with .less than ten percent white enrollment or less than ten percent Negro enrollment. Less than one third of the predominantly white schools show this difference. But, in a majorj.ty of the schools where only a few of these students are white, the white students have lower average achievement than the Negroes. These schools with on 1.y a few white students occur very infrt:quently among American public schools, so they will not be focussed on in this study. But, their exception to many of the generalizations about classroom factors will be mentioned as we go along, and their special characteristics will be detailed further.

So, except for these predominantly Negro schools with a few white students, the general effect of the program assignments within schools on the racial composition of a Negro student's classes is the. same. Students who are enrolled in advanced programs are especially

$$
\begin{aligned}
& \text { FIGURE II. } 1 \\
& \begin{array}{l}
\text { Differ- } \\
\text { ence } \\
\text { Between } \\
\text { Average } \\
\text { White } \\
\text { Student } \\
\text { and } \\
\text { Average } \\
\text { Negro } \\
\text { Student } \\
\text { Achieve- } \\
\text { ment } \\
\text { in the } \\
\text { School }
\end{array}
\end{aligned}
$$

likely to have mostly white classmates and those in non-academic programs are the least likely. Other evidence of the relationship between program of study and classroom racial composition can be seen in the courses enrolled in by Negro students from majovity white and majority Negro classes. Table II. 7 gives this information. Again, for schools with more than ten percent white enrollment, a general pattern can be seen.

Within schools of similar racial composition, the Negro students in mostly white classes are most frequently enrolled in academic courses, and least likely to be taking vocational, commercial, industrial arts or home economics courses. The most dramatic positive differences with the fewest reversals are for courses which are likely to be part of a college preparatory program rather than some other program; the science and foreign language courses. But even for the course work likely to be required for most students, such as English and mathematics, there is some evidence that enrollment in these subjects is related to the racial composition of a Negro student's classmates. It is with courses such as mathematics and English that separate classes will be organized according to the achievement level of students to be assigned to the class. The next tables concern the influences of ability grouping or tracking on the classroom racial composition.

Table II. 8 shows the percent of students in mostly white classes, given the racial enrollments in their school and the track level of their English class. Just as with the previous tabulations on
TABLE II. 7
PERCENT OF NINTH GRADE NEGRO STUDENTS ENROLIED IN VARTOUS COURSES,
BY SEX, PERCENT WHITE IN THE SCHOOL, AND PROPORTION WHITE CLASSMATES

| Course | Sex | Proportion White Classmates | Percent White in the Sciool |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0-9 | 10-29 | 30-49 | 50-59 | -0-99 |
| Hathematics | Boys | Less than Half Half or More $\Delta$ | $\begin{array}{ll} 70.5 & (757) \\ 71.7 & (60) \\ +1.2 & \end{array}$ | $\begin{array}{cc} 76.0 & (262) \\ 74.6 & (118) \\ -1.4 \end{array}$ | $\begin{array}{cc} 69.1 & (233) \\ 75.3 & (150) \\ +6.2 \end{array}$ | $\begin{array}{cc} 74.3 & (105) \\ 72.7 & (209) \\ -1.6 \end{array}$ | $\begin{array}{ll} 53.5 & (28) \\ 71.1 \quad(218) \\ -17.5 \end{array}$ |
|  | Girls | Less than Half Half or More $\Delta$ | $\begin{array}{cc} 65.7 & (947) \\ 66.7 & (48) \\ +1.0 & \end{array}$ | $\begin{array}{cc} 67.7 & (285) \\ 77.4 & (146) \\ +9.7 \end{array}$ | $\begin{gathered} 68.6 \quad(258) \\ 73.5 \quad(196) \\ +4.9 \end{gathered}$ | $\begin{array}{cc} 69.3 \quad(150) \\ 65.9 \quad(211) \\ -3.4 \end{array}$ | $\begin{array}{ll} 04.5 & (48) \\ -5.5 & (230) \\ -11.0 \end{array}$ |
| Science | Boys | Less than Half Half or More $\Delta$ | $\begin{array}{ll} 56.5 & (764) \\ 60.3 & (63) \\ +3.8 \end{array}$ | $\begin{array}{cc} 66.8 & (262) \\ 70.8 & (120) \\ +4.0 \end{array}$ | $$ | $\begin{array}{ll} 49.0 & (106) \\ 67.6 & (207) \\ +18.6 \end{array}$ | $\begin{array}{ll} 51.6 & (31) \\ 76.1 \\ +24.5 \end{array}$ |
|  | Girls | Less than Half Half or More $\Delta$ | $\begin{array}{cc} 53.3 & (956) \\ 66.7 & (48) \\ +13.4 \end{array}$ | $\begin{array}{cc} 56.2 & (210) \\ 71.5 & (112) \\ +19.3 \end{array}$ | $\begin{array}{cc} 47.1 & (261) \\ 56.8 \quad(197) \\ \text { خ9.7 } \end{array}$ | $\begin{array}{ll} 46.8 & (154) \\ 56.8 & (197) \\ +10.0 \end{array}$ | $\begin{array}{cc} -9.2 & (48) \\ 78.3 & (230) \\ -0.9 \end{array}$ |
| English | Boys | Less than Half Half or More $\Delta$ | $\begin{array}{ll} 76.3 & (756) \\ 63.8 & (58) \\ -12.5 \end{array}$ | $\begin{array}{cc} \hline 73.1 & (260) \\ 77.1 & (118) \\ +4.0 \end{array}$ | $\begin{array}{cc} 72.3 & (235) \\ 76.8 & (151) \\ +4.5 \end{array}$ | $\begin{array}{ll} 66.4 & (107) \\ 76.8 & (207) \\ +10.4 \end{array}$ | $\begin{array}{ll} 65.5 & (29) \\ -6.7 & (219) \\ +11.2 \end{array}$ |
|  | Girls | Less than Half Half or More $\Delta$ | $\begin{array}{ll} 76.6 & (949) \\ 75.0 & (48) \\ -1.6 \end{array}$ | $\begin{array}{cc} 77.7 & (287) \\ 81.9 & (149) \\ +4.2 \end{array}$ | $\begin{array}{cc} 79.3 & (256) \\ 80.0 & (195) \\ +0.7 \end{array}$ | $\begin{array}{cc} 79.1 & (153) \\ 81.5 & (211) \\ +2.4 \end{array}$ | $\begin{array}{ll} 66.0 & (47) \\ 79.9 & (229) \\ +13.9 \end{array}$ |
| Foreign Language | Boys | Less than Ralf Half or More $\Delta$ | $\begin{array}{ll} 46.8 & (763) \\ 40.5 & (79) \\ -6.3 \end{array}$ | $\begin{array}{cc} 45.4 & (264) \\ 49.2 & (118) \\ +3.8 \end{array}$ | $\begin{array}{cc} 49.8 & (233) \\ 54.7 & (150) \\ +4.9 \end{array}$ | $$ | $\begin{array}{ll} 40.0 & (30) \\ 46.2 & (221) \\ +6.2 \end{array}$ |
|  | Girls | Less than Half Half or More $\Delta$ | 46.4 $(951)$ <br> 45.8 $(48)$ <br> -0.6  | $\begin{array}{ll} 41.2 & (286) \\ 49.0 & (149) \\ +7.8 \end{array}$ | $\begin{array}{ll} 44.7 & (257) \\ 57.1 & (196) \\ +12.4 \end{array}$ | $\begin{array}{ll} 35.1 & (154) \\ 44.3 & (210) \\ 4 \\ +9.2 \end{array}$ | $\begin{array}{cc} 22.9 & (48) \\ 54.3 & (232) \\ +31.4 \end{array}$ |

TABLE II. 7
(continued)

| Course | Sex | Proportion White Classmates | Percent thite in the School |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0-9 | 10-29 | 30-49 | 50-69 | 70-99 |
| Social Studies | Boys | Less than Half <br> Half or More <br> $\Delta$ $\qquad$ | $\begin{array}{ll} 79.6 & (761) \\ 68.3 & (60) \\ -11.3 \end{array}$ | $\begin{array}{cc} 81.7 & (263) \\ 78.0 & (118) \\ -3.7 \end{array}$ | $\begin{array}{cc} 79.2 & (236) \\ 82.6 & (149) \\ +3.4 \end{array}$ | $\begin{array}{cc} 79.4 & (107) \\ 83.6 & (208) \\ +4.2 \\ \hline \end{array}$ | $\begin{array}{ll} 76.7 & (30) \\ 79.1 & (220) \\ +2.4 \end{array}$ |
|  | Gir 15 | Less than Half <br> Half or More $\Delta$ | $\begin{array}{cc} 83.0 & (955) \\ 79.2 & (48) \\ -3.8 \\ \hline \end{array}$ | $\begin{array}{cc} 79.1 & (287) \\ 81.9 & (149) \\ +2.8 \end{array}$ | $$ | $\begin{array}{cc} 81.2 & (154) \\ 91.0 & (211) \\ +9.8 \end{array}$ | $\begin{array}{ll} 72.9 & (48) \\ 82.2 & (231) \\ +9.3 \end{array}$ |
| Vocational | Boys | Less than Half Half or More $\Delta$ | $\begin{array}{lr} 20.1 & (741) \\ 37.9 & (58) \\ +17.8 \end{array}$ | $\begin{array}{cc} 20.5 & (258) \\ 26.5 & (113) \\ +6.0 \end{array}$ | $\begin{array}{cc} 27.3 & (231) \\ 18.0 & (144) \\ -9.3 \end{array}$ | $$ | $\begin{array}{ll} 25.0 & (28) \\ 14.2 & (219) \\ -10.8 \end{array}$ |
| Conmercial | Girls | Less than Half Half or More $\triangle$ | $\begin{array}{cc} 43.3 & (939) \\ 45.6 & (46) \\ +2.3 \end{array}$ | $\begin{array}{ll} 36.5 & (282) \\ 35.3 & (147) \\ -1.2 \end{array}$ | $\begin{array}{cc} 46.3 & (255) \\ 32.6 & (193) \\ -13.7 \end{array}$ | $$ | $\begin{array}{ll} 34.0 & (4 i) \\ 40.0 & (230) \\ +6.0 \end{array}$ |
| industrial Arts | Boys | Less than Half <br> Half or More <br> $\Delta$ | $\begin{array}{ll} 44.7 & (752) \\ 56.7 & (60) \\ +12.0 & \end{array}$ | $\begin{array}{cc} 60.4 & (263) \\ 56.5 & 115) \\ -3.9 & \\ \hline \end{array}$ | $\begin{array}{lr} 52.8 & (235) \\ 46.3 & (80) \\ -6.5 & \\ \hline \end{array}$ | $\begin{array}{ll} 56.5 & (85) \\ 55.3 & (206) \\ -1.2 \end{array}$ | $\begin{array}{ll} 79.3 & (29) \\ 58.7 & (218) \\ -20.6 \end{array}$ |
| Hone Economics | Girls | Leas than Half Half or More $\Delta$ | $\begin{array}{ll} 44.1 & (921) \\ 54.3 & (46) \\ +10.2 \end{array}$ | $\begin{array}{ll} 68.4 & (279) \\ 62.6 & (147) \\ -5.8 \end{array}$ | $\begin{array}{ll} 46.6 & (251) \\ 54.6 & (194) \\ -15.2 \end{array}$ | $\begin{array}{ll} 75.6 & (152) \\ 60.4 & (207) \\ +8.0 \end{array}$ | $\begin{array}{ll} 65.2 & (46) \\ 45.9 & (231) \\ -19.3 \end{array}$ |

program of study, students in the most advanced track are most frequently in majority white classes. Again, schools with less than ten percent of their enrollment being white are exceptions. But for the others, a larger fraction of the students in the highest track have mostly white classmates. For example, half of the Negro students in the high English track have more than half white classmates in schools which enroll fifty to sixty-nine percent whites, but about one third of the Negro students in the middle and lowest tracks in these schools are in such classes.

Tabulations from the Teacher Questionnaires present a similar picture. Table II. 9 classifies secondary teachers by the racial composition of the school in which they work, and the ability group of the classes they teach. Except for the largely Negro schools, a higher percent of the teachers with high track classes teach mostly white classes than those teaching other track levels. In schools where the percent white enrolled ranges from fifty to sixty-nine percent, eighty percent of teachers of high track classes have mostly white classes and forty percent of those teaching the lowest tracks have classes where half of the students are white. In these same schools, fifty-six percent of the high track teachers have classes where at least three quarters of the students are white and eighteen percent of the low track teachers have similar classes. ${ }^{1}$

[^5]TABLA: 11.8
 by kac: of stumint, track levi:I, Amb perclen WIITE ENBOIIMENT IN THI: SCHool.

| sludenl': Race | Tramk | Percent White in school |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | student': ling- <br> lish e:1ass | 0-9 | 10-29 | $30-14$ | 50-69 | 70-99 |
| - 1. | IIIghest | 3.8 | 35.4 | 52.2 | 71.5 | 92.7 |
|  |  | (447) | (443) | (464) | (562) | (2059) |
| -1 -1. | Madde |  |  | 34.7 | 49.4 |  |
|  |  | (944) | (806) | (852) | (969) | (4207) |
|  | l.owest | 7.5 | 26.7 | 30.5 | 36.9 | 86.7 |
|  |  | (93) | (120) | (105) | (168) | (483) |
| 4. | (1)-(3) | -3.7 | +8.7 | +21.7 | $+34.6$ | $+6.0$ |
|  |  |  |  |  |  |  |
| 5. | Highest | 3.1 | 24.1 | 30.0 | 50.0 | 70.8 |
|  |  | (291) | (170) | (183) | (118) | (72) |
| 0  <br> 204 6. <br> 0  <br> 10  | Middle | 1.6 | 17.2 | 14.6 | 33.4 | 72.0 |
|  |  | (845) | (313) | (343) | (326) | (218) |
| $\cdots 7$. | I,owest | 4.0 | 16.7 | 22.0 | 32.8 | 66.7 |
|  |  | (74) | (36) | (50) | (61) | (27) |
| $\cdots 8$. | (5) -(7) | -0.9 | +7.4 | +8.0 | +17.2 | +4.1 |

## TABLE II. 9

PERCENT Of TEACHERS WHO TEACH MOSTLY WHITE STUDENTS,
BY TRACK LEVEL OF THEIR CLASSES, and percent white enrolled in their school.

|  | Ability <br> Group <br> Taught | Percent White in the School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | 0-29 | 30-49 | 50-69 | 70-100 |
| Percent | A11 High Tracks |  | 50.0 | 80.0 | 88.0 |
| $\begin{gathered} \text { Teaching } \\ 50 \% \text { or } \end{gathered}$ |  | (18) | (20) | (25) | (167) |
|  | Combination of Tracks | 10.4 | 42.4 | 60.1 | 89.3 |
| More <br> White <br> Students |  | (723) | (304) | (436) | (1917) |
|  | Ail Low | 9.5 | 4.5 | 44.4 | 85.3 |
|  | Tracks | (168) | (44) | (63) | (129) |
|  | H-L | -4.0 | +45.5 | +35.6 | +2.7 |
| Percent <br> Teaching <br> $75 \%$ or <br> More <br> White <br> Students | All High Tracks | 0 | 30:0 | 56:0 | 86:2 |
|  | Combination of Tracks | 2.7 | 20.7 | 16.7 | 81.3 |
|  | All Low Tracks | 4.8 | 0 | 17.5 | 68.9 |
|  | H-L | -4.8 | +30.0 | +39.5 | +17.3 |

The previous section showed that the racial composition of the classes may be quite different from the racial enrollments in the schools attended by Negro students. The last few tabulations have demonstrated one process which underlies these discrepancies. The concluding section of this chapter will examine how certain of the situational factors outlined in Chapter I may be different for Negro students in racially contrasted schools and classrooms.

## 3. Situational factors for Negro students in racially different schools and classrooms

In Chapter I, five situational factors were listed for examination in this study. They were posed as appropriate grounds for hypotheses on the effects of desegregation for two reasons. First, these factors are likely to be different for Negro students who are receiving desegregated rather than segregated schooling. And second, there is some evidence that these factors may affect the learning process of Negro students. This section will begin an examination of the first of these assumptions. Succeeding chapters will investigate the influence of factors which are here found to distinguish the situation facing segregated and desegregated Negro students.

### 3.1 Student Environment

The question to be investigated here is degree to which the environment provided by the fellow students of an average Negro ninth grader is related to the racial composition of his school and classes. There are several problems in obtaining appropriate measures with the
survey data which must be solved before certain comparisons can be made. First, the indicators which best measure differences in the climate for learning which exist in different schools require more extensive information than is available from the survey questionnaire. The measure which will be used in this section is the average achievement level of the student body. The most thorough study of educational climates in secondary schools completed recently by McDill and his associates (1966) would argue that measures of average student characteristics such as average achievement or average social class, are not perfectly correlated with differences in school climate. ${ }^{1}$ But it is likely that the major school differences in the enthusiasm and standards for high achievement are uncovered by comparing student bodies according to their average achievement level.

A second problem is to obtain separate measures of the student environment in the school and the student environment in the separate classes of the school. That is, average measures are desired of the characteristics of the other students in the school attended by a particular Negro student, and also the average of the characteristics
${ }^{1}$ One striking finding of this study was that exceptions could be found of schools with above average climates for achievement which were below average in the social class level of the student body. The implication is that educational climates are not merely determined by the kind of students who are recruited to a school. Perhaps the school standards and values for achievement can be affected by some long-standing school tradition or by differences in the practices and attitudes of the school personnel. In these terms, the treatment here will be only of climate as affected by differences in the students enrolled in the school. Hence the use of the term "student environment" rather than "educational climate."
of his classmates. Measures of the school context are obtained in a straightforward manner. Since the survey has information on all the students in a given grade of school, and there is an unambiguous identification of the school attended by each student, the values on certain measures obtained from each student can be aggregated or average over all students in the school.

This aggregate measure becomes the index of the overall student context or student environment which is associated with each student in the school. The calculation of measures of the classroom context is not as immediate, because students cannot be exactly identified through a survey item with the others who may be in their classes. An approximation to this has been accomplished by calculating aggregates for only those students in a school with the same proportion of white classmates. So, for example, in each school a separate average is calculated for all those ninth grade students (no matter what their race) who have mostly Negro classmates; and another aggregate value is obtained by combining students who have mostly white classmates. Altogether, five classroom aggregates are calculated in each school, one for each group of students who responded that their proportion of white classmates was "none," "less than half," "about half," "more than ha1f," or "a11". Then, one of these values is associated with each student in the school, matching the aggregate with the response to his answer on the racial composition of his classmates. For example, the student with no white classmates would be assigned the average achievement of all other students who had no white classmates, and this
would be called the "classroom student environment" for this student. Thus, a measure of the classroom student context is associated with each individual student in a school. ${ }^{1}$

Table II. 10 classifies Negro students by both the racial composition of their school and their classmates, and presents a measure of the students context in their school and a measure of the student context in their classes. This table also shows the difference between the school student context and the classroom student context for each subgroup of Negro students. The measure of student context used in these tables is the aggregate achievement level of the fellow students.

At least four things are noteworthy here. First, holding constant the racial composition of the school, there is a regular trend in student environment within the classes attended by Negro students as the proportion white in the class increases. Except for the almost entirely Negro schools, when school racial enrollments are held constant, the Negro students in the mostly white classes are exposed to fellow students who achieve at a higher level than those in other classes. Second, for students in desegregated classes, there is a strong association of both the school student environment and the classroom student environment with the percent white enrolled in the school. But for those Negro students who remain in mostly Negro classes, no benefit is gained
$1_{\text {Under }}$ this procedure, if there is more than one class within a school with the same racial composition, then the average of all such classes is associated with individual students. The assumption is implicit in this measure of classroom environment that all classes with the same racial composition are similar within a school.
table II. 10
A COMPARISON OF THE ACHIEVEMENT LEVEI IN THE SCHOOL AND THE ACHIEVEYENT LEVEL IN THE CLASSES

| Cnaracteristic <br> Tabulated |  | Proportion White Classmatas | Percent white in the Sciool |  |  |  |  |  |  |  |  | -01al |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 50-39 |  |
|  | 1) | None | $\begin{aligned} & 259.63 \\ & (1023) \end{aligned}$ | $\begin{array}{r} 248.31 \\ (99) \end{array}$ | $\begin{gathered} 259.36 \\ (63) \end{gathered}$ | $\begin{array}{r} 256.70 \\ (222) \end{array}$ | $\begin{array}{r} 255.49 \\ (22) \end{array}$ | $\begin{array}{r} 253.15 \\ (80) \end{array}$ | $\begin{array}{r} 258.57 \\ (4 i) \end{array}$ | $\underset{(i)}{265.10}$ | $\begin{array}{r} 255.5 \dot{s} \\ (1 \mathrm{c}) \end{array}$ | $\begin{aligned} & 258.10 \\ & 1: 5: 9) \end{aligned}$ |
|  | 2) | Less than Half | $\begin{array}{r} 259.80 \\ (844) \end{array}$ | $\begin{gathered} 258.58 \\ (321) \end{gathered}$ | $\begin{gathered} 258.14 \\ (112) \end{gathered}$ | $\begin{array}{r} 261.83 \\ (230) \end{array}$ | $\begin{array}{r} 261.36 \\ (62) \end{array}$ | $\begin{array}{r} 261.31 \\ (105) \end{array}$ | $\begin{array}{r} 261.29 \\ (\mathrm{~S} 1) \end{array}$ | $\begin{array}{r} 262.65 \\ (52) \end{array}$ | $\begin{array}{r} 259.22 \\ (9) \end{array}$ | $\underset{(1-86)}{250.05}$ |
| Classroom | 3) | Abou: Half | $\begin{array}{r} 254.53 \\ (75) \end{array}$ | $\begin{array}{r} 259.25 \\ (69) \end{array}$ | $\begin{array}{r} 260.03 \\ (75) \end{array}$ | $\begin{array}{r} 261.50 \\ (132) \end{array}$ | $\begin{array}{r} 265.34 \\ (70) \end{array}$ | 258.74 <br> (96) | $\begin{gathered} 266.63 \\ (86) \end{gathered}$ | $\begin{array}{r} 259.51 \\ (76) \end{array}$ | $\begin{array}{r} 261 . \dot{8}(14) \end{array}$ | $\begin{array}{r} 262.18 \\ (593) \end{array}$ |
| Achievement | 4) | More than Half | $\begin{array}{r} 253.91 \\ (55) \end{array}$ | $\begin{array}{r} 259.30 \\ (67) \end{array}$ | $\begin{array}{r} 260.95 \\ (79) \end{array}$ | $\begin{gathered} 269.82 \\ (134) \end{gathered}$ | $\begin{array}{r} 276.50 \\ (47) \end{array}$ | 272.54 <br> (87) | $\begin{array}{r} 273.01 \\ (161) \end{array}$ | $\begin{array}{r} 276.71 \\ (236) \end{array}$ | $\begin{gathered} 2-4 .-2 \\ (150) \end{gathered}$ | $\begin{aligned} & 2-0.95 \\ & (1016) \end{aligned}$ |
|  | 5) | Total | $\begin{aligned} & 259.35 \\ & (1997) \end{aligned}$ | $\begin{array}{r} 256.92 \\ (556) \end{array}$ | $\begin{array}{r} 259.48 \\ (329) \end{array}$ | $\begin{array}{r} 261.67 \\ (718) \end{array}$ | $\begin{gathered} 265.64 \\ (201) \end{gathered}$ | $\begin{gathered} 264.13 \\ (368) \end{gathered}$ | $\begin{array}{r} 267.72 \\ (345) \end{array}$ | $\begin{array}{r} 271.02 \\ (371) \end{array}$ | $\begin{array}{r} 2: 2.71 \\ (189) \end{array}$ | $\begin{aligned} & 261.94 \\ & (5074) \end{aligned}$ |
|  | 6) | $\mathbf{M}-\mathrm{N}$ | -5.72 | +10.99 | +1.59 | +13.12 | +21.10 | +19.39 | +14.44 |  |  |  |
|  | 7) | sone | $\begin{aligned} & 260.27 \\ & (1023) \end{aligned}$ | $\begin{array}{r} 256.21 \\ (99) \end{array}$ | $\begin{array}{r} 260.46 \\ (63) \end{array}$ | $\begin{array}{r} 265.86 \\ (222) \end{array}$ | $\begin{gathered} 264.58 \\ (22) \end{gathered}$ | $\begin{array}{r} 259.29 \\ (80) \end{array}$ | $\begin{array}{r} 253.82 \\ (4 i) \end{array}$ | $\begin{array}{r} 2: 2.96 \\ (i) \end{array}$ | $\begin{array}{r} 2: 2.59 \\ (16) \end{array}$ | $\begin{aligned} & 261.11 \\ & (15: 9) \end{aligned}$ |
| Average | 8) | Less than Half | $\begin{array}{r} 258.29 \\ (844) \end{array}$ | $\begin{gathered} 256.86 \\ (321) \end{gathered}$ | $\begin{gathered} 259.72 \\ (112) \end{gathered}$ | $\begin{gathered} 263.62 \\ (230) \end{gathered}$ | $\begin{array}{r} 266.80 \\ (62) \end{array}$ | $\begin{gathered} 269.63 \\ (105) \end{gathered}$ | $\begin{gathered} 269.32 \\ (51) \end{gathered}$ | $\begin{array}{r} 272.84 \\ (52) \end{array}$ | $\begin{array}{r} 2: 3.47 \\ (9) \end{array}$ | $\begin{aligned} & 250.50 \\ & (1786) \end{aligned}$ |
| sehool | 9) | About Half | $\begin{array}{r} 256.80 \\ (75) \end{array}$ | $\begin{array}{r} 257.88 \\ (69) \end{array}$ | $\begin{gathered} 259.75 \\ (75) \end{gathered}$ | $\begin{gathered} 263.43 \\ (132) \end{gathered}$ | $\begin{array}{r} 267.94 \\ (70) \end{array}$ | $\begin{array}{r} 270.21 \\ (96) \end{array}$ | $\begin{array}{r} 272.59 \\ (86) \end{array}$ | $\begin{array}{r} 272 .: 3 \\ (76) \end{array}$ | $\begin{array}{r} 273.00 \\ (144) \end{array}$ | $\begin{array}{r} 255.49 \\ i(93) \end{array}$ |
| Achievement | 10) | More than Half | $\begin{array}{r} 258.04 \\ (55) \end{array}$ | 258.57 <br> (67) | $\begin{array}{r} 259.50 \\ (79) \end{array}$ | $\begin{array}{r} 263.91 \\ (134) \end{array}$ | $\begin{array}{r} 268.22 \\ (47) \end{array}$ | $\begin{array}{r} 266.32 \\ (87) \end{array}$ | $\begin{array}{r} 268.92 \\ (161) \end{array}$ | $\begin{array}{r} 273.63 \\ (236) \end{array}$ | $\begin{gathered} 2: 3.97 \\ (150) \end{gathered}$ | $\begin{aligned} & 25: .84 \\ & (1010) \end{aligned}$ |
|  | 11) | Total | $\begin{aligned} & 259.24 \\ & (1997) \end{aligned}$ | $\begin{array}{r} 257.08 \\ (556) \end{array}$ | $\begin{array}{r} 259.82 \\ (329) \end{array}$ | $\begin{gathered} 264.33 \\ (718) \end{gathered}$ | $\begin{array}{r} 267.29 \\ (201) \end{array}$ | $\begin{gathered} 266.75 \\ (368) \end{gathered}$ | $\begin{gathered} 269.20 \\ (345) \end{gathered}$ | $\begin{array}{r} 273.32 \\ (371) \end{array}$ | $\begin{array}{r} 273.76 \\ (189) \end{array}$ | $\begin{aligned} & 202.87 \\ & (50.4) \end{aligned}$ |
|  | 12) | M-N | -2.23 | +2.36 | -0.96 | -1.95 | +3.64 | +7.03 | +5.10 |  |  |  |
| Difference | 13) | None | -. 64 | -7.90 | -1.10 | -9.16 | -9.09 | -6.14 | -5.25 | -7.86 | --. 03 | -2.95 |
| Between | 14) | Less than Half | +1.51 | +1.72 | -1.58 | -1.79 | -5.44 | -8.32 | -8.03 | -10.19 | -4.25 | -. 54 |
| Classroom | 15) | About Half | -2.27 | +1.37 | +. 28 | -1.93 | -2.60 | -1.47 | -5.96 | -13.12 | -11.38 | -3.31 |
| and | 16) | More than Half | -4.13 | +. 73 | +1.45 | +5.91 | +8.28 | $+6.22$ | +4.09 | +3.08 | +.75 | +3.11 |
| School Achieverment | 17) | Total | +. 11 | -. 16 | -. 34 | -2.66 | -1.65 | -2.62 | -1.48 | -2.30 | -1.05 | -. 94 |

from attendance at mostly white schools in terms of the stident environment in the classes. Third, only those students in the mostly white classes are exposed to fellow classmates rho are achieving at a higher level than the average in their school. That is, all Negro students except those in mostly white classes have fellow classmates whose average achievement is less than the mean achievement in their school. So, taking all the Negro students into account, the general, or average, effect of the classroom organization within schools of similar racial enrollments is to expose Negro students to lower achieving fellow classmates than if their classes duplicated the average achievement level of the students in their school. Fourth, by some comparisons, the racial composition of the classroom is more important than the racial composition of the school in predicting which Negro students will be exposed to the best student environment. For example, those Negro students in the mostly white classes of majority Negro schools have higher achieving classmates than the Negro students in predominantly Negro classes within majority white schools.

The first comparison is made by reading down the columns of the tables for values of the classroom student environment (the top third of Table II. 10). Holding constant the school racial percentages, the trend of the average achievement level of the fellow classmates increases for the successive groups of Negro students who have no white classmates, less tha, half white classmates, about half white classmates, and more than half white classmates. To ease the comprehension of these comparisons, a summary measure is presented on
row 6 of the tables, being simply the difference in classroom environment for Negro students with no white classmates and those with more than half, white classmates (the difference between row 1 and row 4 of the tables). ${ }^{1}$ With one major exception, no matter what the racial composition of the school, the student environment in the classroom of Negro students increases as the proportion of white classmates increases. The exception anticipated in Figure II.l, if for schools whose student enrollment is almost completely Negro: those schools which are less than ten percent white. Here the overall classroom achievement level is highest for the Negro students in mostly Negro classes.

This general pattern is not surprising, given the well known differences in average academic achiovement between white and Negro students (Coleman, et al., 1966). Figure II.1, presented earlier, showed that within most schools, the average Negro student achievement is lower than the average achievement level of white students. With these facts, it would be expected that Negro students in mostly white classes would be exposed to higher achieving fellow students than those in mostly Negro classes. Such is seen to be the case in general, no matter whether the school enrolls thirty percent white students or eighty percent white students. Through the same reasoning, it might
${ }^{1}$ An alternative summary measure is the effect parameter developed by Coleman (1964, Chapter 6), which would average the differences between successive categories of the variable "proportion white classmaies." Except for differences which arise because of unequal cell sizes, these two values will be the same.
be expected that the chances are always good that a Negro student in a predominantly white school will have higher achieving classmates than the student in a majority Negro school. The next comparison shows that this is not always the case.

Reading across the rows, an important difference is seen. For students in majority white classes and classes which are about half white (lines 3 and 4) the classroom student environment is higher in predominantly white schools. The presumed advantage for Negro students attending a class with fifty percent or more whites is even greater if the school too has a majority white enrollment. However, this advantage in classroom student context coming from attendance at a majority white school does not exist if the Negro students are in majority Negro classes. Reading across rows 1 and 2 (ignoring values based on a small case base) for those in mostly Negro classes there is not a strong trend in classroom student context as the percent white in the school increases. If the context of the classroom is the important feature of desegregated schools affecting Negro student development, then those Negro students who remain in predominantly Negro classes may receive no benefit from at the same time attending predominantly white schools. In other words, Negro students kept segregated in their classes might as well also be in mostly Negro schools in terms of any differences in the student environment at the classroom level.

The middle third of these tables (lines 7 through 12) show the school student enviroment for the same subgroups of Negro students.

The figures are shown principally as a point of comparison with measures of classroom student environment. Some things of interest can be noticed here, however. Reading across each of the rows, there is a general pattern of increasing average achievement among all the fellow students in the schools attended by Negro students as the percent white enrollment increases. This correlation between school student environment and percent white in the school has been noted before with these data (Coleman, et al., 1966). Reading down the columns (or comparing the differences between students with no white classmates and more than half white classmates shown on line 12) there are not the large differences for school student environment which appeared for the classroom student environment. If this pattern was the same as before, it would mean that among each group of racially similar schools, it was in the high achieving schools where Negro students were most likely to have white classmates. But this table does not give support for this statement.

The bottom third of these tables (lines 13 through 17) makes use of the other values in the taßle. What appears for each subgroup of Negro students is the arithmetic difference of the classroom student environment and the school student environment. A positive sign on chis difference means that the particular group of Negro students are in classes where their fellow students have a higher average achievement level than the mean achievement in the school. A group where Hhis slgn is negative means that they would be exposed to a higher achieving group of fellow classmates if their classes were a random
subgroup of the students in the school than the way their classes are currently composed. For all the school situations ranging from twenty percent white through eighty or ninety percent white, it is only the Negro students in mostly white classes whose classroom student environment exceeds the school student context. In all other cases for these schools, the Negro students are exposed to a lower achieving group of classmates than exists on the average in the school. (Again, in the almost entirely Negro schools, the Negro students in the predominantly Negro classes appear to have the aost advantageous classroom student environment.)

Looking at row 17 of these tables, the general effect of the classroom organization within schools on the student environment provided for Negro students can be seen. This line gives the difference between classroom.student context and school student context for the average Negro student attending schools with similar racial enrollments. For students in each group of schools, from ten percent white to predominantly white enrollment, the sign of this difference is negative. So, the general result of the classroom assignment of students is to expose Negro students to lower achieving fellow classmates than if their classes were organized randomly and reflected the average achievement level of all the students in their school.

A final interesting point of comparison can be made by viewing the values for Negro students whose classroom and school racial compositions are at variance with one another. Comparing Negro students in mostly white classes within majority Negro schools (twenty to
forty-nine percent white) with those in majority white schools where most of their classmates are Negro, the direction of the differences between school and classroom environment are exactly opposite. Table lI. 11 selects out these values and makes this point. While the students in the mostly white schools are exposed to a higher school environment than those in mostly Negro schools, when their classroom racial composition and the classroom environment are compared, the situation reverses. Even though they are in mostly Negro schools, those students with majority white classes have a higher student environment than those Negroes in Negro classes within mostly white schools.

The effects of classroom organization appear severe in terms of student environment. To summarize some of the results in Table II.10: the classroom organization of schools means. that Negro students are on the average exposed to less high achieving fellow students than if their classes were a random reflection of all the students enrolled in their grade of their school. It is only the Negro students in mostly white classes who appear to gain any exposure to a higher achieving group of classmates when they attend mostly white rather than mostly Negro schools.

In Chapter $V$, the distinction between classroom student environment and school student environment will be reviewed, as the effects of these situational factors on Negro student behavior are analyzed.

TABLE II. 11

THE CLASSROOM STUDENT ENVIRONMENT AND THE SCHOOL STUDENT ENVIRONMENT FOR THE AVERAGE NEGRO STUDEN'S IN MAJORITY WHITE CLASSES WITHIN NEGRO SCHOOLS, AND THE AVERAGE NEGRO S'TUDENT LN MAJORITY NEGRO CLASSES WITHIN WHITE SCHOOLS

| Characteristic <br> Tabulated: | School and Clas <br> Mostly White Classmates Within Majority Negro Schools. 1 | cial Composition <br> Mostly Negro Classmates in Majority White Schools. ${ }^{2}$ |
| :---: | :---: | :---: |
| Classroom | 268.33 | 259.82 |
| Environment | (260) | (367) |
| School | 263.35 | 267.33 |
| Environment | (260) | (367) |

1 In schools where the racial enrollment is $20-49 \%$ white and the student has more than half white classmates.

2
In schools where the racial enrollment is $50-99 \%$ white and the student has either no white classmates or less than half white class mates.

### 3.2 Relative standing for Negro students in racially different schools and classes.

There is another meaning which can be attached to the results presented in the previous section. At the same time that the classroom arrangements for Negro students generally expose them to the poorer achieving fellow students in their school, it might be expected that their relative academic standing in these classes would be better than under different arrangements. It would be true by definition for the Negro students whose own absolute achievement level was uninfluenced by the achievement standards set by his classmates: a student with the same achievement score will rank higher in a class enrolling poor achieving students rather than high achievers. So, to the extent that there is not a growth in individual achievement to maintain a constant rank in class for students who are switched from low average achieving classes to high achieving ones, an increase in Negro students' relative standing in class will be found from their classroom organization corresponding to the decrease in the average achievement level of their fellow students just described. The next tables show this to be the case. The next series of tables will examine the relative standing for Negro students in racially different situations. These tables show that the way classrooms are generally organized within schools of similar racial compositions has the effect of placing Negro students in a better relative position than if their classes were an exacl rellection of the achievement distribution of all the students in the school. It is only the Negro students in mostly white classes who are in a poorer comparative position in their classes than
they are relative to the school mean achievement. These differences correspond to those noted for classroom student context and school student environment: where Negro students were exposed to lower achieving fellow students they are in a better comparative or relative position.

Tables II. 12 and II. 13 have the same format as those used to compare classroom and school average achievement. Negro students are classified into groups according to the racial percentages in their school and classes in these tables, and the achievement test scores of the individual Negro students are expressed relative to the average achievement of the others in their class and in their school. In Table II.12, this relative achievement is expressed in terms of the percent of Negro students in each subgroup who are above the mean of the other students in their class or in their school. Table II. 13 presents the average number of standard deviations above the classroom or school mean for the Negro students in each subgroup.

The most interesting results from these tables come when the position of Negro students relative to their classroom mean is compared to their relative position in the school at large. But some points can be drawn from looking at these two values separately. Recalling Pigure II. 1 which showed that the Negro students received lower achievement scores on the average than the white students in most of the schools enrolling both races, and that the racial differences were largest in majority white schools, some of the trends in Tables TL. 12 and II. 13 are to be expected. First, looking at the "total" rows of
TABLE II. 12
COMPARISON OF THF PERCENT OF NINTH GRADE NEGRO STDEETS ABOVE THE SCHOOL MEAN IN ACHIEUEMEME
AND THE PERCENT ABOVE THE CLASSROOM YEAS, BY ZHE RACIAL COMPOSITION OF THE SCHCOL

table II. 13



the tables (lines 5 and 11) the general pattern is for Negro students to rank below average, and to be furthest below average in the predominantly white schools. The exceptions are again found for schools attended by only a few white students. So, corresponding to the pattern of higher achieving classmates and schoolmates with an increasing percent white enrollment described in the previous section, there is the decreasing relative standing of Negro students as their schools have higher white enrollments.

The second thing to be noted is that Negro students' standing relative to their classmates' achievement is a function of the proportion white classmates no matter what the racial composition of the school. Looking at the top third of these tables and reading down the columns for fixed categories of percent white in school (or comparing the differences in row 6 betwen students with mostly white classmates and those with no white classmates) those in the poorest relative position are the Negro students who are in the minority in their classes. Again, with the exceptions in the schools which are predominantly Negro, a larger percentage of the Negro students in mostly white classes are below the classroom average or are further behind the classroom average, within schools of similar racial percentages. This also is the other side of the picture presented earlier: Negro students in mostly white classes are not achieving at a sufficiently higher level to maintain their position in segregated classes in face of the increase in the average achievement of fellow classmates which accompanies classroom desegregation.

But the most important aspects of these tables come from a comparison of the Negro students' standing relative to the others in their classes and relative to the others in their school. Certain comparisons show in a different way the result just stated, that the classroom arrangements affect the relative standing of Negro students in desegregated schools. Other comparisons specify more exactly the students who are affected positively and negatively by the classroom organization.

Table II. 12 shows that overall, 4.3 percent more of the Negro students in mostly white classes are above the school average achievement level compared to those in segregaed classes (line 12, "total" column), but 14.9 percent less of these students are above the classroom mean achievement. If classes were a random reflection of the school or if students adjusted their achievement to maintain their rank-in-class, these values would be'just the same. Similarly, Table II. 13 shows that for the same comparisons, the. Negro students in mostly white classes are only . C 25 standard deviations further below the school mean than segregated students, but . 421 standard deviations further below the classroom mean. But, further examination of these tables shows it is only one classroom group which exhibits the differences reflected in these overall values.

The bottom third of Tables II. 12 and II. 13 (1ines 13 through 17) presents for each subgroup of Negro students, a comparison between their standing relative to the classroom average achievement and their position relative to the school average. As in Table II. 10, a positive
sign shows that the classroom standing is more favorable than the school, and a negative designates cases where the students would rank relatively better if their classes were the same as the average in the school. These values show that; with some special exceptions, it is only the Negro students in predominantly white classes whose relative position is affected adversely by the classroom arrangements in the schools. Leaving aside the schools with less than twenty percent white enrollment, all classes except those which are majority white leave Negro students in a better relative position than if their classes were a random reflection of the student enrollment in their school. But for the Negro students in classes where more than half of the students are white, the opposite is the case. A higher proportion of these students are below the classroom average and they are further behind the classroom average than they would be if the classroom and school achievement means were the same. These patterns are true overall ("total" column) and with schools of fixed racial percentages above twenty percent.

