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ABSTRACT

A study was conducted in thirty-four sixth grade classrooms in order to examine (1) the effect of teacher behavior on pupil achievement and feelings of control: (2) how pupil characteristics affect teachers' differential behaviors toward different pupils: (3) how the effect of teachers' behaviors on pupils varies according to pupil characteristics: and (4) how changes in pupils' attitudes and expectancies mediate their changes in academic performance. Included in this report are the results of pupil achievement and personality tests (administered three times during the school year) and data from coded observations of teacher pupil interaction. The sample of pupils for which data are analyzed included black and white children of both sexes and different levels of internal and external control. Results are presented in separate chapters on teacher judgments of children, teacher behaviors, the relationship between teacher judgment and behavior, and teacher locus of control. This study also highlights ways that teacher behaviors and pupil characteristics may interact to hinder rather than to facilitate a pupil's learning. (Author/GC)

FINAL REPORT

TWO-WAY SOCIALIZATION PROCESSES IN THE CLASSROOM

National Institute of Education Project No. 3-1437

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Chapter I

Introduction

This study speaks to general issues in socialization, social reinforcement, and academic achievement. The research site is the elementary classroom; the focal concern the two-way influence process in which the teacher's verbal reinforcement behaviors are influenced by individual differences among children and, in turn, affect children's expectancies, feelings of control over the environment, attitudes toward school, and academic performance. The theoretical issues are also relevant to other settings and influence relationship where unequal power prevails: helper and the helped, parent and the child, supervisor and supervisee.

The major objectives were to study: the effect of teacher behavior on pupil achievement and feelings on control; how pupil characteristics affect teachers' differential behavior toward different pupils; how the effect of teachers' behaviors on pupils varies according to the characteristics of the pupils; how changes in pupils' attitudes and expectancies mediate their changes in academic performance.

The sample consists of 34 teachers and 855 pupils in sixth grade classes in a large metropolitan area. Achievement and personality tests were administered to the pupils at three periods, permitting the study of change during the class year. Teacher-pupil interaction with specified individual pupils was observed and coded for 372 of the children--12 in each of 31 of the 34 classes. The twelve pupils were selected because they represented high, moderate, and low positions on internal and external control. Because the sample includes both white and black children, the effect of a teacher's racial attitudes on the dynamics of teacher-pupil interaction can also be explored.

In addition to the theoretical issues it explores, the study highlights ways in which teacher behaviors and pupil characteristics may interact to hinder rather than facilitate a pupil's learning.

Children's Instruments

The children's feelings of control are measured by the Children's Internal-External Control (CIE) Scale, a 26-item forced choice instrument adapted from the adult form of the Rotter Internal-External Control Scale to eliminate error due to vocabulary, lack of clarity and testing time. Measures of pupil academic anxiety and attitude toward the teacher (teacher attractiveness) both come from the Minnesota Pupil Attitude Inventory (PAI). The seven-item anxiety scale measures the child's fear of failure in academic situations. The 53-item teacher attractiveness measure includes the child's judgment of the teacher's fairness, competence, and general attractiveness.

The child's generalized feelings of self-esteem are measured by the Coopersmith Self-Esteem Inventory (Coopersmith, 1967). With a possible range of 0-116, most samples show distributions that are skewed in the direction of high self-esteem.

The Stanford Achievement Test (SAT) was selected to measure children's achievement because of its simplicity in administration, scoring, and interpretation. The SAT is a series of comprehensive achievement tests developed to measure the knowledge, skills, and understanding commonly accepted as desirable outcomes of the major elementary curricula. We used two of the nine subtests, Arithmetic Computation and Social Studies Content.

SES controls were measured by scoring the children's fathers' occupations on the Duncan Occupational Prestige Scale (Reiss, 1961). We obtained information about the father's occupation (or mother's if data on the father were not available) from school records.

Teacher's Instruments

The major emphasis with teachers is on their verbal behavior toward children. The procedure utilized for observing the classroom interaction is a modification of Flanders' Interaction Analysis System. Interaction analysis is an observational method which produces a systematic record of classroom behavior. Every three seconds the observer codes the verbal activity during that interval into one of ten categories (Accepts Feeling; Praises or Encourages; Accepts or Uses Ideas of Students; Asks Questions; Lecturing; Giving Directions; Criticizing or Justifying Authority; Student Talk-Response; Student-Talk-Initiation; Silence of Confusion). The usual ten categories were expanded to include those statements of the teacher which may reinforce feelings of internal or external control. The system was also altered to enable the coder to indicate if one of the twelve previously selected pupils was speaking. Within each of the categories we used two scores: (1) General Interaction Analysis score which is the frequency of use of that category for all pupils in the classroom, and (2) Adjusted Interaction Analysis score which is developed as follows (for each category): the teacher's general interaction score for each category is divided by class size, giving us the proportion of the teacher's verbal behavior in that category that would go to each child if the teacher's behavior were evenly distributed through the class; this figure is then divided into the frequency actually received in that category by the specific pupil observed (i.e., the adjusted score is the ratio of the teacher behavior in a category actually received by a child to what he would have received if the teacher's behavior had been evenly distributed through the class).

The Pupil Behavior Inventory, developed by Vinter (1966) is a thirty-four item instrument that the teacher fills out for each student in her class. It judges five dimensions of pupil behavior: classroom conduct, academic motivation and performance, socio-emotional state, dependence on the teacher, and personal behavior.

Procedure

The data for this study have been collected in the following manner: access was obtained into thirty-four sixth grade classes in two suburban communitites tangential to a large urban community. Pupils in these classrooms ranged widely in socio-economic status. Both black and white children were included in the sample. In the fall all pupils were tested to determine their beliefs in internal-external control of reinforcement (CIEI), their attitude toward the teacher and the extent of their academic anxiety (PAI 1), and their self-esteem (SE). At the same time the teacher's demographic data were also obtained, e.g., age, education, years of teaching, etc. From October to January, intensive observer training was conducted, pupils were administered IQ tests, and pupils were selected for observation (see Figure 1). In January the children's I.E. Scale (IE2) and the Pupil Attitude Inventory (PAI 2) were repeated and the pupils were also given two tests to measure achievement (MA 1 and SSA 1), a measure of self-evaluation (SS) and sociograms (S 1); demographic data on the pupils were obtained from school records. From January until May the teacher's and pupils verbal behavior were recorded by observers in the classroom. The observers recorded the verbal behavior between the teacher and the total class in general and also twelve specific pupils in each class; the twelve pupils had been previously matched on sex, IQ, and race, and varied in their belief in internal-external control. ("Internal," "external," and "middle" pupils were selected.) Since the two achievement variables selected for study were mathematics and social studies, classrooms were observed when these subjects were being taught. The classrooms were randomly assigned to the observers on a weekly basis, and each classroom's observations were spread across the time period. Tallying verbal behavior every three seconds a total of six to eight hours of observation data were gathered for each teacher. In May, at the end of the observation period, achievement (MA2, SSA2), attitude (PAT3), locus of control (CIE3), and sociometric tests (S2) were again administered to the pupils. Teachers were tested to determine their locus of control (MIE) and their perception of the behavior of each pupil in their class (PBI). A flow diagram of the data collection procedure follows on the next page (Figure 1).