Finally, an average can be obtained combining the opposite effects of classroom organization on relative standing for Negro students in mostly white classes and the others, to get a general picture of the effect of classroom organization on competitive standing for all students (line 17). Here it is seen that the general effect of classroom organization is to improve the relative standing of Negro students over what it is in their school, this corresponds to the general decrease in average achievement of classmates versus school-
mates that was noted earlier which was the overall effect of che cłassroom organization within desegregated schools.

Chapter IV will examine the possible influence which differences in relative standing may have for Negro student behavior and attitudes.

### 3.3 School and classroom differences in quality of instizuction

A major section of the Office of Education Report on this survey data examined an extensive list of items measuring the quality of school programs and faculties and compared these features for schools attended by the average white student in different regions of the country. The differences among schools in the region being studied here are summarized in the OE Report (Coleman, et al., 1966). Although differences were to be found, the most striking fact was that the differences were neither all in one direction, favoring whites rather than Negroes, nor were the differences very large in general. A brief re-cap of some of these details will be repeated here from a somewhat different perspective. Instead of comparing school quality for the average Negro and white student, comparisons will be made for the average student in schools with different racial compositions. The tables to be presented were prepared at the time of the first analysis of the data, but were not presented in.the Office of Education Report.

But here too it is of interest to discover whether students who attend racially different classes within the same school are exposed to different facilities and teachers with different competencies. With measures of school facilities, such as science labs and text books
and library benefits, the survey does not allow any comparison among classes within a schoof $\hat{Y}$, since facilities are usually not specifically assigned on a class by class basis. But ieachers are asigned in this way. So comparisons will be made on teacher characteristics between those who teach in predominantly white and predominantly Negro classes within the same school.

School-wide comparisons of teachers and faciliti.es.- Table II. 14 presents several school characteristics for the average twelfth grade student in schools wìth different racial enrollments. Values are shown separately for the average student in schools enrolling 0 to 30,30 to 70,70 to 90 , and 90 to 100 percent white students. When comparisons in school facilities are made in this way, some differences do appear, some differences favoring the average student in mostly white schools and others favoring the student in mostly non-white schools.

The average twelfth grade student in mostly white schools attends a school with a significantly lower pupil-teacher ratio, with fewer science iaboratories, and fewer library books per student than the average student in other schools. The number of pupils per teacher for the average student is about 20 in all the schools except for those enrolling less than 30 percent white students, where the pupil-teacher ratio is about 30. There are about twice as many 1ibrary books per pupil for the average student in schools enrolling more than 70 percent white students as for the average student in other schools. On the other hand, the average student in mostly non-white schools appears to have available to him more special classes and special
and remedial personnel to service the needs of exceptional children; and a higher average salary is paid to teachers in these schools.

Before very much is made of these differences, however, it is important to note that the regression analyses shown in the OE Report failed to uncover any important relationships between student achievement and differences in school facilities such as shown in Table II. 14. Differences in these characteristics did not seem to have any large average educational consequences, nor did the comparisons reveal. consistent under-allocation to students of one race or another. However, certain attributes of teachers did explain variations in student achievement more adequately than did characteristics of a school's facilities and program. Table II. 15 shows several attributes of teachers for the average twelfth grade student in racially different schools. Again, the trend of differences is not always in the same direction. The teachers of the average student in mostly white schools scored higher on a short teacher vocabulary test, and are more likely to be fully certified. On the other hand, the teacher of the average student in mostly non-white schools is more experienced, more likely to plan to remain in education, and are less likely to be white himself or to prefer to teach in all-white schools.

Of all the Teacher attributes studied in the survey, the score received by teachers on the short vocabulary test was most highly related to differences in student achievement. This is one of the teacher attributes which favors the student in the mostly white schools. The next section will investigate how this measure varies with the classroom racial composition as well.
TABEE II. 14
CHARACTERISTICS OF SCHOOLS ATTENDED BY THE AVERAGE TNELFTH GRADE STUDENT, BY PERCENT WHLTE ENROLLMENT IN THE SCHOOL, FOR THE METROPOLITAN NORTHEAST

| School Characteristic | Percent White in the School |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-30 | 30-70 | 70-90 | 90-100 |  |
| Pupils per teacher | 30.30 | 21.52 | 17.18 | 19.64 | 19.65 |
| Percentage of the following in the school: auditorium, cafeteria, gymnasium, ath1etic field | 55.86 | 61.30 | 50.79 | 57.04 | 55.69 |
| ```Science Labs (percent of biology, chemistry, physics labs)``` | 63.81 | 99.00 | 96.07 | 95.50 | 94.15 |
| Library Volumes per student | 1.89 | 2.89 | 7.56 | 5.93 | 6.55 |
| Art and music teachers | 99.00 | 99.00 | 89.44 | 86.61 | 88.30 |
| Percent of classes in school for seven kinds of exceptional children | 38.38 | 63.79 | 36.56 | 29.48 | 32.72 |
| Percent of seven kinds of special and remedial personnel in the school | 20.43 | 11.50 | 12.66 | 18.03 | 16.70 |
| Average teachers salary | 8060 | 8260 | 7400 | 7180 | 7320 |
| Number of principals | 9 | 11 | 20 | 34 | 74 |
| Weighted number of principals | 82 | 56 | 378 | 1129 | 1.646 |
| Number of students | 2683 | 6283 | 5269 | 9032 | 23267 |
| Weighted number of students | 24,108 | 29,742 | 72,435 | 255,227 | 381, 512 |

TABLE II. 15
CHARACTERISIICS OF THE TEACHERS IN THE SCHOOLS ATTENDED BY THE AVERAGE TNEIFTH GRADE STUDENT, BY PERCENT

| Characteristics of Teachers | Percent white in the school |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-10 | 10-30 | 30-70 | 70-90 | 90-100 |  |
| Average Verbal Test Score | 20.98 | 21.96 | 21.97 | 22.57 | 23.03 | 22.82 |
| Proportion white teachers | 34 | 87 | 91 | 94 | 97 | 95 |
| Average number of years of reaching experience | 12.38 | 11.14 | 11.86 | 9.71 | 9.63 | 9.83 |
| Average highest degree earned | 3.50 | 3.50 | 3.57 | 3.37 | 3.44 | 3.43 |
| Proportion not certified for teaching | 34.83 | 32.35 | 27.71 | 21.73 | 25.44 | 25.05 |
| ```Proportion whose father's occupation was professional or technical``` | 46.40 | 37.92 | 57.61 | 45.68 | 41.65 | 44.75 |
| Proportion preferring to teach in an all white school | 2.77 | 2.41 | 3.85 | 11.74 | 14.91 | 13.18 |
| Proportion planning to remain in education | 47.51 | 48.46 | 46.39 | 35.78 | 32. 72 | 34.68 |
| Number of schools | 3 | 6 | 12 | 22 | 37 | 80 |
| Weighted number of school | 32 | 50 | 64 | 401 | 1189 | 1737 |
| Number of students | 934 | 1749 | 6382 | 6020 | 9359 | 24,444 |
| Weighted number of students | 9649 | 14,459 | 30,551 | 81,270 | 261, 245 | . 397,174 |

Teachers of racially different classes. - Table II. 16 permits some judgments about whether the instructional quality differs among classrooms within desegregated schools. This table makes use of the teacher questionnaire from the $O E$ Survey. It classifies secondary school teachers by the percent white student enrollment'in their school (as obtained from the racial frequencies among the student questionnaires received from their school), and the percent of the students taught by a teacher who are white (reported by the individual teachers). For the teachers in each cell of this cross-classification, the average score is shown from a 30 item voçabularly test which was administered as part of the survey.

The rising trend in average scores is evident in the Total row as the percent white student enrollment in the school increases. Likewise, there is a similar trend in seres when teachers who instruct different percentages of white students are compared, as shown in the Total column. But the internal cells of the table are needed to answer the question of whether teacher assignments within schools of similar racial enrollments are made according to the classroom racial composition.

There is some evidence that within mostly Negro schools, the most competent teachers are assigned to the classes with the most white students. The average verbal scores of teachers increase with the percent of white students taught for teachers in schools enrolling 0 to 29 percent white or 30 to 49 percent white. However, there is no evidence of this trend for the majority white

TABLE II. 16
average verbal test score of secondary school teachers, by percent white students enrolled in their school and percent white students in their classes

| Percent of <br> Students Taught <br> Who Are White | Percent White Students in the School |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-29 | 30-49 | 50-69 | 70-100 | Total |
| 0-25\% (1) | 23.06 | 23.16 | 25.88 | 24.31 | 24.43 |
|  | (730) | (147) | (58) | (193) | (1128) |
| 25-75\% (2) | 24.70 | 24.38 | 24.41 | 24.68 | 24.53 |
|  | (213) | (163) ${ }^{\circ}$ | (398) | (249) | (1023) |
| 75-100\% (3) | 24.92 | 24.74 | 25.05 | 24.90 | 24.90 |
|  | (39) | (69) | (104) | (1897) | (2109) |
| Total (4) | 23.51 | 23.97 | 24.68 | 24.82 |  |
|  | (987) | (379) | (560) | (2339) |  |
| (3)-(1) (5) | +1.86 | +1.58 | -0.83 | +0.59 |  |

schools. Within these groups, there are not comparable differences between teachers of mostly white students and the others. Indeed, the highest average teacher scores in the schools enrolling 50 to 69 percent white were achieved by those teaching the majority Negro classes.

Of course, we have already seen that while the mostly white classes may not be assigned any better teachers, the program and curriculum in these classes is likely to be different from other classes. In a desegregated school, the academic programs and advanced courses are most frequently found in the majority white classes.

Later chapters will take into account such classroom differences in teacher scores and program content as are revealed by the survey.

### 3.4 Social stigma and social integration

Up to this point, the situational factors which were shown to distinguish segregated and desegregated situations did not involve any essentially racial factors. The principal reason that desegregation influences the student environment, the relative standing and the instructional quality which a Negro student experiences derives from the circumstance that white students happen to be higher achievers than Negroes and also generally receive somewhat better instruction in school. But there is no reason why a particular segregated school could not match the best desegregated school in these factors. An all-Negro school could be created which had a superior student environment and instructional program and where the level of competition was challenging. In short, the racial composition per se of desegregated schools is not the determining factor for the differences in the
situational factors already described". This section will discuss factors which are essentially tied up with the racial mix in the school rather than conditions which happen to accompany schools enrolling a majority of whites. These factors have to do with the community racial attitudes, and the opportunities a student has for interracial encounters.

Social stigma. - One definition given in Chapter I for the social stigma which is thought to attach itself to segregated schools derived from notions of community attitudes. The possibility was raised that members of a segregated school would feel that their school could never escape a reputation of academic inferiority because of the images of all-Negro schools held by community at large. It was conjectured that even the all-Negro schools whose academic record was superior would be seen by its members to be stigmatized as inferior because of community stereotypes.

The survey questionnaire allows some investigation of these possibilities. The teachers in each school were asked to assess the reputation which they believed their school maintained among teachers outside the school. Table II. 17 gives the percent who beiieved their school had a reputation of being above average, for groups of teachers classified by the percent white enrollment in their school and the average achievement level of students in the school. To begin with, this table shows the strong relationship of the perceived school reputation with the average student achievement, and also with the percent white enrollment. Reading down from the Total column, the

TABLE II. 17

PERCENT OF TEACHERS WHO BELIEVE THEIR SCHOOL HAS THE REPUTATION OF BEING ABOVE AVERAGE, by average student achievement level in the schuol and percent white in the school.

percent of teachers who feel their school is reputed to be above average ranges from close to zero for the schools with low average achievement to close to 100 percent for the highest achieving schools. And, reading across the Total row, there is a similar progression of frequencies as the student racial proportions in the school run from mostly Negro to mostly white. Only 23 percent of the teachers in schools with less than 20 percent white students believe their school has an above average reputation, but 69 percent of the teachers in schools enrolling more than 80 percent white students have this belief.

The internal elements of Table II. 17 show the strong association of the student racial composition and the average student achievement level: the lowest achieving schools are clustered in the majority Negro cells and the highest achieving schools are located in the majority white regions of the Table. But some comparisons are possible between schools of different racial enrollments with similar achievement levels, by reading across the rows of the Table. These comparisons allow a test of the hypothesis that schools which enroll more Negro students have a poorer reputation than other schools with the same average achievement. The frequencies shown in Table II.17 do not support this proposition. There is no consistent pattern whereby the schools with the greatest white enrollments are seen to have the best reputations when the achlevement levels of the students are taken into account.

Although the tabulations do not support the most severe definition of stigmatization of Negro schools, the question of a causal
sequence of change between racial enrollments, school reputation and student achievement remains unanswered. One sequence of change which would produce the results of Table II. 17 is the following: a high Negro enrollment in a school gives a school a poor reputation which in turn is fulfilled by the poor achievement of students in the school. who react to these community expectations. The point is, however, that without data collected at several points in time, this sequence of change cannot be separated from the other causal orderings which could also produce this table.

There is one other piece of information which gives some evidence that the Negro students in the predominantly Negro classes of their schools perceive a low expectation of their potential to achieve. Table II. 18 presents the percent of ninth grade Negro students who believe that their teachers expect them to he one of the best students in their class. These percentages are presented separately for boys and girls who are cross-classified by the racial proportions in their school and classes. There is a strong relationship between the school racial percentages and students' beliefs about their teachers' expectations (lines 5 and 11) with the Negro students in mostly white schools reporting high teacher expectations less frequently than those in other schools. However, within schools of the same racial composition, the Negro students who most frequently believe their teachers have a low cexpectation of their ability to achieve are those students in the mostly Negro classos of the school. (Again, the predominantly Negro schools contain the exceptions to this rule.) This pattern becomes

TABLE JI. 18

PERCEN'I OF NIN'FH GRADE NEGRO STUDENTS WHO FEEL THEIR TEACHERS EXPECT THEM TO BE ONE OF THE BEST STUDENTS IN TIIEIR CLASS, BY SEX, PERCENT WHITE IN THE SCHOOL AND PROPORTION WHITE CLASSMATES

| Sex | Proportion White Classmates | Percent white in the school |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-19 | 20-49 | 50-69 | 70-99 |
| (1) | Less than hal.f | $\begin{array}{r} 40.6 \\ (854) \end{array}$ | $\begin{array}{r} 44.1 \\ (290) \end{array}$ | $\begin{gathered} 28.1 \\ (103) \end{gathered}$ | $\begin{aligned} & 36.6 \\ & (30) \end{aligned}$ |
| Boys (2) | Half or more | $\begin{aligned} & 48.5 \\ & (99) \end{aligned}$ | $\begin{gathered} 43.1 \\ (197) \end{gathered}$ | $\begin{array}{r} 37.3 \\ (201) \end{array}$ | $\begin{array}{r} 29.3 \\ (201) \end{array}$ |
| (3) | (2)-(1) | +7.9 | -1.0 | +9.2 | $+7.3$ |
| (4) | Less than half | $\begin{array}{r} 40.5 \\ (1084) \end{array}$ | $\begin{array}{r} 36.1 \\ ) 3108 \end{array}$ | $\begin{gathered} 31.2 \\ (141) \end{gathered}$ | $\begin{aligned} & 34.9 \\ & (43) \end{aligned}$ |
| Girls (5) | Half or more | $\begin{array}{r} 46.3 \\ (108) \end{array}$ | $\begin{array}{r} 41.0 \\ (251) \end{array}$ | $\begin{array}{r} 38.3 \\ (206) \end{array}$ | $\begin{array}{r} 32.3 \\ (223) \end{array}$ |
| (6) | (5)-(4) | +5.8 | +4.9 | +7.1 | -2.6 |

more persuasive evidence that Negro classes are stigmatized as inferior when it is recalled that the mostly Negro classes were the ones where Negro students were most likely to rank above the classroom average in achievement. In spite of this fact, these are the classes where the smallest frequency of Negro students see their teachers expecting them to be among the best students in the class. The relationship between classroom racial proportions and actual rank-in-class and perceived teachers' expectations are exactly opposite. Negro classes are at the same time the situations where a Negro student has the best chance to rank among the best students in the class and where the students' perceptions of the rank expected of them by their teachers is the lowest. This then is some evidence that students in all Negro classes have particularly strong feelings that others believe they are only capable of inferior academic performance. Social integration. - Chapter I detailed several ways in which the interracial conditions within desegregated schools might have important direct or indirect consequences for Negro student development. That is, the conditons of desegregated schools dealing with the racial composition per se and the character of the interracial affairs of a school were seen to be potentially important situational factors making desegregation influential for Negro students.

There are several ways in which the social acceptance and "social integration" of Negro students will be measured. From the teachers' (fuestionnaires some notions can be developed about how frequently tension exists between the races in desegregated schools. The teachers
were asked whether a problem existed in their school because "the different races or ethnic groups don't get along together". Table IL. 19 shows the percent of teachers who responded "yes" to this question, by the racial enrollments of their classes. This table shows that only a small minority of teachers saw racial tension creating a problem in their school. The highest frequency occurs where there are the largest number of both white and Negro students, in the classes most nearly racially balanced. The highest percentage of teachers reporting race tension was 13.9 percent, occurring among those who had between 50 and 74 percent whites in their class. Although there is evidence that overt hostility between the races is an infrequent occurrence in desegregated schools, "social integration" of the races involves many more subtle elements. The survey data permits some judgments on the degree to which Negro students are included in the formal and informal relationships of the school. Already we have seen that the formal classroom arrangements in desegregated schools set many more Negro students apart from the white students in their school than would occur by chance.

At least in part, the assignment of students to different programs and to different ability groupings in courses frequently accomplishes segregated classrooms within desegregated schools. The next two tables will show the degree to which Negro students are excluded from the more informal associations in schools: extra-curricular activities and interracial friendship groups.

Table II. 20 shows the percent of ninth grade Negro students in

TABLE II. 19
PERCENT OF TEACHERS IN TWELFTH GRADE SCHOOLS REPORTING THAT THE DIFPERENT RACES OR ETHNIC GROUPS DON'T GET ALONG TOGETHER, BY THE PERCENT WHITE STUDENTS IN THEIR CLASSES

| Percent White Students in Their Classes |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 1-9 | 10-24 | 25-49 | 50-74 | 75-89 | 90-99 | 100 |
| 4.5 | 10.4 | 12.9 | 12.5 | 13.9 | 10.3 | 5.2 | 3.9 |
| (155) | (395) | (255) | (504) | (689) | (497) | (1125) | (899) |

tabie II. 20


| nctesity | Sex | $\begin{aligned} & \text { Proportion } \\ & \text { White } \\ & \text { Classmates } \end{aligned}$ | Percent white in the School |  |  |  |  |  |  |  |  |  |  | Toxas |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0-9 | 10-19 | 20-29 | 30-49 |  | 50-69 |  | 70-79 |  | 80-89 |  |  |  |
|  |  | Sone | 39 (429) | 41 (32) | 56 (34) | 39 | (94) | 67 | (39) | 67 | (3) | 50 | (6) | 42 : 3 - ${ }^{-}$ |  |
|  |  | Less thar half | 36 (339) | 33 (148) | 43 (51) | 41 | (124) | 59 | (64) | 47 | (19) | 07 | (3) |  | (1;8) |
| Athletic Team | Boys | About Half | 42 (31) | 35 (23) | 31 (35) | 46 | (63) | 60 | (85) | 55 | (38) | 86 | (:) |  | (282) |
|  |  | More than Half | 38 (24) | 27 (26) | 39 (33) | 36 | (72) | 57 | (122) | 58 | (101) | 57 | (:4) |  | 1452) |
|  |  | total | 38 (823) | 34 (229) | 42 (153) | 40 | (353) | 59 | (310) | 56 | (161) | 59 | (90) |  | (2119) |
|  |  | $x$ - x | -1 | -14 | -17 | -3 |  | -10 |  |  |  |  |  | +8 |  |
| Student Council | Boys | vone | 17 (411) | 10 (31) | 16 (32) | 32 | (91) |  | (39) | 6 | (3)(18) | 2050 | (5) | 19 ( 112 ) |  |
|  |  | Less than Half | 14 (332) | 60 (148) | 19 (47) |  | (116) | 20 | 0 (64) |  |  |  | (2) | 15 ( -2-) $^{\text {- }}$ |  |
|  |  | About half | 10 (29) | 12 (24) | 26 (31) | 14 | (58) | 6 (85) |  | 14 | (37) | 25 | (8) | 12 (272) |  |
|  |  | More than Half | 11 (26) | 17 (23) | 21 (33) |  | 24 (74) | 15 (119) |  | 13 | $\begin{array}{r} (90) \\ (148) \end{array}$ | 13 | (-s) | 16 (440) |  |
|  |  | Total | 15 (798) | $\begin{gathered} \left.11 \begin{array}{c} (226) \\ +7 \end{array}\right) . \end{gathered}$ | $\begin{gathered} 20(143) \\ +5 \end{gathered}$ | $\begin{gathered} 20(339) \\ -8 \end{gathered}$ |  | $\begin{gathered} 15(307) \\ -13 \end{gathered}$ |  | 12 |  | 15 | (90) | $\begin{gathered} 15 \\ \\ \\ \text { (2051) } \\ -3 \end{gathered}$ |  |
|  |  | \% - s |  |  |  |  |  |  |  |  |  |  |  |  |
| Student Council | Girls | None | 18 (494) |  | 33 (24) |  | 21 (118) |  |  |  | 11 (71) | 0 | (2) | 57 | (i) |  |  |
|  |  | Less than Half | 18 (422) | 15 (150) | 20 (49) | 13 | (103) |  | 10 (74) | 14 | (29) | 0 | (5) | $16 \text { (832) }$ |  |
|  |  | About Half | 23 | 20 (41) | 23 |  | (101) | 18 (88) |  | 19 | (31) | 20 | (5) | $20 \quad(323)$ |  |
|  |  | More chan Half | 22 (18) | 19 (32) | 21 (33) |  | (79) | 19 (114) |  | 10 | (120) | 21 | (bi) | $\begin{array}{ll} 20 & (403) \\ 18 & (2393) \end{array}$ |  |
|  |  | Total | $\begin{gathered} 18 \quad(960) \\ +4 \end{gathered}$ | $\begin{gathered} 14 \quad(282) \\ +12 \end{gathered}$ | $\begin{gathered} 23(13 i) \\ -12 \end{gathered}$ | $\begin{gathered} 22 \quad(401) \\ +\quad 16 \end{gathered}$ |  | $\begin{gathered} 15(347) \\ +8 \end{gathered}$ |  | 12 | (182) | 23 | (84) |  |  |
|  |  | M - N |  |  |  |  |  |  |  |  |  |  |  |  |
| Debating,Dramatics orMusical Club | Boys | None | 36 (421) | 29 (31) | 47 (36) |  | 47 (94) |  |  | 52 | (40) | 67 | (3) | 17 | (6) | $38.1531)$ |  |
|  |  | Less than Half | 35 (333) | 38 (146) | 40 (48) | 44 | (131) | 24 | (62) | 33 | (18) | 0 | (2) |  | (:42) |
|  |  | About Half | 42 (34) | 26 (23) | 47 (32) | 55 | (65) | 42 | (85) | 35 | (37) | 12 | (8) |  | (284) |
|  |  | More than Half | 61 (28) | 26 (23) | 43 (35) | 45 | (75) | 33 | (117) | 37 | (91) | 31 | (74) |  | (443) |
|  |  | Total | 37 (818) | 34 (223) | 44. (151) | 47 | (365) | 36 | (304) | 37 | (149) | 28 | (90) |  |  |
|  |  | $x-x$ | +25 | -3 | -4 | -2 |  | -19 |  |  |  | -1 |  |  |  |

table II. 20
(continued)

various extra-curricular activities. These percentages are presented separately for boys and girls and by the racial composition of their schools and classes. Reading across the Total rows of this Table, there is only one activity where the frequency of participation varies with the racial composition of the school. ${ }^{1}$ This exception was for boys' athletic teams, where the Negro students were considerably more likely to be active in mostly white schools than in mostly Negro ones. Apparently, the school sports program is a particularly accessible route for Negro boys to participate in the informal activities of desegregated schools. But for the other activities -- student council, debating, dramatics or music clubs and hobby clubs -- Negro students in majority Negro classes are no more or no less likely to participate than those in majority Negro classes. Within schools of similar racial compositions, the proportion white in a Negro student's classes also seem to be unrelated to the frequency of their participation in these activities outside the classroom. Looking at the Total columns of the Table, no regular trend of large differences in the frequencies of participation can be found with differences in classroom racial composition.

But, there is one kind of association where the classroom racial composition is an important factor. This in the Negro students' participation in interracial friendship groups. Table II. 21 shows the percent of different groups of Negro students who have no white close

[^6]friends. Again, this is a strong function of the school racial composition. For both boys and girls, a much higher proportion report having only Negro students as close friends in the predominantly Negro schools compared to the schools enrolling arge percentages of white students (See the Total rows). But the most important thing to notice in Table II. 21 is that within schools of the same racial composition, the proportion of white classmates is just as important a determining factor on the likeiihood that a Negro student will have established close friendships with some white students. Ignoring percentages based on small case sizes, there is a consistent pattern of large differences in the percent of Negro students in interracial friendship groups when those in desegregated classes are compared to the others, after the school racial composition is held constant.

Chapter VI will examine the role which these informal associations have on the academic growth and certain attitudes of Negro students.

## 4. Summary

This chapter has drawn the distinction between school desegregation and classroom desegregation. It has been shown that even though a Negro student attends a desegregated school, he may be placed in classes within that school in which students of his own race predominate. Formal classroom segregation within desegregated schools occurs more frequently than would be expected by pure chance factors.

One practice of schools which offers an explanation for this



| Sex | Proportion White Classmates |  |  |  |  |  |  |  | ronis | $\because:$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { I } \\ 0-9 \end{gathered}$ | $\begin{gathered} \text { II } \\ 10-19 \end{gathered}$ | $\begin{gathered} \text { III } \\ 20-29 \end{gathered}$ | $\begin{gathered} I K \\ 30-49 \end{gathered}$ | $50-69$ | $\begin{gathered} \text { VI } \\ -0-79 \end{gathered}$ | $\begin{gathered} \because y \\ 80-89 \end{gathered}$ |  |  |
| 30Y5 |  |  |  |  | . |  |  |  |  |  |
| 1) | None | $\begin{aligned} & 54.3 \\ & (444) \end{aligned}$ | 37.5 (33) | $\begin{gathered} 37.8 \\ (37) \end{gathered}$ | $\begin{gathered} 40.5 \\ (99) \end{gathered}$ | $\begin{gathered} 31.8 \\ (44) \end{gathered}$ | $\begin{gathered} =5.0 \\ (4) \end{gathered}$ | $\begin{gathered} 33.3 \\ (5) \end{gathered}$ | $\begin{aligned} & 50.5 \\ & \left(5 e^{-1}\right) \end{aligned}$ |  |
| 2) | Less than Hale | $\begin{aligned} & 34.6 \\ & (355) \end{aligned}$ | $\begin{aligned} & 24.8 \\ & (149) \end{aligned}$ | $\begin{gathered} 38.0 \\ (50) \end{gathered}$ | $\begin{aligned} & 16.2 \\ & (142) \end{aligned}$ | $\begin{gathered} 23.5 \\ (58) \end{gathered}$ | $\begin{gathered} 10.0 \\ (20) \end{gathered}$ | (4) | $\begin{aligned} & 2^{-} .3 \\ & -\because-3) \end{aligned}$ |  |
| 3) | About half | $\begin{gathered} 22.2 \\ (35) \end{gathered}$ | $14.3$ (21) | $\begin{gathered} 28.6 \\ (35) \end{gathered}$ | $\begin{gathered} 22.2 \\ (72) \end{gathered}$ | $\begin{gathered} 15.9 \\ (88) \end{gathered}$ | $\begin{gathered} 10.3 \\ (39) \end{gathered}$ | $12.5$ <br> (8) | $\begin{aligned} & 1 s .7 \\ & i 2091 \end{aligned}$ |  |
| 4) | More tnan half | $\begin{gathered} 46,4 \\ (28) \end{gathered}$ | $\begin{gathered} 14.8 \\ (21) \end{gathered}$ | $\begin{gathered} 27.3 \\ (33) \end{gathered}$ | $\begin{gathered} 16.1 \\ (87) \end{gathered}$ | $\begin{aligned} & 15.0 \\ & (217) \end{aligned}$ | $\begin{aligned} & 18.3 \\ & (104) \end{aligned}$ | $\begin{gathered} 12 .- \\ (79) \end{gathered}$ | $\begin{aligned} & 18.2 \\ & 485) \end{aligned}$ |  |
| 5) | Total | 44.6 <br> (863) | $\begin{aligned} & 27.7 \\ & (224) \end{aligned}$ | $\begin{aligned} & 33.6 \\ & (155) \end{aligned}$ | $\begin{aligned} & 24.8 \\ & (400) \end{aligned}$ | $\begin{aligned} & 19.3 \\ & (327) \end{aligned}$ | $\begin{aligned} & 16.8 \\ & (167) \end{aligned}$ | $\begin{gathered} 13.4 \\ (07) \end{gathered}$ | $\begin{gathered} 31.4 \\ (2239) \end{gathered}$ | -32 |
| 6) | M - : | +i.9 | +42.8 | +10.5 | +30.3 | +16.8 |  |  | -32. ${ }^{\text {c }}$ |  |
| GIRLS |  |  |  |  |  |  |  |  |  |  |
| 7) | None | $\begin{aligned} & \text { 61.7: } \\ & \text { (538) } \end{aligned}$ | $\begin{gathered} 38.0 \\ (57) \end{gathered}$ | $\begin{gathered} 52.0 \\ (25) \end{gathered}$ | $\begin{aligned} & 62.2 \\ & (127) \end{aligned}$ | $\begin{gathered} 34.2 \\ (76) \end{gathered}$ | 56.7 <br> (3) | $\begin{gathered} 80.0 \\ (10) \end{gathered}$ | $\begin{aligned} & 57 .= \\ & (\leqslant 3 s) \end{aligned}$ |  |
| 8) | Less than Half | $\begin{aligned} & 47.0 \\ & (443) \end{aligned}$ | $\begin{aligned} & 35.5 \\ & \text { (152) } \end{aligned}$ | $\begin{gathered} 32.1 \\ (53) \end{gathered}$ | $\begin{aligned} & 43.9 \\ & (139) \end{aligned}$ | $\begin{gathered} 25.6 \\ (82) \end{gathered}$ | $\begin{gathered} 23.3 \\ (30) \end{gathered}$ | $\begin{gathered} 20.0 \\ (5) \end{gathered}$ | $\begin{aligned} & 40.8 \\ & (904) \end{aligned}$ |  |
| 9) | About half | $28.1$ (32) | 34.9 (43) | $\begin{gathered} 25.7 \\ (35) \end{gathered}$ | $\begin{aligned} & 20.3 \\ & (118) \end{aligned}$ | $\begin{gathered} 20.9 \\ (91) \end{gathered}$ | $\begin{gathered} 30.0 \\ (30) \end{gathered}$ | (5) | $\begin{aligned} & 24.0 \\ & (354) \end{aligned}$ |  |
| 10) | More than Half | 47.4 (19) | $\begin{gathered} 25.7 \\ (35) \end{gathered}$ | $\begin{gathered} 33.3 \\ (42) \end{gathered}$ | $\begin{gathered} 24.7 \\ (85) \end{gathered}$ | $\begin{aligned} & 19.3 \\ & \text { (119) } \end{aligned}$ | $\begin{aligned} & 20.9 \\ & (129) \end{aligned}$ | $\begin{gathered} 18.6 \\ (70) \end{gathered}$ | $\begin{aligned} & 23.2 \\ & (490) \end{aligned}$ |  |
| 11) | Total | $\begin{gathered} 54.1 \\ (1032) \end{gathered}$ | $\begin{aligned} & 34.8 \\ & (287) \end{aligned}$ | $\begin{aligned} & 34.2 \\ & (155) \end{aligned}$ | $\begin{aligned} & 39.4 \\ & (469) \end{aligned}$ | $\begin{aligned} & 24.2 \\ & (368) \end{aligned}$ | $\begin{aligned} & 23.4 \\ & (192) \end{aligned}$ | $\begin{gathered} 24.5 \\ (90) \end{gathered}$ | $\begin{gathered} 40.5 \\ (2593) \end{gathered}$ | -35 |
| 12) | M - N | +14.3 | +12.9 | +18.7 | +37. ${ }^{\text {a }}$ | +14.9 |  |  | -34.4 |  |

result is the organization of different programs of curricula and different ability groupings for courses. The classes which are most likely to enroll a majority of white students are those in academic programs and those which offer advanced instruction in a particular area.

The differences in school and classroom racial composition mean that several of the situational factors discussed in the previous chapter are altered for the Negro students. Within schools of similar racial compositions, the general effect of the classroom arrangements for Negro students is to expose them to less high achieving fellowclassmates than if their classes were an average reflection of their school at large. Together with this deprivation of classroom student environment is the fact that Negro students rank higher academically in their own classes than they would in their school at large: their relative standing in class is higher as a result of the classroom organization in their schools. The only group of Negro students who experience opposite results from the classroom arrangements are those who are in mostly white classes. ${ }^{1}$

Drawing a further distinction between the formal and informal contacts between the races, the classroom organization of desegregated schools also influences the "social integration" within desegregated schools. The Negro students who remained in mostly Negro classes were much more likely than others to only have other Negro students as their
$1_{\text {These }}$ patterns also are different in the predominantly Negro schools.
close friends, no matter what the racial composition of their school happened to be. Also, there was some evidence that the students in the mostly Negro classes felt themselves to be particularly stigmatized by their teachers as being only capable of inferior academic performance.

The only situational factor where the school and classroom racial composition did not appear to have consistently large effects was with the quality of the instructional program. Leaving aside the fact that Negro classes were often presented with a different program of studies, the facilities and teachers made available to them were not consistently better or worse than for the racially different situations.

The next chapters will examine the degree to which Negro student development is different in racially contrasted situations. The particular situational factors which have been found to distinguish segregated and desegregated schools and classes will then be examined to gain some understanding of any differences in development which appear.

CHAPTER III

CLASSROOM AND SCHOOL EFFECTS, CONTROLLING<br>FOR SELECTION PROCESSES

The last chapter described how some elements of the learning situation and social environment may differ for Negro students ir racially different schools and classrooms of the metropolitan Northeast. The principal task of this study will be to relate these factors to differences in Negro student attitudes and performance. Before examining the extent to which each of these separate situational factors may explain differences among Negro students, it is necessary to hold constant differences among the students which preceded their placement in the racially contrasted situations.

Because the survey only collected information at one point in time, rather than more closely approximating an experimental design which provides data before and after a "treatment" is applied to the subjects, great care must be taken before statements can be made about the effects of certain school and class room differences. In the case of this study, differences in academic achievement and attitudes of Negro students in racially different situations can partially be explained by selection processes: processes which placed the Negro students who were initially dissimilar in racially different situations. Different selection processes affect the nonrandom placement of Negro students in schools with different racial compositions, and the classroom arrangements withịn each of the schools. In the first case, the Negro families which send their children to predominantly white schools are on the average differ-
cut in several respects from those where the children attend majority Negro schools. And, secondly, within a particular school, the administrative practice of tracking students into separate classes according to their current achievement level, and of providing separate programs of study within the school, means that often the observed differences between Negro students in segregated and desegregated classes preceded their classroom assignments. It is therefore necessary to look at differences in attitudes and performance of the individual Negro students only after these initial family packground differences and selection processes have been taken into account.

Also, comparisons will be shown between Negro students who have attended desegregated schools for different lengths of time. Among the ninth grade Negro students, those who first entered desegregated schools in the early elementary grades and those who first attended desegregated classes in their recent grades can be identified. Before differences in achievement and attitudes between these groups can be taken to be the result of differences in the length of time they have spent in desegregated classes, yet another selection process must be investigated. The classic studies of K 1 ineberg $(1935,1938,1963)$ have shown that Negro students' achievement is influenced by the length of time they have lived in the North, irrespective of the kinds of schools they may attend. So, the movement of Negro families from the South must be taken into account before cieciding that differences in Negro students who have been in desegregated schools for different lengths of time can be explained by something about desegregated schooling.

In order to isolate differences which can be said to be the result
of school desegregation, controls will be applied both on certain selection processes themselves, as well as on the initial differences in student background which influence the selection processes. Accordingly, differences between Negro students will be considered only for subgroups of students who are similar in terms of their family background and home influence. In addition to this, students in the same academic course of study and in the same formal ability grouping within their school will provide the basis for comparisons. Finally, control will be applied on the movement of students from the South. Throughout, the distinction between school and classroom racial composition drawn in the preceding chapter will be continued and extended.

## 1. Controls on family background

Besides the so-called tests of native ability, repeated studies have shown that the greatest proportion of variation in individual student academic achievement is explained by their family background and home influence (Lavin, 1965). Before the influence of any differences in schools on student achievement can be assessed, the advantages which the student brings from home must be taken into account.

An index has been constructed which combines several survey measures of the family background of individual students. This index combines a multi-item measure of the material and educational possessions in a student's home, with a measure of the educational level of the parents. There were nine questions concerning the presence in the home of certain modern conveniences and reading materials: car, TV, refrigerator, vacuum, hi fi, telephone, dictionary, daily newspaper, and ency-
clopedia. Other studies have shown that an index incorporating such measures to be an accurate discriminator of social class level of the home (Davis, 1955; Chapin, 1935). Indeed, for this survey the number of possessions in a student's home was highly correlated with academic achievement (see Total column in Table III.1). What makes such a measure particularly appropriate for social class measures derived from Negro student responses is that there is little lack of knowledge and non-response on these items, which is not true of most other indicators. For instance, on the measures of the educational level of the parents, there was a large fraction of the Negro students who were unable to answer the questions. Because more Negro students knew the educational level of their mothers rather than their fathers, this item was used. Again, there was a strong degree of association of student achievement with mother's education, with those who did not respond or did not know their mother's education being the lowest achieving group (see Row (6) of Table III. 1). These twc items were then combined and values assigned according to the rank ordering on the average achievement of the subgroups of Negro students in the cross-tabulation. For those who did not respond on the mother's education item, they were assigned a value based on the number of items in their home and their average achievement. Finally, six ordered subgroups were determined from this classification. Table III.l shows the average achievement of Negro students by the index of items in the home and of mother's education, as well as the final family background measure based on combinations of these values.