Research Setting

The data were collected in two school districts which we refer to as East and West. East was a working class community with a predominantely black population. There were eleven mixed classes and eleven black classes. Most of the schools in West were in very affluent neighborhoods. Eight of the classes were mixed and four were white.

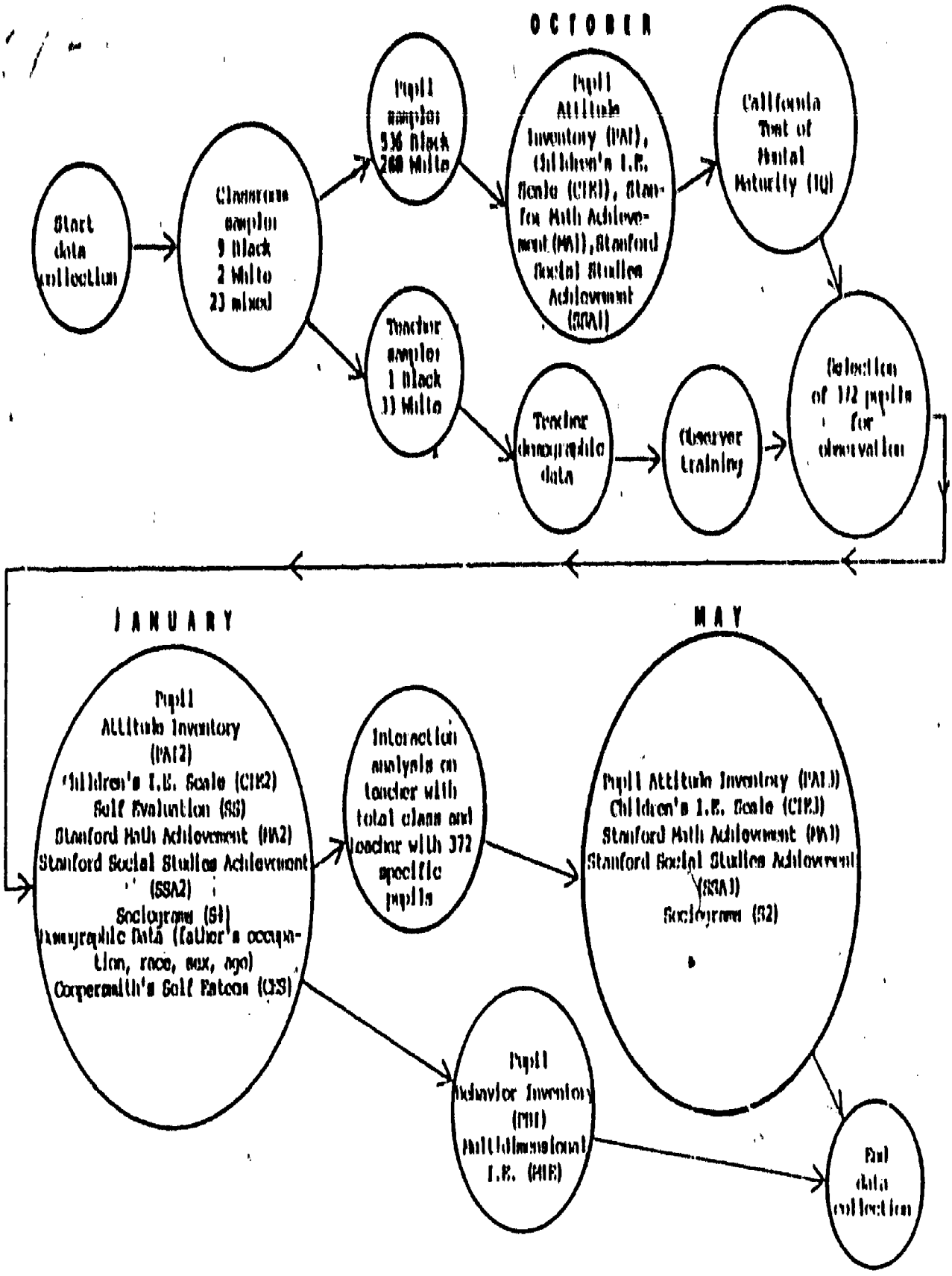

Figure 1. Flow Diagram of Data Collection Procedure

Content of This Report

Chapter II presents results on teacher judgments of children. The results address the following questions:

1. Do teachers judge black and white children differently? Do these race effects persist in racially mixed classrooms where it can be argued that teachers are responding to the child's race more clearly than when teaching only black or white children?
2. Do teachers judge boys and girls differently?
3. Do these sex and race differences exist in both communities studied?
4. Do the race and sex of the child influence teacher judgments, even after controlling the child's performance scores taken at the time the child entered the teacher's class?
5. Do teachers judge internal and external children differently?
6. Do the effects of the child's race and sex persist even when child's level of internality-externality is controlled?
7. Do male and female teachers judge boys and girls differently?

Chapter III covers teacher behaviors and addresses the following questions:

1. Do teachers behave differently toward black and white children? Do these race effects persist in racially mixed classrooms?
2. Do teachers behave differently toward boys and girls?
3. Do these sex and race differences exist in both communities studied?
4. Do teachers behave differently toward internal and external children?
5. Does the effect of the child's sex and race persist even when the child's level of internality is controlled?

Chapter IV turns to the relationship between teacher judgments and teacher behaviors. It addresses the following questions:

1. Are certain teacher behaviors uniquely tied to their judgments of pupil classroom conduct?
2. Are certain behaviors uniquely tied to their judgments of pupil academic motivation? Are some behaviors independent of both types of judmgents?
3. Do pupil sex and pupil race moderate the relationships between teacher judments and teacher behaviors?

Chapter V presents results on teacher locus of control. The results address the following questions:

1. Is teacher locus of control related to teacher judgment?

2. Do internal and external teachers judge black and white pupils differently? Do these race effects persist in racially mixed classrooms?

3. Do internal and external teachers judge boys and girls differently?

4. Do internal and external teachers behave differently toward black and white pupils? Do these race effects persist in mixed classrooms?

5. Do internal and external teachers behave differently toward boys and girls?

6. Do pupils of internal and external teachers achieve differently, perceive the teachers differently and exhibit different levels of anxiety?

7. Do pupil sex and pupil race moderate the relationships between teacher locus of control and pupil attributes.

Chapter II

Teacher Judgments of Children

The vast literature on teacher expectancy[1] shows far more concern with demonstrating the effects of expectancies than with explaining why teachers hold higher expectations for some children than for others. No one doubts that teachers do develop expectations of their students' academic potential and classroom behavior or even that these expectations result in some subsequent effects in the student-teacher dynamic. (Most of the controversy focuses on whether teacher expectancy effects include clear achievement implications for children.) The expectations teachers form in the first two weeks of school have also been shown to be highly stable over the school year (Willis, 1973). Teachers are influenced somewhat by knowledge of pupil test scores (Willis, 1973). But even when test scores are not given to teachers, they make judgments of pupil behavior and form expectations for them very quickly after the school year begins.[2] What influences teachers in making these judgments?

To date very little research has attempted to unravel the origins of teacher expectancies. Even the strongest critics (See Grieger, 1971) of the expectancy phenomenon argue that more research on the origins of teacher expectancies is needed. The few studies that have been done have investigated the effects of pupil characterisitcs such as socio-economic level of the child's family, sex, race, actual level of achievement and the effects of teacher characteristics such as their sex, age, race, experience, and personality. Some have asked teachers to judge children in their own classrooms; others have presented videotapes or audiotapes for teachers to judge. What has the research on the influnece of pupil and teacher characteristics shown about teacher judgments?

Studies of the effects of pupil race and ethnicity on teacher expectancies have depended almost exclusively on procedures in which teachers are asked to judge the oral responses of children with whom they have not previously had contact. Crowl conducted one of the first of these studies. Sixty-two white teachers were asked to evaluate taped oral responses containing identically worded answers spoken by white and black ninth grade boys. Teachers assigned significantly higher evaluations to recorded answers spoken by white than by black boys. And when black boys gave inherently superior answers, their responses were not given higher evaluations than even the poorer answers by white (Crowl and MacGinities, 1974). In an expansion of the Crowl work Williams, et al., (1972) asked teachers to evaluate

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[1] Rosenthal notes that 233 expectancy studies were published between 1968 and 1972 (Rosenthal, 1972--Interchange).

[2] One of the reasons that some studies have not been able to explicate the original Rosenthal and Jacobson results relates to this. Teachers have reported that they did not believe the expectancy induction tney were given because they already "knew" the potential of the students about whom they were given bogus information. "Natural" expectancies are so strong that "induced" expectancies can hardly be expected to alter them so as to result in the Pygmalion effect.

speech samples of black, anglo, and Chicano fifth and sixth grade boys from middle and low status homes. Videotapes were used in which a white female asked the child two questions about games and TV programs. Results from teacher ratings of children on a confidence-eagerness scale found children from low status homes less confident than children from high status homes. Among low status children whites were rated higher than either blacks or Chicanos, although black middle status children were rated higher than either whites or Chicano children. Low status and minority children were also judged as speaking in more "ethnic" or "nonstandard" ways. In still another similar study, Woodworth, et al., (1971) asked 119 elementary teachers in graduate education classes to evaluate identical reports read alternately (three weeks apart) by a black and white sixth grade male student. The white student received significantly higher ratings on seven of the ten evaluations: introduction, variety, unity, transition, clarity, significance and overall grade. The bias was present in teachers who were employed in both urban and suburban school districts.

Two studies that do not show race effects both depended on evaluations of written descriptions of hypothetical children identified as black or white. The first was carried out in Florida (Deitz and Purkey, 1969) and the second a replication in New York City (Miller, 1973). Four versions of the same paragraph were written about a hypothetical adolescent boy's socioeconomic background, likes and dislikes, and past year's school discipline record. In one the boy was described as black and his father was identified as a truck driver; in a second he was black with a lawyer father; the other two paragraphs carried no racial identifier and in the third the boy was given a truck driver father and in the fourth a lawyer father. The paragraphs were randomly distributed to the teachers who then estimated the boy's academic performance for the following year on a seven point scale. Race did not affect teacher expectations in either study although social class did have an effect for both blacks and whites in both studies. The teachers may well have been suspicious of using race in these judgments since the racial cue was so obvious.

A recent study by Jensen and Rosenfeld (1974) suggests another reason studies that have depended on judgments of oral responses have typically found race effects while these two that simply asked teachers to judge a description of a child did not. One hundred sixty-eight teachers evaluated tapes of fifth and sixth grade boys representing anglo, black, and Chicano ethnic groups and middle and lower classes discussing their favorite TV shows and games. Some teachers were presented with audio-tapes and some with visual. The evaluations were made on a scale that included 15 items that these teachers said they typically used in evaluating pupils. It included items such as "participates in class," "has a good attitude," "exerts a great deal of effort," "has a good self concept." White students were evaluated more highly than black students who were evaluated more highly than Chicanos. Social class was a salient dimension in teacher evaluations of both blacks and whites but not of Chicanos. Moreover, mode of presentation influenced the results. The audio-mode showed clearer race-ethnic and class effects. It is not surprising, therefore, that the two studies that asked teachers only to evaluate

children who were described to them in writing did not show strong race effects since Jensen and Rosenfeld indicate that these contrived studies need a strong mode of presentation to capture race bias.

Unfortunately, very few studies have examined teacher judgments of black and white children in natural settings. One that did study natural situations found clear differences in both teacher expectations and behavior ratings of white, black, and Spanish surnamed children (Antonoplos, 1972). White pupils received higher expectations and their behavior was also evaluated more positively than either black or Spanish surnamed children. These race and ethnic differences held for boys and girls.

Several of these studies also indicate that the child's social class influenced teacher judgments. Middle class children were judged more favorably and teachers held higher performance expectations for them (Miller, 1973; Jensen and Rosenfeld, 1974; Deitz and Purkey, 1969; Williams, et al., 1972). Indeed, every study we have reviewed that investigated class shows it to be an important influence. While some people argue that this simply reflects the well-known relationship between social class and performance in which teachers accurately judge middle-class children as more likely to do well in school (Metzner, 1971), the studies in which identical oral responses are spoken by pupils of different class backgrounds essentially control quality of performance and still show social class effects.

Previous studies of teacher expectations and behavior judgments of boys and girls present reasonably consistent evidence that pupil sex also influences what teachers think about children. More of the studies on pupil sex have examined its influence in natural settings than was true of the research on pupil race, presumably because it is (or at least was until recently) more acceptable to admit to different views of boys and girls than to different evaluations of black and white children. Particularly clear evidence about sex effects is seen in studies done by Brophy and Good and their associates. The same procedures were typically used in these studies. First grade teachers were interviewed about the pupils in their own classes at three points in time: during the first two weeks of school, about four weeks after the beginning of school, and again at the end of the first term. Each time the teacher was asked to talk freely about each pupil and then to rank them in order of expected achievement level. At the end of the third interview, teachers were also asked to nominate pupils to four different groups, using Silberman's (1969) questions: attachment--"If you could keep one student another year for the sheer joy of it, whom would you pick?" concern--"If you could devote all your attention to a child who concerns you a great deal, whom would you pick?" indifference--"If a parent were to drop in unannounced for a conference, whose child would you be least prepared to talk about?" rejection--"If your class was to be reduced by one child, whom would be relieved to have removed?" Boys were more likely to be placed in the rejection group (Brophy and Good, 1972; Good and Brophy, 1972; Willis and Brophy, 1974). They were also more salient in

the sense of being noticed and commented upon in the interviews (Good and Brophy, 1972; Willis and Brophy, 1974). In one study boys also were placed more frequently than girls in the concern group (Willis and Brophy, 1974). Another study in a natural setting asked first grade teachers to estimate student IQ's before an IQ test was to be given (Doyle, et al., 1972). Teachers systematically overestimated girls and underestimated boys. Likewise, Antonopolos (1972) found, in addition to the race effects reported above, that teachers felt that girls perform better and are better behaved in the classroom. Taken together, these studies indicate that teachers consider girls better students, more often reject boys but also notice them more often as well.