Table III. 2 shows that Negro students in racially different schools

TABIEE ILI. 1
averaci: virbil acimeverent of ninth gradf: negro stuoents, BY ITEMS [N THE: HOM: AND MOTHER'S EDUCATION

| Ilems in the llome ${ }^{1}$ | Mother's Education ${ }^{2}$ |  |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $9+N \mathrm{~N}$ | 1-3 | 4 | 5, 6 | 7, 8 |  |
| (1) 0-5 | $\begin{gathered} 213.27 \\ (180) \\ 1 \end{gathered}$ | $\begin{gathered} 256.53 \\ (177) \\ 1 \end{gathered}$ | 255.98 <br> (10) | 256.38 <br> (24) | 252.22 <br> (9) | $\begin{aligned} & 255.1 \\ & (460) \end{aligned}$ |
| (2) 6 | $\begin{gathered} 254.35 \\ (235) \\ 1 \end{gathered}$ | $\begin{gathered} 258.29 \\ (195) \\ 11 \end{gathered}$ | $\begin{gathered} 256.78 \\ (167) \\ 11 \end{gathered}$ | $\begin{gathered} 262.85 \\ (40) \\ L V \end{gathered}$ | 258.20 <br> (10) | $\begin{aligned} & 256.7 \\ & (647) \end{aligned}$ |
| (3) 7 | $\begin{gathered} 255.99 \\ (285) \\ i \end{gathered}$ | $\begin{gathered} 257.41 \\ (278) \\ 11 \end{gathered}$ | $\begin{gathered} 259.31 \\ (271) \\ \text { II } \end{gathered}$ | $\begin{gathered} 264.12 \\ (73) \\ V \end{gathered}$ | 263.77 <br> (26) | $\begin{aligned} & 258.2 \\ & (933) \end{aligned}$ |
| (4) 8 | $\begin{gathered} 255.52 \\ (407) \\ I \end{gathered}$ | $\begin{gathered} 259.81 \\ (359) \\ \text { III } \end{gathered}$ | $\begin{gathered} 261.46 \\ (430) \\ \text { IV } \end{gathered}$ | 263.50 (120) $\square$ | 262.67 (70) | $\begin{array}{r} 259.5 \\ (1386) \end{array}$ |
| (5) 9 | $\begin{gathered} 259.78 \\ (388) \\ \text { III } \end{gathered}$ | $\begin{gathered} 261.14 \\ (382) \\ \mathrm{I} V \end{gathered}$ | $\begin{gathered} 264.43 \\ (645) \\ V \end{gathered}$ | $\begin{gathered} 269.31 \\ (293) \\ \text { VI } \end{gathered}$ | $\begin{gathered} 270.1 \varepsilon \\ (219) \\ \text { VI } \end{gathered}$ | $\begin{array}{r} 264.2 \\ (1927) \end{array}$ |
| (6) Total | $\begin{array}{r} 256.3 \\ (1495) \end{array}$ | $\begin{array}{r} 259.1 \\ (1.391) \end{array}$ | $\begin{array}{r} 261.6 \\ (1583) \end{array}$ | $\begin{aligned} & 266.3 \\ & (550) \end{aligned}$ | $\begin{aligned} & 267.3 \\ & (334) \end{aligned}$ | $\begin{array}{r} 260.2 \\ (5353) \end{array}$ |


| Fismily Beckground Index |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 11 | 111 | IV | $v$ | VI |
| 255.27 | 258.05 | 259.80 | 261.34 | 264.14 | 269.68 |
| (1387) | (911) | (747) | (862) | (934) | (512) |

[^7]table III. 2


| Proportion <br> White <br> Classmates | Percent White in the School |  |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-19 | 20-49 | 50-69 | 70-79 | 80-99 |  |
| None | $\begin{aligned} & 3.169 \\ & (1122) \end{aligned}$ | $\begin{aligned} & 2.567 \\ & (307) \end{aligned}$ | $\begin{aligned} & 2.874 \\ & (127) \end{aligned}$ | $\begin{gathered} 3.000 \\ (7) \end{gathered}$ | $\begin{gathered} 2.812 \\ (16) \end{gathered}$ | $\begin{aligned} & 3.024 \\ & (1579) \end{aligned}$ |
| Less than Half | $\begin{aligned} & 2.984 \\ & (1165) \end{aligned}$ | $\begin{aligned} & 3.084 \\ & (394) \end{aligned}$ | $\begin{aligned} & 3.000 \\ & (156) \end{aligned}$ | $\begin{gathered} 3.000 \\ (52) \end{gathered}$ | $\begin{gathered} 3.889 \\ (9) \end{gathered}$ | $\begin{aligned} & 3.018 \\ & (1786) \end{aligned}$ |
| About Half | $\begin{aligned} & 2.680 \\ & (144) \end{aligned}$ | $\begin{aligned} & 3.307 \\ & (277) \end{aligned}$ | $\begin{aligned} & 3.472 \\ & (182) \end{aligned}$ | $\begin{gathered} 2.842 \\ (76) \end{gathered}$ | $\begin{array}{r} 3.571 \\ (14) \end{array}$ | $\begin{aligned} & 3.178 \\ & (694) \end{aligned}$ |
| More than Half | $\begin{aligned} & 2.984 \\ & (122) \end{aligned}$ | $\begin{aligned} & 3.531 \\ & (260) \end{aligned}$ | $\begin{aligned} & 3.577 \\ & (248) \end{aligned}$ | $\begin{aligned} & 3.716 \\ & (236) \end{aligned}$ | $\begin{aligned} & 3.715 \\ & (151) \end{aligned}$ | $\begin{aligned} & 3.547 \\ & (1017) \end{aligned}$ |
| TOTAL | $\begin{aligned} & 3.048 \\ & (2553) \end{aligned}$ | $\begin{aligned} & 3.100 \\ & (1238) \end{aligned}$ | $\begin{aligned} & 3.299 \\ & (713) \end{aligned}$ | $\begin{aligned} & 3.423 \\ & (371) \end{aligned}$ | $\begin{aligned} & 3.636 \\ & (190) \end{aligned}$ |  |
| M - N | -. 185 | +1.064 | +. 701 |  |  | +. 523 |

and classes are not the same in terms of family background. Negro students in mostly white schools come from higher social classes than those in mostly Negro schools ("Total" row) and students in mostly white classes are on the average from stronger family backgrounds than the others ("Total" column). And within schools of similar rarial composition, there is a general tendency for Negro student family background to increase with proportion white classmates, except for those students whose school has less than twenty percent white enrollment.

So in all the comparisons of individual Negro students, where it is to be argued that differences in performance or attitudes are the effect of school situations, contrasts will only be examined within subgroups of students which are similar on this measure of family background. The remainder of the section will focus in this way on comparisons in the verbal achievement of Negro students. There are two questions which will be examined in these comparisons. First, what is the size of the difference in average achievement between segregated and desegregated Negro students? And second, what is the comparative importance of school and classroom desegregation on these differences?

### 1.1 Size of achievement differences due to desegregation

Table III. 3 presents the average verbal achievement scores for subgroups of ninth grade Negro students who are similar in three ways: those who are the same on the index of family background, attend schools with similar racial enrollments, and have the same proportion of white classmates. So, for example, the first entry in the table, 254.50 , is the average of the verbal achievement: scores of the 282 Negro students

TABI, 111.3

 ANI PHOPOK:ION WIITT: (:IASSMATES

who were in the lowest category of the family background measure, attend schools with 0 to 19 percent white enrollment and have no white classmates. In addition, within each of the family background categories, row and column totals are shown. The total columns allow comparisons of achievement scores of students in contrasting classroom situations, ignoring the racial composition of their school. And the comparisons across the total rows show differences in achievement for Negro students in racially different schools, regardless of the proportion white in their classes.

This table shows the same association between desegregation and Negro achievement scores which have been pointed to in earlier analyses of the survey data. Reading down the total column of the table, there is a regular upward trend in average achievement of Negro students with increases in the proportion of their classmates who are white. The differences in scale scores between the Negro students with no white classmates and those in mostly white classes are shown in this column for each family background group. These differences range from 3.9 scale score points and 6.7 , with the average of the six differences being 5.6 Similarly, reading across the "Total" rows (rows $5,11,17,23,29$, and 35 ), the Negro students who generally have the lowest average achievement are those in inostly Negro schools. With the exception of one group, the Negro students in schools which enroll more than 70 percent white students have higher average achievement scores than those in 0-19 percent white scnools. These *differences are shown as the last entry in the total rows, and the
average of the six differences is 3.3 scale score points. ${ }^{1}$ Several facts are useful for placing these differences in perspective.

First, the differences in achievement due to desegregation are much smaller than those due to differences in family background. For example, this can be seen by comparing the size of the achievement differences between the extremes on the family background measure. The difference between the achievement scores for all Negro students in the lowest family background category and those in the highest is 14.8 (269.9 - 255.1) which is more than twice as large as the average difference between students in all Negro and mostly white classes. The same relative difference appears when more general measures are used. Table III. 4 presents summary .measures of the differences in achievement due to alternative facts which take into account the distribution of the sample among these categories. These "effect parameters" give the average difference in achievement between two successive categories of the independent variable, weighting these differences by the fraction of the sample in each category (Coleman, 1965, Chapter 6; Boyle, 1966). So, for example, in Table III.4, the value 1.96 associated with "classroom racial composition" can be interpreted as the average increment in achievement due to moving

[^8]
## TABLE III. 4

WEIGHTED PARAMETERS OF EFFECTS ON NINTH GRADE NEGRO STUDENT ACHIEVEMENT

| Effect Variable | Unstandardized | Parameter <br> Standardized <br> to Dichotomy |
| :---: | :---: | :---: |
| Family Background | +2.89 | +8.67 |
| Classroom Racial Composition | +1.96 | +3.92 |
| School Racial Composition | +1.67 | +3.34 |

from one category of "proportion white classmates" to the next highest category. When the variables to be compared on these effect parameters have a different number of categories, it is.necessary to standardize these measures to a dichotomy (Coleman, 1965, pp. 217-224). The standardized value for the overall family background effect shown in Table III. 4 is 8.67, which again is more than twice as large as the standardized value for classroom racial composition.

While family background is a much more potent predictor of the achievement level of Negro students than is the racial composition of the classmates, this does not mean that the differences due to desegregation are small or insignificant. This can be seen by translating these scale score differences into grade level equivalents or into standard deviation units. The standard deviation of the verbal achivement scores in the North is 13.0 scale score points, so the average difference of 5.6 between the achievement of Negro students in all Negro classes and those in mostly white classes is .43 standard deviations. The racial gap in the ninth grade -- the difference between the average white students' verbal achievement and the average for Negro students -- is about one standard deviation. In these terms, the difference of .43 standard deviation units due to desegregation is equal to almost half the racial gap.

With regard to grade level equivalents, the differences are similarly impressive. At grade nine, one standard deviation difference is equivalent to about 2.4 years difference in academic growth. ${ }^{1}$
$1_{\text {See Table }}$ 3.121.1, page 274 , OE Report.

The average difference of .43 standard deviation units between Negro student achievement in all Negro classes and mostly white classes is therefore equal to more than one entire year in academic growth. After family background differencos are taken into account, the Negro students in all Negro classes are achieving at a whole grade level behind the Negro students with a majority of white classmates.

All of these statements are based on racial composition comparisons after differences in family background have been taken into account. That is to say, the differences in achievement between segregated and desegregated Negro students remain impressive after family background controls are imposed. Effect parameters in Table III. 5 show that controlling for family background does not greatly disturb the uncontrolled differences in achievement between segregated and desegregated Negro students. The effect parameter which represents the influence of changes in classroom racial composition on student achievement is +1.96 when no family background controls are used. With these controls, the effect parameter reduces only slightly to +1.61 . Similarly, the effect of differences in school racial composition is diminished very little after student family background is taken into account (+1.67 vs. +1.37).

Because the correlation between school and classroom racial composition is high for the Negro students being studied, the statements on the size of the average differences due to school desegregation would be very similar to those just stated for classroom desegregation. That is without taking any special note of the

TABLE III. 5
WEIGHTED PARAMETERS OF EFFECTS ON NINTH GRADE NEGRO STUDENT VERBAL ACHIEVEMENT, UNDER DIFFERENT CONTROL CONDITIONS

${ }^{\text {a }}$ The numbers in parentheses are the number of comparisons which were combined in the weighted average of achievement increments. Each value in this Table is based on 5,075 cases.
students in those classes where the racial composition is different from the racial enrollments in the school, statement about the magnitude of the effect of desegregation on achievement would not be very different if schools rather than classrooms were the point of comparison. (In terms of Table III.3, similar results appear if the row totals rather than the column totals are used for comparisons.) But, when care is taken to distinguish students in classes which differ from the school racial composition, a different finding about the relative importance of school and classrooin desegregation appears.

### 1.2 Relative influence of school and classroom desegregation on achievement

The question here is whether desegregation at the school level or desegregation at the classroom level has the greatest effect on Negro student achievement. There are several plausible possibilities. It could be that desegregation at each level has some influence: students may achieve higher if they attend desegregated schools, and also receive an additional increment to their achievement if they also are enrolled in the desegregated classes within these schools. On the other hand, it may be that desegregation at only one level has the primary influence: either the classroom racial proportions may add little to the influence of attendance at mostly white schools; or, alternatively, classroom desegregation may be the only important agent for increased academic growth. An inspection of the internal cells of Table III. 3 suggests
the answer. Generally, it is the desegregation of classrooms which has the principal influence on differences in Negro student achievement, and not school desegregation without classroom desegregation. Indeed, it appears that the beneficial effects of school desegregation can be offset by segregation within the school. It is only the students in mostly white classes who seem to receive any additional benefit from attendance at mostly white schools. Several relationships support these conclusions.

The relationship between classroom racial composition and Negro student achievement is not diminished when the racial composition of the school is taken into account in addition to the students' family background. That is, both in majority white schools and in most of the majority Negro schools, there is a trend of rising average Negro student achievement with increases in the proportion of white classmates. On the other hand, the relationship between percent white enrolled in the school and Negro student achievement largely disappears when the racial composition of their classmates is held constant. In different words, Negro students in racially similar classes do not generally increase in average achievement as the proportion white in their school increases.

Effect parameters in Table III. 5 demonstrate both these points and specify them more exactly.

1. Controlling for the percent white enrolled in the school does not eliminate the effect of differences in classroom racial composition on Negro student achievement. When achievement increments due
to differences in classroom racial composition are averaged for students matched on both their family background and on the percent white in their school, the effect parameter is nearly the same as that calculated for students matched only on family background $(+1.61$ and +1.67$)$. This means that regardless of the racial composition of the school, the average achievement of Negro students increases with the proportion of their classmates who are white.
2. The components which contribute to this overall parameter suggest that the amount of influence which classroom desegregation has on Negro student achievement is different in schools with contrasting racial enrollments. Table III. 5 shows separately the effect parameter for students matched on family background within each of the four categories of percent white in the school. There is a regular trend in the average achievement increment due to changes in classroom racial composition as the percent white in the school increases. ${ }^{1}$ That is, differences in classroom racial composition are associated with smaller increments in achievement for Negro students in mostly Negro schools compared to those in mostly white schools.
3. On the other hand, when classroom racial composition as well

1
This trend in effect parameters could result from differences in the achievement increments between particular categories of the classroom racial composition variable (non-linearity), together with different frequency distributions among these categories for racially different schools. An examination of unweighted parameters and parameters based on comparisons of the extreme categories of the classroom variable showed that such factors were not the source of this trend.
as family background differences are held constant, there is no evidence that the percent white enrolled in the school generally has any appreciable-influence on Negro student achievement. While the average increment in achievement due to changes in the school racial composition is +1.37 when.students are matched on the family background measure alone, the parameters reduces to +0.19 when the degree of classroom desegregation is held constant as well.
4. The component effect parameters shown in Table III. 5 which combine to yield the +0.19 value, specify this previous generalization more precisely. The only group of Negro students for which increases in the percent white enrolled in their school has any noteworthy influence on their academic preformance are those in mostly white classes. The +1.09 effect parameter for this group suggests that Negro students in mostly white classes exhibit additional increased academic performance if they also attend mostly white schools. For the other groups of students, school desegregation has nc beneficial effect. Stated differently, Negro students who remain in segregated classes receive no benefit in terms of their academic growth from attendance at desegregated schools. Indeed, the small negative effect parameters for students in mostly Negro classes suggests that segregated classes may be more detrimental for Negro student achievement if they occur in mostly white schools rather than mostly Negro schools.

Taken together, the above results strongly suggest that it is desegregation at the classroom leve 1 which encompasses the factors having important influences on Negro student academic performance.

No matter what the racial composition of the school, increases in Negro student achievement accompany increases in the proportion of their classmates who are white. The only students who appear to derive benefit from attendance at mostly white schools are those in predominantly w'lite classes within the school. As far as differences in their achievement are concerned, the students in segregated ciasses may as well be in segregated schools as desegregated ones.

## 2. Controls on program of study and track level

Before the results just presented can be accepted with confidence, the influence of an additional selection processes must be examined: the selection process which exists within schools. Chapter II showed that the racial composition of a Negro student's classes was related to the program and ability group in which he is enrolled within his school. Except for the predominantly Negro schools, the Negro students in the college preparatory programs were more frequently found in mostly white classes than Negro students in other programs. And, with the same exceptions, Negro students in the high track level of English courses were more likely than other Negro students to have mostly white classmates.

Assignments to particular programs and tracks may often be based on existing achievement differences between students. Because of the correspondence between classroom racial composition and the program or track level within the school, it is necessary to investigate whether the observed relationships between classroom racial composition and Negro student achievement are simply a function
of assignments within schools based on existing achievement levels. Before applying these tests to ninth grade students, it is interesting to note how controls on program of study and track level actually may be partial controls on desegregation in the early grades.

### 2.1 Early desegregation and placement within schools at later grades

There is evidence that attendance at desegregated schools affects a student's chances of being placed in a high track or in a college preparatory program in his later grades. Tables III. 6 and III. 7 show the effect of the length of time in desegregated schools on these two variables. To measure how long students have attended desegregated schools, children in the ninth grade were asked "What was the first grade you attended with students from another race in your classes." Few Negro students in the Metropolitan Northeast responded that they never attended classes with white, so that within subgroups similar on family; background, there are usually not enough cases to compare these students with the others. Among the other groups, a regular trend is evident in Table III. 6 and III.7: the percent of Negro students in the hıghest traci and the percent in college preparatory psogram increases as the length of time in desegregated schools increases. Those ninth grade Negro students who first attended desegregated classes in the early elementary grades are more likely than those who only recetntly experienced such classes, to be in the highest track and in college preparatory classes. This is so for students who are similar in family background (Total rows), and also for those who are both from similar families and
presently attend racially similar classes. That is, there is evidence that whether or not a Negro student attended desegregated classes in the early grades, when tracking is not a prevelant practice, has an effect on whether he will be placed in an advanced track or program in the later grades. Consequently, controlling on the present track of a student is a particularly severe test of desegregation results, since the effects of earlier desegregation are being controlled as well.

Nevertheless, it is important to apply these controls on program and track placement to check further on the source of the differences in Negro student achievement pointed to in the previous section. The checks are particularly classed for on the presumed effects on students' achievement deriving from differences in the racial composition of their classmates, rather than on the effects assigned to attendance at racially different schools. It is the selection process due to family background differences which can result in Negro students who are initially disferent in their achievement and attitudes attending one school or another. So, if the controls on family background are accurate and thorough, no other selection process need be examined in attributing present differences in Negro achievement to their attendance at racially different schools. But within schools, program and track assignments are often consciously made because of initial student differences in achievement and attitudes. Indeed, the definition of "tracking" or "ability grouping" is to assign students to particular classes on the basis of their
table ili.s


| Family <br> Background | Proportion White Classmates | Earliest Grade i: Jesegregateo Class |  |  |  |  |  |  |  | TOT: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1, 2 or 3 |  | 4. 5 or 6 |  | -. 8 or ${ }^{\text {? }}$ |  | Never |  |  |  |
|  | 1. None | 26.8 | (82) | 22.2 | (27) | 2.1 .1 | (39) | 20.5 | (i4) | 24.0 | (192) |
|  | 2. Less than Half | 22.3 | (121) | 15.0 | (6,) | 28.9 | (45) |  |  | 22.3 | (200) |
| I | 3. About Half | 35.7 | (49) | 22.2 | (9) | 25.9 | (27) |  |  | 31.- | (85) |
|  | 4. More than Half | 24.6 | (57) | 0 | (15) | 11.1 | (18) |  |  | 17.8 | (90) |
|  | $5 . \quad$ Total | 26.2 | (309) | 15.4 | (91) | 24.0 | (129) | 20.5 | (44) | 23.6 | (573) |
|  | $6 . \quad$ None | 33.3 | (57) | 12.5 | (24) | 25.0 | (40) | 42:9 | (14) | 28.1 | -135) |
|  | 7. Less than Half | 31.5 | (127) | 18.9 | (37) | 17.6 | (34) |  |  | 20.8 | (198) |
| II | 8. About Half | 18.2 | (44) | 22.2 | (9) | 33.3 | (15) |  |  | 22.1 | (58) |
|  | 9. More chan Half | 33.9 | (59) | 50.0 | (16) | 35.4 | (11) |  |  | $3^{-} .2$ | (86) |
|  | 10. Total | 30.3 | (287) | 23.2 | (86) | 250 | (100) | 42.9 | (14) | 28.3 | (487) |
|  | 11. None | 23.4 | (64) | 13.3 | (30) | 21.2 | (28) | 20.0 | (25) | 20.4 | (147) |
|  | 12. Less than Half | 37.2 | (86) | 25.9 | (27) | 4.8 | (21) |  |  | 29.8 | (134) |
| III | 13. About Half | 22.6 | (31) | 9.1 | (11) | 7.7 | (13) |  |  | 16.4 | (55) |
|  | 14. More than Half | 34.5 | (58) | 30.0 | (10) | 18.8 | (16) |  |  | 31.0 | (84) |
|  | 15. Total | 31.0 | (239) | 19.2 | (78) | 14.1 | (;8) | 20.0 | (23) | 25.0 | (420) |
|  | 16. None | 29.9 | (6i) | 35.0 | (25) | 14.3 | (42) | 29.6 | (2:) | 26. ${ }^{-}$ | (161) |
|  | 17. Less than Half | 31.3 | (115) | 9.5 | (21) | 36.8 | (19) |  |  | 29.0 | (155) |
| IV | 18. About Half | 24.4 | (45) | 31.3 | (16) | 0 | (12) |  |  | 21.9 | (i3) |
|  | 19. More than Helf | 28.9 | (76) | 23.8 | (21) | 15.8 | (19) |  |  | 25.8 | (110) |
|  | 20. Total | 29.4 | (303) | 25.3 | (83) | 17.4 | (92) | 29.6 | (27) | 20.5 | 505) |

TABLE III. 6
(continued)

| Family <br> Background | Proportion White Classmates |  | Earliest Grade in Desegregated Class |  |  |  |  |  |  |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1, 2 or 3 |  | 4,5 or 6 |  | 7, 8 or 9 |  | . Sever |  |  |  |
|  |  | None |  | (94) | 28.6 | (34) | 31.4 | (35) | 40.0 | (15) | 35.2 | (178) |
|  |  | Less than Half | 37.1 | (140) | 23.1 | (26) | 29.2 | (24) |  |  | 34.2 | (190) |
| v | 23. | About Half | 22.0 | (59) | 30.8 | (13) | 22.2 | (18) |  |  | 23.3 | (90) |
|  |  | More than Half | 34.7 | (101) | 34.6 | (26) | 32.0 | (25) |  |  | 34.2 | (152) |
|  | 25. | Total | 34.5 | (394) | 29.0 | (99) | 29.4 | (102) | 40.0 | (15) | 32.9 | (610) |
|  |  | None | 28.6 | (56) | 34.8 | (23) | 54.5 | (11) | 33.3 | (6) | 33.3 | (96) |
|  | 27. | Less than Half | 44.9 | (89) | 22.2 | (18) | 0 | (11) |  |  | 37.2 | (118) |
| VI |  | About Half | 42.1 | (38) | 0 | (4) | 0 | (8) |  |  | 32.0 | (50) |
|  |  | More than Half | 50.0 | (66) | 57.1 | (14) | 58.3 | (12) |  |  | 52.2 | (92) |
|  | 30. | Total | 42.2 | (249) | 33.9 | (59) | 30.9 | (42) | 33.3 | (6) | 39.3 | (356) |

table ini. 7
percent of ninth grade negro strdents enrolied in a coliege
PREPARATORY CCRRICLLCM, BY STCDENT'S FAMILY SACKGROTND,
PERCEMT WHITE IY SCHOOL AND PROPORTION WEITE CLASSMATES

| Family <br> Background | Proportion White Classmates | Earliest Grade in Desegregated Class |  |  |  |  |  |  |  | retas |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1, 2 or 3 |  | 4,5 or 5 |  | 7,8 or 9 |  | Sever |  |  |
| I | None | 22.8 | (123) | 16.7 | (48) | 27.6 | (98) | 28.6 | (\%) | 24.5 (339) |
|  | Less than Half | 24.1 | (162) | 22.4 | (58) | 11.7 | (94) |  |  | 20.1(314) |
|  | About Half | 28.6 | (77) | 35.0 | (20) | 18.6 | (43) |  |  | 26.8(133) |
|  | More than Half | 28.9 | (97) | 33.3 | (2i) | 19.4 | (36) |  |  | 27.5(160) |
|  | Total | 25.5 | (459) | 24.2 | (153) | 19.5 | (271) | 28.6 | (70) |  |
| II | None | 33.7 | (86) | 31.4 | (35) | 36.7 | (90) | 26.3 | (38) | 33.3(249) |
|  | Less than Half | 34.0 | (191) | 27.3 | (55) | 21.9 | (64) |  |  | 30.3(310) |
|  | About Half | 30.7 | (75) | 35.3 | (17) | 20.7 | (29) |  |  | 28.9(121) |
|  | More than Half | 35.7 | (84) | 20.0 | (20) | 16.0 | (25) |  |  | 29.4 (129) |
|  | Total | 33.7 | (436) | 28.4 | (127) | 27.4 | (208) | 26.3 | (38) |  |
| III | None | 27.6 | (87) | 29.0 | (31) | 34.7 | (49) | 14.3 | (28) | 27.7(195) |
|  | Less than Half | 31.2 | (138) | 41.9 | (43) | 9.1 | (44) |  |  | 28.9 (225) |
|  | About Half | 31.9 | (47) | 25.0 | (8) | 17.6 | (17) |  |  | 27.8(72) |
|  | More than Half | 43.5 | (69) | 47.4 | (19) | 28.1 | (32) |  |  | 40.0 (120) |
|  | Total | 32.8 | (341) | 38.0 | (101) | 23.2 | (142) | 14.3 | (28) |  |
| IV | None | 28.6 | (91) | 29.4 | (34) | 6.5 | (74) | 35.9 | (39) | 29.2(238) |
|  | Less than Half | 36.6 | (175) | 20.6 | (34) | 26.1 | (46) |  |  | 32.6 (255) |
|  | About Half | 34.8 | (66) | 28.6 | (21) | 28.6 | (21) |  |  | 32.4 (108) |
|  | More than Half | 48.3 | (120) | 48.3 | (29) | 26.5 | (34) |  |  | $44.2(183)$ |
|  | Total | 37.8 | (452) | 31.4 | (118) | 30.9 | (175) | 35.9 | (39) |  |

TABLE III. 7
(continued)

|  | Proportion White |  |  | arlie | Grade | egrega | ed Cla |  |  | TOṪAi |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sackground | Classmates | 1, 2 or 3 |  | 4. 5 or 6 |  | 7. 8 or 9 |  | Sever |  |  |  |
| v | None | 40.3 | (119) | 25.6 | (43) | 46.9 | (64) | 30.8 | (26) | 38. |  |
|  | Less than Hapf | 44.4 | (171) | 39.4 | (33) | 37.8 | (45) |  |  | . | (240) |
|  | About Half | 42.9 | (84) | 40.9 | (22) | 39.1 | (23) |  |  | 41. | (129) |
|  | More than Half | 56.6 | (145) | 42.9 | (35) | 47.8 | (46) |  |  | 52. | (226) |
|  | Total | 46.6 | (519) | 36.1 | (133) | 43.8 | (1:8) | 30.8 | (26) |  |  |
| . | None | 46.4 | (69) | 57.7 | (26) | 47.6 | (21) | 62.5 | (8) |  |  |
| \% | Less than Half | 65.1 | (106) | 60.9 | (23) | 42.9 | (14) |  |  | . |  |
| II | About Half | 58.9 | (56) | 57.1 | (7) | 54.5 | (11) |  |  |  |  |
|  | More than Half | 62.6 | (107) | 57.1 | (21) | 88.0 | (25) |  |  |  |  |
|  | Total | 59.5 | (338) | 58.4 | (77) | 62.0 | (71) | 62.5 | (8) |  |  |

previous level of achievement. Similarly, the assignments of students tc different programs are based on student differences in achievement level, aspirations and goals for the future. So, when looking at classroom differences within a given school, these assignment processes must be taken into account if the claim is to be made that comparisons do not merely reveal differences which preceded the classroom arrangements.

### 2.2 Program of study

Tables III.8, III.9, and III. 10 show the average achievement scores of subgroups of students who are similar on four measures: family background, school racial composition, classroom racial composition and program of study. Table III. 8 presents averages only for those ninth grade Negro students in a college preparatory program and Table III. 9 only for those in a general program. Table III. 10 is for students in several non-academic programs: commercial or business; vocational; agricultural; or industrial arts. To provide sufficient cases for reliable estimates in as many instances as possible, categories were combined on the classroom racial composition item, so comparisons will be made between Negro students who have less than half white classmates and those who have half or more white classmates. Otherwise these tables are the same as earlier ones (Table III. 3 for example) except that each includes only tabulations on students in similar programs of study.

In Table III. 11 it is shown that partitioning the students by their program of study does not greatly reduce the classroom racial

TABIS: 111.8




| Ifandy <br> Hackgromed | Proportlom While (:Insamates | Percent White lin the schoold |  |  |  |  | toras, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (0-19 | 20-49 | 50-69 | 70- |  |  |
| I | l.ens than llalf | 264.20 (64) | 263.43 (30) | 260, 92 (13) | 239.00 | (1) | 263.36 (108) |
|  | Half or More | 260.11 (9) | 265.53 (15) | 267.75 (12) | 273.77 | (13) | 267.26 (49) |
|  | Total | 263.70 (73) | 264.13 (45) | 264.20 (25) | 271.29 | (14) | 264.58 (157) |
|  | M - I . | -4.09 | +2.10 | $+6.83$ |  |  | +3.90 |
| 11 | Lu-ss than llalf | 263.12 (88) | 264.97 (36) | 262.78 (9) |  | (0) | 263.60 (133) |
|  | Half or More | 270.00 (7) | 267.25 (20) | 264.30 (10) | 268.40 | (5) | 267.14 (42) |
|  | Total | 263.63 (95) | 265.78 (56) | 263.58 (19) | 268.40 | (5) | 264.45 (175) |
|  | M - I . |  | +2. 28 | +1.52 |  |  | +3.54 |
| 111 | l.esm than Half | 268.92 (63) | 266.24 (21) | 258.64 (11) | 290.00 | (1) | 267.38 (96) |
|  | Half or More | 273.83 (6) | 272.40 (10) | 271.67 (15) | 269.40 | (15) | 271.37 (46) |
|  | Total | 269.35 (69) | 268.23 (31) | 266.16 (26) | 270.69 | (16) | 268.67 (142) |
|  | M - 1. |  | $+6.16$ | +13.03 |  |  | +3.99 |
| IV | liess than Half | 269.46 (73) | 270.28 (25) | 263.00 (14) | 259.33 | (3) | 268.59 (115) |
|  | llalf or More | 265.00 (4) | 268.36 (25) | 269.74 (19) | 274.18 | (33) | 270.89 (81) |
|  | Total | 269.23 (77) | 269.32 (50) | 266.88 (33) | 272.94 | (36) | 269.54 (196) |
|  | M - L |  | -1.92 | +6.74 |  |  | +2.30 |
| $v$ | l.ess than Half | 270.23 (106) | 269.16 (43) | 267.36 (14) | 264.50 | (2) | 269.64 (165) |
|  | Half or More | 266.63 (17) | 271.67 (54) | 272.34 (26) | 278.10 | (30) | 272.65 (127) |
|  | Total | 269.73 (123) | 270.56 (97) | 270.60 (40) | 277.25 | (32) | 270.95 (292) |
|  | M - 1. | -3.60 | +2.51 | $+4.98$ |  |  | +3.01 |
| VI | Lean than Malf | 277.52 (101) | 271.00 (22) | 259.50 (6) | 239.00 | (1) | 275.29 (130) |
|  | Halt or More | 258.14 (7) | 276.27 (48) | 274.27 (30) | 278.21 | (29) | 275.12 (1.14) |
|  | Total | 276.26 (108) | 274.61 (70) | 271.81 (36) | 276.90 | (30) | 275.21 (244) |
|  | M - I . |  | +5.27 |  |  |  |  |

rabif lil. 9




| rimilly <br> Backpromind | Proportion White c:lassmates | Protcent White in the school |  |  |  |  |  |  |  | Totidi |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-19 |  | 20-49 |  | 50-6,9 |  | 70-99 |  |  |  |
| 1 | l.ess than Half | 254.40 | (55) | 254.71 | (24) | 255.09 | (11) | 247.20 |  | 254.18 |  |
|  | Half or More | 255.86 | (7) | 270.0 | (8) | 260.67 | (9) | 261.75 | (16) | 262.13 | (40) |
|  | Total | 254.56 | (62) | 258.53 | (32) | 257.60 | (20) | 258.28 | (21) | 256.54 | (135) |
|  | M - I. |  |  |  |  |  |  |  |  | +7. |  |
| 11 | 1.1.8s than lialf | 260.18 | (46) | 254.58 | (12) | 253.80 |  | 256.33 | (3) | 258.50 |  |
|  | Half or More | 263.80 | (10) | 266.90 | (10) | 277.00 | (1) | 253.72 | (14) | 261.03 | (35) |
|  | Total | 260.83 | (56) | 260.18 | (22) | 257.67 | (6) | 254.18 | (17) | 259.38 | (101) |
|  | M - I. | +3.62 |  | +12.32 |  |  |  |  |  | +2.53 |  |
| 111 | I.cess than Half | 261.74 | (43) | 261.15 | (13) | 263.00 | (3) | 261.00 | (2) | 261.65 | (61) |
|  | lialf or More | 261.14 | (7) | 265.54 | (11) | 262.78 | (9) | 261.42 | (12) | 262.84 | (39) |
|  | Total | 261.66 | (50) | 263.16 | (24) | 262.84 | (12) | 261.36 | (14) | 262.11 | (100) |
|  | M-1. |  |  | +4.39 |  |  |  |  |  | +1.19 |  |
| IV | l.ess than lialf | 259.32 | (56) | 261.38 | (16) | 253.62 | (8) |  | (0) | 259.16 | (80) |
|  | Half or More | 254.33 | (3) | 264.39 | (13) | 266.84 | (12) | 264.66 | (23) | 264.50 | (51) |
|  | Total | 259.07 | (59) | 262.73 | (29) | 261.55 | (20) | 264.66 | (23) | 261.24 | (131) |
|  | M - I . |  |  | +3.01 |  |  |  |  |  | +5.34 |  |
| v | l.ess than Half | 265.66 | (57) | 262.25 | (16) | 257.75 | (4) | 271.33 | (3) | 264.80 |  |
|  | Half or More | 261.00 | (6) | 270.00 | (7) | 273.13 | (16) | 272.48 | (19) | 270.90 | (48) |
|  | Total | 265.22 (63) |  | 264.61 (23) |  | 270.05 | (20) | 273.32 | (22) | 267.09 (128) |  |
|  | M-1. |  |  | +6.10 |  |  |  |  |  |  |
| VI | l,ess than Half | 268.13 | (31) |  |  | 260.60 | (5) | 252.33 | (3) | 265.50 | (2) | 265.93 | (41) |
|  | lialf or More | 267.67 | (3) | 274.00 | (5) | 276.00 | (8) | 277.60 | (15) | 275.64 | (31) |
|  | Total | 268.09 |  | 267.30 (10) |  | 269.54 | (11) | 276.18 | (17) | $270.11 \quad(72)$+9.71 |  |
|  | M - 1 . |  |  |  |  |  |  |  |  |  |  |

TABId: 111.10





| Vrmily | Proportion |  | Percent White | In the | hool |  |  | trornt. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| background | CAasmates | 0-19 | 20-49 | 50-69 |  | 10-99 |  |  |  |
| 1 | l.ess than llalf | 254.83 (159) | 255.41 (81) | 256.92 | (25) | 257.00 | (4) | 255.23 | (269) |
|  | Half or More | 253.95 (21) | 256.77 (31) | 256.13 | (23) | 252.16 | (13) | 255.25 | (88) |
|  | Total | 254.73 (180) | 255.79 (112) | 256.54 | (48) | 253.30 | (17) | 255.24 | (357) |
|  | M-1, | -. 88 | +1.36 | -. 79 |  |  |  | -. 03 |  |
| II | Less than Half | 256.00 (130) | 256.96 (48) | 251.65 | (20) | 257.33 | (3) | 255.82 | (201) |
|  | Half or More | 252.00 (10) | 256.04 (25) | 259.76 | (25) | 257.59 | (22) | 257.10 | (82) |
|  | Total | 255.72 (140) | 256.64 (73) | 256.16 | (45) | 257.56 | (25) | 256.19 | (283) |
|  | $\mathrm{M}-\mathrm{l}$ |  | -. 92 | +8.11 |  |  |  | +1.28 |  |
| III | l.ess than llalf | 257.46 (92) | 257.82 (28) | 257.67 |  | 249.67 | (3) | 257.39 | (138) |
|  | Half or More | 265.25 (8) | 260.33 (18) | 263.28 | (14) | 258.78 | (9) | 261.69 | (49) |
|  | Total | 258.08 (100) | 258.80 (46) | 260.38 | (29) | 256.50 | (12) | 258.52 | (187) |
|  | M-I. |  | +2.51 | +5.61 |  |  |  | +4.30 |  |
| IV | Less than Half | 256.86 (117) | 258.24 (34) | 259.41 | (17) | 254.50 | (2) | 257.36 | (170) |
|  | Half or More | 251.00 (9) | 259.22 (18) | 260.23 | (22) | 261.86 | (22) | 259.31 | (71) |
|  | Total | 256.44 (126) | 258.58 (52) | 259.87 | (39) | 261.25 | (24) | 257.93 | (241) |
|  | M - I |  | +. 98 | +. 82 |  |  |  | +1.95 |  |
| V | L.ess than Half | 257.02 (89) | 258.00 (38) | 261.80 | (15) | 0 |  | 257.79 | (1.42) |
|  | Half or More | 250.43 (7) | 263.84 (25) | 267.96 | (23) | 263.52 | (19) | 263.77 | (74) |
|  | Total | 256.54 (96) | 260.32 (63) | 265.53 | (38) | 263.52 | (19) | 259.84 | (216) |
|  | M - L |  | +5.84 | +6.16 |  |  |  | +6.03 |  |
| VI | l.ese than Half | 258.48 (46) | 260.10 (10) | 256.67 | (3) | 249.50 | (2) | 258.36 | (61) |
|  | Half or More | 251.50 (2) | 263.58 (12) | 262.22 | (9) | 260.50 | (4) | 261.78 | (27) |
|  | Total | 258.19 (48) | 262.00 (22) | 260.83 | (12) | 256.83 | (6) | 259.41 | (88) |
|  | M - l |  | +3.48 |  |  |  |  | +3.42 |  |

TABLE III. 11

WEIGHTED PARAMETERS OF EFFECT OF CLASSROOM RACIAL COMPOSITION ON NINTH GRADE NEGRO VERBAL ACHIEVEMENT, gIven family background and percent white in school, by student's program of study

| Program of Study | Effect Parameter |
| :---: | :---: |
| A11 Students Responding to Program of Study Question (24 comparisons, $3 ; 245$ cases) | +2.88 |
| A11 Students, Partitioned by Their Program of Study (72 comparisons, 3,245 cases) | +2. 52 |
| College Preparatory (24 comparisons, 1,206 cases) | +1.88 |
| General Program (24 comparisons, 667 cases) | +5.93 |
| Commercial, Business, Vocational or Industrial Arts (24 comparisons, 1,372 cases) | +1.50 |

composition parameter. The parameter is +2.88 when comparisons are made for students matched on family background and the school racial percentage categories. When students are matched on their program of study in addition to the other variables, the value is +2.52 .

The parameters for the separate subgroups in each program are not uniformly smaller than the original value. This is also evidence that the classroom effect is not simply the result of program assignments. The parameter for students in vocational, commerical and industrial arts programs and in the college preparatory program is about half the value calculated without the program control. On the other hand, the average achievement increment due to classroom desegregation is considerable larger than the original value for students in the general course of study.


#### Abstract

2.3 Track level

This section will describe the checks made on the classroom desegregation effect by taking into account the track level to which a student is assigned. Table III. 12 presents the effect parameters which summarize the results of these exercizes. This Table gives parameters measuring the classroom desegregation effect separately for students who report they are in the high, middle or low track section of English courses. Because the school racial percentages were combined in different ways for each of these subgroups (to be described below) three separate parameters without the track control are shown as the point of comparison. The effect parameter for high track students alone is to be


TABLE III. 12
WEIGHTED PARAMETERS OF CLASSROOM RACIAL COMPOSITION
ON NINTH GRADE NEGRO VERBAL ACHIEVEMENT,
gIVEN FAMILY BACKGROUND AND PERCENT WHITE IN THE SCHOOL,
by Students' track level in english courses

| Track Level | Effect Parameter |
| :---: | :---: |
| All students (18 comparisons, 4,717 cases) | +2.17 |
| High track students (18 comparisons, 991 cases) | +1.78 |
| All other students (18 comparisons, 3,726 cases) | +1.96 |
| All students (24 comparisons, 5,075 cases) | +2.69 |
| Middle track students ( 24 comparisons, 1,979 cases) | +2.91 |
| All other students ( 24 comparisons, 4,096 cases) | +2.21 |
| All students (12 comparisons, 5,075 cases) | +2.82 |
| Low track students (12 comparisons, 255 cases) | +1.62 |
| All other students ( 12 comparisons, 4,820 cases) | +2.86 |

compared with the parameter calculated for the entire sample of students matched in a corresponding way on the family background and school racial enrollment variables. For the other track subgroups, a separate parameter calculated from matching cross-tabulations of the entire sample is presented for comparison.

The effect parameter shown in Table III. 12 which was calculated for high track students is not greatly reduced from the value obtained for the entire sample. These values are +1.78 and +2.17. Similarly, the parameters for the middle track group and the entire sample have comparable values, 2.91 and 2.69. For the low track group, the parameter is about half the size of the value for the entire sample, although it is not reduced to zero.

If the effect parameters for each track subgroup are compared with parameters from the rest of the sample which does not include the subgroup, the results are the same. Table III. 12 also shows these residual values which are very similar to the parameters obtained from the complete sample.

Since the classroom racial compositicr effect remains within subgroups of Negro students who are matched on either their track or their program of study, there is evidence that the observed achievement increments due to classroom desegregation are not simply the result of differences which preceded the classroom assignments.

Track level and track criterion. - It was mentioned that for these results, different subgroups were compared in each of the track levels. The selection of the groups to be compared was based on two
requirements: that there be as many cases available as possible to allow reliable estimates of achievement averages and that the subgroups to be compared would be matched on both the track level and the criterion established by the school for admission to the particular track.

The criteria established for admitting students into a particular ability track is likely to differ widely from school to school. If, for example, one third of the students in each school are placed in the high track, it will require a higher level of performance for an individual student to receive this classroom assignment in schools where the average level of achievement is higher than in other schools. It was shown earlier that the average achievement level in the school increases substantially as the proportion white enrollment increases. Consequently, it is likely that the same Negro student admitted to high track classrooms in a predominantly Negro school would be eliminated from these classes if he transferred to a predominantly white school. What this means is that both the track level and the track criteria must be taken into account when attempting to control for selection processes within desegregated schools. If achievement comparisons were only made between high track Negro students in segregated and desegregated schools, an apparent desegregation effect might appear which was simply the result of the different criteria for admission to the high track in the contrasted schools.

In many cases, it will be possible with the survey data to make classroom comparisons which take into account both track level and the track criteria, because of one fact. While track criteria differ widely between schools with different racial enrollments,
they are similar for schools with the same racial populations. So, if both the track level and the racial enrollment in the school are held constant, the selection process will be largely eliminated as factor which contaminates classroom comparisons.

The way the track criteria was established for each school was by obtaining verbal achievement test averages separately for all ninth grade students in the school in each track. So for each individua 1 school, the average achievement was calculated for all students who reported they were in the high English track, another average for those in the middle track, and a third for those in the low track. For each Negro student in the study who was in the high track, a value could be assigned which was the criteria for participation in the high track of his school (i.e., the average achievement of all the high track students in his schools). Similarly, associated with each Negro student in the middle track was the criteria for admission to that track in his school. In a like manner the Negro stadents in the low track were assigned a corresponding school track criteria value.

Dealing first with students in the middle track, Table III. 13 presents the average track criteria for the groups of Negro students who are similar in family background, percent white in their school and proportion white classmates. For example, the first entry in this table, 257.67 , is the average school track criteria for 86 Negro students in the middle English track who are similar in family background and the racial composition of their school and class.

## TABI』: 111.13




| Family <br> Background | Proportlon White Classmates | Percent White in the School |  |  |  |  |  | TOTAI. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-19 | 20-49 | 50-69 |  | 10-99 |  |  |  |
|  | None | 257.67 (86) | 263.88 (39) | 256.76 | (10) | 257.90 | (1) | 259.4 | (136) |
|  | l.ess than lialf | 256.34 (96) | 260.59 (38) | 265.57 | (10) | 269.87 | (8) | 258.7 | (152) |
| 1 | About llalf | 258.21 (12) | 260.30 (22) | 265.72 | (13) | 265.10 | (4) | 261.6 | (51) |
|  | More than Matif | 257.53 (11) | 260.86 (17) | 263.04 | (22) | 268.47 | (18) | 263.0 | (68) |
|  | Total | 251.07 (205) | 261.68 (116) | 263.0 | (5) | 268.38 | (31) | 260.0 | (407) |
|  |  | L. AM - N -1.03 | AM-NI. -1.72 | M-NL.A | +0.08 | $11-\mathrm{NLA}$ | +0.22 |  |  |
|  | None | 251.38 (59) | 263.88 (21) | 257.96 | (10) |  | (0) | 259.0 | (90) |
|  | l.ess than lialf | 256.08 (96) | 262.02 (28) | 268.64 | (10) | 269.04 | (3) | 258.5 | (13) |
| 11 | About llalf | $25 \% .95$ (12) | 261.37 (12) | 267.78 | (18) | 268.23 | (6) | 263.8 | (48) |
|  | More than llalf | 257.50 (4) | 260.35 (16) | 264.82 | (18) | 268.68 | (11) | 263.6 | (49) |
|  | Total | 256.69 (171) | 262.08 (77) | 265.2 | (56) | 268.60 | (20) | 260.2 | (32) |
|  |  | I.AM-N -1.05 | AM-NL -2.03 | M-NLA | -0.60 | M-NLA | +0.18 |  |  |
|  | None | 259.58 (83) | 264.48 (18) | 257.36 | (10) | 269.60 | (1) | 260.2 | (112) |
|  | J.ees than Half | 258.32 (57) | 262.02 (24) | 266.64 | (11) | 272.43 | (2) | 260.5 | (94) |
| 111 | Aboul lialf | 258.45 (l) | 261.61 (10) | 268.38 | (20) | 268.25 | (5) | 265.1 | (42) |
|  | More Lhan Half | 259.64 (3) | 262.87 (11) | 266.58 | (19) | 272.13 | (23) | 267.8 | (56) |
|  | Total | 259.05 (150) | 262.81 (63) | 265.6 | ( $0^{0}$ | 271.44 | (31) | 262.4 | (304) |
|  |  | L.AM-N -1.19 | AM-NI. $\quad \mathbf{- 0 . 8 0}$ | M-NLA | +1.36 | M-NL.A | +2.67 |  |  |
|  | Nonc | 259.91 (77) | 263.90 (18) | 260.28 | (10) |  | (0) | 260.6 | (105) |
|  | f.ess than Half | 258.83 (75) | 262.22 (18) | 269.68 | (10) | 270.50 | (2) | 260.7 | (105) |
| IV | About lialf | 257.31 (3) | 262.07 (23) | 269.03 | (20) | 269.81 | (8) | 265.5 | (54) |
|  | More than Half | 258.09 (3) | 259.60 (10) | 266.16 | (18) | 271.28 | (47) | 265.16 | (78) |
|  | Total | 259.31 (158) | 262.23 (69) | 266.7 | (58) | 271.05 | (51) | 263.9 | (34) |
|  |  | 1.AM-N -1.16 | AM-NI. -1.74 | M-NLA | -0.84 | M-NI,A | +1.10 |  |  |
|  | None | 262.29 (83) | 265.00 (14) | 260.75 | (10) | 273.26 | (3) | 262.8 | (110) |
|  | l.eas than latf | 259.80 (73) | 262.10 (31) | 267.94 | (12) | 272.29 | (5) | 261.7 | (121) |
| $v$ | About Half | 257.58 (12) | 263.91 (23) | 269.92 | (28) | 272.26 | (4) | 265.8 | (67) |
|  | More than Half | 258.61 (11) | 262.86 (16) | 266.93 | (26) | 270.20 | (40) | 266.6 | (93) |
|  | Total | 260.73 (179) | 263.22 (84) | 267.4 | (76) | 270.74 | (52) | 263.9 | (391) |
|  |  | LAM-N -2.90 | AM-NI. +0.48 | M-NLA | -0.68 | M-NI.A | -2.33 |  |  |
|  | None | 262.91 (56) | 264.83 (4) | 269.84 | (1) | 267.85 | (1) | 263.2 | (62) |
|  | l.ess than Hall | 263.24 (41) | 263.97 (24) | 265.97 | (5) | 271.98 | (4) | 264.5 | (74) |
| VI | About malt | 258.90 (3) | 265.00 (13) | 270.34 | (11) | 271.50 | (5) | 267.3 | (32) |
|  | More Lhan half | 260.02 (3) | 265.03 (16) | 266.98 | (6) | 273.18 | (18) | 268.4 | (43) |
|  | Total | 262.84 (103) | 264.56 (57) | 268.5 | (23) | 272.52 | (28) | 265.3 | (211) |
|  |  | LAMSA -0.15 | AM-NI. +0.93 | M-NIA | -2.04 | A-NL. | +0.35 |  |  |

Prom this table it is evident that the variation in track criteria is much greater across schocls with different racial enrollments than within schools of similar proportion white students. Reading down the columns, there is no consistent pattern of differences favoring the schools where Negroes are found in mostly white classes. As an approximation of the proportion of variation in track criteria for the average Negro student which is between schools with differeat racial proportions compared to that between classes in schools with similar racial enrollments, effect parameters were calculated. The effect parameter for school racial composition on track criteria (given gamily background and classroom composition) was 14 times greater than the effect parameter for class room composition (given family a background and percent white in the school). The two parameter values are +2.65 and +0.19 .

Finally, because there were cells in the Table where either the case size was small or there were particularly deviant track criteria, categories of the classroom racial composition variable were combined within each family background by school racial composition group to minimize these problems. The rows of Table III. 13 labelled with $\Delta$ show the classroom groups chosen for comparisons. For instance, among the Negro students in the lowest family background category attending schools with 0 to 19 percent white enrollments, those whose proportion of white classmates are either Less than half, About haif, or More than half (L, A, M in the symbols used in the table) are compared to those with No white classmates (N).

After the decisions about combining groups were made on the basis of case size and track criteria, similar groups were established \{or the investigation of classroom effects on Negro student achievement. It is these comparisons which are reported in Table III. 12.

Unfortunately, the sample is too thin to make the same comparisons for the high and low track groups as were chosen for the middle track. In order to provide some test for these groups of the degree to which taking track level and track criteria into account affects the size of the achievement differences in racially contrasted classrooms, other combinations of classroom and school racial composition categories were made in selecting groups for comparison. Tables III. 14 and III. 15 show these comparisons (lines labelled $\Delta$ ) together with the track criteria for the various groups. Achievement differences of the selected groups are summarized in Table III. 12 described above.

In the end, the groups selected for comparison imposed another conservative bias on discovering desegregation effects in addition to the one described in section 2.1. The parameters calculated from Tables III. 13, III. 14, and III. 15 measuring the effect of differences in classroom racial composition on school track criteria are -0.54 , -1.21 , and -0.25 , respectively. That is, the Negro students in the classes with the larger proportion of white students among the groups selected for comparison, attended schools with lower criteria for track admission than the students in the more totally Negro classes. Because the groups for comparison were set up in this way, the selection process operating alone should have the effect of showing a

TABLE III. 14
TrACK CRITERIA OF HIGH ENGLISH TRACK FOR AVERAGE NINTH GRADE STUDENTS, BY FAMILY BACKGROUND, percent vilite in the school, and proportion wilte classmates

| Family <br> Background | Classroom Racial Composition | Percent White in the School |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 0-19 | 20-49 | 50-79 |
| I | Segregated | N 264.83 (31) | NL 269.68 (26) | L 276.84 (6) |
|  | Desegregated | LAM 263.82 (29) | AM 269.90 (26) | AM 275.78 (15) |
|  |  | -1.01 | +0.22 | -1.06 |
| II | Segregated | N 265.42 (25) | NL 269.87 (26) | NLA 275.78 (12) |
|  | Desegregated | LAM 264.51 (46) | AM 269.10 (24) | M 274.37 (7) |
|  |  | -0.91 | -0.77 | -1.41 |
| III | Segregated | NL 265.98 (55) | LA 271.84 (10) | $\left\lvert\, \begin{aligned} 50-69 & \text { NLA } \\ 276.83 & (7) \end{aligned}\right.$ |
|  | Desegregated | AM 264.97 (14) | M 273.74 (9) | $\begin{array}{\|cc} 50-69 . & M \\ 276.20 & (7) \end{array}$ |
|  |  | -1.01 | +1.90 | -0.63 |
| IV | Segregated | N 267.78 (31) | NL 270.34 (26) | LA 282.55 (11) |
|  | Desegregated | LAM 265.95 (31) | AM 269.35 (18) | M 282.66 (12) |
|  |  | -1.93 | -0.99 | +0.11 |
| V | Segregated | N 271.03 (47) | L 270.29 (20) | A 283.50 (5) |
|  | Desegregated | LAM 266.45 (53) | AM 270.47 (27) | M 279.82 (24) |
|  |  |  | +0.18 | -3.68 |
| VI | Segregated | N 273.78 (31) | NLA 273.39 (19) | A 280.90 (4) |
|  | Desegregated | LAM 273.71 (42) | M 273.06 (14) | M 281.87 (25) |
|  |  | -0.07 | -0.33 | +0.97 |

Effect Parameter = Classroom difference (given family background, and percent white in school) $=-1.21$
table lil. 15
TRACK CRI'TERIA OF ION ENGLISH TRACK FOR AVERAGF NintH cradf students, by family background, PERCHNT WHITE IN THE SCHOOI, AND PROPORTION WHITE CLASSMATES

| Family | $\begin{gathered} \text { Classroom } \\ \text { Racial } \\ \text { Composition } \end{gathered}$ | Percent White in the School |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Background |  | 0-49 |  | 50-99 |  |
| [ | Segregated <br> Desegregated | 253.59 | (24) | 260.18 | (11) |
|  |  | 252.22 | (38) | 261.16 | (6) |
|  |  | LAM-N | $-1.37$ | M-NLA | +0.98 |
| II | Segregated | 253.10 | (9) | 259.74 | (12) |
|  | Desegregated | 254.56 | (16) | 259.53 | (7) |
|  |  | L.AM-N | +1.46 | M-NLA | -0.21 |
| III | Segregated <br> Desegregated | 254.98 | (7) | 261.24 | (6) |
|  |  | 255.38 | (13) | 261.87 | (7) |
|  |  | LAM-N | +0.40 | M-NLA | +0.64 |
| IV | Segregated <br> Desegregated | 254.55 | (12) | 259.09 | (12) |
|  |  | 251.88 | (10) | 261.13 | (11) |
|  |  | LAM-N | -2.67 | M-NLA | +2.04 |
| V | Segregated <br> Desegregated | 256.61 | (9) | 261.52 | (5) |
|  |  | 254.86 | (16) | - 262.16 | (5) |
|  |  | LAM-N | -1.75 | M-NLA | +0.64 |
| VI | Segregated <br> Desegregated | 256.43 | (3) | 260.42 | (5) |
|  |  | 254.06 | (9) | 264.94 | (2) |
|  |  | LAM-N | -2.37 | M-NLA | +4.52 |

Effect parameter $=$ classroom differences (given family background and percent white in the school) $=+0.19$.
negative classroom desegregation effect.
To summarize, although the tests on low and high track students are not strong - (the case sizes are often small and only selected comparisons are made) - they do add some evidence that the patterns of classroom racial composition differences in Negro student achievement described earlier are not eliminated or seriously diminished because of track placement. Taken together with the results on middle track students, and family background controls, described in section 2.1 , the survey data does allow one to argue that the important effects of classroom desegregation are not to be explained by prior differences and selection processes.

## 3. Differences among Negro students by length of time in desegregated classes

To complete this chapter describing the extent of average differences among segregated and desegregated Negro students, two additional matters will be taken up. First, besides the comparisons based on current racial enrollments, information is available for students who have attended desegregated schools for different lengths of time. Some preliminary description of the effect of early attendance in desegregated schools will be given here. Second, up to this poine, segregated and desegregated Negro students have only been compared in terms of their academic performance and achievement level. Tables will be presented in this section showing contrasts on several attitudinal measures as well.

### 3.1 Early desegregation and achievement

Earlicr in this chapter, it was shown that Negro students who first attended desegregated classes in the early grades were more likely than the others to be enrolled in college prep programs and high track classes. Table lII. 17 shows these students also are achieving at a higher average level than those who first attended desegregated classes later in their schooling. Several details which underlie this generalization can be drawn for the values in Table III. 16.

1. When we consider differences in both the proportion of white classmates in a Negro student's present class and in the length of time he has attended desegregated schools, the effects come close to accounting for the racial gap in academic achievement. If the ninth grade Negro sțudents who have never attended desegregated classes are compared to those who first entered desegregated classes in their early elementary grades, the differences for each fàmily background group are: $6.62,11.29,9.52,8.39,12.24$, and 11.46 . The average of these six values is 9.92 , which is about seventy-five percent of a standard deviation on the test of verbal achievement. Since the gap in achievement between white and Negro students in the Metropolitan Northeast is about one standard deviation, the difference between the most segregated and the most desegregated Negro students is about threequarters of the racial achievement gap.

Table III. 17 presents effect parameters calculated from Table III.16, which point up several additional facts about early desegregation and Negro student achievement.
2. The effect of length of time in desegregated classes is not simply explained by the differences in family background of the ninth grade Negro students who first attended desegregated classes in the carly elementary grades and those who attended such classes later in their career or who have always had only Negro classmates. The effect parameter for length of time in desegregated classes is somewhat reduced when family background controls are imposed (the value +2.38 changes to +1.88 ); but it is by no means reduced to zero.
3. There are several results which suggest that desegregation in the very early elementary grades is where the greatest benefit for later learning is accomplished. Table III. 17 partitions the overall effect parameter value +1.88 into the components which indicated the differentials in achievement for desegregation changes in early and later grades. The achievement differential comparing changes from segregated to desegregated in the early rather than late elementary grades is larger than the differential for changes in late elementary rather than junior high or than desegregation in junior high rather than total segregation. There is a regular trend in these differentials comparing each category of "earliest grade desegregated" to the next highest category as the comparisons become earlier in a child's school career.
4. The effect of early school desegregation is little affected by the current proportion of white students in ninth grade Negro students' classes. The value of the effect parameter for length of time in desegregated classes is the same whether family background is
TASLE III. 16
STERAGE YERBAI ACHIEVEMENT OF MINTH GRADE NEGRC STYDENTS,
BY FAMLI BACKGROND, PROPORION WHITE CLASSATES,
AND EARIIEST GRADE IN DESEGREGTED CLASES

| ramily <br> Background | Proportion White Classmates | Earliest Grade in Desegregated Class |  |  |  |  |  |  |  | TOTAI |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1. 2 or 3 |  | 4. 5 or 6 |  | 7,8 or 9 |  | Yever |  |  |  |
| I | None | 256.92 | (197) | 254.01 | (80) | 253.87 | (148) | 254.95 | (122) | 255.35 | (547) |
|  | Less than half | 257.12 | (268) | 253.75 | (104) | 254.02 | (147) |  |  | 255.57 | (519) |
|  | About Half | 258.91 | (124) | 254.81 | (27) | 254.23 | (65) |  |  | 256.99 | (216) |
|  | More than Half | 261.57 | (141) | 258.78 | (45) | 256.12 | (57) |  |  | 259.77 | (243) |
|  | Total | 258.23 | (730) | 255.08 | (256) | 254.29 | (417) | 254.95 | (122) | 256.36 | (1525) |
| II | None | 256.17 | (126) | 257.70 | (53) | 256.28 | (120) | 257.55 | (49) | 256.68 | (348) |
|  | Less than Half | 250.42 | (271) | 255.88 | (84) | 256.51 | (92) |  |  | 258.95 | (447) |
|  | About Half | 260.00 | (109) | 259.36 | (25) | 257.85 | (41) |  |  | 259.40 | (175) |
|  | More than Half | 262.30 | (121) | 261.03 | (30) | 258.71 | (31) |  |  | 261.48 | (182) |
|  | Total | 259.86 | (627) | 258.08 | (192) | 256.89 | (284) | 257.65 | (49) | 258.73 | (1152) |
| III | None | 259.33 | (123) | 255.93 | (46) | 257.89 | (62) | 257.55 | (47) | 258.14 | (278) |
|  | Less than Half | 261.49 | (190) | 258.43 | (61) | 257.17 | (66) |  |  | 260.00 | (317) |
|  | About Half | 261.81 | (68) | 261.53 | (15) | 256.67 | (24) |  |  | 250.62 | (107) |
|  | More than Half | 267.07 | (97) | 263.05 | (20) | 265.08 | (35) |  |  | 26́. 22 | (152) |
|  | Total | 262.11 | (478) | 258.60 | (142) | 258.94 | (187) | 25:. 55 | (47) |  |  |
| IV | None | 259.75 | (127) | 257.78 | (51) | 258.67 | (91) | 257.58 | (53) | 258.78 | (322) |
|  | Less than Half | 263.76 | (229) | 259.65 | (46) | 258.10 | (67) |  |  | 262.10 | (342) |
|  | About Half | 263.79 | (95) | 260.50 | (24) | 259.27 | (26) |  |  | 262.43 | (145) |
|  | More than Half | 265.97 | (153) | 264.82 | (33) | 263.00 | (42) |  |  | 265.26 | (228) |
|  | Total | 263.48 | (604) | 260.27 | (154) | 259.37 | (226) | 257.58 | (53) | 261.81 | (1037) |

TABLE III. 16
(continued)

| Family <br> Background | Proportion White Classmates | Earliest Grade in Desegregated Class |  |  |  |  |  |  |  | total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1, 2 or 3 |  | 4. 5 or 6 |  | 7, 8 or 9 |  | Never |  |  |  |
| v | None | 265.31 | (145) | 260.56 | (55) | 260.86 | (79) | 258.06 | (33) | 262.58 | (312) |
|  | Less than Half | 264.79 | (227) | 261.31 | (54) | 260.02 | (64) |  |  | 263.36 | (345) |
|  | About Half | 266.71 | (109) | 261.69 | (29) | 261.29 | (31) |  |  | 264.85 | (169) |
|  | More than Half | 270.30 | (182) | 265.72 | (46) | 266.04 | (51) |  |  | 268.77 | (2;9) |
|  | Total | 266.73. | (663) | 262.25 | (184) | 261.85 | (225) | 258.06 | (33) | 264.73 |  |
| vI | None | 267.21 | (86) | 269.97 | (30) | 264.84 | (25) | 262.92 | (12) | 267.58 | (153) |
|  | Less than Half | 271.31 | (122) | 269.83 | (29) | 260.48 | (21) |  |  | 269.74 | $(1 ; 2)$ |
|  | About Half | 269.18 | (62) | 271.12 | (8) | 266.36 | (14) |  |  | 268.89 | (84) |
|  | More than Half | 274.38 | (125) | 272.92 | (24) | 273.40 | (30) |  |  | 274.02 | (1:9) |
|  | Total | 271.05 | (395) | 270.80 | (91) | 266.91 | (90) | 262.92 | (12) | 270.36 | (588) |

table III. 17
heighted parameters of desegregation effects on nivth graje

| Effect Variable | Effect Parameter |
| :---: | :---: |
| Length of time in desegregated classes ( 3 comparisons) | +2.38 |
| Length of time in desegregated classes, controlling family background (18 comparisons) | +1.88 |
| Earliest grade differentials: $4,5,6-1,2,3$ | +2.87 |
| 7,8,9-4,5,6 | +0.90 |
| Never - 7,8,9 | +0.73 |
| Length of time in desegregated elasses, controlling family background and proportion white classmates in present class ( 48 comparisons) |  |
| Categories of proportion white classmates: |  |
| None | +1.10 |
| Less than half | -2.42 |
| About half | +2.18 |
| More than half | +1.92 |
| Proportion white classmates ( 3 comparisons) | +2.16 |
| Proportion white classmates, controlling family background (18 comparisons) | +1. 88 |
| Proportion white classmates, controlling family background and length of time in desegregated classes (54 comparisons) | +1.61 |
| Categories of earliest desegregated grade: |  |
| 1, 2 or 3 | +1.92 |
| 4, 5 or 6 | +1.40 |
| 7, 8 or 9 | +0. 99 |

${ }^{\text {a }}$ The numbers in parentheses are the number of comparisons which were combined in the weighted average of acinievement increments.
controlled, or whether both family background and the proportion white classmates sn the student's present classes are taken into ge count. The value remains a constant +1.88 in both "cases. When the component parameters which combined to yield +1.88 under the two variable control conditions are examined, it appears that the ninth grade students who experienced desegregated schools in the early grades but who currently attend segregated classes, benefit least from these early desegregated experiences. Of the four groups of students defined by their present classroom racial composition, those with no white fellow-classmates have the smallest effect of early grade desegregation. While this suggests that early and sustained school desegregation is important, the evidence is not particularly strong: even those with no white students in their current classes show a positive effect of early desegregation; and the differences in effect parameters among the four groups are not large and do not follow a trend with increasing proportions of white classmates.
5. Just as controlling for proportion white classmates does not disturb the effect of length of time in desegregated classes, an effect of the proportion of white classmates remains when the time of first desegregated school experience is taken into account. The effect parameter for white classmates is +1.88 when students' family background is controlled, and is only slightly reduced to +1.61 when both categories of student family background and time of earliest desegregated class are fixed. In different words, the effects of early desegregated experience and current proportion white classmates are
additive. An achievement increment is evident for the average ninth grade Negro students due to each of these variables, with those whose experience in desegregated schools occurred first in the early grades and has been sustained until their present school grade having the highest achievement of all. The separate importance of early school desegregation is seen in another way when the +1.61 parameter for the current white classmates effect is partitioned among the gioups in the different categories of the variable measuring their first grade in desegregated class. There is a regular trend in parameter of effect for increases in present white classmates as the students' first grade in desegregated classes approaches the early elementary stage. For students who first entered desegregated classes in grades $1, .2$, or 3, the effect on achievement due to the racial composition of their current class is +1.92 ; for those who first enter desegregated classes in grades' 4, 5, or 6, the value is +1.40 ; and the value reduces to +0.99 for those most recently desegregated. The Negro students who appear to be möst influenced by attendance in currently desegregated classes are those who also had the benefit of early desegregation.
6. Apart from these special interactions of the two variables, the overall effect of early desegregation is of very much the same strength as the overall effect of differences in the students' current proportion of white classmates. The value of the effect parameters for these two variables are equal when only family background is controlled (+1.88). Controlling family background and the other variable, the value for length of time in desegregated school is +1.88 , and for
the current proportion of white classmates is $+1.66{ }^{1}$
Another factor needs to be checked about the effects of early school desegregation on the academic growth of Negro students which are drawn from Tables III. 16 and III. 17 .

### 3.2 Controls on regional migration

In the classic studies of Otto Kleinberg in the 1930's (1935, 1938, 1963) it was demonstrated that the performance of Southern-born Negro children in New York City on intelligence tests was related to the length of time they had been in the North. The students gained regularly in I.Q. with each grade they completed in the North. This suggests the possibility that the achievement differences just described between Negro ninth graders in the Metropolitan Northeast who had attended desegregated schools for different periods of time might be the result of differences in family migration patterns from the South rather than differences in their Northern school careers. If the students who。 entered desegregated schools later in their school career have recently migrated from the South, this fact may explain their lower achievement scores rather than the racial character of their schooling. In an effort to isolate the student population which most likely only attended Northern schools, two things were done.

The student questionnaire in the ninth grade had two items on geographic region of origin. Each student was asked in what state he

[^9]FOR NINTH GRADE NEGRO STUDENTS BORN IN THE NORTH*:
ALERAGE VRBAL AAHIEVEMENT, BY FAMILY BACKGROCND, PROPORTIU
WHITE CLASSMATES, AND EARLIEST GRADE IN DESEGREGTED CLASSES

| Family <br> Sackground | Proportion White Classmates | $\therefore \quad$ Earliest Grade in Desegregated Ciass |  |  |  |  |  |  |  | -0: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1, 2 or 3 |  | 4,5 or 6 |  | 7,8 or 9 |  | Sever |  |  |  |
| I | None | 256.78 | (151) | 256.24 | (50) | 254.70 | (121) |  |  |  |  |
|  | Less than Half | 257.15 | (214) | 254.10 | (68) | 254.38 | (94) | 235.84 | (98) | 255.90 |  |
|  | About Half | 260.05 | (88) | 255.22 | (22) | 254.24 | (94) |  |  | 255.90 | (375) |
|  | More than Half | 261.32 | (118) | 259.20 | (35) | 254.24 | (49) |  |  | 257.59 | (159) |
|  | Total | 258.36 |  |  | (35) | 251.86 | (3i) |  |  | 260.26 | (190) |
|  |  |  |  | 255.87 | (175) | 254.91 | (301) | 255.84 | (98) | 256.86 | (1145) |
| II |  | 255.86 | (97) | 255.84 | (38) | 255.64 | (i7) | 258.35 | (34) | 256.13 |  |
|  | Less than Half | 260.76 | (209) | 257.90 | (40) | 256.62 | (65) |  |  |  |  |
|  | About Half | 261.21 | (80) | 258.70 | (20) | 257.34 | (26) |  |  | 259.54 | (314)" |
|  | More than Half | 262.42 | (100) | 263.70 | (20) | 260.12 |  |  |  | 260.01 | (126) |
|  | Total | 260.20 | (486) | 258.36 |  | 260.12 | (24) |  |  | 262.21 | (144) |
| III |  |  |  |  |  | 256.76 | (292) | 258.35 | (34) | 259.06 | (830). |
|  | Less than Half | 260.81 | (93) | 257.33 | (33) | 259.03 | (46) | 259.50 | (32) | 259.64 |  |
|  | Less than Half | 261.68 | (147) | 260.41 | (35) | 258.11 | (46) |  |  |  |  |
|  | About Half | 263.40 | (48) | 258.56 | (7) | 257.00 | (18) |  |  | 260.76 | (228) |
|  | More than Half | 267.40 | (82) | 265.31 | (16) | 268.61 | (26) |  |  | 261.36 , | (73) |
|  | Total | $\stackrel{262.95}{ }$ | (370) | 260.01 | (91) | 260.28 |  |  |  | 26i.38 | (124) |
| IV | None | 259.41 |  |  |  |  |  | 259.50 | (32). | 261.77 | (629) |
|  |  | 25.41 |  | 259.52 | (34) | 258.91 | (70) | 258.99 | (39) | 259.22 | (248) |
|  | About Half | 264.52 | (193) | 260.84 | (32) | 257.79 | (49) |  |  | 262.89 | (274) |
|  | More than Half | 264.14 | (74) | 259.50 | (18) | 260.86 | (21) |  |  | 262.79 |  |
|  |  | 267.25 | (120) | 265.66 | (26) | 263.25 | (36) |  |  |  |  |
|  | Total | 264.04 | (492) | 261.35 | (110) | 259.72 | (176) | 258.99 | (39) | 262.51 |  |

TABLE III. 18


[^10]tabie III. 19
FOR NINTH GRADE NEGRO STLDENTS WHOSE MOTHER WAS BORS IN THE : XORTH: PROPORTION WHITE CLASSMATES AND EARLIEST GRADE TN DESEGREGATED CLASSES

TABLE III. 19
(continued)

| Family <br> Background | Proportion White Classmates | Earliest Grade in Desegregated Class |  |  |  |  |  |  |  | TOTAL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1, 2 or 3 |  | 4, 5 or 6 |  | 7, 8 or 9 |  | Never |  |  |  |
| v | None | 265.10 | (63) | 259.22 | (26) | 259.98 | (46) | 257.69 | (16) | 261.74 | (151) |
|  | Less than Half | 264.77 | (122) | 257.60 | (28) | 258.01 | - (31) |  | . | 262.50 | (181) |
|  | About Half | 267.45 | (52) | 258.36 | (14) | 260.25 . | (20) |  |  | 264.30 | (86) |
|  | More than Half | 271.46 | (103) | 269.70 | (26) | 266.31 | (32) |  |  | 270.15 | (161) |
|  | Total | 267.27 | (340) | 261.51 | (94) | 261.12 | (129) | 257.69 | (16) | 264.70 | (579) |
| vI | None | 266.08 | (47) | 274.47 | (13) | 264.33' | (15) | 259.50 | (8) | 266.44 | (83) |
|  | Less than Half | 272.58 | (55) | 259.59 | (17) | 260.59 | (12) |  |  | 270.26 |  |
|  | About Half | 269.95 | (37) | 269.74 | (4) | 268.51 | (6) |  |  |  |  |
|  | More than Half | 276.07 | (64) | 272.11 | (10) | 276.56 | (18) |  |  | 275.74 | (92) |
|  | Total | 271.70 | (203) | 271.62 | (44) | 268.26 | (51) | 259.50 | (8) | 270.53 | . (366) |

was born, and also in what state his mother was born. Table III. 18 presents the same cross-tabulation as Table III.16, except that all students who reported they were born in the South were eliminated in the tabulation. Table III. 19 eiiminates from consideration the students who reported their mothers were born in the South". If region of origin accounts for the achievement differences between Negro students who entered desegregated classes for the first time in the early elementary grades compared to the others, the effects in Tables III. 18 and III. 19 should be greatly reduced from those evident in Table III.16.

Table III. 20 summarizes effects of early desegregation from Tables III.16, III.18, and III.19, and shows that controling for region of origin does not change the results. When family background is controiled, the parameter for the effects of length of time in desegregated schools is very much the same whether calculations are based on all ninth grade Negro students in the Metropolitan Northeast sample, or only those who were born in the North or whose mothers were born in the North. The values are $+1.88,+1.80$, and +2.23 . Taking into account both students' family background and the proportion of white students in their present classes, the picture is much the same. The effect parameter under these control conditions is +1.79 for the entire Metropolitan Northeast sample of ninth grade Negro students, and is actually larger in the subsamples which eliminate students who are Southern-born or have Southern-born mothers. These values are +1.92 and +2.04 . These differences, though small, suggest that Negro students who have been least exposed to the Southern environment are most likely to benefit

TABLE III. 20.
WEtGHTED PARAMETERS OF EFFECT OF LEINGTH OF TIME IN DESEGREGATED CLASSES ON NINTH GRADE NEGRO STUDENT VERBAL ACHIEVEMENT, UNDER DIFFERENT CONTROL CONDITIONS, BY REGIOM.AL MIGRATION PATTERNS

| Effect Variable | Effect Parameter |  |
| :---: | :---: | :---: |
| $=$ |  |  |
| length of time in desegregated classes, controlling |  |  |
| family background (18 comparisons) | +1.88 |  |
| Earliest desegregated grade differentials: |  |  |
| 4,5,6-1,2,3 |  | +2.87 |
| 7,8,9-4,5,6 |  | +0.90 |
| Never - 7,8,9 |  | +0.73 |
| For students born in the North, Length of time in desegregated classes, controlling family background (18 comparisons) | +1.80 |  |
| Earliest desegregated grade differentials: |  |  |
| 4,5,6-1,2,3 |  | $\pm 2.77$ |
| 7,8,9-4,5,6 |  | +1.14 |
| Never - 7,8,9 |  | +0.37 |
| For students whose mothers'were born in the North, |  |  |
| Length of time in desegregated classes, controlling |  |  |
| family background (18 comparisons) | +2. 23 |  |
| Earliest desegregated grade differentials: |  |  |
| 4,5,6-1,2,3 |  | +3.46 |
| 7,8,9-4,5,6 |  | +1.22 |
| Never - 7,8,9 |  | +0.83 |
| * |  |  |
| Length of time in desegregated classes, controlling |  |  |
| family background and proportion white |  |  |
| classmates (48 comparisons) | +1.79 |  |
| For students born in the North, Length of time |  |  |
| in desegregated classes, controlling family background and proportion white classmates |  |  |
| (48 comparisons) | +1.92 |  |
| For students whose mothers were born in the North, |  |  |
| Length of time in desegregated classes, controlling |  |  |
| family background and proportion white classmates (48 comparisons) | +2.04 |  |

from early desegregated schooling in the North.
This is not to suggest that the region of origin itself had no effect. This can be seen by comparing the values in Table III. 16 with Table III. 18 and III.19. Reading down the "total" column and comparing Table III. 16 to III. 18 , the averages are lower in Table III. 18 in twenty-eight out of the thirty cases. Eliminating the Southernborn students from the calculations served to increase the achievement averages; thus, the Southern-born students were achieving at a lower level. The result is not the same when students whose mothers are born in the South are eliminated from the tabulations: Comparing the values in the "total" column of Tables III. 16 and III. 19 for students who are matched on the index of family background and the racial composition of their recent classes, the values of Table III. 19 are larger in less than half of the cases (twelve of thirty) suggesting that the effects of experiences in the Southern culture are eiiminated in a generation. This is consistent with Kleinberg's research which showed that Negro students who had been in the North for a number of years approached the I.Q. levels attained by Northern-born Negroes (Kleinberg, 1935).

### 3.3 Classroom racial composition, early desegregation and student attitudes

To complete this chapter describing the differences between Negro students in segregated and desegregated situations, student attitudes will now be examined. Tabulations similar to Table III. 16 were performed on six attitude measures from the survey question-
naire. Table III. 21 presents the summary effect parameters calculated from these tabulations. In addition to the tabulatiuns performed on the total ninth grade Negro sample, analyses were performed separately for boys and girls. Effect parameters from these tabulations are also shown in Table III.21.

The six attitude items selected for this investigation willallow some preliminary judgments on the way school desegregation affects Negro students' aspiratious, self-image, sense of opportunity and racial attitudes.

Aspirations and self-image. - From the review in Chapter I, it might be deduced that the potentially detrimental influences of school desegregation would most Jikely appear operating on Negro students' aspirations and self-image. The experience of attending a school with more stringent standards for success and sterner academic competition was shown in Davis' study of college students to have a negative effect on aspirations (Davis, 1966). Moreover, it was suggested in the OE Report that, while some other Negro student attitudes showed positive effects of desegregation, Negro self-image was influenced in a negative direction.

There are three measures shown in Table III. 21 which will be used to examine these possibilities. First, a comparison is made between

[^11]table III. 21
WEIGHTED PARAMETERS FOR EFFECT OF PROPORTION HHITE CLASSMATES
AND EARIIEST DESEGREGATED GRADE ON SELECTED ATITITDES OF
NLNTM GRADE NEGRO STLDENTS, BY SEX, CNDER DIFFERENT CONIROL CONDITY

| 1: Effeçt Variable | Dependent Variable |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | College Plans |  |  | Desire to be Best in Class |  |  | Self Image |  |  | Control of Environment |  |  | Choice of White Classmates |  |  | Unoice $0 i$ Whate Friends |  |  |
|  | Total | Soys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | 3oys | Girls | Total | Sovs | Girls | Total | 3oys | ¢ifls |
| Sex, ${ }^{(a)}$ given family background (1) | . 028 |  |  | . 021 |  |  | .049 |  |  | -. 002 |  |  | -.010 |  |  | -. 031 |  |  |
| Family background, given sex (2) | $\underline{.278}$ |  |  | . 064 |  |  | . 060 |  |  | . 150 |  |  | . 030 |  |  | . 038 |  |  |
| Proportion white classmates, given family background (3) | . 021 | . 034 | . 007 | -. 028 | -. 022 | -. 032 | . 025 | . 019 | . 034 | . 056 | . 048 | $\underline{.066}$ | $\underline{.} 031$ | . 019 | . 044 | . 048 | . 0.52 | . $04{ }^{\circ}$ |
| Proportion white classmates, given family background and earliest desegregated grade (4) | . 016 | . 030 | . 006 | -. 024 | -. 018 | -. 025 | . 014 | . 010 | . 025 | . 046 | . 043 | . 060 | . 032 | . 021 | . 043 | . 045 | . 053 | . 040 |
| Earliest desegregated grade, given family background ( 5 ) | . 042 | . 021 | . 066 | . 001 | . 026 | -. 017 | . 098 | $\underline{+14}$ | . 088 | $\underline{-126}$ | $\underline{-125}$ | $\underline{.129}$ | . 044 | . 022 | . 05 | . 024 | . 004 | .04s |
| Earliest desegregated grade, given family background and proportion white classmates $(6)$ | . 040 | . 038 | . 050 |  | . 034 | . 005 | . 054 | . 034 | . 053 | $\underline{-085}$ | $\underline{.102}$ | $\underline{-}$ | . 010 | . 010 | . 008 | . 005 | . 008 | -. 002 |

(a) A positive value indicatea that girls were higher than boys.
the percentages of students in the different groups who responded "definitely yes" to the question "Are you planning to go to college?". Another measure of student aspirations, concerning more immediate educational goals is drawn from investigating the students who reported they wanted to be "one of the best students in my class" rather than be satisfied with some other academic ranking. Finally, an indicator of students' self-esteem is the percent in each group who disagree to the statement, "If I could change, I would be someone different from myse1f."

The most general result shown in Table III. 21 for these variables is that desegregation has no appreciable effect, positive or negative, on either Negro student aspirations or self-image. None of the effect parameters are large which measure the influence of differences of the racial composition of the students' current class on the three attitude measures. Looking at the values in the third and fourth rows of Tables III. 21 for the first three dependent variables, none of the effect parameters reach the . 05 percent level of statistical significance. ${ }^{1}$ The only exceptions for these three items which deviate from the pattern of small differences are for the effects of desegregation in the early grades, and the influences in these cases are positive, not detrimental. Rows five and six of the Table give parameters showing that Negro student self-esteem is highest for those ninth grade students who have attended desegregated classes since early elementary grades. The value of .098 for the entire sample is significant at

[^12]the . 01 level; and the parameters calculated for the boys and gir1s scparately are also large, with the effect for boys being somewhat greater. It is interesting to note that this larger effect on Negro boys' self-image from early desegregation occurs together with the finding that girls have a generally higher self-image than boys when on1y the students' family background is controlled. This sex difference is shown by the value . 049 in the top row. A1so, with regard to student self-image, there is some indication that although differences in current classroom racial composition have no appreciable effect when considered alone, this factor does explain some part of the positive effect of early desegregation. When the current proportion of white classmates is added to family background as a control variable, the parameter for early desegregation reduces from. 098 to . 054 . So, while early school desegregation is the more important factor, the fact that students who first attended desegregated classes in the early grades are more likely to be in desegregated classes in their later grades also serves as an influential factor.

The other exception to the absence of general effects on selfimage and aspirations is that gir1s who had attended desegregated classes in the early grades are more likely than other girls to have definite plans for college. In contrast to se1f-image, the effect is larger for the sex which also has the higher values to begin with. The value of .028 in the first row shows that Negro girls more frequently have definite college plans than boys from similar family backgrounds.

There is one case where negative effects appear. Although the
differences are not large, these results are of interest. The only negative effects for Negro students whose current classes differ in racial composition are on their desire to be one of the best students in their class (rows three and four of Table III.21). Here the tendency is for fewer Negro students to hold this desire as the proportion of white classmates increases. This pattern is true for boys and girls alike, and whether family background and early desegregation is controlled. The negative influence is somewhat stronger for girls than boys, although the differences for either group are not large enough to be statistically significant. This pattern will be further analyzed in the next chapter which treats the level of competition as a factor in desegregated schools.

Sense of opportunity and racial attitudes. - In contrast to the generally small differences in self-esteem and aspirations due to desegregation, the pattern is one of significant positive influences on students' feeling of opportunity and on their racial attitudes. There is some indication that both the length of time a student has attended desegregated classes and the racial composition of his present classes have positive effects on both these variables for ninth grade Negro students.