Two other studies on sex effects provide additional evidence that pupil sex matters but in a far more complex way than pupil race. One indicates that girls who behave aggressively or disruptively risk having their learning abilities underestimated since this "unusual behavior" seems to disturb teachers more; girls who conform to school and female norms are in danger of having learning difficulties neglected because of falsely elevated grades or because teachers are grateful for their good behavior (Caplan, 1973). This study matched 85 children in grades 1-3 who had repeated a grade during the current year with promoted children on age, sex, color and academic grades. Teachers were then asked to evaluate the classroom conduct of these children. The promoted and repeating girls were clearly distinguishable by teacher judgment of classroom conduct while the conduct of the promoted and repeating boys did not differ. Girls whose academic grades were no worse than girls who were promoted were nonetheless held back if they behaved poorly; girls whose academic grades were no better than girls who were held back were promoted if their conduct was good. Classroom conduct was not an important issue in the promotion, and thus overall judgment, of boys. The second study likewise shows that teachers hold complicated views of boys and girls, however much they say that girls perform better (Ricks and Pike, 1973). In this study 30 female and 30 male secondary school teachers enrolled in a university education course were interviewed and asked a series of questions about their male and female pupils. Teachers felt that girl pupils perform better but they also saw them as more passive while boys were viewed as more active. (This was particularly true of female teachers.) When teachers expressed a preference, they also said they would rather teach boys because they are more outspoken, active, willing to exchange ideas, and open. Girls have an edge in teacher expectancy of academic performance and in teacher judgment of "good classroom conduct;" they just aren't viewed as active, outspoken, or interesting!

The one study we have reviewed that did not find sex effects in teacher judgment did not examine a naturalistic setting. Instead teachers and teacher trainees taking a University course were asked to watch a videotape of a kindergarten boy (or girl) taking a test of concept development (Mason, 1972). The teachers were then asked what grades they expected the child to receive at the end of the first grade and whether they thought the child passed or failed the test. Pupil sex did not influence either judgment. One other study which shows sex effects only among white but not black children also

depended on contrived procedures (Finn, 1972). One hundred thirteen urban and 187 suburban fifth grade teachers were asked to listen to taped copies of a pair of essays that differed in style but not quality. The oral essays were attributed to a child described as a boy (or girl), white (or black), and high (or low) ability. The essays were evaluated on many dimensions (grammar, punctuation, structure, etc.). No significant main effects were found, although urban teachers rated white females lowest. Sex did not differentiate teacher evaluation of black children even among urban teachers. Suburban teachers did not use sex, race, or "presumed" ability in judging the essays.

Overall, these studies indicate that pupil sex does influence teacher judgments of behavior and academic expectations when teachers are asked about the children in their own classes. Studies in natural settings are clearly more powerful in assessing how teachers view boys and girls, as well as how they view minority and white children. There are simply not enough studies that examine both race and sex in a natural setting and in a situation in which teachers are merely told to judge the children in their class rather than to think about how they judge boys relative to girls, or minority children relative to white children. The research reported here adds to the work guided by Brophy and Good that does just that.

Most people seem to accept that teacher expectancies at least partially reflect performance cues from children. No one argues that teachers form expectations of their pupils' academic performance entirely independently of the competence children express in the classroom. We have found no studies that have managed to assess teacher expectancies immediately when school opens and thus before children's behavior could influence teacher judgments; all the naturalistic studies involve the possibility that actual achievement differences among children serve as important influences on teachers' expectations. The critical issue is whether teacher expectancies are influenced only by pupil performance differences. Some people in the expectancy literature argue that children's performance cues so predominantly influence teacher expectancies as to preclude any possibility of teacher bias. This argument views the devices by which teachers assess pupil performance (tests, reading performance in school, their own observations, etc.) as valid indicators of pupil competence or "ability," despite the large body of socio-linguistic research that shows class, race, and ethnic bias in assessments that depend heavily on language, especially on verbal expression (Cazden, 1970; Cole and Bruner, 1971). Even if tests were perfectly correlated with subsequent teacher expectancies, teacher expectancies may involve considerable class, race, and ethnic bias; it is just the same bias that pervades standard assessment devices. Moreover, previous research does not show that teacher expectancies correlate perfectly with "independent" assessments of pupil achievement. The few studies that expressly address this problem in a natural setting simply provide evidence of significant positive correlations between child test score performance and teacher rankings of expected achievement (Dusek and O'Connell, 1973).

Studies typically do not partial out the contribution of pupil test scores in accounting for teacher expectancies of different groups of children--boys versus girls, blacks versus whites, lower versus middle status children. We believe that racial and sex stereotyping are unfortunately prevalent enough in our society that teacher judgments are influenced by the child's sex and race, even after adjusting for test score performance. Studies of teacher expectancies in contrived settings lend some support to this. Some of these studies control for the presumed ability of two sets of speakers. For example, teacher evaluations of the oral responses of speakers defined as high ability black and high ability white are compared. The ability attributions clearly influence teacher judgment but these few studies also indicate that speaker race and class also influence teacher evaluations, even after controlling for ability or response quality. Crowl (1971) even shows that the superior oral responses of black boys were not rated as highly as the more inferior oral responses of white boys. And there is some evidence that children from lower income groups, especially minorities, who score highly on tests or score better than teachers expect are evaluated more negatively rather than positively, as the simple ability hypothesis suggests (Rosenthal and Jacobson, 1968; Rubovits and Maehr, 1972; Leacock, 1969; Coble, 1975). Our study allows us to examine whether there is something about race and sex stereotyping that goes beyond the teacher's use of the child's initial test scores in accounting for teacher evaluations of brightness and academic motivation.

Very few other pupil characteristics have been examined as possible influences on teacher expectancies. Our study places particular stress on the child's sense of internal control. We found no studies that have examined whether the child's internality influences teacher expectancies or judgments of classroom behavior. One previous study does indicate that the child's level of internality conditions the impact of teacher expectancy on subsequent achievement (Asbury, 1971) but did not investigate whether teachers used cues tied to the child's internal contorl in making initial judgments of their pupils. Our study allows a thorough investigation of the possible role of the child's sense of control on teacher expectancies. The first measure of the child's internal and external control was collected before the teacher's behavioral judgments were assessed. We are interested in whether or not teachers judge internal and external children differently and whether sex and race effects are muted by controlling for pupil differences in level of internal control.