For the measure of a student's feeling that he has an opportunity to control his own future, the pattern of large positive effects is almost complete. The item used to gauge this attitude this attitude is, "Agree or disagree: Good luck is more important than hard work for success." When only family background is taken into account, Table III. 21 shows the parameter for early grade desegregation (.126)
is larger than the value for the effect due to white students in current classes (.056). In both cases the effect for girls is somewhat larger than for boys. But, together with this evidence that desegregation in the early grades is a more important influence than current classroom composition on Negro students' sense of opportunity, there are indications that both desegregation factors operate in additive fashion. The parameters for each factor reduce when the other factor is added to the family background.control. The early desegregation parameter of .126 reduces to . 085 (still signigicant at . 01 level) when both family background and proportion white classmates are taken into account. Similarly, the classroom racial composition parameter value of .056 becomes .046 when early desegregation is imposed as an additional control variable. This means that some part of the explanation for each desegregation factor is contained in the fact that attendance in a currently desegregated class is related to whether a student attended desegregated elementary grades. In other words, both stages of desegregation contribute a positive influence on Negro students' feelings of mastery over their own fate: the student who is likely to be highest in this feeling is the one who both currently attends desegregated classes, and has been enrolled in such classes for an extended time.

Of all the attitude items, the desegregation effects are strongest and most constant for this measure of sense of opportunity and control of environment. This gains its importance from the findings contained in the $O E$ Report that this attitude most dramatically distinguished

Negro from white students, and was also the variable which best accounted for the achievement differences among Negro students (Coleman, et al., 1966). So, the aspect which seems to be among the most important clements in explaining the achievement retardation of Negro students, is also a factor which appears particularly susceptible to positive influences from desegregation.

Important differences also appear between Negro students in segregated and desegregated situations in terms of their attitudes about interracial contacts. Parameters are shown in Table III.21 based on tabulations of the percent of Negro students who did not choose all Negro situations for the two questions, "If you could be in the school you wanted, how many of the students would you want to be white?" and "If you could have anyone you wanted for your close friends, how many would be white?"

In contrast to the positive effects on students' sense of opportunity which came from Negro students exposed to whites in their current classes as well as from desegregation in their earlier grades, only the current classroom composition appears to have strong effects on Negro students' racial attitudes. In Table III. 21 there is a positive effect on both the frequency of choices of integrated classroom groups and of integrated friendship groups. These effect parameters remain undiminished when controls are imposed on the time of earliest desegregated classroom experience as well as the student's family background. The parameters with only family background taken into account are .031 and .048 , and with the two control variable situations, the
values are . 032 and .045 . On the other hand, the statistically significant parameter measuring the effect due to early desegregation upon choice of classmates, is greatly reduced when controls for current classroom racial composition are imposed. The value reduces from . 044 to .010 , suggesting that the early desegregation effect is simply explained by the greater likelihood of students in currently desegregated classes to have also attended desegregated elementary classes.

There are differences in racial choices between the boys and girls, with girls more frequently choosing all-Negro situations than boys, especially when it comes to a selection of friends. The boys were more likely to prefer integrated situations. Although with choice of friends, both boys and girls showed significant influences of exposure to whites in their classrooms on their likelihood to choose interracial situations; only the girls showed such an influence for choice of classmates.

The differences which exist in racial attitudes in segregated and desegregated situations are particularly impressive when it is recognized that the necessity to carefully control for differences in family background is not as severe for these items as for the other attitude measures. Of all the attitudes considered here, racial attitudes were the only ones which were not positively associated with family background. ${ }^{1}$ For college plans, the effect of family background was par-

[^13]ticularly striking. But for racial attitudes, it was only differences in exposure to desegregated classroom which seemed to have any influence in changing Negro students' reluctance to associate with whites.

## 4. Summary

This chapter has made no attempt to explain differences between Negro students in segregated and desegregated situations in terms of the different situational factors which may distinguish these schools and classrooms. Instead, the intention has been to lay the groundwork for these attempts by describing the extent of Negro student differences in the contrasted situations which cannot simply be explained by differences which preceded their placement in the raciaily different schools or classes. The activity for the succeeding chapters will be to explore some alternative explanations for the differences which have been uncovered.

Three different measures of the kind of segregated or desegregated schooling have been analyzed in this chapter. Students were compared whose schools had racially different enrollments, and differences were also checked where the classroom racial proportions varied. Finally, the grade at which a Negro student's experience with racially mixed classes first began was examined for its effects. Several selection processes were taken into account, in an attempt to isolate differences which could be said to result from the students' experiences in racially different schools. The processes included differences which precede a child's enrollment in school (his family background, and lis region of origin) and selection processes within the school
(the placement of students in different programs and tracks).
The two most important general results were the discovery of the importance of classroom racial composition differences rather than school desegregation as the effective agent for change in academic achicvement; and the failure to discover any large negative influences on Negro students' personality and attitudes from the strains which are believed to accompany descgregation for these students.

In the investigation of achievement differences, it was shown that the positive influence of school desegregation can be largely offset if the Negro students within desegregated schools are kept in segregated classrooms. The positive influence of desegregated classes was evident within both mostly white and mostly Negro schools (with the exception of schools which were almost entirely composed of Negro students). On the other hand, Negro students in segregated classes would achieve just as well in segregated as desegregated schools and perhaps somewhat better.

The comparison between ninth grade Negro students who had attended desegregated classes from their earliest grades with other Negro students showed that the length of time a student has attended desegregated schools also has a positive effect on his achievement. This factor operates over and above the influence of the immediate classroom composition, so that students whose present and past classrooms have been desegregated are achieving at the highest average level of all the groups. The dual effects of the stages of desegregation were in evidence, as well, for certain attitude measures drawn from the
student questionnaires.
Positive desegregation effects were generally noticeable for Negro students' sense of opportunity and mastery of their future, and for their likelihood to value associations with groups which were integrated. But beyond these positive effects, it is noteworthy that little evidence was uncovered of any detrimental influences of desegregation on Negro students. The influence was small, but positive, on measures of aspirations and self-esteem, with early desegregation showing a significant relationship with a positive self-image of Negro students. The only negative effects which appeared at all were again small (not reaching statistical levels of significance) and had to do with students' perception of their rank in class. Fewer Negro students in the mostly white classes expressed a desire to be one of the best students in their class.

The next chapter will continue the search for signs of detrimental effects, and focus particularly on the level of competition in desegregated classes as a factor which offers an explanation for observed differences.

CHAPTER IV

## ON THE EFFECTS OF $2 H E$ LEVEL OF COMPETITION IN DESEGREGATED CLASSROOMS

With this chapter, we begin an investigation of the five situational factors outlined in the first two chapters. Having shown that differences in Negro student academic performance and attitudes cannot simply be explained by selection processes, the next goal is to determine which features of desegregated schooling explain these various differences. This chapter will both further describe the character of the differences in attitudes and achievement between segregated and desegregated Negro students and focus on one situational factor of desegregated schooling: the level of academic competition in the classrooms.

For our discussion, the potential strains on Negro students which come from the higher level of academic competition in desegregated schools can be located at two different points in time. First, we can speak of the problems which arise for Negro students because they enter desegregated schools with less preparation for high academic performance than the other students, created by the typical differences between the social and economic class level of Negro and white families. A central question is whe iher many Negro students are unable to survive academically given the initial disadvantages among Negro students in desegregated schools. Second, beyond the influence which the initial differences in preparedness
may have on Negro studenis' academic growth, it is important to investigate whether the continuing academic rank in class of Negro students has important effects on their attitudes and personalities. Liven if over time, all Negro students are able to survive the disadvantages with which they first enter desegregated schools, it is questionable whether their improvement in academic proficiency due to descgregation will be sufficient to leave them in the same position relative to their classmates as they would have been in desegregated schools. The question is whether the change in Negro students' academic standings among classmates after desegregation will influence their aspirations, self-concept, sense of opportunity or racial attitudes.

Because Negro students are less likely than whites to bring to school certain advantages for learning which come from growing up in a home which is economically stable and where the parents have a high educational level, Negro students will be in a poor relative position when they first enter desegregated schools. The question is whether the relative preparedness with which Negro stidents enter desegregated schools will be such a hardship that there will be many cases of academic failure among these students. We already have seen that, on the average, Negro students from each family background category are achieving at a higher level when they are in classes with mostly white classmates. But an average does not reveal the frequency with which students may be found at the extremes of the distribution: the number of very high and very
low achieving students. For example the pattern of increasing averages could exist even though a larger frequency of desegregated Negro students existed among both the very high achievers and the very low achievers. So, a closer inspection will be made of the distributions of Negro achievement to investigate such possibiiities. Another indication that Negro students' relative preparedness in desegregated classes is a serious strain would be seen if the average rate of academic growth due to desegregation was smallest among the students from the poorest background. So, the achievement differences due to desegregation will be compared for students from different backgrounds.

In terms of the effect that relative rank in class may have on Negro student attitudes, several tabulations wili be presented, showing questionnaire responses for Negro students who have the same level of achievement, but are in segregated and desegregated classes where their relative academic standing differs. The direction of attitude differences for students, who move from below slightly average in ranking to greatly below average after desegregation will be compared to those who would be above average in segregated classes but are below the mean of the desegregated classmates.

## 1. Variability of negro student achievement in desegregated classes

The previous chapter only discussed differences in the location of the distribution of achievement scores for Negro students in seg-
regated and desegregated situations. On the average, Negro students seemed to derive important benefits from desegregated schools for the rate of their academic development. But a more complete description of the pattern of differences in test performance will allow some conclusions on the extent to which desegregated schools may at times create a severe strain on the learning process of some Negro students.

There were some preliminary tabulations of these data in the $O E$ Report which showed that accompanying the upward trend in Negro students ${ }^{\text {B }}$ average achievement scores was a corresponding trend in the variability of the scores. Negro students wi.th more than half white classmates had both the highest average achievement scores and the largest standard deviation of test performance. It was suggested that this pattern of variation in test scores might imply that both very high scores and very low scores occur more frequently for desegregated Negro students than for segregated students (Coleman, et al., 1966). Katz (1967) has pointed to the greater variability in desegregated Negro students' scores as some support for his experimental studies which suggest that desegregated schools can exert both positive and negative influences on Negro students' academic growth. As was mentioned earlier, Katz saw the level of competition as one potentially harmful influence on Negro student learning.

If it is true that both very high and very low levels of academic performance are most frequently found among Negro students in desegregated schools, the previous training of Negro students in light
of line more exacting academic standards in desegregated classes is a likely explanation for this pattern. Under this view, desegregated schools act to intensify the influence of the previous background of the students. Those who have been particularly disadvantaged because they have grown up in a lower social class environment and have attended inferior schools in the early grades will find that desegregated schools only exacerbate their disadvantages. Finding the standards so harsh that achieving a passing grade is barely possible, these students may give up the effort so that their academic growth will be even more stunted than if they were in a less competitive situation. On the other hand, this explanation would see more advantaged Negro students calling up previously unused resources for meeting the challenge of the higher academic standards, and being motivated to higher rates of learning in the desegregated schools. With a significant fraction of both relatively advantaged and disadvantaged Negro students attending desegregated schools, these notions would predict a bifurcation of achievement scores: more high achievement and nore low achievement.

However, a closer inspection of the distribution of the achievement scores of Negro students in racially different classrooms does not support these conjectures. The difference in the shape of the distribution of scores of Negro students with mostly white classmates compared to the segregated Negro students is not because of greater frequencies of students at both extremes of the distribution. On the contrary, those students in desegregated classes do not

TABLE IV. 1

SUMMARY MEASURES OF VERBAL ACHIEVEMENT TEST PERFORMANCE* OF NINTH GRADE NEGRO STUDENTS, BY PROPORTION WHITE CLASSMATES

| Characteristic | Proportion White Classmates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | None | Less than Half | About <br> Half | More than Half |
| Average ( $\overline{\mathrm{x}}$ ) | 20.95 | 21.86 | 22.91 | 26.39 |
| Median (med.) | 19.83 | 20.66 | 22.07 | 25.73 |
| Standard Deviation ( $\sigma$ ) | 9.70 | 10.03 | 10.44 | 11.61 |
| Coefficient of Variation $(\sigma / \bar{x})$ | . 463 | . 459 | . 456 | . 440 |
| $\left(\frac{3(\bar{x} \text {-med })}{\sigma}\right)$ | +.346 | $+.359$ | +. 241 | +. 170 |
| n | 1579 | 1786 | 693 | 1016 |

*Number correct on a test of sixty items.

TABII: IV. 2
 OF NIMTII GRADI: NE:GRO STUDENTS, BY FAMLI.Y bac:kgeround ANI) PROPORTION WIITH: (IIASSMATIS

| Family <br> backgromid | Characterlatle | Proportion White diassmates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | l.ess than llalf | About Half | More than Ilalf | Totni |
| 1 | $\overline{\mathrm{x}}$ | 17.91 | 18.23 | 18.81 | 21.25 | 18.41 |
|  | Med | 17.10 | 17.11 | 17.17 | 20.25 | ------ |
|  | $\sigma$ | 8.13 | 8.25 | 8.89 | 10.57 | 8.74 |
|  | O\% | . 454 | . 453 | . 473 | . 497 | . 475 |
|  | Skewness | +. 299 | +.407 | +. 553 | $+.283$ | ------ |
|  | n | (436) . | (464) | (176) | (183) | (1387) |
| 11 | $\bar{x}$ | 19.44 | 20.74 | 21.18 | 22.45 | 20.52 |
|  | Med | 19.41 | 19.50 | 19.90 | 21.25 | ------ |
|  | $\sigma$ | 8.29 | 9.34 | 10.27 | 9.92 | 9.26 |
|  | $\sigma^{-} / \bar{x}$ | . 426 | . 450 | . 485 | . 442 | . 451 |
|  | Skewness | $+.001$ | +. 398 | +. 374 | +. 362 | ----- |
|  | 11 | (255) | (361) | (117) | (141) | (911) |
| III | $\bar{x}$ | 20.41 | 21.94 | 22.65 | 25.64 | 21.91 |
|  | Med | 19.40 | 21.42 | 22.25 | 25.71 | ------ |
|  | $\sigma$ | 9.34 | 8.85 | 10.49 | 10.62 | 9.75 |
|  | $\sigma / \mathrm{x}$ | . 457 | . 403 | . 463 | . 414 | . 440 |
|  | Skewness | +. 324 | +. 176 | $+.114$ | -. 020 | ------ |
|  | 11 | (234) | (247) | (85) | (140) | (747) |
| IV | $\overline{\mathbf{x}}$ | 20.99 | 23.04 | 23.84 | 26.09 | 23.15 |
|  | Med | 20.15 | 21.83 | 21.75 | 25.50 | ------ |
|  | $\sigma$ | 9.64 | 9.91 | 10.79 | 10.75 | 10.36 |
|  | $\sigma / \bar{x}$ | . 459 | . 430 | . 453 | . 412 | . 448 |
|  | Skewness | +. 262 | +. 366 | +. 581 | $+.165$ | --..-- |
|  | n | (267) | (264) | (112) | (187) | (861) |

TABLE LV. 2
(continued)

| Family <br> Background | Characteristic | Proportion White Clasamates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | l.ess than Half | About <br> Half | More than Half. | total |
| v | $\bar{x}$ | 24.63 | 23.47 | 26.03 | 29.26 | 25.37 |
|  | Med | 23.69 | 22.54 | 26.30 | 30.33 | --* |
|  | $\sigma$ | 10.09 | 10.11 | 9.76 | 11.54 | 10.72 |
|  | $\sigma / \vec{x}$ | . 410 | . 431 | . 375 | . 394 | . 442 |
|  | Skewnesa | +. 279 | +. 276 | -. 083 | -. 278 | ----- |
|  | n | (258) | (293) | (131) | (220) | (934) |
| VI | $\overline{\mathbf{x}}$ | 27.78 | 30.05 | 28.89 | 33.48 | 30.10 |
|  | Med | 27.12 | 30.07 | 31.33 | 34.62 | --".- |
|  | $\sigma$ | 11.30 | 12.10 | 9.92 | 11.63 | 11.72 |
|  | $\sigma / \tilde{x}$ | . 407 | . 403 | . 343 | . 347 | . 389 |
|  | Skewness | +. 166 | -. 005 | -. 738 | -. 294 | -----* |
|  | n | (129) | (157) | (72) | (145) | (512) |

cluster in the low score regions to the same extent as other Negro students.

Table IV. 1 shows both the mean and standard deviation of verbal achievement scores for ninth grade Negro students in racially different classes. (Some other summary measures are shown in this table also, which will be discussed shortly.) This table shows the same pattern for the verbal achievement test as was described in the OE Report for other tests: Negro students in classes where more than half of their classmates are white have higher average scores together with a larger standard deviation in the scores. Table IV. 2 presents similar values for students grouped by their family background characteristics. The pattern of differences in means and standard deviations is the same when students from similar backgrounds are compared. Further investigation of the character of the distributions of test scores clarifies what meanings of these differences in standard deviations are appropriate and what possible implications are misleading.

First, the standard deviation as a summary measure of the homogeneity of a distribution has frequently been found to be a function of the mean of a sample on which a characteristic is being measured. Notice, for example, in Table IV. 2 that the values of the standard deviation grow with the means as the groups at increasing family background levels are compared. As such, using the standard deviation as a measure may give misleading notions on the difference in homogeneity of two populations where the average value differs on the characteristic of interest. Another measure of homogeneity
(or dispersion) which has been suggested to counteract this tendency of the standard deviation is the coefficient of variability, which simply expresses the standard deviation relative to the mean of the population. ( $V=\sigma / \overline{\mathrm{x}}$ ) With this measure, there is little evidence that any group of students from classes with a given racia mix is any more homogeneous in verbal skills than the other. The difference between the groups on this measure are very small, and there is no regular trend evident in Table IV.2. If anything, looking at the homogeneity of each of the groups relative to their average, there is a slight tendency for the coefficient of variation to be smaller rather than larger among those in mostly white classes (See $V$ in Table IV.1).

The complete frequency distributions are shown in the next Table and figures. Table IV. 3 gives the cumulative percentage distribution of test scores for Negro students classified by their family background and by the racial composition of their classes. Figure IV. 1 shows the distribution of scores of the Negro students from totally segregated classes and Figure IV. 2 compares the frequency distributions in these two classroom situations for six groups of Negro students who are similar on the family background index. Several things are worth noting from these distributions.

1. Just as some students can be found from the poorest social class category who receive very high scores, and some very low scores appear for a few students in the highest family background group, it is also true that there are Negro students who are among the highest
table it 3


| Family <br> Background | Proportion inite Classmates | Number Correct on Verbal Acnievement Test (50) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | $40-4$ | +5-4 | 52- |
| 1 | None | 1.4 | 14.2 | 39.9 | 64.0 | 79.8 | 89.9 | 95.4 | 98.0 | 99.8 | 100.0 | ---- |
|  | Less than Half | 1.5 | 12.9 | 36.0 | 63.2 | 77.4 | 89.6 | 95.2 | 98.5 | 99.8 | 100.0 | ----- |
|  | About Half | 1.1 | 11.4 | 38.1 | 59.7 | 76.1 | 86.9 | 94.3 | 97.2 | 98.3 | 100.0 | ----- |
|  | More than Half | 2.2 | 10.9 | 30.5 | 49.1 | 66.6 | 78.0 | 87.9 | 93.9 | 98.3 | 98.8 | 100.0 |
| II | Yone | 1.2 | 9.4 | 32.6 | 53.0 | 73.7 | 87.8 | 93.: | 98.8 | 99. | 100.0 | ---- |
|  | Less than Half | --- | 8.0 | 28.8 | 52.6 | 69.5 | 86.0 | 91.4 | 95.6 | $9 \times .3$ | 9.2 | 100.0 |
|  | About Half | ؛. 6 | 7.7 | 29.1 | 50.4 | 67.5 | 80.3 | 92.3 | 93.2 | 95.- | 97.4 | 100.0 |
|  | More than Half | 4.4 | 4.2 | 20.5 | 44.6 | 65.9 | 80.1 | 87.2 | 92.9 | $9{ }^{9} .1$ | 99.9 | ----- |
| III | None | 0.8 | 12.0 | 28.6 | 52.6 | 70.1 | 85.5 | 91.9 | 95. | 97.4 | 99.5 | 100.0 |
|  | Less than Half | ----- | 4.4 | 21.4 | 44.1 | 67.6 | 81.8 | 87.8 | 90.3 | 98.8 | 100.0 | ----- |
|  | About Half | - | 4.7 | 24.7 | 44.7 | 60.0 | 82.3 | 85.8 | 39.4 | 95.3 | 93.5 | 100.0 |
|  | More chan Half | 1.4 | 7.1 | 16.4 | 28.6 | 46.4 | 64.3 | 77.1 | 88.6 | 9:. 1 | 100.0 | - |
| IV | None | 0 | 7.5 | 28.8 | 49.4 | 70.0 | 84.3 | 89.9 | 94.4 | 97.4 | 58. 9 | 100.0 |
|  | Less than Half | 0.4 | 4.9 | 19.3 | 41.3 | 61.4 | 74.6 | 84.1 | 93.6 | 96.6 | 99.2 | 100.0 |
|  | About Half | $\cdots$ | 7.1 | 21.4 | 37.5 | 59.8 | 70.5 | 81.2 | 37.5 | 97.3 | 99.1 | 100.0 |
|  | More than Half | 0 | 2.1 | 15.0 | 29.9 | 49.9 | 66.3 | 76.5 | 37.2 | 94. ${ }^{\text {\% }}$ | 93.4 | 100.0 |
| v | None | 0.4 | 2.7 | 18.6 | 36.4 | 54.6 | 70.2 | 81.4 | 92.2 | 96.5 | 98.4 | 100.0 |
|  | Less than Half | 1.4 | 4.4 | 18.4 | 40.6 | 59.7 | 73.0 | 86.0 | 92.1 | 95.9 | 99.3 | 100.0 |
|  | About Half | 0.8 | 3.8 | 9.9 | 29.0 | 43.5 | 66.4 | 79.4 | 90.8 | 94.6 | 100.0 | -- |
|  | More than Half | 0.4 | 3.6 | 12.3 | 22.7 | 32.3 | 49.1 | 65.9 | 81.3 | 90.9 | 95.9 | 100.0 |

TABLE IV. 3
(continued)

| Family <br> Background | Proportion White Classuates | Number Correct on Verbal Achievement Test (60) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50+ |
| VI | None | 0 | 1.6 | 10.1 | 27.9 | 44.2 | 58.9 | 70.6 | 81.4 | 89.2 | 96.9 | 100.0 |
|  | Less than Half | 0.6 | 3.2 | 10.2 | 20.4 | 31.8 | 49.7 | 64.3 | 76.4 | 85.4 | 94.3 | 100.0 |
|  | About Half | -- | 1.4 | 11.1 | 18.0 | 31.9 | 47.2 | 69.4 | 86.1 | 95.8 | 100.0 | --..- |
|  | More than Half | 0 | 0 | 55 | 15.9 | 24.8 | 40.0 | 51.0 | 64.1 | 78.6 | 91.7 | 100.0 |

and lowest achievers in both the segregated and desegregated classrooms.
2. But low scores occur less frequently among the Negro students whe are attending mostly white classes. This contradicts the earlier speculations that the highest frequency of both high and low achieving Negro students will appear in the desegregated schools. Table IV. 3 shows, that for every social class category, a smaller percent or students in the mostly white classes fall among the low achievement scores and and larger percent appear with high achievement scores.
3. Indeed, the differences in the s'rape of the distribution of the achievement scores for students in mostly Negro classes and those in mostly white classes is that those Negro students in segregated classes are more clustered in the region of low scores rather than being a symmetric distribution. A summary value which reflects this is a measure of skewness shown in Table IV.1 and IV.2.1 This value is negative fuf distributions where the low values are most unusual and spread furthest away from the scores with the largest frequency. In this case, the distribution is said to be skewed to the left. This distribution with the largest positive value on this measure is one where the highest scores appear with less frequency than the others, and the distribution is skewed to the right. Table IV. 1 shows that overall, the distribution of scores of the Negro students in mostly white classes is less skewed to the right than the scores of the other groups. In Table IV.2, this pattern is

[^14]FIGURE IV. 1

FREQUENCY DIS'TRIBU'ION OF VERBAL ACHIEVEMENT TEST SCORES FOR NINTH GRADE STUDENTS IN SEGREGATED AND DESEGREGATED CLASSROOMS


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FIGURE IV. 2
FREQUENCY DISTRIBUTION OF VERBAL ACHIEVEMENT SCORES FOR NINTH GRADE NEGRO STUDENTS FROM SEGREGATED AND DESEGREGATED CLASSES, BY FAMILY BACKGROUND


## FIGURE IV. 2 (CONTINUED)


evident for students similar in family background. Among the students from the most advantaged home environments, the direction of skewness is opposite for the students in mostly Negro classes and those in mostly white classes. In the segregated classes, scores cluster in the low region and the high scores provide the long tail to the distribution. But the scores in the mostly white classes are skewed to the left, with the low achievers tailing off from the peaked region of the distribution. Comparing the distributions of scores for students in mostly white classes, as the family background level increases, the distributions go progressively from skewed to the right, to symmetric, to skewed to the left. The distributions of students in all Negro classes do not follow this progression, but are all skewed to the right no matter what the family background of the students.

Taken together, these results do not support the contention that Negro students may frequently find desegregated schooling to be actually disruptive for their academic growth. In no case, for either the students from the poorest or the richest family backgrounds, is there general evidence of anything but a greater likelihood of improved academic performance. Other comparisons of performance differences of students from advantaged and disadvantaged home backgrounds give further evidence that students in desegregated schools are not finding the academic standards to be oppressive.

## 2. Descgregation and achievement for students from contrasting backgrounds

Not all theories of the way family background and increased academic standards may interact predict that those with the poorest background or those most severely challenged by such a change will show the least positive influence. One theory is that the students with the least positive family influences will find these changes most beneficial. Another hypothesizes that an environment which is neither too easy nor too harsh produces the highest level of motivation.

In the OE Report on these data, Coleman developed a theory of "differential sensitivity" to explain how the influence of a student's family background might interact with changes in his school. According to this model, the most disadvantaged students should reveal the most beneficial effects from improvements in the student environment, and the students whose families are a strong source of educational stimulation and support should demonstrate the smallest differences due to changes in student environment in class or school. (Coleman, et al., 1966). The explanation underlying chese predictions are not grounded on notions of a student's relative position in the school but on a theory of how the influence of the school and family might interact. The reasoning is, if a student's family has a strong educational influence on him, there is little the schools can add or detract to this influence. In this case, the strong family influence would act as a buffer against the detractions
of a poor school; and a particularly good school could add little to the family influence. On the other hand, a student whose family could not strongly support his academic growth would be very responsive to changes in the quality of his school. For these students, a very good school and stimulative student environment would supply the influence which was missing at home. There are two general findings from the regression analysis in the $O E$ Report which suggested this model. First, the proportion of variation in academic achieve-产 ment explained by family differences is considerably less for Negro students than white students and for Southern Negro students than for Northern Negro students. At the same time, the variation in achievement accounted for by differences in schools is greater for Negro students than whites, and for Southern Negro students than for Northern Negro students. The differences in schools for which this was true were not only general measures of school influence, but measures of teacher quality in the schools and measures of the student environment in the school. ${ }^{1}$ The question is whether these results can be generalized to more restricted populations. If Negro students are more sensitive to differences in schools than whites, and Northern Negroes are more responsive to school differences than Southern Negroes, are disadvantaged Northern Negroes more affected

[^15]by improvements in schools than advantaged Northern Negro students?
Intermediate to the opposing theories which predict the largest bencficial influence for the best prepared students, and the greatest differences for the least advantaged students, is Atkinson's model based on the "subjective probability of success". As discussed in Chapter I, Atkinson used experimental evidence to show that an optimal level. of motivation and effort is likely if an individual perceives his chance of success to be neither too certain nor too remote. Atkinson would predict an optimal competitive position for enhancing motivation and performance to be where the individual saw his probability for success to be about fifty-fifty. Accordingly, it might be postulated that neither the students from the poorest backgrounds nor those with many advantages would show the largest benefit from desegregation. The poorest students would see a small chance of academic success be even further diminished by school desegregation. The most advantaged students might find no more challenge in desegregated schools.

The following Tables provide a basis for some judgments on whether one of these theories is most appropriate for explaining the reaction of Negro students to the challenge of desegregated schooling. The survey evidence to be presented for ninth grade Negro students does not strongly support any of these alternative hypotheses. Rather, it appears that the rate of growth which might be influenced by attendance in desegregated classes is the same for advantaged and disadvantaged students alike.

Table IV. 4 gives two measures of the relationship between classroom racial composition and achievement for students in each of the six categories of the family background index. The effect parameter is an estimate of the amount of change in achievement which is due to classroom desegregation. The correlation coefficient provides an estimate of the strength of the assocation between classroom racial composition and achievement. In both cases, the values are very similar for students from different family backgrounds. There are no large differences in these values between the several groups. Certainly no evidence can be drawn from these values that the students from the poorest backgrounds receive more benefit than the others from attendance at desegregated schools. If anything, the values for these groups are slightly lower than for the others. But the differences are small and not statistically significant.

Table IV. 5 and IV. 6 approach this question from a different angle. The tables separate out the poor achievers and high achievers from each of the classroom groups and show the distribution of each of these groups of students among the different family background groups.

If attendance in desegregated classes provided a particular learning hardship for students from poor home environments, it would be expected that a higher proportion of the poor achievers would be from these backgrounds in desegregated classes than in the other cases. Conversely, it would be predicted that the fraction of high achieving students found among the lower social class Negro students would be smaller in the mostly white classes. But there are no large

TABLE IV. 4
ESTIMATES OF THE RELATIONSHIP BETWEEN CLASSROOM RACIAL COMPOSITION AND VERBAL ACHIEVEMENT FOR NINTH GRADE NEGRO STUDENTS FROM DIFFERENT FAMILY BACKGROUNDS

| Family <br> Background | Effect Parameters: |  | Correlation between Classroom Racial Composition and Verbai Achievement |
| :---: | :---: | :---: | :---: |
|  | Unweighted | Weighted |  |
| I | 1.1 | 1.10 | . 128 |
| II | 1.0 | 1.30 | . 121 |
| III | 1.6 | 2.06 | . 209 |
| IV | 1.6 | 2.29 | . 174 |
| V | 1.4 | 1.34 | . 198 |
| VI | 1.7 | 2.26 | . 196 |

TABLE IV. 5
PERCENTAGE DISTRIBUTION OF FAMILY BACKGROUND INDEX FOR NINTH GRADE NEGRO STUDENTS WITH LOW VERBAL ACHIEVEMENT SCORES*, BY PROPORTION WHITE CLASSMATES

| Percent whose family background index is: | Proportion White Classmates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | None | Less than Half | About Half | More than Half |
| I | 43.4 | 45.8 | 42.6 | 50.0 |
| II | 16.8 | 22.1 | 19.1 | 15.0 |
| III | 19.6 | 8.3 | 8.5 | 5.0 |
| IV | 14.0. | 9.9 | 17.0 | 10.0 |
| V | 4.9 | 9.9 | 10.6 | 20.0 |
| VI | 1.4 | 3.8 | 2.1 |  |
| Total | $\begin{aligned} & 100.1 \\ & (143) \end{aligned}$ | $\begin{array}{r} 99.8 \\ (131) \end{array}$ | $\begin{aligned} & 99.9 \\ & (47) \end{aligned}$ | $\begin{aligned} & 100.0 \\ & (40) \end{aligned}$ |
| $\cdots$ Nine or less correct out of sixty. $\quad \chi^{2}=25.07 \quad$ N.S. |  |  |  |  |

TABLE IV. 6
PERCENTAGE DISTRIBUTION OF FAMILY BACKGROUND INDEX FOR NINTH GRADE NEGRO STUDENTS WITH HIGH VERBAL ACHIEVEMENT SCORFS,* BY PROPORIION WHITE CLASSMATES

| Percent whose family background index is: | Proportion White Classmates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | None | Less than Half | About Half | More than Half |
| I | 7.6 | 6.8 | 8.9 | 7.6 |
| II | 3.8 | 9.7 | 8.9 | 2.8 |
| III | 12.8 | 8.7 | 16.1 | 22.1 |
| IV | 19.2 | 16.5 | 26.7 | 16.7 |
| V | 25.6 | 22.3 | 21.4 | 28.3 |
| VI | 30.8 | 35.9 | 17.8 | 22.7 |
| Total | $\begin{aligned} & 99.8 \\ & (78) \end{aligned}$ | $\begin{aligned} & 99.9 \\ & (103) \end{aligned}$ | $\begin{aligned} & 99.8 \\ & (56) \end{aligned}$ | $\begin{aligned} & 100.2 \\ & (145) \end{aligned}$ |

$x^{2}=13.91$

Fiorty or more correct out of sixty.
differences in these directions. Even though studenis from the lowest social class levels are more likely to be found in the segregated classes, which should bias these tables in favor of the predicted differences, there are no statistically significant relationships between family background and classroom racial composition for very poor achieving students, and very high achieving students.

In short, it appears that the effects of school desegregation on Negro student academic achievement are about the same whether the student comes from a home which provdes a rich environment for academic learning or from a very poor one. Figure IV. 3 shows this in one more way, and also indicates why Negro students who transfer to desegregated schools are apt to find their rank in class to be lower in desegregated classes, despite their increased rate of academic development. This figure gives the graph of average achievement scores of Negro students with no white classmates and with more than half white classmates from each family background category. At the same time, the average achievement of the fellow classmates of each group of Negro students is shown on this graph. Again, the similarity in the rate of growth due to desegregation for students from different backgrounds is apparent. The slopes of the lines showing the average achievement of individual Negro students in racially different classes is an indication of the rate of growth due to desegregation, and these slopes are very similar for students in the different family background categories. But this figure also indicates that after desegregation, the degree of
change in the achievement of the average Negro student in not enough to keep him in the same relative position to his fellow classmates as he would have been in segregated classes without the additional academic growth. On each graph in Figure IV.3, the level of achievement of the fellow classmates iound in segregated and desegregated classes is shown along with the graph of the rate of change in achievement of individual Negro students. In every case, the rate of change in Negro student achievement is significantly less than the difference between the level of achievement for all the fellow students in segregated and desegregated classes. The slope of the line for the change in the average achievement of classmates is steeper than the slope for the average achievement of individual Negro students. ${ }^{1}$ The Negro students from the low family background categories are close to the classroom average where they have entirely Negro classmates even though the classmates usually come from several family background categories; but the Negro students from low family background categories in mostly white classes are several points below the average achievement level of their classmates. For the students from the highest family background categories, there is a reversal j.n their position relative to the classroom achievement

[^16]THE ACHIEVEMENT LEVEL AND STUDENT ENVIRONMENT FOR THE AVERAGE NEGRO STUDENT IN SEGREGATED AND DESEGREGATED CLASSES, BY FAMILY

BACKGROUND

average when all Negro classes are compared to predominantly white nnes. In classes where all of their classmates are of their own race, these Negro students are above average in achievement; while in mostly white classes, these Negro students find themselves below average.

So the evidence is that desegregated schooling facilitates the academic growth of Negro students from both advantaged and disadvantaged backgrounds, but their higher achievement in desegregated classes is not enough to keep them in the same relative position in these classes as they would have been in segregated classes without this additional growth. In the sense of the absolute amount of learning and level of academic proficiency, the iegro students in desegregated schools have a distinct advantage. In terms of their relative standing among the other students in their school, the desegregated Negro students are in a poorer position. The next: section will examine how this difference in relative standing may influence the attitudes and personalities of Negro students.

## 3. Relative academic standing and Negro student attitudes

The principal tables in this section will group together the ninth grade Negro students who are achieving at the same absolute level, in order to allow comparisons within these groups of the students in mostly Negro classes and mostly white classes. Such comparisons will be made separately for boys and girls. The intention of these comparisons is to point out how the differences in Negro
students' relative academic ranking in segregated and desegregated classes may affect their attitudes and personality development.

Table IV. 7 shows how the relative standing of Negro students at the same level of achievement differs for those attending mostly white classes and those attending mostly Negro classes. At each achievement lerel, as the proportion white in class increases, there is a regular trend in the number of standard deviations from the classroom mean $^{1}$ for the average Negro student. The low achieving students who are below the classroom average even in segregated classes are further below the classroom average in the mostly white classes. For example, the boys in the lowest achieving group are 1.04 standard deviation units below the classroom average in all Negro classes, but 1.70 standard deviation units below the classroom mean in classes which are more than half white. In the second lowest achieving group of girls, 32.7 percent are above the classroom mean in verbal achievement in segregated classes, but only 3.2 percent are above average in the mostly white classes. The Negro boys in the highest achieving groups average 1.34 standard deviations above the classroom mean in all Negro classes, but only 0.38 units above the mostly white classroom average. For the next to highest achieving group, the great majority are still above the all-Negro class average ( 84.5 percent for boys and 78.3 percent for girls) but only about one quarter are above average in the mostly white classes ( 28.7 percent for Negro

[^17]TABIE IV.7A
percent of Ninth (fradf: nforo students wio ake above
their ciasshoom average in veribal achievement, by their absol.uTE ACHIEVEMENT IEVEL., THE PROPORTION WHITE STUDENTS in their classes, and sex

| Sex | Proportion White <br> (:1as smates | Achinevement I.evel |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1.0w |  | Med-Low |  | Ned-lilgh |  | 118 h |  |
| BOYS | None | 0 | (170) | 33.3 | (186) | 84.5 | (206) | 100.0 | (146) |
|  | I.ess than Malf | 0 | (177) | 15.6 | (244) | 78.5 | (219) | 100.0 | (192) |
|  | About Half | 3.2 | (62) | 9.6 | (83) | 62.4 | (85) | 98.9 | (91) |
|  | More than Half | 0 | (79) | 11.0 | (100) | 28.7 | (136) | 69.1 | (188) |
| GIRLS | None | 1.9 | (215) | 32.7 | (281) | 78.3 | (230) | 100.0 | (134) |
|  | Leas than Half |  | (191) | 15.9 | (289) | 77.3 | (264) | 100.0 | (182) |
|  | About Malf | 0 | (74) | 10.9 | (101) | 63.6 | (107) | 96.5 | (85) |
|  | More than Half |  | (52) | 3.2 | (123) | 26.8 | (142) | 71.0 | (190) |

TABLE IV.7B
average number of standard deviations from olassroom
MEAN ACHIEVEMENT FOR NINTH GRADE NEGRO ST JENTS, BY
absollite achievement level, proportion white classmates, and sex

boys and 26.8 percent for Negro gir1s).
Although the trend of poorer relative standing in class as the proportion white increases is the same for each group of Negro students, the character of this trend is somewhat different. Among the lower achieving groups, the majority are below the classroom mean in both the segregated and desegregated classrooms, but they are further below the mean in the desegregated classes. There is actually a reversal of the students in the medium-high achievement group, with the majority being above the classroom mean in segregated classes but below the mean in mostly white classes. The large majority of the highest achieving group are above the classroom mean in all situations, but they are closer to the classroom mean on the average in the mostly white classes.

The analyses in the remainder of this chapter are intended to show how these differences in relative standing due to classroom desegregation affect Negro student attitudes. Tables which group students the same ways as in Table IV. 7 were constructed, with attitude items as the dependent variables. Thus, we know that any differences in attitude responses in these tables which accompany changes in classroom racial composition after student achievement differences are held constant occur together with the changes in relative academic standing due to desegregation which were just described. If the level of competition in desegregated classes has particular effects on Negro students' attitudes, these tables should reveal these results. Before examining the effect parameters calcu-
lated from these tabulations of attitude responses, some preliminary comments are in order.

First, it must be made clear that the tabulations that place a control on students' absolute achievement level show the isolated influence of one situational component of classroom desegregation: the relative standing of students or the level of competition in the classroom. The finding of significant effects due to this situational component must be kept in the context of the net effects of all components which vary with classroom desegregation. For example, a negative effect of one situational factor like the level of competition may be offset by another situational factor such as the student environment. So, it is useful at this point to show the net effects of classroom desegregaticn on Negro students' attitudes, several of which were described in detail in Chapter III.

Table IV. 8 shows the overall parameters of effect due to differences in classroom desegregation controlling on family background for sixteen different attitude variables. The first thing to notice is that all but three of the sixteen effect parameters show a positive overall effect of desegregation, although most of the values are small and not statistically significant. It is only with students' reports of their desired rank in class, whether they played hooky last year, and whether they would make any sacrifice to stay in school that any evidence arises that the strains experienced in desegregated classrooms override other factors to create a negative influence. And even these values are very small and not statis-
table IT. 8


| Dependent Variable | Efiec: Parameer |
| :---: | :---: |
| 1. Percent responding "definitely yes" to "Are you planning to go to college?" | -. 021 |
| 2. Percent reporting they want to graduate from a four-year college to the question "How far do you want to go in school?" | -. 008 |
| 3. Percent reporting they want to be "one of the best students in my class." | -. 028 |
| 4. Percent who report they never "stay away from school just because you didn't want to come." | -.015 |
| 5. Percent who report "I would do almost anything to stay in school." | -.009 |
| 6. Percent who disagree to the statement "I sometimes feel that I just can't learn." | -. 010 |
| 7. Percent who disagree to the statement "I would do better in school work if teachers didn't go so fast." | -.003 |
| 8. Percent who rate their brightness as "above average" in comparison with the otner students in their grade. | +.015 |
| 9. Percent who disagree to the statement "If I could change, I would be someone different from myself." | +. 025 |
| 10. Percent who agree to the statement "I am able to do many things well." | +.00- |
| 11. Percent who disagree to the statement "Good luck is more important than hard work for success." | +.05s |
| 12. Percent who disagree to the staterent "People like me don't have much of a chance to be successful in life." | -. 020 |
| 13. Percent who disagree to the statement "Every time I try to get ahead, something or somebody stops me." | +. 030 |
| 14. Percent who disagree to the statement "Even with a good education, I'll have a hard time getting the right kind of jot." | -. 014 |
| 15. Percent who would choose some whites to be their close friends. | $\underline{-.048}$ |
| , | $\underline{+031}$ |

tically significant. So, the generally favorable influence of classroom desegregation on student attitudes, especially on control of environment and racial attitudes, is the context to be kept in mind when particular situational components of desegregated classrooms are isolated for examination.

These generally positive values are not surprising when the positive effects of classroom desegregation on achievement are recalled together with the fact that each of these attitudes is strongly correlated with achievement differences. ${ }^{1}$ It is to be expected that accompanying the positive desegregation effect on achievement, there will be a positive effect on the attitudes associated with achievement. But the question we now address is whether the observed differences in attitudes are as large as would be expected to accompany the large differences in achievement due to desegregation: when achievement differences are held constant, does desegregation have a significant negative effect on student attitudes? In different words, taking the relative achievement level of competition as the situational component being isolated in tabulations which control on absolute achievement, the following tables ask whether this particular situational factor has a negative effect on Negro attitudes.
$I_{\text {Table }}$ IV. 14 shows the association between absolute achievement and each of the sixteen attitude items.

## 3.1 level of aspiration

'l'able IV. 9 presents weighted effect parameters which measure the influence on Negro students' aspirations of the changes in their rank in class which accompany increases of proportion of white classmates. These effeci parameters are calculated separately for boys and girls. More formally, this table presents effect parameters measuring the differences in the aspirations of students at the same achievement level who have increasingly larger proportions of white classmates. If the level of competition in desegregated classrooms affects Negro student attitudes, then this effect should be revealed by the parameters for the classroom racial composition comparisons after differences in absolute achievement are taken into account, since it is this tabulation which isolates the changes in relative rank-inclass due to desegregation. A parameter for the classroom racial composition effect due to changes in students' relative standing is shown separately for each of four groups of students who are similar in their verbal achievement level. The value given in the "Total" column combines these separate values to show the effect of the level of competition under differing classroom racial compositions for all students, after their achievement leve1 is held constant. There is evidence in Table IV. 9 that the level of competition in desegregated classes influences Negro students' level of aspiration.

In the first place, Negro students apparently recognize that because of the classroom level of competition, their chances of ranking among the best students in their class diminish as their proportion
TABLE IV. 9
WEIGHTED EFFECT PARAMETERS FOR CLASSROOM RACIAL CONPOSITION EFFECT ON ASPIRATION LEVEL OF NINTH GRADE NEGRO STUDENTS, BY STUDENTS' SEX
(VALUES SIGNIFICANT AT . 05 LEVEL ARE UNDERLINED.)

| Dependent Variable: | AChiEvenent |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Boys |  |  |  |  | Girls |  |  |  |  |
|  | Low | Med-Low | Med-High | High | TOTAL | Low | Med-Low | Med-High | High | TOTAL |
| How good a student do you want to be? Percent responding "one of the best in my class" or "above the middle of my class." | -. 092 | -. 073 | -. 027 | -. 019 | $\underline{-.051}$ | -. 088 | -. 050 | -. 037 | -. 019 | -. 04 |
| How far do you want to go in sc:ool? Percent respond ing "I want to graduate fro a 4-year college" or "I wan to do professional or gradu ate work after I finish college." | $\begin{aligned} & -.038 \\ & \text { d- } \\ & \text { om } \\ & \text { nt } \\ & \text { u- } \end{aligned}$ | -. 032 | -. 040 | $+.016$ | -. 024 | -. 068 | -. 039 | -. 050 | -. 028 | -. 04 |
| Are you planning to go to college? Percent responding "definitely yes." | -. 005 | $+.016$ | -. 069 | +. 094 | . 008 | -. 090 | -. 034 | -. 032 | -. 055 | -. 049 |

[^18]oE white classmates increases. The frequency with which they desire to be above the middle of their class decreases accordingly. The first row of Table IV. 9 shows the influence of increasing proportions of white classmates on the frequency with which $\mathfrak{N e g r o e s}$ at fixed achievement level respond that they want to be "one of the best students in my class" or "above the middle of the class". When the achievement level of the students is held constant, the frequency of these responses decreases as the proportion of white classmates increases. Moreover, the change due to classroom racial composition differences is largest for the lowest achieving students, and the degree of change decreases as the students' level of achievement rises. This is evident in the trend of effect parameters, as you read across the row in the Table. In different words, not only do the poorest achieving students have the lowest desire to achieve above average in their class, but their goals are most seriously affected by classroom desegregation. The highest achieving students have the most ambitious academic goals no matter what the racial composition of their classmates, and their goals are least influenced by changes in the classroom enrollments.

Somewhat the same effects appear when college desires and plans are considered rather than the students' desired rank in class. Here the picture is different for boys and girls, however. For those ninth grade Negro boys at the highest achievement levels, classroom desegregation seems to actually increase in the aspirations for college, even though their rank in class is lower when they have
mostly white classmates. But for the other male students, and for girls in every achievement level, the influence of school desegregation on aspirations, when the influence or achievement is held constant, is negative. For these other Negro students within each achievement group, as the proportion of white classmates increases, the percent is smaller of those who say they want to at least complete a four-year college and who report they have definite plans to attend college. ${ }^{1}$ Again, these results must be put in context. First, the influence of classroom desegregation on achievement is being held constant here in order to investigate whether the level of competition as an isolated factor in school desegregation exerts a particular influence on students. Chapter III showed that the overall pattern is for a slightly higher level of college plans to accompany classroom desegregation, at least for the boys, after background factors are controlled.

Second, as pointed out in the first chapter, previous research has shown that the aspirations and plans of Negro students are often particularly unrealistic and may be adopted with little consciousness of the practical steps which are required to achieve the goals. So, the meaning of the lower college plans for many Negro students due to the level of competition in desegregated. schools may be quite complicated, and involve a change in the realism and concreteness with which aspirations are held. Along this line, Table IV. 10 shows parameters measuring changes in college pians, and also changes in the frequency with which students have taken practical steps to investigate colleges or contacting a college

[^19]TABLE IV. 10

WEIGHTED EFFECT PARAMETERS FOR CLASSROOM RACIAL COMPOSITION EFFECT ON COLLEGE PLANS AND REIATED ACTIVITIES OF TWELFTH GRADE NEGRO STUDENTS BY STUDENTS' SEX AND ACHIEVEMENT LEVEL

| Achievement | Dependent Variable |  |  |
| :---: | :---: | :---: | :---: |
|  | Definite College Plans | ```Read College Catalog``` | Contacted College Official |
| BOYS |  |  |  |
| 1 | -. 003 | $+.044$ | -. 008 |
| 2 | $+.011$ | -. 001 | $+.014$ |
| 3 | -. 005 | -. 003 | +. 009 |
| 4 | . 000 | $+.036$ | +. 044 |
| 5 | +. 024 | $+.047$ | $+.056$ |
| Total | $+.005$ | $+.020$ | +. 031 |
| GIRLS |  |  |  |
| 1 | -. 002 | $+.026$ | $+.031$ |
| 2 | -. 01.0 | $+.002$ | -. 016 |
| 3 | $+.039$ | $+.045$ | +. 069 |
| 4 | $+.010$ | $+.018$ | $+.066$ |
| 5 | $+.025$ | +. 013 | +. 028 |
| Total | $+.011$ | $+.021$ | $+.031$ |

official. These tablulations are for twelfth grade Negro students, whicl, was the only survey grade in which the questions were asked about college catalogues and college officials. In this grade, the positive effect of classroom desegregation on the concrete steps which should follow from college plans is evident. Even when the students' absolute achievement level is held constant, those in mostly white classes are consistently more likely to report that they have read a college catalogue or contacted a college official. 'The parameters of effect on these activities are larger than the parameters measuring differences in expressed college plans. This suggests that any negative influence on expressed college plans due to changes in the level of competition in desegregated classes may reflect a more realistic appreciation of the prerequisites for college and more purposeful and practical attitudes about future goals.

Finally, in comparison to other attitude items, there are several inconsistencies in the effects on college plans for boys and girls. Further studies are required to investigate the nature of these sex differences in aspirations and to suggest explanations for different effects on these attitudes.

To sum up the impressions gathered to this point, it appears that the level of competition in desegregated classes as an isolated factor has some important effects on Negro student aspirations. Among all the sixteen attitude variables which will be examined in this section for ninth grade Negro students, only students' desires


#### Abstract

to be best in class and girls' college plans have negative effects due to relative standing which reach the .05 level of statistical significance. The first of these is taken to indicate that Negro students perceive the higher level of competition in desegregated classes and recognize its immediate implications on cheir rank-inclass. The effects on college plans may be more complicated, since the effect of desegregation seems to be to reduce the unrealistic component of aspirations, but to increase implementation of those plans which are maintained.


### 3.2 Self-esteem and academic self-confidence

In line with less frequent aspirations of Negro students to be above the middle of their class, there is some evidence that the level of competition in desegregated classrooms creates an academic strain on some Negro students. This appears most clearly for the group at the lowest achievement level, for girls rather than boys. In examining the influence on students' self-image, the distinction is made between self-confidence and more generalized measures of students' self-esteem. Neither aspect of students' self-image shows any general influence from the changes in classroom level of competirion due to desegregation. The evidence on changes in academic self-confidence is inconsistent and reveals only sunall differences. With the more general personality measures of selfconcept, only the very lowest group of Negro students appear to be affe:sted adversely by differences in relative standing because of classroom desegregation. Table IV. 11 presents effect parameters
TABLE IS. 11
 CONTROLLING FOR STUDENTS' SEX AVD ACHIEVEMEYT.
(VALNES SIGNIFICANT AT . 05 LEVEL ARE (TDERIITED.)

| Dependent Variable. | ACHIE:EAEMT |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Boys |  |  |  |  | Girls |  |  |  |  |
|  | Low | Med-Low | Med-High | Hign | TOTAI | Low | Sed-iow | : $:$ ed-: $:$ igig | \#igh | COTAL |
| Percent who never played hooky. | -. 050 | -. 023 | -. 030 | -. 019 | -. 029 | -. 065 | -. 001 | -. 029 | -. 031 | -.02: |
| Percent who would do almost anything to stay in school. | $+.010$ | -. 006 | -. 007 | +. 070 | +. 016 | -. 075 | -. 023 | -. 046 | -.037 | -. 04 |
| Percent disagree: 'Sometimes <br> I feel that $I$ just can't learn." | +. 004 | +. 018 | -. 016 | -. 038 | -. 010 | -. 064 | +. 000 | -. 026 | -. 064 | -. 033 |
| Percent disagree: "I would do better in school if the teachers didn't go so fast.' | +. 057 | -. 004 | +. 010 | -. 025 | $\div .003$ | $+.011$ | +. 009 | -. 015 | +. 052 | +. 014 |
| Percent who rate their own brightness as one of the best in the class or above the middle of the class. | -. 037 | -. 002 | -. 017 | -. 007 | -. 014 | +. 010 | -. 020 | -. 004 | -. 016 | -. 009 |
| Perrent agree: "I am able to do many things well." | -. 081 | +. 012 | +. 034 | +. 058 | +. 016 | -.075 | -. 052 | +. 021 | -. 008 | -. 025 |
| Percent disagree: "If I could change I would be someone different from myself.' | +. 046 | +. 064 | +. 028 | -. 002 | +. 032 | -. 038 | +. 021 | +. 018 | -. 001 | +.005 |

in a format similar to 'Table IV.9. This Table shows parameters measuring the influence on several indicators of academic strain, students' academic self-confidence, and their self-esteem.
'I'wo measures of the general level of academic strain that students may experience in desegregated classes are the percent who fail to respond that they "would do almost anything to stay in school" and that they never play hooky. ${ }^{1}$ of these measures, the pattern for hooky is the same for boys and girls. Students at the same achievement level are less likely to never have played hooky from school if they attended mostly white classes rather than mostly Negro classes. This pattern of increases in willful absences from school is not reflected by large enough differences to achieve the .05 level of statistical significance, but it is a consistent finding within each of the subgroups at a fixed achievement level. For both boys and girls, the negative effect is greatest for the low achieving group, a? though these values are not statistically significant either. With the other item, it is only the Negro girls who less frequently report in predominantly white classes that they would do almost anything to stay in school. But again, the effects are of small significance.

Moving from these measures of academic strain to questions about students' academic self-confidence, the pattern is not clear across the separate measures. Controlling for achievement level,

[^20]more students of both sexes report in desegregated classes that "sometimes I feel that I just can't learn", but the overall differences are small and not consistent within the separate subgroups. On the other hand, fewer desegregated students on the average agree that "I would do better in class if teachers didn't go so fast", with similarly small and inconsistent patterns in separate subgroups. Both of these items shown no regular pattern of difference in effects between low and high achieving groups. These two items give no strong evidence that Negro students have either more or less self-confidence in their ability to learn in desegregated environments, when the effects of desegregation on growth in achievement are held constant. A third item used in the $O E$ Report to gauge academic self-confidence -the student's evaluation of his brightness in comparison to others in his grade -- does not change this pattern very much. The parameters for both boys and girls are generally negative, but the magnitude of the effects is again too small to pass the statistical significance tests at the .05 level. Of the twenty-four parameters for subgroups matched on sex and achievement for the three measures of academic self-confidence, eight were positive and fifteen were negative (one was .000). All the values were small, and the fifteen or more negative values would occur just by chance twenty-five percent of the time if it was true that a positive effect was just as likely as a negative one.

Finally, effect parameters on two more general measures of selfesteem or self-respect suggest that it is only for the poorest achieving
students where changes in the rank in class due to desegregation may threaten a student's self-image. For both Negro boys and girls, it is only among the lowest achieving group that fewer students from desegregated than segregated classes disagreed with the statement: "If $I$ could change $I$ would be someone different from myself". Similarly, it appears that only among the low achieving groups did the level of competition in desegregated classes result in fewer desegregated students disagreeing to "I can do many things well". ^gain, the overall pattern suggests that classroom desegregation is more damaging to the self-esteem of Negro girls than Negro boys. The overall parameters for self-esteem, after desegregation effects on achievement are controlled, are slightly positive for boys (see "Total" column) and are negative for girli. Considering the results of Tables IV. 9 and IV. 11 together gives some clues to how the level of competition in desegregated schools is dealt with psychologically by Negro students. The fact that hooky playing -- the only item that taps some objective behavior rather than student opinion -- is reported more frequently among desegregated Negro students, implies that the desegregated classrooms do create strains which Negro students must deal with, and from which sometimes they feel the nced to escape. They appear to recognize that their probability of achieving above the classroom mean is lower in desegregated classes, and they adjust their desires accordingly. But, arriving at this lower aspiration for rank in class seems to be sufficient for the students to maintain
their self-respect, generally. Negro students do not wish they could change to be someone else more frequently in desegregated classes, even when the changes in the level of competition due to desegregation is separated from other situational factors. It does not appear to be necessary for Negro students to achieve higher than most of the white students in order to continue their beliefs that they are not inferior. It is sufficient to rank higher than at least some of their white classmates to personally affront any stereotype of inferiority. But the poorest achieving group of Negro students do not pass this test. They find themselves so far below the classroom average in mostly white classes that almost all of the white students surpass them in achievement and they seem to actually suffer in terms of their self-esteem.

### 3.3 Sense of opportunity and fate control

Although the picture is somewhat complicated, it does not appear that changes in the level of competition due to desegregation has any negative effect on Negro students' sense of mastery over their own destiny. Three questions were used in the OE Report to measure students' sense of control over their environment. The single item which best distinguished the higher sense of futility in Negro students compared to whices, and which was most highly correlated with achievement was: "Agree or disagree" Good luck is more important than hard work for success". Table IV. 12 shows no negative effects at all on this item when the classroom desegregation effect is measured after student achievement is held
TABLE IV. 12
WEIGHTED EFFECT PARAIETERS FOR CLASSROON RACIAL COMPOSITION EFFECT ON IHE SENSE OF OPPORTLNITY AND FATE CONTROL OF NINTH GRADE NEGRO STUDENTS (VALUES SIGNIFICANT AT . 05 LEVEL ARE UNDERLINED.

constant so as to isolate changes in relative standing due to desegregation. FQr both boys and girls, and in every group fixed by achievement level, the effect of desegregation is positive on this measure. The values are all small, but up to this point, this is the only item where the positive effects which vary with desegregation so completely overshadow any negative influence of changes in the level of competition as to create positive effect parameters in tabulations of the form of Table IV. 12.

Now, with the other measures of fate control, the picture is less consistent. The next two measures in Table IV. 12 are the remaining items used in the $O E$ Report's index of control of environment. Among the separate subgroups matched on achievement level, the effect parameters are small and there is a fairly even split between positive and negative parameters for the effect of level of competition, with no pattern noticeable for the occurrence of one or the other effect. So the judgment is justified that differences in level of competition due to desegregation showed neither a positive nor a negative effect on these items.

The final question studied in Table IV. 12 is a very specific aspect of students' sense of opportunity: whether education is seen to be a determining factor in obtaining "the right kind of job". The values here are also small, but an interesting pattern appears. For the Negro boys, the effect of desegregation when achievement is fixed, becomes progressively more negative as the higher achievement groups are compared to the lower ones. So, the
valurs +.008 for the poorest achieving group of Negro boys means that actually more desegregated students feel that education is relevant for getting the right job. For the next group, the parameter turns negative, -.013, meaning that desegregated students fail to see the importance of a good education for their job opportunities more than the others. As the next higher achieving groups are examined, the effect parameters reach higher negative values, -. 043 and -.069 . These are still not significant at the .05 level, but the trend is what is to be noticed. For the girls, the value for the poorest achieving group is the major exception to a similar pattern.

Of course, as the groups at increasingly higher achievement levels are compared, the students' definition of "the right kind of job" will likely be very different. But it is interesting that the trend of the Negro boys' belief in the occupational payoff from education matches what other investigators have found to be the case for Negroes in the United States. Siegel (1965), using 1960 Census data to measure Negro-white occupatioıal differences for fixed cducation levels, showed that occupational discrimination was smaller for high school dropouts than those who completed high schcol or received some college training (although not less than for college graduates). Apparently with attendance at desegregated classes, for ninth grade Negro boys comes an awareness of this occupational discrimination which is most often severe for those who see "the right kind of job" to be ones usually held by high achieving students.

Thus, in this section, the effects of the level of competition seem mixed. For the measures of a:general sense of control over environment and sense of mastery over environment, no negative effect is found. Indeed, the strongest fate control item is the first one to show a small positive effect of desegregation even when the level of competition factor is isolated. This result is viewed with particular importance, because this particular measure of control of environment was the item most clearly distinguishing Negro and white students in the $O E$ Report, and which was most highly related to Negro student achievement in school. But, at the same time, some of the specific details of discrimination in the opportunity structure may become somewhat more salient for desegregated male Negro students who regularly observed white students planning for their future occupations without these constraints.

### 3.4 Racial attitudes

Just as with the principal measure of fate control, there is no evidence that the level of competition in desegregated classes offsets the positive effects on racial attitudes of other factors which change with classroom desegregation. In fact, as shown in Table IV.13, not only do the effects of classroom desegregation on racial attitudes remain positive when achievement is held constant, but the parameters are statistically significant. No matter what the sex or achievement level of ninth grade Negro students, those in desegregated classes are more likely than the others, when they are given the choice, in hypothetical future situations, to select some

TABLE IV. 13

WEIGHTED EFFECT PAKAMETERS FOR CLASSROOM RACIAL COMPOSITION EFFECT ON RACIAL CHOICES OF NINTH GRADE NEGRO STUDENTS, CONTROLLING FOR STUDENTS' SEX AND ACHIEVEMENT

whites for their close friends and for their classmate:.

### 3.5 Overview

Table IV. 14 allows a conve ilent summary of the analyses of the effects of differences in relative academic standing due to $\sigma$ classroom desegregation on Negro student attitudes. The previous tabulations in this section showed how attitudes vary with classroom racial composition after the relative standing of students is separated out as the influential factor by holding constant the students' absolute level of achievement. Table IV. 14 shows in the right column the same kind of analysis, except that both students' absolute level of achievement and their family background are held constant. The first column of figures in this Table shows that this extra control variable is generally not needed for the purposes of this section, because controls on achievement level remove the influence of family background as well. Nevertheless, the results in Table IV. 14 correspond very well to the earlier conclusions.

Looking at the right column of Table IV.14, there are only four parameters which achieve the .05 level of significance. The only significant negative value is for students' desires to be among the best in their class. So, while among the first ten items measuring aspirations, self-confidence, and self-esteem, all but two are negative, it is only with students' resignation about being below class average in achievement that any significantly large negative value appears. It is noteworthy that along with this result is the finding that students' general self-esteem -- measured by

TABLE IV. 14
WEIGHTED EFFECT PARAMETERS ON NINTH GRADE NEGṘO STUDENT ATTITUDES, OF FAMILY BACKGROUND, ACHIEVEMENT LEVEL, AND CLASSROOM RACIAL COMPOSITION, UÑDER DIFFERENT CONTROI, CONDITIONS
(VALUES SIGNIFICANT AT . 05 LEVEL ARE UNDERLINED; THOSE SIGNIFICANT AT . 01 ARE UNDERLINED TWICE.)

| Dependent Variable: | Effect of family back- | Effect of |  |
| :---: | :---: | :---: | :---: |
|  |  | achievement, | Effect of proportion white |
| Numbers refer to | achieverent | given fami- | classmates, |
| items indicated in | and propor- | and propor- | given family |
|  | tion white | tion white | background |
| Table IV. 8. | classmates. | classnates. | and achievement. |


| 1. college | . 244 | . 152 | -. 017 |
| :---: | :---: | :---: | :---: |
| 2. how far | . 186 | . 215 | -. 034 |
| 3. desire to be best | . 050 | . 132 | -. 047 |
| 4. hooky | -. 001 | . 049 | -. 023 |
| 5. do anything to stay | . 074 | . 044 | -. 024 |
| 6. can't learn | . 017 | . 134 | -. 007 |
| 7. teachers fast | . 035 | . 184 | +. 034 |
| 8. rate brightness | . 066 | . 181 | -. 004 |
| 9. change self | -. 008 | . 216 | +. 019 |
| 10. can do things | . 042 | . 113 | -. 008 |
| 11. good luck | . 041 | . 353 | +. 049 |
| 12. no chance | -- | ---- | -...-. ${ }^{\circ}$ |
| 13. something stops me | . 050 | . 202 | +. 007 |
| 14. no right job | . 050 | . 096 | -. 003 |
| 15. choice of friends | . 013 | . 063 | . 062 |
| 16. choice of classmates | . 007 | $\underline{.} 074$ | . 041 |

their desire io change to be someone else -- is not negatively affected by the level of competition in the classroom. The positive values which are significant, suggesting that other situational factors
. besides the changes in level of competition play the dominant roles in determining the effects of desegregation, are the effects on the principal measure of fate control and on the racial attitudes of Negro students.
4. Summary

This chapter has begun the investigation of which situational factors which vary with classroom desegregation offer explanations. for the observed effects, by focusing on the level of competition in desegregated classes.

In terms cf effects on achievement, the possible influence of level of competition was examined in several indirect ways. This was done by showing that earlier conjectures were mistaken about the greater frequency of both low and high Negro achievement scores in desegregated classes, and about the particular risk of academic withdrawal of those desegregated students from the poorest family backgrounds. In short, no general indications appeared that there was any Negro student group showing any more widespread failure due to desegregation: the odds seem heavily in favor of improvements if any-changes occur at all.

For Negro student attitudes, the investigation was more direct. Tabulations were constructed which isclated groups of students for comparison according to the changes in the rank in class they
experienced due to desegregation. Sixteen different attitude measures were examined in these tabulations, with only the students' appreciation of the change in their level of competition showing negative effect. Both fate control and racial attitudes showed no negative effects, meaning that other situational factors in desegregated schools appear to play the overriding influential role. The next two chapters will examine some of these other factors."

CHAPTER V

## INSTRUCTIONAL QUALITY AND STUDENT ENVIRONMENT

Two more situational factors of desegregated schools will be examined in this chapter for the extent to which they may explain differences among segregated and desegregated Negro students. These factors are the quality of the instructional program and the environment for learning established by the fellow students. Earlier analyses of the survey data have treated both these factors. These analyses will be extended here to continue the school and classroom distinctions which have been made in earlier chapters and to investigate the influence on attitudes as well as achievement.

## 1. Controls or the instructional quality

A principal section of the OE Report was directed at assessing the comparative influence on student achievement of the quality of the formal instructional program in a school and the nature of the student environment in the school. The quality of instruction in the school was measured by several indicators of the facilities and programs available in the school, such as library facilities, science laboratories, and varìed curriculum offerings. Included also were several measures of the characteristics of the schools' teaching staffs, such as their educational background, their social class level, and their performance on a short vocabulary test. The environment provided by the students enrolled in the school was measured by indices of the average social class level of the students, the average achievement
level of the students in the school, as well as their attitudes and valucs. The analysis of the extent to which each of these clusters of variables had a significant separate influence on student achievement was greatly complicated by the fact that the characteristics of the facilitics, teaching staff, and student environment in $a$ given school are related to one another: the schools with the superior facilities are also likely to have the most competent faculty and enroll students from the higher social classes.

But two results of the regression analyses reported by the Office of Education strongly suggested that the student environment is the feature of schools which has most influence on individual student achievement. First, an effort was made to rank the separate school factors in terms of their relationship to achievement. Only caking into account the family background of students and analyzing separately the influence of school facilities, faculty characteristics and student environment, the student environment had the strongest influence on individual achievement, the teaching staff had the second strongest. effect, and school facilities had the weakest relationship with student test performance. Since other school factors are not taken into account when each is analyzed separately, whatever relationship exists between the separate factors may color the results. So, a second set of analyses attempted to assess the unique influence of each of the school factors when both students' family background and the other school factors were statistically controlled. This analysis established that the relationship between student environment and the achievement level of the indi-
vidual students in the school is not to be simply explained by other school factors which often accompany a superior student environment. Of the three clusters of school variables -- facilities, teachers, and student environment -- only student environment passed the test of retaining a relationship with individual student achievement when the influence of the other school factors were statistically controlled, along with the family background of individual students.

Similarly the regression analyses of the OE Report showed that the relationship between the percent white enrolled in the school and the achievement level of Negro students was not eliminated when Eamily background as well as school curriculum and school facilities were taken into account. Further analyses of the relationship between the racial composition of classes and Negro student achievement from this survey data conducted for the U.S. Commission on Civil Rights strongly concurred with this conclusion. In the Civil Rights Commission report (1967), thirty tables are presented which show that relationship between classroom desegregation and Negro student achievement is little disturbed when various measures of the characteristics of the teaching staff and instructional programs in the school are taken into account. All of these results taken together give strong evidence that the differences in average achievement between segregated and desegregated Negro students are not to be explained by differences in the quality of the instructional program in the contrasted situations. Nevertheless, we shall extend the analysis one more step, by investigating differences in instructional quality at the level of the classroom, and their effect on the relation between desegregation and Negro student development.

### 1.1 Classroom instructional quality

The previous analyses have used controls on the quality of the instructional program in the school as a whole. Since this study emphasizes the influences which result from classroom desegregation, some attempts will be made to impose controls which measure the instructional quality in the classrooms within a school. This will be done with the measure of teacher competence based on teachers' performance. on a short vocabulary test which was taken by the surveyed teachers. The average on this test was the characteristic of teachers which was found in the OE Report to be most highly related to differences in Negro student achievement. Table II.16, presented earlier showed that the average scores on this test varied regularly with the proportion white students enrolled in their school; and within racially similar schools, there was a tendency for the highest average to be found among the teachers who taught mostly white scudents rather than those teaching mostly Negroes.

The technique for associating teachers with particular students will be similar to the methods used in the earlier examinations of track criteria and the achievement level of fellow classmates. Separate averages of test score performance are calculated for groups of teachers in each school depending upon their response to the question about the racial proportion of the students they teach. So, an average achievement test score is obtained in each school for those teaching mostly

Negro students, and another for those who have mostly white pupils. 'lhe teacher verbal. score value associated with each student is the average for the teachers who have classes where the racial proportions are similar to the proportions in the student's class. Table V.I shows that, using this indicator, the Negro students in mostly white classes are likely to have teachers with higher verbal competence than students in other classes.

The next table groups students by their family background, the proportion of their classmates who are white and whether the teachers who instruct class with a similar racial composition in their school have high, medium or low scores on the teacher vocabulary test. Comparing achievement scores of Negro students who are matched on family background and teachers' vocabulary scores in Table V.2, the classroom racial composition differences are the same as before. Reading across the rows of Table V. 2 in each of these matched groups, it is the Negro students in the mostly Negro classes who average the lowest achievement scores, and those in the mostly white classes who have the highest averages. Just as with the previous analyses which took into account school-wide measures of the instructional quality, the relationship between classroom racial composition and Negro student achievement is left largely undisturbed when measures of instructional quality which more closely gauge classroom differences are used.

Finally, corresponding to the OE Report, there is no regular relationship to be seen in Table V. 2 associating high teacher verbal scores with high average student performance, when the classroom racial

TABLE V. 1

FOR THE AVERAGE NINTH GRADE NEGRO STUDENT:
VERBAL COMPETENCE SCORE* OF TEACHERS
IN THE STUDENT'S CLASSROOM, BY STUDENT'S FAMILY BACKGROUND, AND PROPORTION WHITE CLASSMATES.

| Family <br> Baskground | Proportion White Classmates |  |  |  |
| :---: | :---: | :---: | :---: | :---: |

TABIEE V. 2

AVEKACE VERBAI, ACHIEVEMEN'I OF NLNTH GRADE NEGRO STUDENTS, BY FAMILY BACK(BROUND), CLASSROOM TEACHERS' VERBAI. SCORE, AND PROPORTION WIITIE CIASSMATES.

| Family <br> Background | (:1assroom <br> Teacher's Verb.Score | Proportion White Clasamates |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | Less than Half | About Half |  | Less than Half |  | $\mathrm{M}-\mathrm{N}$ |
| 1 | 1,0w | 255.59 (159) | 253.74 (184) | 256.91 | (33) | 256.42 | (45) | +0.83 |
|  | Med | 253.67 (66) | 252.98 (47) | 258.10 | (10) | 258.80 | (10) | +5.13 |
|  | High | 252.77 (140) | 256.66 (195) | 256.33 | (79) | 260.85 | (95) | +8.08 |
| 11 | Low | 257.60 (141) | 256.33 (165) | 262.21 | (24) | 263.63 | (30) | +6.03 |
|  | Med | 256.54 (41) | 261.80 (49) | 265.40 | (5) | 264.80 | (10) | +8.26 |
|  | High | 254.96 (70) | 258.55 (150) | 258.57 | (65) | 259.57 | (83) | +4.61 |
| [ I ! | t.ow | 259.20 (148) | 259.45 (109) | 263.34 | (15) | 265.56 | (25) | +6.36 |
|  | Med | 252.45 (31) | 259.76 (47) | 262.67 | (3) | 259.50 | (14) | +7.05 |
|  | High | 257.96 (49) | 260.71 (85) | 259.57 | (35) | 264.51 | (80) | +6. 55 |
| IV | J.ow | 258.49 (165) | 261.73 (118) | 262.66 | (21) | 263.38 | (39) | +4.89 |
|  | Med | 259.84 (31) | 259.14 (45) | 264.50 | (14) | 271.59 | (17) | +11.75 |
|  | High | 258.39 (65) | 262.39 (94) | 262.29 | (52) | 265.33 | (121) | +6.94 |
| v | I.ow | 263.85 (184) | 258.36 (66) | 261.50 | (18) | 266.39 | (28) | +2.54 |
|  | Med | 260.35 (51) | 263.63 (106) | 268.79 | (19) | 273.82 | (23) | +13.47 |
|  | High | 263.14 (52) | 263.00 (103) | 268.36 | (47) | 269.35 | (140) | +6.21 |
| VI | Low | 268.87 (102) | 274.07 (102) | 264.91 | (11) | 267.50 | (16) | -1.37 |
|  | Med | 259.67 (12) | 250.66 (9) | 268.28 | (7) | 277.14 | (14) | +17.47 |
|  | High | 260.92 (13) | 261.95 (41) | 267.18 | (33) | 273.37 | (95) | +12.45 |

composition is held constant. There is no positive residual relationship between their classroom factor and student achievement when comparisons are made down the columns of Table V.2, taking differences in classroom racial composition into account. Among the matched groups, the-lowest achieving group of students is found associated with the teachers with the high scores as often as they are found associated with the poorer scoring teachers.

We conclude, therefore, that a consideration of the influences of the instructional quality in segregated and desegregated situations leaves a major portion of the differences in Negro student achievement unexplained. The original racial composition differences are not seriously reduced when instructional quality is taken into account, and the remaining variation within racially similar classroom situations does not vary regularly with measures of differences in the quality of instruction. The remaining section of this chapter will examine a factor which does offer an explanation for some of these differences: the student environment in the classroom.

## 2. Classroom social context and classsroom racial composition

In this section two different characteristics of an individual's Eellow students will be examined for their influence. First, the effects of attending classes with fellow students who come from different social class backgrounds will be examined. Second, the influence of having classmates of different racial compositions will be studied. The general question is whether either of these two
student body attributes have an independent influence on individual Negro students.

The mode of analysis will be to compare the size of the parameters measuring the effect on achievement due to differences in the classroom social context with parameters measuring the effect of differences in classroom racial composition. Effect parameters for these two variables will be calculated under different control conditions. These comparisons will permit some judgments about the relative influence of the two factors. In particular, some notions will be developed on the extent to which the differences in the social class composition of a student's classmates which usually accompany desegregation offer a complete explanation of the effects of desegregation. This section will only begin an examination of the independent influence of differences in the classroom racial composition per se (apart from any other non-racial differences in classroom peer groups). Here, the investigation will focus on whether any residual racial composition effects remain when other aspects of the classroom social context are held constant. The next chapter will continue this examination in a more direct fashion, by using some separate measures of the degree of interracial contact and acceptance by particular desegregated Negro students.

Two previous treatments of the OE Survey have examined the separate effects of racial composition and other student body characteristics on Negro students, with somewhat different results (Coleman, et al., 1966; U. S. Commission on Civil Rights, 1967).

These results will be reviewed, resuming the distinction between classroom and school influences. llowever, the discussions here will be broader than simply examining earlier results. Instead of focusing entirely on Negro academic achievement as the dependent variables, the separate effects of racial mix and other classroom environment aspects will be viewed with regard to several kinds of student behavior and attitudes.

Ti:e study by McDi.11 and his associates (1967) has broadened the consideration of student environment as an influence within schools. Their research perspective was that the climate created by the student body ${ }^{1}$ in a school might have several dimensions, each with a potential influence on different aspects of an individual student's behavior and outlook. Similarly, two specific aspects of the attributes of an individual's fellow students will be distinguished: their average social class background and their racial composition. The attributes of classmates will be examined for their independent influence on several attitudes of Negro students as well as on their academic achievement.

### 2.1 Influences on academic achievement

Earlier it was noted how the pattern of relationships between
$1_{\text {The }}$ sources of a school's "climate" was an important question in this research, and was not seen to simply result from the student peer groups alone, rather than the faculty as well, for example.،In line with this, present treatment speaks of "student environment" to specify the student peer group as the source of "climate" under consideration here.
school and classroom desegregation and Negro student achievement matched the relationship between desegregation and the student environment in Negro students' classes. Now the influence of classroom student environment on Negro student achievement will be examined more directly, as it operates in desegregated classes.

Table V. 3 shows the average achievement of groups of ninth grade Negro students classified by their family background, the proportion of their classmates who are white, and the average social class of the students in their class. This last variable is obtained by averaging the amount of education received by the best educated parent of all the students in an individual's classroom. ${ }^{1}$ Table V. 4 summarizes the effects of these separate variables on Negro student achievement, under different control conditions, which were calculated from Table V.3. The number of categories used to define the separate independent variables are different (6 categories for family background, 4 for classroom racial composition and 3 for classroom social context). To allow comparisons between the separate variables, the effect parameters are standardized to take the difference in number of categories, as suggested by Coleman (1964, pp. 217-219).

The values presented in Table V. 4 are based on tabulations very similar to those presented in the report of the Commission on Civil Rights (1967) and provide the same grounds for the conclusion

[^21]IABIR: V. 1




| I imilly <br> Biackeromid | C.I:1saroom <br> Soclal (:Iass | Proportion White ciasmmates |  |  |  |  |  |  |  | TOTA. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Hone |  | l.ess |  | About llalf |  | More. <br> Than llalf |  |  |  |
| 1 | 1.0w | 253.39 | 97 | 255.92 | 294 | 255.81 | 57 | 2'7. 72 | 74 | 255.69 | 522 |
|  | lied | 294.95 | 323 | 2:3.46 | 150 | 2'5. 84 | 108 | 259.56 | 79 | 255.31 | 660 |
|  | IIf ${ }_{\text {sh }}$ | 254.94 | 16 | 255.40 | 20 | 255.45 | 11 | 260.43 | 30 | 257.27 | 77 |
|  | 'lotal | 2'34.60 | 436 | 255.10 | 4,44 | 255.81 | $1 / 6$ | 258.96 | 183 | 255.59 | 1259 |
| 11 | I.ow | 257.05 | 75 | 259.44 | 226 | 260.39 | 35 | 262.31 | 45 | 259.41 | 379 |
|  | Med | 236.61 | 173 | 256.38 | 123 | 258.15 | 74 | 260.33 | 73 | 257.42 | 443 |
|  | 11 ish | 255.71 | 7 | 254.00 | 12 | 259.56 | 9 | 257.91 | 23 | 256.98 | S1 |
|  | Total | 256.71 | 255 | 258.22 | 361 | 258.90 | 116 | 260.63 | 141 | 258.26 | 873 |
| III | 1.0w | 256.84 | 55 | 259.07 | 125 | 263.07 | 15 | 263.89 | 27 | 259.37 | 222 |
|  | Med | 257.49 | 150 | 259.65 | 89 | 259.95 | 61 | 260.41 | 59 | 258.92 | 359 |
|  | 11 gh | 262.04 | 28 | 263.74 | 31 | 263.25 | 8 | 268.54 | 52 | 265.40 | 119 |
|  | rotal | 257.88 | 233 | 259.87 | 245 | 260.82 | 84 | 264.15 | 138 | 260.16 | 700 |
| 19 | 1,ow | 254.98 | 71 | 261.71 | 136 | 266.44 | 16 | 263.29 | 38 | 260.4 C | 261 |
|  | Med | 259.26 | 170 | 260.18 | 96 | 261.05 | 84 | 262.91 | 88 | 260.54 | 438 |
|  | lifg | 263.65 | 26 | 262.81 | 32 | 260.70 | 10 | 269.06 | 61 | 265.77 | 129 |
|  | fotal | 258.55 | 267 | 261.29 | 264 | 261.80 | 110 | 264.99 | 187 | 261.31 | 828 |
| V | 1.0w | 258.12 | 42 | 262.40 | 113 | 263.52 | 23 | 263:08 | 38 | 261.81 | 216 |
|  | Med | 263.62 | 154 | 259.96 | 115 | 265.17 | 82 | 265.62 | 89 | 263.36 | 4,40 |
|  | 114 | $26,5.71$ | 62 | 264.40 | 65 | 266.64 | 25 | 274.50 | 92 | 268.77 | 244 |
|  | Total | 263.23 | 258 | 261.89 | 293 | 265.16 | 130 | 268.91 | 219 | 264.55 | 900 |
| VI | 1.0w | 259.83 | 6 | 261.03 | 34 | 253.00 | 5 | 263.92 | 13 | 260:86 | 58 |
|  | Med | 266.25 | 72 | 266.12 | 42 | 267.10 | 40 | 270.39 | 38 | 267.22 | 192 |
|  | 114 gh | 268.90 | 51 | 274.99 | 81 | 272.89 | 27 | 276.36 | 93 | 274.04 | 252 |
|  | Total | 267.00 | 129 | 269.59 | 157 | 268.29 | 72 | 273.66 | 144 | 269.91 | 502 |

TABLE V. 4
OF FAMILY BACKGROUND, CLASSROOM SOCIAL CONTEX AND CLASSROOM RACI ACHIEVEXEXT (The numbers in parentheses are the number of comparisons which were
combined in the weighted average of achievement inctisons which were increments.)

| Effect Variable | Effect Parameter | Parameter Standardized to a Dichotomy |
| :---: | :---: | :---: |
| Family background (5 comparisons) | +3.96 | +11.88 |
| Family background, given classroom SES (15) | +2.30 | + 6.90 |
| Family background, given proportion white classmates (20) | +2.62 | + 7.86 |
| Family background, given classroom SES and proportion white classmates (60) | +2.30 | + 6.90 |
| Classroom SES (2) | +3.65 | + 4.85 |
| Classiroom SES, given family background (12) | +1.61 | + 2.14 |
| Classroom SES, given family background and proportion white classmates (48) | +1.49 | +1.98 |
| Proportion white classmates (3) | +1.96 | + 3.92 |
| Proportion white classmates, given family background (18) | +1.61 | +3.22 |
| Proportion white classmates, given family background and classroom SES (54) | +1.55 | + 3.10 |

presented there: the size of the influence of classroom social context and classroom racial composition are of comparable magnitude and both of these factors retain some independent effect when the other is taken into account.