Although a few review articles conclude that particular teacher characteristics influence teacher expectations of children (See Metzner, 1971; Grieger, 1971), our review of previous research on the effects of teacher characteristics makes us less sure about that, especially about their influence on judgments of boys and girls and of white and minority children. Not many studies have explicitly examined whether teacher sex, age, experience or race condition the influence of pupil sex and race on teacher expectancies. The few pertinent studies have given little support to the significance of such teacher characterisitcs. Crowl and MacGinitie (1974) found sex, age, and years of teaching experience unimportant in the judgments teachers made of the oral responses of black and white boys. Guskin likewise found that teacher sex, age, race, and teaching experience

did not influence teacher bias in evaluating oral responses of black and white male speakers. Woodworth (1971) examined whether locale of teaching experience in urban or suburban settings muted race bias in teacher evaluations of oral responses. Urban teachers gave higher evaluations overall but race bias was present among them just as it was among the suburban teachers. Studies of the influence of teacher sex on sex bias in teacher expectancies are even rarer. Rogers (1971) did investigate whether sex and age of teacher influenced their perceptions of boys and girls and found no effects. Ricks and Pike (1973) likewise found that male and female teachers both evaluated the academic performance of girls better than boys, although more female than male teachers showed the pattern of judging boys more active and girls more passive. This shows some evidence of greater sex stereotyping among female than male teachers. By and large, however, the evidence to date is not impressive, both because of limited investigation and no effect results from the few available studies. We were interested, therefore, in whether male and female teachers in our study judged the boys and girls, and black and white children, in significantly different ways. We could not examine the influence of race of teacher since there was only one black teacher among the thirty-one. Further restrictions in the data also limited even what we could learn about the influence of sex of teacher. Although the thirty-one teachers included 9 men and 22 women, all but one of the male teachers taught in East. This meant we could use the data only from that one community in exploring the influence of teacher sex. Then we discovered that all of the male teachers in East taught in exclusively black classrooms. None of them had racially mixed classes. This meant we could examine the impact of sex of teacher only on judgments of black children. Therefore, our focus in teacher sex influences is on their role in conditioning the impact of pupil sex in judging black children.

Since systematic use of children's sex and racial characteristics in evaluating their classroom behavior shows race and sex bias, we would expect the more "prejudiced" teachers to show such biases most strongly. Although previous literature has not explored the impact of teachers' racial attitudes on teacher expectancies of black and white children, we felt that was an important line of investigation. In fact, restricted variance in our measure of teacher attitudes limited our examination of this issue. Teachers were asked to answer a set of forced-choice questions in which race differentials in status, income, and education are attributed either to personal deficiencies of black people (individual blame) or to systematic social inequities, particularly to race discrimination (system blame). For example, one question asks the respondent to choose either: "It's lack of skill and abilities that keeps many blacks from getting a job; it's not just because they're black; when a black is trained to do something, he is able to get a job" or "Many qualified blacks can't get a good job; white people with the same skills wouldn't have any trouble." This index of four such questions, originally developed in research with black samples (Gurin, et al., 1969) has recently been further validated on a national sample of adults (Gurin, Gurin, Morrison, 1978). Blacks generally are more willing than whites to blame the system; highly educated whites

more often than other whites blame the system; whites who identify with a cluster of "liberal challenging" groups more often than other whites blame the system. Thus, we know that this measure of Individual-System Blame can effectively distinguish groups with different racial experiences and political outlooks. Yet our teachers who taught racially mixed classrooms almost unanimously blamed individual blacks rather than the social system on these items on the Individual-System Blame index. Fifteen of the eighteen teachers in racially mixed classrooms chose the individual blame alternative on at least three out of the four questions on this index. The three teachers who expressed a much stronger system orientation and did not blame blacks for racial inequities in our society were simply too few for a meaningful comparison of the judgments they made of black and white children in their own classrooms with the much larger group of teachers who expressed individualistic, anti-black explanations of race differentials in American society. We realistically could not examine the important questions of whether teachers who hold positive attitudes toward black people generally and who believe that race discrimination does exist would show more positive expectations of black children than we find in the results to follow.

Specific Questions About Teacher Judgments Investigated in this Study

Our review of the literature and our own concerns led us to investigate the following sets of questions around which the results are organized:

1. Do teachers judge black and white children differently? Do these race effects persist in racially mixed classrooms where it can be argued that teachers are responding to the child's race more clearly than when teaching only black or only white children?

2. Do teachers judge boys and girls differently?

3. Do these sex and race differences exist in both East and West?

4. Do the race and sex of the child influence teacher judgments even after controlling the child's performance scores taken at the time the child entered the teacher's class?

5. Do teachers judge internal and external children differently?

6. Do the effects of the child's race and sex persist even when the child's level of internality-externality is controlled?

7. Do male and female teachers who teach in black classrooms in East judge boys and girls differently?

Procedures

Teachers were asked in February of the school year to fill out a Pupil Behavior Inventory (PBI) for each child in the class. The PBI lists thirty-four behaviors that children may exhibit and asks the teacher to rate how frequently the child shows each one. The rating scale ranges from one to five with the following alternatives: very frequently, frequently, sometimes, infrequently, and very infrequently. These teacher ratings of each child were collected after teachers had had ample experience for performance cues at influence their judgments. Therefore, it is particularly important to examine whether race and sex of the child influence teacher judgments even after controlling for the child's initial performance scores.

The procedure of asking each teacher to rate each child without reference to the child's sex or race minimizes artificial effects of pupil sex and race, particularly the tendency for teachers to mask their biases about sex and race. The judgments asked for in the PBI are not explicitly measures of teacher expectancies. The typical procedure in expectancy studies asks teachers to rank their children (sometimes to rate) according to their "expected achievement." Some studies have also asked additional teacher assessments of the child's performance, motivation, or classroom conduct; these tend to be treated in the expectancy literature as measures of teacher behaviors rather than as measures of teacher expectancies. We have reviewed such studies in this chapter, however, because they really ask much the same thing as the teacher expectancy judgments. When teachers are asked to rate expected achievement or current behaviors reflecting achievement, motivation, or conduct, they are making judgments of children. The broader issue in the expectancy literature is whether teacher evaluations of children influence their behavior toward children, and, whether the judgment-behavior dynamic influences children's achievement or liking for school or other outcomes. The subtlety of whether the teacher evaluation is asked as a future expectation or as a current judgment of the child's performance or behavior does not seem nearly as important as conceptualizing both as evaluations and judgments of children. The self-fulfilling prophecy should operate whether teachers talk about a child as "not very bright" or as "a child who won't achieve very much in school."

Previous factor analyses of teacher responses to the thirty-four items in the Pupil Behavior Inventory have resulted in five factors: judgments of the child's classroom conduct, academic motivation, personal behavior, social and emotional adjustment, and dependency on the teacher. We have summarized the results of the influence of pupil sex and race on teacher judgments as measured by these five indices as well as by the separate items comprising them. The rest of the analyses reported in this chapter depend on results with the five summary indices.