When no controls are imposed, the standardized parameter for classroom social context $(+4.85)$ is somewhat larger than the parameter for classroom racial composition (+3.92). After categories of individual student's family background are held constant, the parameters for both factors are reduced but the racial composition parameter is reduced the least of the two. Controlling for family background, the racial composition parameter is now somewhat larger (+3.22) than the value due to differences in classroom social context $(+2.14)$. This reflects the fact that the measure of individual student's family background is more highly related to the measure of social class level of his fellow classmates than to the racial proportions in his classes. ${ }^{1}$ But both parameters remain as important situational correlates of Negro student achievement.

The final comparison to be noted from Table V. 4 shows the independent effect of both factors. When both a student's family background and the proportion of his classmates who are white are taken into account, the average effect on individual Negro student achievement due to differences in the classroom social context is

[^22]+1.98 , which is reduced only slightly from the +2.14 value when only Eamily background controls were imposed. The picture is similar [or the effect due to classroom racial composition: adding classroom social context as a control variable to the controls established on an individual student's family background leaves the parameter of effect largèly undisturbed, changing it from +3.22 to +3.10. Tiese results mean that, as measured in Table V.3, classroom racial composition and classroom social context have independent and additive effects. Among the classrooms which enroll students who come from the same average social class level, a Negro student is found to be achieving at a higher level if most of these classmates are white. Conversely, holding constant the classroom racial proportion groupings, the Negro students are achieving at a higher level whose fellow classmates come from higher social class levels. The Negro students who are achieving at the highest average level of all are those with classmates who are both from upper social class levels and are also white. These statements are made after the family background of the individual Negro students being compared is taken into account.

These results are different from the picture presented by the correlational analyses presented in the $O E$ Report, which treated racial composition and social context variables measured at the school level, rather than at the classroom level as in the present analysis. In the OE Report, the amount of variance in Negro student achievement scores which was explained by differences in the school racial compo-
sition was large, relative to the explanatory power of most other school factors. 'lhis conclusion was left undistur'jed when a variety of school facility and curriculum characteristics were held constant in addition to the measures of the individual student's family background. llowever, when other measures of the student environment in the school were statistically controlled, the additional amount of variance in achievement explained by the school racial composition was sharply reduced. This lead the authors to conclude:

The higher achievement of all racial and ethnic groups in schools with greater proportions of white students is largely, perhaps wholly, related to effects associated with the student body's educational background and aspirations. This means that the apparent beneficial effect of a student body with a high proportion of white students comes not from racial composition per se, but from the better educational background and higher educational aspirations that are, on the average, found among white students. (Coleman, et al., 1966)

The present analyses at the classroom level suggest otherwise. 'llere is both a strong residual effect of racial composition after social class context is controlled, and conversely also a strong social cläss context effect when racial composition is held constant. The conclusion then is that both the social class context and the racial composition of the classroom make significant independent contributions to Negro students' academic growth. Stated differently, on the average Negro students would benefit academically by switching from a mostly Negro class to a mostly white cl-sf, even if these classes enrolled fellow students of the same social class background. Also, no matter what the racial composition differences of the classes, Negro students attending classes with fellow students from
higher social class backgrounds will achieve at a higher average level. An interesting case in this regard has been noted above, where in the mostly Negro schools the Negro students in the mostly Negro classes achieved at a higher level than the comparable students in the mostly white classes which enrolled the students from the poorest social backgrounds in these schools.

Nonetheless, we will take these results to merely suggest that classroom racial composition is an infiuence on Negro student achievement which operates beyond the effects of the social class composition of an individual's ciassmates. Final judgments will be reserved until other measures of the interracial conditions within desegregated schools are examined in the next chapter. There is a principal difficulty which prevents a strong conclusion that the reason for the discrepancy between the present results and the OE Report results lies in the fact one analysis was performed at the classroom level and the other at the level of the school. This reason is that the OE analysis used many more dimensions in the measure of student social context than was used in the present treatment. 'herefore, it is possible that the social context controls were not sufficiently severe in the classroom analyses to capture the effects this factor has in common with classroom racial composition.

But even with thjs possible difficulty, the analysis of attitude differences between Negro students in a manner similar to this section does allow some firm conclusions.

### 2.2 Influences on Negro student attitudes

Ti, s.ame exercise as was just described for the analysis which was reported in the previous section has been performed using student attitudes rather than their achievement scores as the dependent variable to be accounted for. ${ }^{1}$ Because some interesting differences appear between boys and girls which did not arise in the study of student verbal achievement, the findings are presented separately by sex as well as for the total sample of ninth grade Negro students.

Table V. 5 gives parameters of the effects due to differences in〔amil.y background, or to classroom social class context, or to classroom racial composition, under different control conditions. There are five attitude variables on which these effect parameters were separately calculated. College plans aremeasured by the percent of students in each cell of the parent tabulations who responded "definitely yes" to the question: "Are you planning to go to college?" More immediate aspirations are trapped by comparing the percentage of students who checked that they wanted to be "one of the best students in my class" to the questionnaire item about students' desired rank-in-class. Contol of environment is gauged by the percent who checked "disagree" to the statement: "Good luck is more important than hard work for success." The percent who disagree to the item "If I could change, I would be someone different from myself" is taken as the measure of self-concept. Two racial attitudes were used, based on the percent who did not select

[^23]TABLE $\mathrm{V}^{\circ} 5$
WEIGHTED PARAYETERS OF THE EFFECT OF FAMIIY BACKGROND, CLASSROOM SOCLAi COMTEXT
("alues significant at 05 level are underlined; those significant at 01 level are underlined :wice.)

| effect variable | depeydemt varlable |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | College Plans |  |  | Desire to be Sest in Class |  |  | Self-Image |  |  | Control of Environment |  |  | Choice or intice Classmates |  |  | ت̈oise of inize Friends |  |  |
|  | Total | Boys | Girls | Total | 3oys | Girls | Total | Boys | Girls | Total | 3oys | Girls. | Socal | Soys | airls | Iozal | Soys | -irls |
| $\begin{gathered} \text { Sex, }{ }^{\text {a given }} \\ \text { family background } \end{gathered}$ | . 028 |  |  | . 021 |  |  | . 049 |  |  | -. 002 |  |  | -. 016 |  |  | $\underline{-031}$ |  |  |
| Family background. given sex (2) | $\stackrel{.278}{-}$ |  |  | $\stackrel{.064}{=}$ |  |  | . 060 |  |  | $\underline{.150}$ |  |  | . 030 |  |  | . 038 |  |  |
| Classroom social context. given family background (3) | . 023 | . 019 | . 026 | $\underline{-057}$ | -. 062 | -. 049 | . 001 | -. 024 | . 021 | . 032 | . 031 | . 032 | -. 006 | -. 005 | -. 018 | -. 013 | -. 009 | -. 01 |
| Classroom social context. given family background and proportion white classmates (4) | . 017 | . 013 | . 021 | $\underline{-049}$ | $\underline{-055}$ | -. 042 | -. 008 | $\underline{-.040}$ | . 015 | . 017 | . 019 | . 019 | -. 014 | -. 002 | -. 024 | $\underline{-023}$ | -.02: | -. 02 |
| Proportion white classmates, given family background (5) | . 021 | . 034 | . 007 | -. 028 | -. 022 | -. 032 | . 025 | . 019 | . 034 | $\stackrel{.056}{ }$ | . 048 | $\stackrel{.066}{ }$ | $\xrightarrow{.031}$ | . 019 | $\underline{.044}$ | $\xrightarrow{.048}$ | . 052 | . 040 |
| Proportion white classmates. given family background and classroom social context (6) | . 018 | $\stackrel{.037}{ }$ | . 000 | -. 030 | $\underline{-.028}$ | -. 029 | . 023 | . 025 | . 032 | . 05 | $\underline{.046}$ | . 060 | . 037 | . 028 | . 048 | . 053 | . 060 | . 04 |

${ }^{a}$ a positive value indicates that girls were higher than boys.
all Negroes for their close friends, or for the students in their school, using the questionnaire items: "If you could have anyone you wanted for you close friends, how many would be white?" and "If you could be in the school you wanted, how many of the students would you want to be white?"
'lhe pattern of effects is quite different among the several attitude measures. In Table V.5, the effect parameters which are statistically significant at the .05 level are underlined, and those which exceed the .01 level are underlined twice. A negative sign before the parameter indicates a negative effect. The differences in the size and direction of the effect parameters suggest that the racial composition and the social context of a classroom may indeed have separate influences on different dimensions of Negro student development.

Among the six separate dependent variables, there are two for which neither situational factor appears to have any general effect. Three others reveal a particularly strong racial composition effect, without a corresponding classroom social context influence. One variable seems to be negatively influenced by the social class level of the classroom but without a similar strong effect from racial desegregation. Added to these is the additional pattern described above for student achievement, where both the racial enrollments and the social class composition of the classroom appear to be effective positive agents of change.

Aspirations and self-image. - In Chapter III, it was pointed out that it was generally the case that the racial enrollment of a student's present classroom has little or no effect positively or negatively 0: Negro students' aspirations or self-image. However, the small decrease in Negro students' desires to be the best student in their classes as the proportion of white in the clasis increased was noted. Chapter IV showed that the changes in the standards and level of competition which often results from classroom desegregation offered a likely explanation for Negro students' resignation about not being the top achiever in their class. The parameters shown in Table V. 5 lend added support to these findings. Only classroom social context shows a significant residual relationship with a decrease in Negro student desires to be among the best in class. Classroom social context varies directly with the achievement level in the classroom which creates the differences in the level of competition in desegregated class rooms. So, the results shown in Chapter IV for the significant negative effect of level of competition on the Negro students' awareness of their chances to rank high in their class, offer a satisfactory explanation for the values shown in Table V.7. This is especially so since the racial composition of the classroom showed only a small negative effect compared to the social class context factor.

Looking at the parameters of effect on Negro students' college plans, again there is little evidence that the classroom environment has general effects on these goals. Just as differences in the classroom racial composition were found to be associated with only small
differences in college plans, classrooms with contrasting social contexts are generally found to differ by small amounts in the college goals of the Negro students enrolled in the classes. The single exception is for boys. While no large effect of the social class level of one's fellow students is found when only family background of the individual Negro students is controlled, when both family background and the proportion white classmates are controlled, a significant student effect does appear for the boys (.037). Recall, in Chapter III, where the grade when students were first desegregated was examined as an independent variable, it was only the girls for whom a positive effect appeared. This confusion of results only makes apparent the complicated nature, and different dimensions of students' expressed plans for the future. With all of this, the most noteworthy result is reported in Chapter IV, with regard to the concrete steps usually taken to follow through on college plans: reading college catalogues and contacting college officials. The Negro students who were attending classes where most of their fellow students were white, were more likely to have taken these steps than other Negro students. This is taken as some evidence that, no matter what their expressed future goals these plans are held more realistically and with a more complete understanding of their prerequisites when a Negro student is in a desegregated classroom.

Similarly, there are no general indications that the classroom environment affects Negro students' self-image. The parameters for the effect of the social class context are small for this variable,
just as the effects due to differences in classroom racial composition were found to be. There do appear for the first time, however, some very weak indications that Negro boys may suffer some strain on their self-esteem due to changes in their classroom environment. Improvements in the classroom social context are associated with a greater tendency for this group to want to change to be someone else. But, whatever the influence, it does not appear to be in differences in the racial enrollments, per se. Thus, with these first three attitude measures, we have examples of the case where neither classroom environment component has an effect, and of the case where only the social class context of the classroom is influential. The general patterns for expressed college plans and self-image fall is the first case, and scudents' tolerance of the fact they will not lead their class in achievement is the second case. Again, social class context is seen to have its effect on this last variable because of its influence on the academic standards and level of competition in the classroom.

Control of environment and racial attitudes. - The last three dependent variables in Table $V .5$ are examples of the case where the classroom racial composition, but not the social class context of the classroom, is an effective agent for change.

Beginning with the parameters for effects on Negro students' Eeelings of opportunity and that they can control their own environment, there are several comparisons which support this conclusion. First, when students' family background is controlled, parameters of effects
due to differences in the racial character of the classroom are larger than those due to raising the social class level of the fellow classmates. On line (5) of Table V.5, the value for the white classmates' effect is .056 , and the parameter on line (3) measuring the classroom social context effect is .032 . But the argument that the classroom racial composition, per se, is the influential factor gains power when other control variables are added to the family background measure. The value of the parameter for the effect due to classroom social context reduces in half when the class room racial composition is held constant together with family background. The original value, .032, which diminished to .017 when the additional control variable was imposed. This suggests that the reason the social class context parameter was significant in the first place was because this factor was related to differences in the classroom racial enrollments. This reasoning appears particularly sensible, because a corresponding reduction in effect parameters does not occur for the racial composition measure. The original value for this measure is left undisturbed when the classroom social context is taken into account in addition to family background. The two values shown in rows (5) and (6) of the table are . 056 and .052 .

A similar conclusion that increases in white classmates and not high social class fellow students is the cause of changes in Negro students' racial attitudes is even more persuasive. In the case of the racial attitudes, the effects of the two environmental components of the classroom are in opposite directions. For the final two
dependen't variables in Table V.5, the parameters showing the effects on choices of integrated classroom and friendship groups are positive when measuring the effect of increased exposure to white classmates (. 031 and .048 on line (5) of the table), but the parameters are negative for the influence in higher social class contexts in che classroom (-. 006 and -.013 on line (3) of the table).

Although these negative values are small when only family background is controlled, the parameters double their negative value when the proportion white classmates is held constant as well. The parameter for choice of classmates under these conditions, -.023 , is large enough to pass a statistical test of significance at the .05 level. That is, for Negro students in racially similar classes and from similar family backgrounds, they are more likely to choose groups whose members are all of their race if they attend class with students from a high social class than if their classmates are from a low social class:

When additional controls are imposed on the analysis of the racial composition effect, the parameters increase in their value. Comparing rows (5) and (6) of Table V.5, the positive effect on Negro students' choice of integrated situations due to their exposure to white classmates grows in size after both variations in family background of the individual students and in the social class context of their classroom are taken as given. When the contaminating effect of social class context is controlled, the influence of racial desegregation per se becomes more evident.
3. Summary

This chapter has examined the influence of some components of student environment as an explanation for differences between the achievement level and attitudes of segregated and desegregated Negro students. Beginning with an exercise to show that differences in the quality of instruction in segregated and desegregated classes do not Fully explain the differences in student development, additional evidence was provided that the classroom student environment rather than the school student environment offered a promising source of explanation.

Focusing particularly on the classroom student environment, two dimensions of this environment were distinguished: the classroom social context and the racial composition. Tabulations using measures of these variables suggested that each component had independent effects, although the separate effects were often on different dimensions of Negro student development. Both racial composition differences and changes in classroom social context were seen as influences on Negro student academic achievement. Improvements in the social class context, by itself, were seen to negatively influence Negro students' desires to lead their class in achievement. The discussions in Chapter $I V$ on the effect of the level of competition on a student's resignation to a particular rank-in-class were recalled here. The evidence for an independent racial composition effect was clearest for both Negro students' sense of opportunity and power and also for their desire for integrated groups. Indeed, only changes in racial
composition and not differences in social class context were seen to influence these attitudes.

The case for a separate influence of classroom racial composition on achievement differences among Negro students is open to some question. The argument in this chapter rests on a residual relationship after family background and a measure of the average social class level in the classroom were controlled. Other results in this chapter on an independent racial composition were drawn when only one of these control variables was positively related to the dependent variable. So, the next chapter will further examine racial conditions within desegregated schools, to provide more direct information on the nature of the racial composition effect.

SOC: LAL INTEGRATION: INTERRACIAL ACCEPTANCE IN DESEGREGATED SCHOOLS

This chapter will follow up the suggestions from the preceding chapter that the interracial conditions within desegregated schools may have important consequences for how Negro students react to other situational fictors in their classrooms. There will be three different approaches taken nere in examining whether the residual racial composition effects shown in Chapter $V$ do indeed arise from interracial conditions. First, the race of each Negro student's close friends will be used as a measure of the degree to which a desegregated student enjoys social acceptance within his school. The question to be asked using this measure is how completely does the race of close friends explain the relationships between student behavior and desegregation which have been already described. Second, other measures of the degree of social integration in a desegregated school -- principally the degree of racial tension which is seen to exist among students, and students' participation in extra-curricular activities will be used. The goal will be to discover whether these school measures separate out the Negro students who appear to benefit most from school desegregation. Pinally, the racial attitudes of white students in desegregated classes will be briefly examined.

## 1. The role of white friends

In Chapter II, where the distinction between classroom and school desegregation was first introduced, it was shown that the chances that a Negro student would have some ciose friends who were not all of his own race was much more a function of the racial composition of his classes than of his school. Table VI.l shows that the length of time a Negro student has been attending desegregated classes is also related to the chance he will have some close friends from outside his own racial group. This is true, no matter what the racial composition of his current classmates.

The importance of the classroom student composition rather than the school composition as an important influence on Negro student achievement and attitudes has been emphasized in the preceding chapters. Here we wish to examine the way the racial composition of a Negro student's classmates and of his close friends interact to influence his academic performance and some selected attitudes.

### 1.1 Academic achievement

Table VI. 2 presents the average achievement scores of ninth grade Negro students, grouped by their family background, by the proportion of their classmates who are white and by whether they have any close friends who are white. Weighted effect parameters calculated from these tabulations are shown in Table VI.3. Again the parameters are standardized to take into account the different numbers of categories for the groupings on each variable (six categories were used for
'IABI.EVV.I




| I'anily <br> Hackground | Preporifon White Clasamintes | Farliest lesegregnted itade |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1. 2 or ${ }^{\text {3 }}$ |  | 4,5 or 6 |  | 7.8 or 9 |  | Never |  |
| 1 | Norie | 5 | (136) | 60 | (57) | 59 | (86) | 55 | (101) |
|  | 1.6es than lialf | 34 | (198) | 32 | (76) | 43 | (94) |  |  |
|  | About llalf | 22 | (82) | 25 | (16) | 15 | (40) |  |  |
|  | More than llalf | $1)$ | (94) | 24 | (29) | 34 | (29) |  |  |
| II | None | 53 | (95) | 65 | (37) | 62 | (64) | 54 | (41) |
|  | I.es.s than Malf | 30 | (201) | 35 | (63) | 43 | (54) |  |  |
|  | About Half | 23 | (69) | 33 | (15) | 35 | (20) |  |  |
|  | More than Half | 28 | (86) | 15 | (20) | 9 | (22) |  |  |
| 111 | None | 54 | (99) | 34 | (38) | 38 | (42) | 76 | (41) |
|  | Hess than Half | 35 | (134) | 24 | (46) | 36 | (36) |  |  |
|  | Ahout llalf | 20 | (49) | 25 | (12) | 14 | (14) |  |  |
|  | More than $\mathrm{Half}_{\text {l }}$ | 17 | (81) | 7 | (14) | 43 | (21) |  |  |
| IV | None | 57 | (108) | 46 | (41) | 45 | (56) | 77 | (44) |
|  | l.eas than Malf | 35 | (164) | 40 | (30) | 44 | (36) |  |  |
|  | . About llalf | 21 | (63) | 33 | (18) | 20 | (15) |  |  |
|  | More than Half | 21 | (106) | 23 | (30) | 32 | (28) |  |  |
| V | None | 55 | (117) | 46 | (46) | 49 | (45) | 67 | (27) |
|  | Less than llalf | 36 | (181) | 28 | (46) | 37 | (35) |  |  |
|  | Aborat llalf | 23 | (75) | 11 | (18) | 26 | (23) |  |  |
|  | More than Half | 20 | (140) | 12 | (33) | 32 | (31) |  |  |
| VI | None | 44 | (72) | 48 | (27) | 61 | (13) | 44 | (9) |
|  | I.ess than lialf | 28 | (104) | 44 | (23) | 33 | (18) |  |  |
|  | About llalf | 12 | (48) | 14 | (7) | 11 | (9) |  |  |
|  | More tlian Half | 13 | (93) | 22 | (18) | 14 | (22) |  |  |


Famaly background, given proportion white clasmates and earliest desegregated grade..... 0.037
Proportion wille clasinates. given family background and earliest desegregated grade....t. 163 (aig. at . 01 )
Earliest desegregated grade, given fanily background and proportion witite classmates....t. 029 (sig. at . 10 )
'TABII: VI. 2

AVERAC: VIERBAI, ACDIIEVI:MFNT OF NINTII GRADI: NEGGR SJIUDENTS


| FAnllly <br> Barkgronind | ranse Whilte frifinds | Proportion White cilassmates |  |  |  | TOTAI, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | None | l.ess Than llalf | About Half | More Than llalf |  |
| 1 | No | $\begin{array}{r} 254.32 \\ (232) \end{array}$ | $256.29$ <br> (163) | $\begin{gathered} 255.03 \\ (35) \end{gathered}$ | $\begin{gathered} 253.98 \\ (39) \end{gathered}$ | $\begin{array}{r} 255.03 \\ (469) \end{array}$ |
|  | Yes | $\begin{array}{r} 255.54 \\ (179) \end{array}$ | $\begin{array}{r} 254.90 \\ (209) \end{array}$ | $\begin{gathered} 256.60 \\ (131) \end{gathered}$ | $\begin{array}{r} 260.66 \\ (137) \end{array}$ | $\begin{array}{r} 256.47 \\ (716) \end{array}$ |
|  | Total. | $\begin{array}{r} 254.85 \\ (411) \end{array}$ | $\begin{gathered} 255.42 \\ (432) \end{gathered}$ | $\begin{array}{r} 256.27 \\ (166) \end{array}$ | $\begin{gathered} 259.18 \\ (176) \end{gathered}$ |  |
| I [ | No | $\begin{array}{r} 256.78 \\ (143) \end{array}$ | $\begin{gathered} 256.88 \\ (116) \end{gathered}$ | $\begin{gathered} 257.50 \\ (28) \end{gathered}$ | $\begin{gathered} 260.61 \\ (31) \end{gathered}$ | $\begin{array}{r} 257.25 \\ (318) \end{array}$ |
|  | Yes | $\begin{array}{r} 257.34 \\ (104) \end{array}$ | $\begin{array}{r} 259.46 \\ (232) \end{array}$ | $\begin{gathered} 259.18 \\ (84) \end{gathered}$ | $\begin{array}{r} 261.14 \\ (106) \end{array}$ | $\begin{array}{r} 259.33 \\ (526) \end{array}$ |
|  | Tote 1 | $\begin{array}{r} 257.02 \\ (247) \end{array}$ | $\begin{array}{r} 258.60 \\ (348) \end{array}$ | $\begin{array}{r} 258.76 \\ (112) \end{array}$ | $\begin{gathered} 261.02 \\ (137) \end{gathered}$ |  |
| 111 | No) | $\begin{array}{r} 258.91 \\ (118) \end{array}$ | $\begin{gathered} 260.68 \\ (80) \end{gathered}$ | $\begin{gathered} 262.89 \\ (18) \end{gathered}$ | $\begin{gathered} 252.00 \\ (28) \end{gathered}$ | $\begin{array}{r} 260.14 \\ (244) \end{array}$ |
|  | Yea | $\begin{gathered} 257.38 \\ (110) \end{gathered}$ | $\begin{array}{r} 259.80 \\ (156) \end{array}$ | $\begin{gathered} 260.83 \\ (63) \end{gathered}$ | $\begin{array}{r} 265.58 \\ (106) \end{array}$ | $\begin{array}{r} 260.74 \\ (435) \end{array}$ |
|  | Total | $\begin{array}{r} 258.17 \\ (228) \end{array}$ | $\begin{gathered} 260.10 \\ (236) \end{gathered}$ | $\begin{gathered} 261.29 \\ (81) \end{gathered}$ | $\begin{array}{r} 264.83 \\ (134) \end{array}$ |  |
| IV | No | $\begin{array}{r} 259.83 \\ (143) \end{array}$ | $\begin{gathered} 261.02 \\ (91) \end{gathered}$ | $\begin{gathered} 261.27 \\ (26) \end{gathered}$ | $\begin{gathered} 262.36 \\ (42) \end{gathered}$ | $\begin{array}{r} 260.66 \\ (302) \end{array}$ |
|  | Yes | $\begin{gathered} 257.16 \\ (113) \end{gathered}$ | $\begin{array}{r} 262.22 \\ (162) \end{array}$ | $\begin{gathered} 264.03 \\ (79) \end{gathered}$ | $\begin{array}{r} 266.31 \\ (139) \end{array}$ | $\begin{gathered} 262.50 \\ (493) \end{gathered}$ |
|  | fotal | $\begin{array}{r} 258.65 \\ (256) \end{array}$ | 261.79 <br> (253) | $\begin{array}{r} 263.35 \\ (105) \end{array}$ | $\begin{array}{r} 265.39 \\ (181) \end{array}$ |  |
| V | No | $\begin{array}{r} 264.39 \\ (128) \end{array}$ | $\begin{gathered} 262.09 \\ (97) \end{gathered}$ | $\begin{gathered} 264.00 \\ (26) \end{gathered}$ | $\begin{gathered} 266.75 \\ (44) \end{gathered}$ | $\begin{array}{r} 263.95 \\ (295) \end{array}$ |
|  | YC= | $\begin{gathered} 263.53 \\ (116) \end{gathered}$ | $\begin{array}{r} 262.49 \\ (183) \end{array}$ | $\begin{gathered} 265.89 \\ (98) \end{gathered}$ | $\begin{gathered} 269.84 \\ (171) \end{gathered}$ | $\begin{array}{r} 265.50 \\ (568) \end{array}$ |
|  | Total | $\begin{array}{r} 263.98 \\ (244) \end{array}$ | $\begin{array}{r} 262.35 \\ (280) \end{array}$ | $\begin{gathered} 265.49 \\ (124) \end{gathered}$ | $\begin{array}{r} 269.20 \\ (215) \end{array}$ |  |
| VI | No | $268.67$ <br> (60) | $\begin{gathered} 270.02 \\ (46) \end{gathered}$ | $264.38$ <br> (8) | $\begin{gathered} 273.33 \\ (21) \end{gathered}$ | $\begin{gathered} 269.60 \\ (135) \end{gathered}$ |
|  | Yes | $\begin{gathered} 265.57 \\ (67) \end{gathered}$ | $\begin{array}{r} 269.54 \\ (109) \end{array}$ | $\begin{gathered} 269.55 \\ (60) \end{gathered}$ | $\begin{gathered} 273.68 \\ (123) \end{gathered}$ | $\begin{gathered} 270.22 \\ (359) \end{gathered}$ |
|  | Total | $\begin{array}{r} 267.03 \\ (127) \end{array}$ | $\begin{gathered} 269.68 \\ (155) \end{gathered}$ | $\begin{gathered} 268.94 \\ (68) \end{gathered}$ | $\begin{gathered} 273.63 \\ (144) \end{gathered}$ |  |

TABLE VI. 3

| Effect Variable | Effect Parameter | Parameter Standardized to Dichotomy |
| :---: | :---: | :---: |
| Proportion white classmates, given family background (18) | +1.62 | +3.24 |
| Proportion white classmates, given family background and race of friends (36): <br> no white friends (18) <br> yes white friends (18) | $\begin{aligned} & +1.62 \\ & +.075 \\ & +2.05 \end{aligned}$ | $\begin{aligned} & +3.24 \\ & +1.50 \\ & +4.10 \end{aligned}$ |
| Race of friends, given family background (12) | +1.45 | +1.45 |
| ```Race of friends, given family background and proportion white classmates (24) Proportion white classmates: None (6) Less than half (6) About half (6) More than half (6)``` | $\begin{aligned} & +0.55 \\ & -0.65 \\ & +0.24 \\ & +1.63 \\ & +3.32 \end{aligned}$ | $\begin{aligned} & +0.55 \\ & -0.65 \\ & +0.24 \\ & +1.63 \\ & +3.32 \end{aligned}$ |

family background, four for proportion of white classmates, and two for race of close friends).

Looking at the overall parameters measuring the influence of race of classmates and race of friends on Negro student achievement, classmates dominate over friends. When only family background is controlled, the effect parameter for classmates' racial composition is more than twice as large as the parameter for race of close friends (3.24 and 1.45). When both family background and other racial composition variables are held constant, it appears at first that only the classroom racial composition matters for Negro student achievement, and that the race of close friends does not intervene as an influence at all. The parameter for the achievement due to classroom racial composition remains at the constant vaiue of 3.24 when the race of close friends is taken into account in addition to the family background of the Negro students. In contrast to this, the achievement effect due to race of friends is seriously diminished when the racial enrollments in the classroom are taken as given. The value 1.45 of the parameter measuring the effect with family background controlled, reduces to 0.55 when classroom racial composition is imposed as an additional control variable. Although these results argue strongly for the primary influence of the classroom composition rather than the racial character of the friendship group, it is the nature of the way race of classmates and race of friends interact as influences where the more interesting findings appear.

While it is true that the parameter of effect for classroom racial
composition remains unchanged when the existence of white friends is added as a conlrol variable (+3.24), this masks the importance of the close Iriends. Ihe component values which combine to make up this value are also shown in Table VI.3. The achievement effect due to classroom racial composition is 4.10 for the Negro students who have some white friends, and 1.50 for the students with no white friends. Thus, the influence of white classmates on Negro student achievement is much stronger if the student can also count whites among his close friends. The partitioning of the effect due to the race of close friends into its components, shows the interaction in a different way. Among the separate groups of Negro students in racially similar classrooms, having a white student as a close friend only adds an additional advantage for Negro students' academic growth if the student attends a class with half or more white students. The overall effect due to white friends is 0.55 , but among the students in classes which are about half white, this parameter is 1.63 , and the value is 3.32 for those Negro students in mostly white classes. For the students in mostly Negro classes, the achievement effect due to having close friends is small, and is actually slightly negative for those in all Negro classes.
'There are two different kinds of models which offer alternative explanations for these results. The first considers the relative influence of different peer groups on an individual student to be a function of the proximity of the alternative groups to the individual. The second appeals to the notion of social acceptance in interracial situations which have been developed by Katz.

Peer group influences and proximity. - We have considered three different peer groups as sources of influence on Negro students. First, the attributes of all the students enrolled in the school were distinguished from the characteristics of those students in an individual's own classroom, as separate forces for individual change. The second set is a subgroup of the first. Now, an individual's close friends are introduced as a third peer group. If the different groups of fellow students in a school are placed on a continuum according to their proximity to a particular individual student, the fellow classmates would lie in an intermediate position between the total student body of a school and his close friends.

Other studies have suggested that the peers who form the immediate environment for an individual will have a greater influence on him than those with whom he has little regular contact or association. Studies of students in school by Campbell and Alexander (1965) and McDill, Meyers, and Rigsby (1966) have shown that the attributes and values of a student's close friends will usually affect him more than any characteristics which may typify the general student body of his school. In their study of political allegiances in the typographical union, Lipset, Trow and Coleman (1962) distinguished the union climate and the climate within an individual's own shop as they operate on an individual's own political predispositions. They also judged it likely that the climate which was closer to the man would have the most effect on his political behavior.

When considering the separate peer groups as sources of influence,
the question arises whether each can exert a force on an individual when it is in conflict with the peer groups which are in closer contact with an individual. In our case, this question is whether the school-wide student body has an influence over and above the classmates, and whether the classmates taken as a group have an influence independent of an individual's closer friends. The results presented above suggest different answers to these two questions.

In Chapter III it was shown that in general the effect of school desegregation disappears when the racial characteristics of the classroom were held constant. Negro students kept in segregated classes received no benefit to their academic growth from attendance at desegregated schools. But, Table VI. 3 suggests that a Negro student's exclusion from friendship groups which include whites does not eliminate the benefit he derives from attendance in desegregated classes. To be sure, the inclusion in integrated friendship groups had an important conditioning value on how much benefit an average Negro student derived from classroom desegregation (the values were 4.10 for those with white friends and 1.50 for those without white friends). But it does seem that some positive effect of classroom desegregation supersedes the student's social integration into friendship groups.

Finally, each of these three sets of fellow students also seem to intensify the influence of the one at the next lower level of proximity from the individual. If the racial characteristics of one peer group coincide with the composition of the group at the next
level, that influence on achievement seems to be stronger. So the effect on achievement of classroom desegregation was largest for students who also attended mostly white schools. At the same time, the students in mostly white classes appear to be the only group of Negro students who derived some additional benefit from increases in the proportion white enrolled in their school. Also, the effect of an integrated friendship group only appeared for those students whose classes were mostly white. Conversely, the classroom desegregation effect showed itself to be strongest for those Negro students who were part of an integrated friendship group. As a result, the group of Negro students with highest average achievement of all are those in integrated schools, classrooms, and informal associations.

Interracial acceptance. - As described in the first chapter, Katz (1964) has outlined some reasons why the social acceptance of desegregated Negro students by their white classmates may serve as both a direct and a facilitating influence on their development. In terms of academic achievement, Katz saw the potential respect and acceptance by whites as an important motivating factor for Negro students. On the other hand, racial hostility and stress was seen as a significant distraction and impediment to learning. Beyond these direct influences, some of the ways that social acceptance and racial harmony might facilitate the operation of other situational components were described in detail in Chapter $I$.

Explanations drawn from Katz's model for the results reported
above are centered on the racial nature of the friendship group. It is the fact that close friendships have been established by the Negro students with the white classmates, rather than perhaps the better achieving students in the class, which Katz would point to. That is, the racial rather than the social class composition of close friends is seen as the effective agent.

Just as with the distinction between classroom racial composition and classroom social class context, it will not be possible to give clear evidence that the racial attributes of friends per se, is the factor affecting achievement differences. With the survey information there is no way of separating out other non-racial features of an individual's friendship group. Again, however, the independent influence of racial integration is clearer for its effects on certain atti.tudes.

### 1.2 Student attitudes

The importance of being accepted into integrated friendship groups within desegregated classrooms is very clear in terms of its effect on some Negro student attitudes. Table VI. 4 presents the parameters of effect on certain Negro student attitudes due to social. integration. ${ }^{1}$ In every case but one, the force of the race of close friends shows up, although often this influence is as an indirect

[^24]TABII: VI. 4




| Fiffect varlable | DEPENDENT VARIABL. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | College Plans |  |  | Desire to Be Best in ciass |  |  | Self-Imsge |  |  |
|  | Total | Boys | Cirls | Total | Boys | Girls | Total | Boys | Girla |
| Sex, ${ }^{\text {a }}$ given family background (1) | . 028 |  |  | . 021 |  |  | . 049 |  |  |
| Proportion while cisssmates, glven family ba•kground (2) | . 001 | . 022 | -. 020 | -. 037 | -. 048 | -. 029 | . 045 | . 035 | . 052 |
| Proportion white clasmates, given family background, and white friends (3): no white friends yes whlte friends | -.014 -.042 .000 | .003 .002 .004 | -.035 -.078 -.007 | $\frac{-.049}{-.057}$ | -.055 -.078 -.044 | -.050 -.046 -.053 | $\begin{aligned} & .045 \\ & .002 \\ & .067 \end{aligned}$ | $\begin{aligned} & .045 \\ & .017 \\ & .055 \end{aligned}$ | $\begin{array}{r} .052 \\ -.007 \\ .087 \end{array}$ |
| White friends, given family background (4) | . 051 | . 049 | . 055 | . 015 | . 002.029 |  | . 021 | . 022 | . 029 |
| White friends, given family background and proportion wilte classmates (5) | . 054 | . 044 | . 066 | . 029 | . 018 | . 046 | . 01.6 | . 012 | . 021 |
| EFEECT VARIABLE | Control of Environment |  |  | Choice of White Classmstes |  |  | Choice of White Friends |  |  |
| Sex, ${ }^{\text {a }}$ g ven family background (1) | -. 002 |  |  | -. 016 |  |  | -. 031 |  |  |
| Proportion white classmates, given family background (2) | . 098 | .069 | $\underline{.1}$ | $\underline{.050}$ | . 043 | $\underline{.057}$ | . 067 | $\underline{-}$ | . 056 |
| Prodortion white classmstes, given family background and white friends (3) no white friends yes white friends | . 093 | . 072 | . 110 | -. 001 | -. 006 | .006 | -. 020 | -. 001 | -. 037 |
|  | . 083 | . 088 | . 080 | -. 015 | -. 058 . 013 |  | -. 067 | -. 057 | -. 081 |
|  | . 097 | . 064 | . 128 | . 006 | . 015 | . 003 | . 004 | . 022 | . 0.011 |
| White friends, given family background (4) | $\underline{.052}$ | . 015 | $\underline{.080}$ | . 190 | $\underline{.192}$ | $\underline{.188}$ | $\underline{+327}$ | $\underline{.323}$ | +378 |
| White friends, given fainily background and proportion white classmates (5) | . 025 | -. 011 | . 055 | $\underline{.189}$ | $\underline{.195}$ | . 181 | . 332 | , 325 | $\underline{+336}$ |

- A positive value indicates thet girls were higher than boys.
factor mediating the effects of other conditions. Each of the six attitude variables will be discussed in turn. At this time, the earlier results for each variable when scudied together with other situational variables in earlier chapters will be reviewed. In this way, it will be possible to not only learn more about the direct and indirect roles which white friends play in changing Negro student attitudes, but also to make some final judgments on the particular situátional factors within desegregated schools which have the largest direct influence nn each separate attitile. The conclusion which will be drawn is that different situational factors have their influence on separate dimensions of Negro student development.

College plans. - Throughout all of our investigations of Negro students' college plans, the first significant effect for a situational variable appears in Table VI.4. The general patterns described earlier for differences in classroom racial composition, classroom social context, level of competition and early desegregation, was for none of these variables to show any significant relationship to all Negro students' college plans. There were exceptions for some of these variables when boys and girls were considered separately, but generally no clear relationship held for any of these variables across the board. Only family background and sex distinguished all students on these goals. Now, Table VI. 4 shows that the racial composition of close friends is another attribute which has a significant general influence.

Line 4 of the table shows that the ninth grade Negro students
who have some white close friends are more likely than others to have definite plans to attend college. This is true after the family background characteristics of the students have been statistically controlled, and it holds for both boys and girls - although the effect appears somewhat stronger for the girls. When both family background and the classroom racial composition are taker into account, the effect is not diminished (row 5 of the table).

Moreover, the race of friends may have a mediating influence on how students react to classroom desegregation in terms of their college plans. It appears that if a Negro stude.t does not establish close friendships with white students, attendance at a desegregated classroom has a somewhat depressing effect on their plans for attending college (parameter value: -.042). If a student does have white friends, attendance in desegregated classes neither changes college plans in a positive or negative direction. The size of the component effect parameters on which this conclusion is based are small, and the pattern appears only for the girls.

A summary of the findings on college plans from all the preceding tables on this variable can be done in a few words. The net effect of desegregation on expressed college plans was shown in Chapter III (Table III.22) to be quite small, but slightly positive, with proportionally a few more of the students in desegregated classes or who had entered desegregated classes in the early grades reporting that they definitely planned college. It was discussed how this conclusion of small positive effects on expressed college plans may hide changes in the nature of
of these plans, since more of the desegregated students have actively taken steps to implement these plans. Underlying this overall pattern was the effect of the level of competition for the lowest achieving students and of the lack of white friends to make desegregation a depressing influence on college plans for these special groups of students. Having white friends was the only situational factor that had any significant effect for all students and its effect was positive.

Desire to be best in class. - This is the only variable which had an overall negative net effect of desegregation, although the effect was small and statistically insignificant. This finding from Chapter III was explained in the following chapter in terms of the level of competition in desegregated classes. Students with the same achievement level rank further below the classroom average in deseqregated classes than they would in segregated ones, and apparently they recognized that their chances of being among the best students in the class are often not very good. There was a significant negative effect of the level of competition in desegregated classes on desires to be best in the class when this situational factor was isolated from the others. This was taken to explain the significant negative effect of the other situational factor which varied regularly with the average achievement or level of competition in the classroom: the class room social context or student environment (Chapter V).

There was also a slight negative residual racial composition
effect after the classroom social context was taken into account in Chapter V. Because it is so small compared to the residual classroom social context variable, it is probably best to avoid attaching any meaning to the value. This conclusion seems especially appropriate when it is seen in Table VI. 4 that close contact with whites in friendship groups has a small positive effect on students desires to rank among the top in their class. If interracial conditions were threatening to Negro students' academic self-confidence, this value should be negative.