TABLE 1A - II

TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS: IN ALL CLASSROOMS

PUPIL BEHAVIOR INVENTORY	ALL CLASSROOMS				ALL RACIALLY MIXED CLASSROOMS			
Teacher Judgments of:	White Girls (126)	White Boys (129)	Black Girls (267)	Black Boys (252)	White Girls (91)	White Boys (97)	Black Girls (143)	Black Boys (120)
Classroom Conduct Range	4.51	3.84	3.68	3.36	4.55	3.92	3.79	3.38
	F, Race Effect = 100.00 ($p < .0001$)				F, Race Effect = 62.35 ($p < .0001$)			
	F, Sex Effect = 57.30 ($p < .0001$)				F, Sex Effect = 40.00 ($p < .0001$)			
	F, Interaction = 7.12 ($p < .007$)				F, Interaction = (NS)			
Academic Motivation Range	3.86	3.52	3.35	3.09	3.87	3.56	3.29	3.05
	F, Race Effect = 48.72 ($p < .0001$)				F, Race Effect = 39.12 ($p < .0001$)			
	F, Sex Effect = 19.00 ($p < .0001$)				F, Sex Effect = 10.04 ($p < .001$)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Social Emotional Adjustment Range	4.15	4.02	3.74	3.82	4.19	4.09	3.73	3.72
	F, Race Effect = 27.25 ($p < .0001$)				F, Race Effect = 28.58 ($p < .0001$)			
	F, Sex Effect = (NS)				F, Sex Effect = (NS)			
	F, Interaction = 3.20 ($p < .07$)				F, Interaction = (NS)			
Dependency on Teacher Range	4.13	4.15	3.78	3.78	4.24	4.25	3.95	3.82
	F, Race Effect = 31.47 ($p < .0001$)				F, Race Effect = 18.20 ($p < .0001$)			
	F, Sex Effect = (NS)				F, Sex Effect = (NS)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Personal Behavior Range	4.83	4.67	4.34	4.30	4.85	4.68	4.40	4.34
	F, Race Effect = 100.00 ($p < .0001$)				F, Race Effect = 62.15 ($p < .0001$)			
	F, Sex Effect = 8.19 ($p < .004$)				F, Sex Effect = 4.95 ($p < .03$)			
	F, Interaction = (NS)				F, Interaction = (NS)			

TABLE 1B - II

TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS: IN CLASSROOMS IN EAST

PUPIL BEHAVIOR INVENTORY	ALL CLASSROOMS IN EAST				RACIALLY MIXED CLASSROOMS IN EAST			
Teacher Judgments of:	White Girls (17)	White Boys (21)	Black Girls (235)	Black Boys (228)	White Girls (17)	White Boys (21)	Black Girls (111)	Black Boys (96)
Classroom Conduct Range	4.63	3.72	3.66	3.40	4.63	3.72	3.77	3.46
	F, Race Effect = 20.16 ($p < .0001$)				F, Race Effect = 14.44 ($p < .0002$)			
	F, Sex Effect = 16.0 ($p < .0001$)				F, Sex Effect = 17.07 ($p < .0001$)			
	F, Interaction = 4.97 ($p < .025$)				F, Interaction = 4.10 ($p < .04$)			
Academic Motivation Range	4.24	3.58	3.39	3.13	4.24	3.58	3.36	3.12
	F, Race Effect = 19.1 ($p < .0001$)				F, Race Effect = 18.10 ($p < .0001$)			
	F, Sex Effect = 9.6 ($p < .002$)				F, Sex Effect = 8.12 ($p < .005$)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Social Emotional Adjustment Range	4.29	3.92	3.72	3.81	4.29	3.92	3.68	3.69
	F, Race Effect = 7.67 ($p < .005$)				F, Race Effect = 9.50 ($p < .002$)			
	F, Sex Effect = (NS)				F, Sex Effect = (NS)			
	F, Interaction = 3.46 ($p < .06$)				F, Interaction = (NS)			
Dependency on Teacher Range	4.44	4.07	3.76	3.77	4.44	4.07	3.96	3.80
	F, Race Effect = 13.84 ($p < .0002$)				F, Race Effect = 7.19 ($p < .008$)			
	F, Sex Effect = (NS)				F, Sex Effect = 3.46 ($p < .06$)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Personal Behavior Range	4.82	4.48	4.35	4.29	4.82	4.48	4.36	4.34
	F, Race Effect = 11.09 ($p < .0008$)				F, Race Effect = 8.30 ($p < .004$)			
	F, Sex Effect = 4.0 ($p < .04$)				F, Sex Effect = 3.21 ($p < .07$)			
	F, Interaction = (NS)				F, Interaction = (NS)			

TABLE 1C - II

TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS: IN CLASSROOMS IN WEST

PUPIL BEHAVIOR	ALL CLASSROOMS IN WEST				RACIALLY MIXED CLASSROOMS IN WEST			
Teacher Judgments of:	White Girls (109)	White Boys (10[illegible])	Black Girls (32)	Black Boys (24)	White Girls (74)	White Boys (76)	Black Girls (32)	Black Boys (24)
Classroom Conduct Range	4.49	3.86	3.85	3.04	4.54	3.97	3.85	3.04
	F, Race Effect = 32.26 ($p < .0001$)				F, Race Effect = 32.51 ($p < .0001$)			
	F, Sex Effect = 31.25 ($p < .0001$)				F, Sex Effect = 23.46 ($p < .0001$)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Academic Motivation Range	3.80	3.52	3.08	2.74	3.79	3.56	3.08	2.74
	F, Race Effect = 30.91 ($p < .0001$)				F, Race Effect = 26.81 ($p < .0001$)			
	F, Sex Effect = 5.29 ($p < .02$)				F, Sex Effect = 3.68 ($p < .06$)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Social Emotional Adjustment Range	4.12	4.04	3.89	3.87	4.17	4.14	3.89	3.87
	F, Race Effect = (NS)				F, Race Effect = 4.15 ($p < .04$)			
	F, Sex Effect = (NS)				F, Sex Effect = (NS)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Dependency on Teacher Range	4.09	4.16	3.95	3.92	4.20	4.30	3.95	3.92
	F, Race Effect = (NS)				F, Race Effect = 4.21 ($p < .04$)			
	F, Sex Effect = (NS)				F, Sex Effect = (NS)			
	F, Interaction = (NS)				F, Interaction = (NS)			
Personal Behavior Range	4.83	4.70	4.50	4.34	4.86	4.74	4.50	4.34
	F, Race Effect = 27.04 ($p < .0001$)				F, Race Effect = 28.25 ($p < .0001$)			
	F, Sex Effect = 4.78 ($p < .02$)				F, Sex Effect = 3.79 ($p < .05$)			
	F, Interaction = (NS)				F, Interaction = (NS)			

TABLE 2 - II

SUMMARY OF TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS CLASSROOM CONDUCT ITEMS: ALL CLASSROOMS, CLASSROOMS IN EAST, CLASSROOMS IN WEST

Classroom Conduct Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls (126)	White Boys (129)	Black Girls (267)	Black Boys (252)	White Girls (17)	White Boys (21)	Black Girls (235)	Black Boys (228)	White Girls (109)	White Boys (108)	Black Girls (32)	Black Boys (24)
Blames others for trouble	4.32	3.55	3.35	2.99	4.52	3.61	3.35	3.04	4.28	3.54	3.34	2.50
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .02$				Race, $p < .0001$ Sex $p < .002$ Interaction, NS				Race, $p < .0001$ Sex $p < .0001$ Interaction, NS			
Resistant to teacher	4.51	3.92	3.75	3.54	4.76	4.00	3.69	3.55	4.47	3.90	4.18	3.45
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, p .01				Race, $p < .0001$ Sex, $p < .01$ Interaction, p .07				Race, $p < .02$ Sex, $p < .0001$ Interaction, NS			
Attempts to manipulate adults	4.41	3.96	3.84	3.71	4.35	3.76	3.84	3.76	4.42	4.01	3.81	3.20
	Race, $p < .0001$ Sex, $p <$ 10002 Interaction, $p < .04$				Race, NS Sex, $p < .04$ Interaction, NS				Race, $p < .0001$ Sex, $p < .001$ Interaction, NS			
Influences others toward troublemaking	4.75	3.88	3.86	3.44	4.82	3.67	3.84	3.49	4.74	3.92	4.03	2.91
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .007$				Race, $p < .002$ Sex, $p < .0001$ Interaction, $p < .03$				Race, $p < .0001$ Sex, $p < .0001$ Interaction, NS			
Impulsive	4.34	3.89	3.56	3.29	4.23	3.80	3.50	3.34	4.35	3.90	3.93	2.79
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .001$ Sex, NS Interaction (NS)				Race, $p < .0001$ Sex, $p < .0001$ Interaction $p < .03$			