Self-image. - Throughout, the distinction has been made betweer generalized measuras of self-image, and indicators of stidents' academic self-confidence within the competition of their own classes. For both kinds of measures, there have been no general indications that desegregation was significantiy related to a positive Negro student selfimage from the more general measure. But in terms of differences in current classroom racial proportions, the net effect was slightly negative for students' desires to be best in class, and slightly positive for the general esteem in which Negro students hold themselves. Again, although it is best not to make very much of the small positive residual effects of classroom racial composition factor, white friends do seem to operate as a slight intensifier of the positive aspects of classroom racial composition. Table VI. 4 shows that the classroom racial composition effect is larger for those Negro students with white friends (.067) than for those with no white friends (.002).

This pattern is the same when Negro boys and Negro girls are treated separately.

Sense of control of environment. - In contrast to the variables already discussed in this section, Negro students' sensc of opportunity and feeling of mastery over their own fate is one attitude where significant effects of differences in classroom racial composition were noted. The net effect of differences in proportion white classmates and early desegregation discussed in Chapter II were strongly positive for this variable. And later in Chapter $V$ it was shown that the classroom racial composition per se had an independent positive effect, while the independent effect of the classroom social context was not significant. Table VI. 4 suggests how these results might be interpreted.

Table VI. 4 shows that similar to the social class context, the race of close friends does not have an independent effect on Negro students' sense of opportunity. The value of the effect parameter for differences in the race of a Negro student's close friends, which is a significant . 052 when only family background is controlled, reduces by half to a non-significant .025 when the racial composition of: the classroom is controlled as well. This suggests that the apparently positive effect of the race of friends actually reflects the effect of the classroom racial composition which is related to the chance that a Negro student will have white friends. The conclusion that the class room racial composition per se is the effective agent for change in this attitude becomes more secure when some further
values in Table VI. 4 are examined. The parameter measuring the effects of classroom racial composition which is a highly significant . 098 when family background is held constant, remains just as strong when the race of close friends is added as a control variable. Even among those students with no white close friends, the value remains close to the original value (although the smaller number of cases on which this value is based makes the significance test more stringent). So, while the proportion of white classmates greatly reduced the race of friends effect, the converse is not true.

Altogether, only one factor is found to have a large effect on Negro students' feelings of fate control: the racial composition of classmates per se, independent of either the classroom social class context or the race of friends. No other factor -- either the level of competition, the student environment or social class context or the race of informal friendship groups -- has a similar independent effect. Thus, just the fact of being permitted to attend class with white students appears to have a dramatic effect on Negro students' sense of opportunity to succeed in life through their own efforts. Very much along the line argued by the Supreme Court, desegregated Negro students seem to be more able to escap? defeatism and stigma of lack of opportunity.

The probable importance of this attitude for the academic growth of Negro students has been discussed at several earlier points. The feeling of mastery over environment was the attribute found to be most highly correlated with achievement in the OE Report (Coleman, et
al., 1966). This knowledge, together with the finding that the classroom racial composition per se influences Negro students' feeling of control of environment gives added impetus to the conclusion stated quite tentatively earlier that Negro student achievement may be affected by both the racial mix and the social class mix of students in desegregated classes.

Racial attitudes. - Negro students' racial attitudes are the only variables where the race of close friends is the factor offering a complete explanation for the net desegregation effects.

Up to this point, the large net effects of classroom desegregation on the likelihood that Negro students would choose only other Negroes for classmates $\stackrel{\$}{s}$ and close friends were noted in Chapter III. Succeeding chapters showed that neither the level of competition nor the social class context of desegregated classes served to alter or to explain the general result. At the same time, the classroom racial composition effect survived undiminished when family background, early desegregation and student environment variables were taken into account. Now, Table VI. 4 shows that it is actually the Negro students' interracial associations which are most prevalent in majority white classes which does explain the general effect.

The parameter measuring the effect of classroom racial composition on Negro students' racial attitudes is highly significant when oniy family background is held constant. The value is .050 for choices of race of classmates and .067 for choices of race of friends. But when the actual race of the students' close friends is also taken
into account, these values are reduced close to zero. Indeed, among those N(gro students who have not been included in interracial friendship groups, there is a small tendency of classroom desegregation to increase ethno-centric choices. It becomes even more clear that the effect of desegregation on racial choices is explained by the informal associations which form in desegregated schools when the parameters for the effects due to white friends shown in Table VI. 4 are also examined.

The parameters for the race of friends'effects on racial attitudes are by far the largest values uncovered in all the analyses which have been reported. And it is clear that the informal associations exert an independent effect on these attitudes. The values observed when only family background is entered as a control variable remain with equal force when classroom racial composition is imposed as an additional control. In short, what matters for the chance that a Negro student will seek future contacts with interracial groups is the experience he has had in establishing close friendships with whites. These experiences are considerably more likely in desegregated classes, and this is why the overall or net effect of classroom desegregation on Negro students' racial attitudes appears.

These results correspond to the theory of prejudice change described in Chapter $I$ which focuses on equal status contact. This theory maintains that contact alone may not break down unfavorable stereotypes between two groups, if the contact between the individuals occurs in situations where strong status distinctions are maintained. In the present case, unless classroom desegregation is accompanied by
the social integration of the students, no change in racial attitudes is expected. But when Negro students are included in the informal friendship groups which include white students, as is frequently the case in desegregated classes, their racial attitudes are influenced. There are two difficulties which exist for this analysis, which can only be partially removed. The first involves questions about the measurement of the variables, and the second concerns the direction of causality.

There is a risk that the correspondence between Negro students' racial choices and the proportion of their friends who they report are white, is merely an artifact of the construction of the student questionnaire. The questions used for these variables require the students to distinguish between the proportion of their actual friends who are white, and the choice they would make if they could have anyone they wanted as close friends, and desired friends and classmates were consecutive items on the ninth grade questionnaire. ${ }^{1}$ Consequently; it may be that after a student responded to the question about his actual friends, a "psychological set" was established for answering the next questions in the same way without carefully considering the hypothetical situations. Actually, a significantly larger proportion
${ }^{1}$ The items in question are: 61. Think now of your close friends. How many of them are white? (None, less than half, about half, more than half, all); 62. If you could choose anyone you wanted for your close friends, how many would be white? (None, less than half, about half, more than half, all); and 63. If you could be in the school you wanted, how many of the students would you want to be white? (None, less than half, about half, more than half, all).
of Negro students reported having no white friends than those who chose the all Negro situations, so many students were making this distinction. In the ninth grade sample, thirty-two percent reported having only Negro friends, but orly sixteen percent chose all Negro friends and eleven percent chose all Negro schools.

In the sixth grade, the question about the racial composition of close friends, and the desired racial composition of classmates were not consecutive items in the questionnaire, but separated by seven other items. The results in this grade were the same as those presented for ninth grade students.

Moreover, in the ninth grade, there are other items which give added support to the argument that the social integration in desegregated schools is the factor which accounts for differences in Negro students' racial attitudes. A student's participation in extracurricular activities, such as athletic teams, the student council, and hobby clubs is another indication of whether the student is socially integrated into the informal associations of the school. Table VI. 5 shows that the Negro students in racially similar classes who were active in extra-curricular activities less frequently chose all Negro friendship groups. Table VI. 6 shows the same pattern for their choices of fellow-classmates.

Students who are socially integrated into these school activities outside of the class room are more likely than the others to value future associations in interracial groups.

The second difficulty is that the assignment of the direction of
'IABII: VI. 5



| Membership In Activity | Proportion White classmates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  | Less Than Half |  | About Malf |  | More Than Half |  |
| Athletic Team |  |  |  |  |  |  |  |  |
| 1. Yes | 53 | (491) | 30 | (524) | 18 | (271) | 19 | (417) |
| 2. No | 56 | (925) | 38 | (1071) | 24 | (331) | 21 | (498) |
| 3. None in the school | 53 | (49) | 35 | (68) | 17 | (35) | 27 | (41) |
| 2-1 | +3 |  | +8 |  | +6 |  | +2 |  |
| Student Council |  |  |  |  |  |  |  |  |
| 1. Yes | 52 | (254) | 35 | (231) | 18 | (97) | 17 | (165) |
| 2. No | 55 | (1120) | 35 | (1318) | 22 | (489) | 20 | (728) |
| 3. None in the achool | 59 | (78) |  | (106) | 25 | (44) | 33 | (67) |
| 2-1 | +3 |  | 0 |  | +4 |  | +3 |  |
| Debate, Dramatics or Music Club |  |  |  |  |  |  |  |  |
| 1. No | 57 | (823) | 39 | (937) | 25 | (325) | 19 | (518) |
| 2. Yes, active | 49 | (478) |  | (508) | 17 | (220) | 23 | (309) |
| 3. Yes, not active | 56 | (117) |  | (143) | 14 | (62) | 23 | (70) |
| 4. None in the school | 67 | (30) | 37 | (63) | 22 | (27) | 18 | (55) |
| 1-2 | +8 |  | +9 |  | +8 |  | -4 |  |
| Hlobby Clubs |  |  |  |  |  |  |  |  |
| 1. No | 57 | (919) | 38 | (1069) | 24 | (391) | 20 | (599) |
| 2. Yes, Hetive | 47 | (320) | 26 | (317) | 18 | (126) | 25 | (193) |
| 3. Yes, hot active | 56 | (59) | 29 | (69) | 20 | (39) | 12 | (50) |
| 4. Nonk In the achool | 57 | (142) |  | (186) | 15 | (68) | 15 | (104) |
| 1-2 | +10 |  | +12 |  | +6 |  | -5 |  |

TABIE V L. 6
PGRCENT' OF 'TWBLIF'TH (;RADE NEGRO STUDENTS HAVING NO WHITE FRLENDS , BY MEMBERSHLP IN l:X'IRA-CURRICUIAR AC'TIVI'TIES AND PROPORTION WHITE

CIASSMATES

| Membership in Activity | Proportion White Classmates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None |  | Less Than Half |  | About Half |  | More Than Half |  |
| Student Council |  |  |  |  |  |  |  |  |
| 1. Yes | 54 | (84) | 29 | (195) | 20 | (169) | 21 | (224) |
| 2. No | 64 | (491) | 41 | (998) | 26 | (976) | 26 | 1,111) |
| 3. None in the school | 74 | (19) | 36 | (14) | 25 | (20) | 30 | (30) |
| 2-1 | +10 |  | +12 |  | +6 |  | +5 |  |
| Debating team, or dramatics or music club. |  |  |  |  |  |  |  |  |
| 1. Yes, active | 56 | (162) | 37 | (320) | 20 | (338) | 22 | (453) |
| 2. Yes, not active | 58 | (33) | 41 | (91) | 30 | (60) | 17 | (88) |
| 3. No | 66 | (379) | 39 | (777) | 27 | (755) | 28 | (808) |
| 4. None in the school | 70 | (20) | 47 | (19) | 8 | (12) | 25 | (16) |
| 3-1 | +10 |  | +2 |  | +7 |  | +6 |  |
| Hobby Clubs |  |  |  |  |  |  |  |  |
| 1. Yes, active | 47 | (111) | 29 | (210) | 19 | (196) | 20 | (262) |
| 2. Yes, not active | 45 | (29) | 26 | (61) | 21 | (47) | 18 | (60) |
| 3. No | 69 | (405) | 41 | (888) | 26 | (876) | 27 | (969) |
| 4. None in the school | 59 | (49) | 56 | (48) | 30 | (46) | 19 | (74) |
| 3-1 | +22 |  | +22 |  | +7 |  | +7 |  |
| Athletic team |  |  |  |  |  |  |  |  |
| 1. Yes | 51 | (142) | 35 | (387) | 21 | (409) | 20 | (563) |
| 2. No | 67 | (408) | 41 | (802) | 27 | (742) | 29 | (787) |
| 3. None in the school | 66 | (44) | 22 | (18) | 29 | (14) | 13 | (15) |
| 2-1 | +16 |  | +6 |  | +6 |  | +7 |  |

causality cannot be fully justified with data collected at ne point in time. All that is actually escablished by the analyses reported here is that social integration and racial choices are highly related, but not that the racial attitudes change only after the social integration is accomplished. The relationship could just as likely represent an opposite temporal sequence of changes: the desegregated Negro students who most frequently at first desire contact with whites are the only ones who in fact establish close interracial friendships. It is likely, however, that the observed relationships are created by instances of both kinds of developmental processes. In fact, for a given individual it is useful to think of a model where the experiences of social integration and any racial predisposition, influence each other in turn over time. When a Negro student who values the association with whites is successful in establishing close informal relationships in interracial groups, these values are likely to be strengthened and supported and to motivate further contacts. On the other hand, a desegregated student who is excluded from friendships or informal associations with whites is not likely to retain positive perceptions of interracial associations, nor approach such future encounters with the same enthusiasm. Indeed, Table VI. 4 shows that the Negro students with no white friends in desegregated classes are more likely to choose al. Negro friends and classmates than the Negro students with no white friends in segregated classes. The general point, however, is that without information collected at several points in a developmental process, not very much can be said about the strength and frequency
of one causal direction rather than another.

### 1.3 Summary

This section has examined the role that white friends may play for different dimensions of Negro student development. This factor, which was taken as an index of social integration in desegregated schools, was investigated for both its direct influence and for the manner in which it facilitates the operation of other situational factors.

The findings from these analyses were brought together with earlier results in order to arrive at some judgments on the particular situational factors which have the most important direct influence for different aspects of Negro student development. The general conclusion is that each of four situational components which vary with class room desegregation reveal their influence, but each affects different dimensions of Negro students' attitudes and behavior.

[^25]to explain the changes which accompany classroom desegregation.

The situational factors having major influence on particular aspects of Negro student development. - Table VI. 7 summarizes the conclusions drawn about the net or overall effects of classroom desegregation on six different measures of Negro student behavior and attitudes. This table also lists the situational components distinctive of desegregated classrooms, and summarizes the conclusions from several analyses concerning the particular situational factors which appear to explain each particular net effect of desegregation.

A net or overall effect of classroom desegregation is indicated if, in Chapter III, there was a positive effect parameter due to differences in classroom racial composition after the family background difference of Negro students were statistically controlled. Conclusions on the effects deriving from differences in student environment are drawn from the analysis of the classroom social class context variable used in Chapter V. The "level of Competition" factor was isolated in Chapter IV for analysis by treating differences in relative standing in class for students matched on their absolute achievement scores, and the significant effects which occurred are indicated. The factor of the "stigma" which characterizes mostly Negro classes is said to explain desegregation effects if there remains a significant residual effect of differences in classroom racial composition per se, after classroom social class context and the proportion of white friends are held constant. Finally, the principal measure of the "social integration" within classes was measured by the proportion white friends, and
TABLE VI. 7

| SITUATIONAL FACTORS | DEPENDENT VARIABLES |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Achievement | College Plans | ```Desire to be Best in Class``` | Self- <br> Esteem | Sense of Opportunity | Racial <br> Attitudes |
| Student environment (Classroom social context) | $+$ | 0 ( + ) |  |  |  |  |
| Level of competition (Relative achievement) |  |  | $\cdots$ |  |  |  |
| Lack of stigma (Independent racial composition effect) | + |  |  | , | $+$ |  |
| Social integration (White friends) | + | $+$ |  |  |  | $+$ |
| Net classroon desegregation effect | $+$ | (+) | - | 0 | $+$ | $+$ |

the particular effects due directly to this factor uncovered in this chapter are noted in the table. Generally, each situational factor is said to be influential if the effect parameter remained significant in the analyses when the other situational components were controlled, and if holding constant the particular factor greatly reduced the effect of the other components.

A plus (+) sign in this table indicates:a significant positive influence, and a negative (-) sign designates a significant negative influence.

Column 1 of this table indicates that the sources for the postive effects on Negro student achievement due to desegregation were located in the classroom differences in student environment, stigma, and social integration factors. The overall effects for college plans were uneven, and thus no general desegregation effect is noted. However, some evidence was given that although general changes in expressed college plans were not found, the meaning and realism desegrega'ed students attach to these expressions is different from the other students. The desegregated students were more likely than the others to follow up their college aspirationo with concrete actions to investigate particular colleges. The source of the negative effect on desegregated students' desires to be among the best students in their class was found in the changes in a Negro student's relative achievement due to the level of competition in desegregated classes. No regular effects were found for a generalized measure of self-esteem, but the changes in Negro students' sense of opportunity was seen to derive from
the changes in the racial composition per se of desegregated classes, indicating that the stigma of inferiority and defeatism had been somewhat lifted for them. Finally, social integration within desegregated schools, as measured by a Negro's inclusion in an interracial friendship group, was found to be the effective agent for changes in racial attitudes.

The general result, then, is that each of the four situational factors which distinguish desegregated classrooms from segregated ones, have influences on Negro students' behavior and attitudes. Student environment affects academic achievement and perhaps some dimensions of college plans. The level of competition in the classroom has a negative effect on Negro students' aspirations to be best in class, but not on other aspects of Negrostudent development. Because desegregated classes lack the stigma of inferiority and low expectations attached to segregated situations, Negro students' sense of opportunity and academic achievement are raised. Finally, the social integration within schools has important consequences on Negro students' racial attitudes, but also for their academic achievement and college plans. It is important to note that even the Negro students in desegregated classes who are not part of interracial friendship groups, achieve at a higher averagé level than those in segregated classes.

## 3. Attitudes of whites

Since the degree of social integration in desegregated schools was found to mediate many of the potentially beneficial effects of desegregation for Negro students and was the principal factor accounting
for changes in Negro students' racial attitudes, a few more words will be added on this factor. The source of racial tension in desegregated schools can be thought to come from either the predispositions of the white students or the predispositions of the Negroes. If one of these groups greets the other with rejection and hostility, it will take many continuing gestures of good will from the others to overcome these barriers to cooperation and mutual respect. While no attempt has been made in this study to decide whether racial conflict in desegregated schools more frequently finds its source with incidents initiated by whites or Negroes, there is some evidence that continued contact in desegregated schools affects the racial attitudes of both groups.

Already, we have seen that contact with whites in desegregated schools results in changing Negro students' reluctance to have later associations in interracial groups. The influence of the social integration in desegregated schools was crucial for these changes. The next few tables ${ }^{1}$ will deal with the racial attitudes and the friendship patterns for white students in segregated and desegregated schools.

Table VI. 8 shows that for white students just as for Negro students, as the proportion of students from the other race increases in a student's ciasses, the proportion of those who have close friends outside of their own race increases. About one half of the white students in classes which are half or more Negro have established close friendships with the Negro students, but only a third are members of

These tables were first shown in the report of the U.S. Commission on Civil Rights (1967).

TABLE VI. 8

PERCENT OF NINTH GRADE WHITE STUDENTS HAVING SOME CLOSE NEGRO FRIENDS, BY FATHER'S EDUCATION, AND PROPORTION WHITE CLASSMATES LAST YEAR
(SOURCE: CCR TABLE 8.11)

| Father's Education | Proportion White Classmates Last Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | Less than Half | About Half | More than Half | A11 |
| Less than high school graduate | 51 (45) | 53 (248) | 58 (205) | 38(1039) | 20(1363) |
| High school graduate | 38 (52) | 50 (257) | 51 (199) | 35(1213) | 16(1807) |
| At least some college | 55 (49) | 46 (127) | 46 (127) | 34 (809) | 17(1228) |

interracial friendship groups in the majority white classes, and less than one fifth of the white students in all white classes can count some Negroes as their close friends. This pattern of the relationship between classroom racial composition and the race of close friends is true for white students from different social backgrounds, as shown in Table VI,9, which groups white students according to their fathers' education.

Table VI. 10 shows that the race of close friends is the important factor in determining the influence which classroom desegregation has on the racial attitudes of white students. This is similar to the findings for Negro students. No matter what the racial composition of their classroom, the white students who have Negro close friends are much less likely to choose a school which is all white. Imposing this variable of race of close friends largely explains the relationship between the racial choices of white students and the racial composition of their classrooms, since little relationship remains after the race of friends is taken into account. So, bringing together the results of both Table $\hat{6}$ VI. 9 and VI.10, a likely pattern of development is established. The white students who attend class with Negro students are more likely than the others to become members of interracial friendship groups. And the existence of a close friendship tie with a Negro student has an important influence on whether a white student will value and choose interracial groups for his later associations.

Finally, Tables VI. 11 and VI. 12 show that the length of time that a white student has been attending desegregated classes affects his

## TABLE VI. 9

PERCENT OF NINTH GRADE WHITE STUDENTS CHOOSING AN ALL WHITE SCHOOL, BY FATHER'S EDUCATION, PROPORTION WHITE CLASSMATES LAST YEAR, AND WHETHER THE STUDENT HAS ANY CLOSE

FRIENDS WHO ARE NEGRO
(SOURCE: CCR TABLE 8.10)

TABLE VI. 10
PERCENT OF NINTH GRADE WHITE STUDENTS CHOOSING AN ALI-WHITE SCHOOL, BY PARENTS' EDUCATION, PROPORTION WHITE CLASSMATES LAST YEAR, AND EARLIEST GRADE CCR TABLE 8.8) IN CLASS WITH NON-WHITES (SOURCE:

TABLE VI. 11
PERCENT OF NINTH GRADE WHITE STUDENTS CHOOSING ALL WHITE FRIENDS, by parents' education, proportion white classmates last year, and earliest grade in class with non-whites (solrce: CCR table 8.9)

racial attitudes. For Negro students, the conditions in his current classroom were such a dominant influence that no significant effects from carly desegregation were noted (see Chapter III). But for whites, within each group classified by their parents' education and the racial enrollments of their current classes, it is those who only recently attended desegregated classes for the first time who more frequently choose all white schools and all white friends, compared to others who attended desegregated classes in their early elementary grades.

## 3. Summary

This chapter has focused on the interracial conditions within desegregated schools. It was found that the social integration of students, both white and Negro, in desegregated schools was the major factor to explain changes in racial attitudes which resuit from classroom desegregation. For other aspects of Negro student development, their inclusion in interracial friendship groups was often a conditioning factor on the operation of other situational factors in desegregated situations. Some final judgments were made on the particular situational factors which explain the differences in Negro student development due to desegregation which were described earlier. These conclusions will be reviewed again in the next chapter. Some preliminary suggestions were offered about the effects of desegregation on white students' racial attitudes.

## CHAPTER VII

SUMMARY AND SOME POSSIBLE IMPLICATIONS FOR SCHOCL ORGANIZATION

This concluding chapter is divided into three parts. First the principal results of the analyses described in earlier sections will be summarized. Second, some of the limitations will be described which make this study only an early beginning of the explanations of very complicated processes. Finally, some implications are drawn about the organization of schools which are quite general, and go beyond the prospects for desegregation alone.

## 1. Summary of Principal Results

Beginning with a survey of the previous research on which hypotheses might be drawn on the effects of desegregation, the existing studies proved often contradictory although suggestive of many variables and factors to which attention should be directed. Noteworthy in this literature is the work of Irwin Katz (1964) and the model he suggests of the situational factors within desegregated schools which hold the potential for influencing change.

Five situational factors were listed for examination: student environment, level of competition, social stigma, social integration, and quality of the instructional program. Two different questions
were asked regarding these factors. First, are segregated and desegregated situations distinguishable on these five factors? For this question, the distinction was made between school desegregation and classroom desegregation. It was found that because of the formal arrangements of separate programs and tracks within schools, Negro students in desegregated schools could nevertheless find themselves in segregated.classes. Moreover, there was evidence that for each of the situational factors, desegregation at the classroom level rather than the school level played an important role on the kind of influences to which a Negro student would be exposed. The second question was "can the differences between segregated and deségregated Negro students in achievement and in several attitude and personality measures be explained by one or more of these situational factors?" In describing the differences between segregated and desegregated Negro students, several selection processes occurring outside of and within schools, were examined and statistically controlled. Again, the dominant influence of classroom desegregation rather than school desegregation revealed itself. An important result in this regard was that while generally desegregation had a positive effect on Negro student achievement, those who remained in segregated classes within desegregated schools received no benefit in terms of their academic growth; indeed, these students in segregated classes may actually achieve at a higher level if they also attend desegregated schools. Ignoring many of the interesting details, the general answers offered to the second question can be summarized in a few words:
$1 \theta \theta$
It appeared that each of the situational factors had some effects on Negro students, but that each influenced different aspects of the Negro students' development. ${ }^{1}$ Sources for desegregation effects on Negro student achievement were located in student environment, stigma and social integration factors. The effects on college plans were uneven, and thus no general desegregation effect was noted. However, some evidence was given that although general changes in expressed college plans were not found, the meaning and realism desegregated students attach to these expressions is different from the other students. The desegregated students were more likely than the others to follow up their college aspirations with concrete actions to investigate particular colleges. The source of the negative effect on desegregated students desires to be among the best students in their class was found in the changes in a Negro student's relative achievement due to the level of competition in desegregated classes. No regular effects were found for a generalized measure of selfesteem, but the changes in Negro students' sense of opportunity was seen to derive from the changes in the racial composition per se of desegregated classes, indicating that the stigma of inferiority and

[^26]defeatism had been somewhat lifted for them. Finally, social inte-. gration within desegregated schools, as measured by a Negro's inclusion in an interracial friendship group, was found to be the effective agent for changes in racial attitudes.

Some limitations of the study. - The presentation of results throughoul has not been modest in drawing conclusions about effects. This has not been done in ignorance of the dangers which caution any conclusions about effects from non-experimental research, and which particularly affect this survey. Because this survey was administered at a single point in time, only relationships and not changes over time could be established. Moreover, the survey was not originally intended as a study of desegregation, so measures of many of the variables of interest were established even more crudely than indicators defined under the constraints ordinarily imposed by self-: administered questionnaires. Nevertheless, the survey data provided a unique set of information on issues of considerable interest. So it was decided that it was important to clearly point out apparent processes of change, in cases where few other existing data and studies offered any clues.

All of this is to alert the reader to the cautions stated at the outset about statements of causality, and to make clear that the findings are in need of replication in a more carefully planned program of rescarch. But more than this, the generality of the findings is restricted because the population under study was not
representative of the nation at large, and several large questions were not asked at all. Generally, the analyses only dealt with tone region, the Metropolitan Northeast, and with only Negro students in the secondary grades. The condit-ions in other regions, and for younger students may creare very different developmental patterns than the ones described here, but no suggestions are offered on these * matters. Moreover, the reaction of white students' achievement to school desegregation which was examined in a preliminary wăy in the report of the U.S. Civil Rights Commission (1967) and which has strong policy implications, was not included in the scope of these analyses. A recent paper by David Cohen (1968) does deal with this aspect more completely. Finally, although the original sample of sçools was a representative one for each racial composition category in the region, the effect of non-response in the survey on the character of the sample under study rểmains in doubt. ${ }^{1}$

Within the framework of the situational factors in schools affecting student development, important questions about the influence of the formal instructional program in the school were not raised for consideration. The question of the degree to which certain improvements in the facilities and faculties of schools may result in a greater rate of academic growth for students, is one for which only preliminary answers can be offered. The OE Report suggests that
${ }^{1}$ See the Appendix in Coleman et al. (1966) for more details.
variations in the facilities and formal programs of schools have very liftele direct influence on students' rate of academic growth (Coleman et. al., 1966). It is possible however that variations in the formal program offered by a school may have consequences through an indirect pattern of causation. The effects on individual students of changes in the formal program and arrangements may be conditioned by the changes which they encourage in the norms adapted by the student body at large.

## 2. Implications for School Organization

There are two results which argue that future studies are needed which focus on the way in which the formal programs and arrangements of schools operate upon and through the student environment. First there is the result from the $O E$ Report that the student environment of a school is the characteristic which best explains differences in student achievement. This characteristic had more direct explanatory power than measures of either school facilities and programs, or of differences among teachers, and particularly for Negro students. The second result, which comes from the research of McDill and his associates (1967) suggests that the educational climate in schools is not entirely a function of the backgrounds of the students recruited to a particular school. Exceptions were uncovered in this study where the environment in the school was a surprisingly active force for academic achievement given the relatively poor social backgrounds of the students enrolled, as well as some exceptions to
the converse. In different words, there were some strong implications that the student environment of a school is manipulable, and not insulated from influence because of the social class context of the student body. One immediate, candidate for influence on the student environment are modifications in the organization and attributes of the school's formal program. These posisibilities for lower class Negro students in urban areas are particularly worthy of investigation because the prospects for immediate widespread school desegregation are decreasing. (See for example, U.S. Commission on Civil Rights, 1967, Chapter I and II.) That is, because it appears that a large. number of urban Negro children will only be exposed to fellow-students from low social class backgrounds, it is important to discover ways of influencing the student environment of lower social class schools if many Negroes are to experience more effective schooling.

Organization of classrooms within schools.- One kind of modification which is suggested by this study involves the manner in which the classrooms within a school are organized. Analyses demonstrated that the practices of enrolling students in separate programs and tracks on the basis of their previous achievement level can seriously affect the learning situation for those in the remedial programs and classes. This is not to say that schools must choose between only two polar alternatives: random assignment of students to classes and classroom assignments based on a single measure of current student performance. Of course there are many alternatives intermediate to
these choices. Ordinarily, the alternatives discussed involve careful examination of many sets of needs for an individual student and separate decisions on each of his classes to mect these needs. This i.s grouping students by subjects rather than programs: an individual is assigned to a class in each subject according to his interest and current achievement in the particular area. Along with this detailed matching of students' needs and classroom offerings, a typical matter of concern is the frequency with which evaluations of student progress result in new assessments of the individual's classroom assignments.

Besides considerations of the flexibility of classroom assignments and the opportunity for movement between tracks, there is a different kind of modification in classroom organization which has not been as widely considered. This involves the question of who decides the particular classes and subjects within the school to which an individual is assigned: the student himself and his parents or the faculty and officials of the school? Certainly any method of assignments would involve the latter group, if only in establishing the rules for progress through an educational system and in advisory roles. But, several of the results from this present study as well as other research suggest that investigations of the consequences of moving the locus of decision making closer to the students would be fruitful.

An example of one such modification in educational practice would be to operate junior and senior high schools in a manner
similar to many undergraduate programs in colleges or universities. The student is provided with a catalog of courses, (often with the same subject offered at different levels of difficulty as is presently the casc with different track levels in high schools) and he chooses his own program from these lists of courses. To be sure, in colleges these choices are made under prescribed rules of prerequisites for entrance and with the suggestions of informed advisors. But within many colleges, the student himself in a very real way decides the kind of challenge to which he wishes to expose himself. At the junior and senior high school level, an analog would be to retain the division of courses into separate tracks, but to make these "optional tracks," open to the choice of the students themselves. Under this arrangement a student could choose to enroll in advanced English, remedial mathematics and intermediate science courses, for example.

There are several research findings which suggest in an indirect way that modifications along this line may have important implications for the academic development of Negro students. These findings involve the individual attitudes which appear to be linked to high rates of academic growth, and some situational components which distinguish learning environments.
(1) This present study has shown that many Negro students can be distinguished from the typical majority group student on several attitudinal dimensions. Ferhaps the most important of these is the student's sense of opportunity or control of environment. This attitude is more highly related to differences in Negro student
academic achievement than any other variable measured in the $0:$ survey. The hypothesis is that students who are permitted to control and influence their immediate circumstances by developing their own academic program will change their general feelings in the direction of a more positive sense of opportunity. One study in another context which lends some substance to this hypothesis is Blauner's ${ }^{1}$ investigation of alienation of factory workers, where he argues that manual workers weṛe more likely to value control over their immediate work process than a more general control, and less likely to feel alienation from their general environment if they exercised control over their immediate work circumstances.

The sense of control of environment can be liniked to the learning process in at least two ways. First, as a motivational component, the degree to which a student believes his actions are relevant to his later status is seen to influence how strongly induced he is to excell in his present behavior. Under this view, a student who believes education is largely irrelevant to his future will not be as concerned with educational pursuits as another individual. In addition to being less motivated to learn, students with a low sense of control of environment may also fail to develop the ability to focus attention on cues and tasks in the classroom. If rewards and successes appear to come to them in a precarious manner over which they have no control, there will be little reason to attend to the environmental cues through which students learn on a trial by trial

[^27]basis. Changes in the immediate opportunity for a student to design and affect his environment may influence both his motivation and his skill at perceiving classroom cues.

Another distinctive characteristic of Negro students and their families, which is detailed in the preceding chapters, is their high aspirations, particularly as regards educational attainment. Because these aspirations are so elevated, it would be surprising if Negro students who are given the chance to prescribe their educational E program did not make selections which were challenging to them: at Least in part.
(2) Much of this present study has argued that the situational components of schools and classrooms can have strong influences on student development. At least three of these components are relevant to this discussion.

First, the results of the analyses presented earlier suggested that elassroom desegregation had effects on Negro students' sense of mastery over their environment because the "stigma" which characterized the segregated situation was removed. Within schools, it is likely that the lower tracks can be characterized by a similar situational component: a stigma deriving from a poor reputation and low expectation of performance. The hypothesis is that changing the character of the track system will remove the stigma of the learning environment to which many Negro students are assigned. The effects would be expected on the students' sense of opportunity and in turn
on their academic achievement.
Part of the definition of stigma was the low expectation for student performance held by teachers in particular settings. One difficulty with the research which demonstrates the relationship between teachers' expectations and student performance is that it is difficult to prescribe new practices which will affect teachers' expectations. However, student options in designing programs of study may be one such practice. It is hypothesized that teachers will have a higher expectation of a student's future performance if the student chooses a challenging program than if the same student was assigned to a remedial course of study.

A second situational factor which was examined in this study was the classroom level of competition or relative academic standing of a student in his classroom. The general result was that Negro students were not intimidated by changes in this factor due to desegregaiion. There was no evidence that a greater proportion of the desegregated students failed in their classwork or felt any less self-esteem or sense of opportunity after changes in the level of competition. These results argue that it may be easy to give too much concern to the possible negative effects due to relative academic standing when considering classroom changes which at the same time expose a student to a more envigorating learning environment and also the tension of a more severe level of competition. In different words, it can be postulated that after changes in classroom organization, most Negro students who are exposed to higher academic
standards and competition levels will not withdraw or suffer any scrious damage to their personality development.

Finally, the student environment of a school - the informal norms and standards developed by the student body at large - has been found to have important effects on the academic growth of the individuals in a school. This study, along with many others, has documented this relationship. As stated earlier, what is problematic for school policy and practice is how to influence and intervene in the development of the student environment. The values of a student body are ordinarily strongly conditioned by the social class composition of the students enrolled in the school. This is one principal reason why desegregation appears to be influential; it is a means through which Negro students can be exposed to fellow students from the social class backgrounds which most often create a student environment strongly oriented toward academic pursuits.

But beyond the differences in student environment which come from recruiting students to a school from contrasting social backgrounds, it is hypothesized here that changes in the formal organization of a school can intervene in the informal norms and climate developed by the student body. Very little research exists which makes the link between formal structure and informal climates in schools to support the hypothesis just stated. One of the few examples is a study of streaming or tracking in English grammar
schools done by lacey. ${ }^{1}$ In this study of a very limited student population, Lacey describes how the formal structure of a school doc:s influence the informal student norms and he speculates on some of the social-psychological mechanisms through which the influence occurs. The general hypothesis, then, is that one promising avenue for affecting what is perhaps the most crucial element of the classroom learning environment - the student climate - is through modifications in the formal structure of classroom organization. In particular, it is postulated that a school organization which can affect student body norms is one that is formally differentiated into classes according to the stringency of the academic standards, and at the same time is open to student options in the arrangement of classroom assignments.

All of this is highly conjectural, and ignores many factors which almost certainly condition how students react to modifications in classroom organization. One such important conditioning variable is likely to be the character of the formal reward system. This involves the questions of how student performance is evaluated and what formal consequences the evaluations have for a student's progress through the school's program. These discussions are merely intended

[^28]to suggest an area of future investigation into the interplay between the two kinds of variables which this study has argued are important for the learning of Negro students: the situational factors of the Joarning environment and the formal organization of classrooms within the school.

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[^0]:    $1_{\text {Throughout }}$ this study, this will be referred to as the OE Survey or the OE Report.

[^1]:    $1_{\text {Personal communication with former counselors in all Negro high }}$ school in Baltimore, Maryland.
    ${ }^{2}$ Pettigrew discusses Negro personality development in role theory terms (Pettigrew, 1964).

[^2]:    ${ }^{1}$ Several studies have treated the racial differences in vocabulary and dialect and their relationship to achievement. See, for example, Baehr (1966) and Carson (1960).

[^3]:    ${ }^{1}$ The details of the sample design and the pattern of non-response are presented in section 9 of the $O E$ Report.

[^4]:    $1_{\text {More }}$ preciscly: this table refers to nonwhites rather than Negroes.

[^5]:    ${ }^{1}$ One published study which shows similar kinds of differentiation in a desegregated high school is Hickerson (1963). In this school, Negroes were under-represented in $A$ or $B$ sections, in the college preparatory program, academic activities and certain teams.

[^6]:    ${ }^{1}$ St. John (1964) in her study of two desegregated New England high schools found Negro students to be no less active than whites in several extra-curricular activities.

[^7]:    ${ }^{1}$ Number of the following items possessed by the family: television set; telephone; record player; hifi or stereo; electric or gas refrigerator; dictionary; encyclopedia; car; vacuum cleaner; daily newspaper.
    ${ }^{2}$ Mother's education is scored as follows: 1 =none or some grade school, $2=$ completed grade achool, $3=8$ one high school but did not graduate, $4 x$ graduated from high school, $5=$ technical, nursing or buaineas school after high school, $6=s$ me college but less than 4 years, 7 agraduated from a four-year college, $8=a t t e n d e d$ graduate or professional school, 9×don't know.

[^8]:    $1_{\text {Because }}$ the extreme groups on the school racial composition include a 20 and 30 percent range of value, the full extent of the achievement difference between the students in the almost entirely Negro schools and those in the predominantly white schools is not shown here. The regression analyses for the OE Report found the estimated average difference between Negro student achievement in all Negro and almost all white schools to be 7.96 points.

[^9]:    $1_{\text {The number of }}$ of comparisons averaged in this case is not for the two variables. Adjustments for this feature does not change the impression of generally equal effects.

[^10]:    Carolina, Virginia, West Virginia, Tennessee, and Texas. Arkansas, Florida, Georgia, Kentucky, Louisiana. Mississippi. North Carolina. South

[^11]:    ${ }^{1}$ The tabulations with attitude measures as dependent variables divided the proportion white classmates variables into three categories instead of four as in Table III.16. "iVone" and "less than half" were combined into one category.

[^12]:    ${ }^{1}$ The test of significance is described in Coleman (1964), Chapter. 6.

[^13]:    $1_{\text {The }}$ measure of self-image did not quite achieve the .05 level of significance, and so is another possible exception.

[^14]:    $I_{\text {The measure of }}$ skewness is $\frac{3(\ddot{x}-\text { Median })}{\sigma}$. See Blalock, г. 74.

[^15]:    ${ }^{1}$ The regression runs reported in this report were re-examined, focusing on regression coefficients rather than correlation coefficients. The same pattorns appear if regression coefficients are compared, rather than the correlation coefficients reported in the $O E$ Report.

[^16]:    ${ }^{1}$ In this figure, the rate of change in achievement of fellow classmates is similar for each of the family background categories. This similarity of slopes is some evidence that the equal effects of classroom desegregation for Negro students from different backgrounds shown in Table CV .4 holds when the student environment changes due to desegregation are held constant.

[^17]:    $1_{\text {The calculation of }}$ of the classroom average is described in Chapter II, Section 3.1.

[^18]:    *Low $=$ scores 230-249, Med-Low $=250-259$, Med-High $=260-269$, High $=270$ or above

[^19]:    1
    These results are similar to Armour (1967).

[^20]:    $1_{\text {The }}$ actual questionnaire item is "During the last school year, did you ever stay away from school just because you didn't want to come?'

[^21]:    $1_{\text {The determination }}$ of the students who comprise the classmates for a given individual is done in the manner described in Chapter II, section 3.1.

[^22]:    $1_{\text {This }}$ can also be seen from the fact that the family background effect parameter is reduced more by controlling classroom SES (+6.90) than by controlling proportion white classmates ( +7.86 ).

[^23]:    ${ }^{1}$ In these analyses, proportion white classmates is grouped into three rather than four categories.

[^24]:    $1_{\text {For }}$ this table, proportion white classmates was a four category variable. This accounts for the difference in parameters of effects due to this variable compared to Tables III. 22 and V.7, where it was measured with three categories.

[^25]:    Direct and indirect influence of social integration. - $0 f$ the six dependent variables examined in this chapter for Negro students, the racial compositions of close friends had an influence on five. The effect was direct for college plans and racial atcitudes. For academic achievement, self-image, and classroom aspirations, only an indirect influence of white friends could te noticed which served to facilitate the effect of other situational aspects of classroom desegregation. It was only for differences in Negro students' feeling of control of environment where the racial composition of close friends did not seem

[^26]:    $1_{\text {Differences }}$ in the quality of the instructional program such as the facilities available for a particular course and the quality of the teachers, were not carefully examined for their independent effect. This variable only served as an additional control on the racial composition effect (see Chapter $V$ ). The nature of the separate effect of instructional quality remains a large question for future research. Because these factors do vary with differences in student environment, a judgment pressed at this time would be that the influence of differences in school quality was on the same variables and in the same direction as the student environment effects, but of a smaller magnitude.

[^27]:    $1_{\text {Robert }}$ Blauner, Alienation and Freedom. Chicago: University of Chicago Press, 1964.

[^28]:    ${ }^{1}$ Colin Lacey, "Some Sociological Concomitants of Academic Streaming in a Grammar School," British Journal of Sociology, September, 1966, Vo1. XVII, No. 3.