TABLE 2 (continued) - II

Classroom Conduct Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls (126)	White Boys (129)	Black Girls (267)	Black Boys (252)	White Girls (17)	White Boys (21)	Black Girls (235)	Black Boys (228)	White Girls (109)	White Boys (108)	Black Girls (32)	Black Boys (24)
Requires continuous supervision	4.37	3.57	3.65	2.98	4.82	3.57	3.67	3.01	4.31	3.57	3.50	2.62
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)			
Aggressive toward peers	4.61	4.00	3.63	3.59	4.64	3.81	3.60	3.55	4.61	4.03	3.84	3.62
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .0008$				Race, $p < .0004$ Sex, $p < .01$ Interaction, $p < .03$				Race, $p < .0002$ Sex, $p < .01$ Interaction (NS)			
Disobedient	4.73	4.14	3.87	3.53	4.76	3.95	3.83	3.53	4.73	4.17	4.15	3.45
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .08$				Race, $p < .0001$ Sex, $p < .001$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)			
Easily led into trouble	4.48	3.55	3.62	3.05	4.64	3.23	3.63	3.11	4.45	3.62	3.59	2.50
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .03$				Race, $p < .0009$ Sex, $p < .0001$ Interaction, $p < .009$				Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)			
Resentful of criticism or discipline	4.26	3.86	3.38	3.37	4.58	3.76	3.34	3.39	4.22	3.87	3.68	3.25
	Race, $p < .0001$ Sex, $p < .01$ Interaction, $p .01$				Race, $p < .0001$ Sex, $p < .03$ Interaction, $p < .01$				Race, $p < .0005$ Sex, $p < .01$ Interaction (NS)			

Table 2. (continued) - II

Classroom Conduct Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls (126)	White Boys (129)	Black Girls (267)	Black Boys (252)	White Girls (17)	White Boys (21)	Black Girls (235)	Black Boys (228)	White Girls (109)	White Boys (108)	Black Girls (32)	Black Boys (24)
Disrupts classroom procedures	4.68	3.96	3.94	3.5	4.71	3.81	3.92	3.57	4.67	3.99	4.12	3.12
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .05$				Race, $p < .004$ Sex, $p < .0005$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)			
Teases or provokes students	4.58	3.76	3.67	3.32	4.64	3.66	3.63	3.36	4.57	3.78	4.00	2.91
	Race, $p < .0001$ Sex, $p < .0001$ Interaction, $p < .004$				Race, $p < .0004$ Sex, $p < .0008$ Interaction, $p < .05$				Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)			
Shows positive leadership	3.09	2.81	2.56	2.53	3.52	2.76	2.63	2.55	3.02	2.82	2.06	2.33
	Race, $p < .0001$ Sex, $p < .07$ Interaction (NS)				Race, $p < .002$ Sex, $p < .01$ Interaction (NS)				Race, $p < .0002$ Sex (NS) Interaction (NS)			

All of the analyses are carried out for the total sample of children as well as separately for children attending classrooms in East and in West. Since East serves a more predominantly working class population and West a more predominantly white-collar, professional population, the control for community provides a general control for family social status. If teachers in both communities show the influence of the child's race and sex in judging children's motivation and behavior, we can be reasonably sure that the child's family status is not the underlying influence on the teacher. Black and white children within each community show much the same social status: the NORC prestige scores for their fathers' occupations are very nearly the same.

The Influence of Pupil Sex and Race

We analyzed teacher judgments by a two-way analysis of variance so as to test for the main effects of the child's sex and race as well as for possible interactions between sex, race, and teacher judgments. The first analysis included all children in the 31 classrooms: 267 black girls, 250 black boys, 126 white girls, 129 white boys. Then we analyzed the data collected in East and West separately. In East this included: 235 black girls, 226 black boys, 17 white girls and 21 white boys. In West this included 32 black girls, 24 black boys, 109 white girls and 108 white boys. Finally, we analyzed data just from the racially mixed classrooms, 11 in East and 8 in West. This included 143 black girls (111 in East, 32 in West), 120 black boys (96 in East, 24 in West), 91 white girls (17 in East, 74 in West) and 97 white boys (21 in East and 76 in West).

Judgments of Classroom Conduct

Teacher judgments of their pupils' classroom conduct showed clear effects of the child's sex and race. (See Tables 1A, 1B, and 1C). White children were judged more positively than black children and girls more positively than boys. The main effects of pupil sex and race appeared in both the summary classroom conduct score and on all thirteen items comprising it (See Table 2). Teachers judged white children and girls as less likely to blame others, resist the teacher, manipulate adults, act impulsively, require supervision, act aggressively toward peers, be disobedient, be easily led into trouble, resent criticism, disrupt class procedures, and tease others. They also felt that girls and white children were more likely to show positive leadership. All of the main effects of race of the child held up in the data from both East and West. Almost all of the sex effects also held in both communities. The only exceptions were that teachers in East felt boys and girls were equally likely to act impulsively; teachers in West felt boys and girls equally often showed positive leadership.

TABLE 3 - II

SUMMARY OF TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS ON ACADEMIC MOTIVATION ITEMS: ALL CLASSROOMS, CLASSROOMS IN EAST, CLASSROOMS IN WEST

Academic Motivation Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Motivated toward academic performance	4.01	3.52	3.45	3.10	4.35	3.66	3.48	3.14	3.95	3.49	3.28	2.66
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .004$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .0009$ Interaction (NS)			
Shows Initiative	3.53	3.16	3.02	2.84	4.05	3.28	3.12	2.93	3.45	3.13	2.28	2.04
	Race, $p < .0001$ Sex, $p < .001$ Interaction (NS)				Race, $p < .0005$ Sex, $p < .008$ Interaction (NS)				Race, $p < .0001$ Sex, (NS) Interaction (NS)			
Alert and interested in school work	3.94	3.64	3.43	3.19	4.35	3.61	3.48	3.22	3.88	3.63	3.09	2.83
	Race, $p < .0001$ Sex, $p < .0004$ Interaction (NS)				Race, $p < .0003$ Sex, $p < .004$ Interaction (NS)				Race, $p < .0001$ Sex, (NS) Interaction (NS)			
Learning retained well	3.86	3.70	3.40	3.11	4.11	3.67	3.44	3.16	3.82	3.71	3.09	2.71
	Race, $p < .0001$ Sex, $p < .005$ Interaction (NS)				Race, $p < .0007$ Sex, $p < .03$ Interaction (NS)				Race, $p < .0001$ Sex, (NS) Interaction (NS)			
Completes assignments	4.35	3.87	3.88	3.48	4.58	3.80	3.80	3.47	4.32	3.96	3.88	3.58
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .002$ Sex, $p < .0006$ Interaction (NS)				Race, $p < .03$ Sex, $p < .008$ Interaction (NS)			

TABLE 3 (Continued) - II

Academic Motivation Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Positive concern for own education	4.07	3.61	3.40	3.04	4.35	3.61	3.42	3.08	4.03	3.61	3.28	2.66
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .002$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .001$ Interaction (NS)			
Hesitant to try or gives up easily	3.84	3.83	3.48	3.23	4.35	3.95	3.48	3.26	3.77	3.81	3.46	2.91
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .0005$ Sex (NS) Interaction (NS)			
Uninterested in subject matter	4.03	3.60	3.50	3.28	4.47	3.81	3.54	3.32	3.97	3.56	3.18	2.91
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .007$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .03$ Interaction (NS			

The ratings of academic motivation also showed equally pronounced sex and race effects in racially mixed classrooms as in all thirty-one classrooms. The average ratings of the four groups of children from all classrooms were in fact almost identical to those in racially mixed classes. This was true in both East and West (See Tables 1A, 1B, and 1C).

Judgments of Personal Behavior

Teachers consistently viewed white children and girls as showing better personal behavior (See Tables 1A, 1B, and 1C). Teachers felt white children and girls were less frequently absent, less often showed inappropriate behavior, cheated, stole, swore, or showed poor personal hygiene (See Table 4). The ordering of the four groups of children remained constant on both the summary index and on all six of these items. White girls were always judged most positively. They were followed by white boys who were seen very similarly to black girls. Black boys were always judged least positively. These sex and race effects held in both East and West, although both sets of differences were larger in East. Black girls were judged enough more positively in West than in East to mute the race effect in West; white boys were judged enough more positively in West than in East to mute the sex effect in West. No significant interactions of sex, race, and teacher judgments appeared.

The ratings of personal behavior showed equally pronounced sex and race effects in racially mixed classrooms as in all classrooms in the sample. Again, the average ratings of the four groups of children were almost identical in the two settings. Again this was true in both East and West.

Judgments of the Child's Social and Emotional Adjustment

Teacher judgments of the social and emotional adjustment of their pupils depended somewhat less on sex and race influences (See Tables 1A, 1B, and 1C). Sex was not a significant factor generally although sex did interact with race on the three emotional judgments that teachers in East made (See Table 5). This occurred because teachers in East viewed white girls as less depressed and much more happy and friendly than other children. Otherwise, boys and girls were judged much the same. Teachers in both communities also viewed black and white children very similarly in social behavior--how friendly and well received they were by others and how isolated they were (See Table 5). Race of the child did matter, however, in the teachers' judgments of emotional adjustment. Teachers in both West and East felt that black children were more depressed and less happy (See Table 5). Teachers in East further felt that black pupils were more withdrawn and uncommunicative.

The ratings of social and emotional adjustment showed equally pronounced race effects in racially mixed classrooms as in all classrooms in the sample. Again, the average ratings of black and white children from all classrooms were almost identical to the ratings made in the racially mixed classrooms and in both East and West.

TABLE 4 - II

SUMMARY OF TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS ON PERSONAL BEHAVIOR ITEMS: ALL CLASSROOMS, CLASSROOMS IN EAST, CLASSROOMS IN WEST

Personal Behavior Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Absences or truancies	4.65	4.61	4.19	4.13	4.76	4.28	4.14	4.13	4.63	4.67	4.53	4.20
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .01$ Sex (NS) Interaction (NS)				Race, $p < .03$ Sex (NS) Interaction (NS)			
Inappropriate personal appearance	4.87	4.72	4.36	4.40	4.88	4.62	4.31	4.38	4.87	4.74	4.68	4.54
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .004$ Sex (NS) Interaction (NS)				Race, $p < .01$ Sex (NS) Interaction (NS)			
Lying or cheating	4.78	4.44	4.16	3.89	4.87	4.19	4.18	3.19	4.76	4.49	3.95	3.63
	Race, $p < .0001$ Sex, $p < .0001$ Interaction (NS)				Race, $p < .004$ Sex, $p < .005$ Interaction (NS)				Race, $p < .0001$ Sex, $p < .03$ Interaction (NS)			
Steals	4.92	4.87	4.69	4.65	4.93	4.85	4.74	4.64	4.92	4.87	4.30	4.68
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .05$ Sex (NS) Interaction (NS)				Race, $p < .0001$ Sex (NS) Interaction (NS)			
Swears or uses obscene language	4.87	4.63	4.57	4.42	4.81	4.55	4.60	4.47	4.88	4.64	4.33	3.88
	Race, $p < .0001$ Sex, $p < .001$ Interaction (NS)				Race (NS) Sex (NS) Interaction (NS)				Race, $p < .0001$ Sex, $p < .006$ Interaction (NS)			
Poor personal hygiene	4.92	4.77	4.38	4.38	4.76	4.61	4.35	4.37	4.94	4.81	4.59	4.59
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .01$ Sex (NS) Interaction (NS)				Race, $p < .0001$ Sex (NS) Interaction (NS)			

TABLE 5 - II

SUMMARY OF TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS ON SOCIAL-EMOTIONAL ADJUSTMENT ITEMS: ALL CLASSROOMS, CLASSROOMS IN EAST, CLASSROOMS IN WEST

Social-Emotional Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Appears depressed	4.36	4.29	3.83	3.94	4.52	4.09	3.79	3.94	4.33	4.33	4.09	4.00
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .002$ Sex (NS) Interaction, $p < .04$				Race, $p < .04$ Sex (NS) Interaction (NS)			
Appears generally happy	4.26	4.06	3.74	3.79	4.58	4.09	3.71	3.81	4.21	4.06	4.00	3.70
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .02$ Sex (NS) Interaction (NS)			
Withdrawn and uncommunicative	4.20	4.11	3.76	3.79	4.47	4.23	3.76	3.78	4.16	4.08	3.78	3.87
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .0003$ Sex (NS) Interaction (NS)				Race, $p < .08$ Sex (NS) Interaction (NS)			
Friendly and well received by others	3.97	3.78	3.62	3.71	4.00	3.52	3.60	3.69	3.97	3.83	3.75	3.91
	Race (NS) Sex (NS) Interaction (NS)				Race (NS) Sex (NS) Interaction, $p < .05$				Race (NS) Sex (NS) Interaction (NS)			
Isolated few or no friends	3.93	3.83	3.71	3.84	3.83	3.66	3.70	3.83	3.94	3.86	3.81	3.83
	Race (NS) Sex (NS) Interaction (NS)				Race (NS) Sex (NS) Interaction (NS)				Race (NS) Sex (NS) Interaction (NS)			

Judgments of the Child's Dependency on the Teacher

The dependency summary score involves only two items--judgments of the extent to which the child seeks reassurance and is possessive of the teacher. Sex of the child did not influence the teachers' judgments on either item nor in either community (See Tables 1A, 1B, 1C, and 6). Race of the child was significant, however, although primarily in East. East teachers felt that black girls and boys were more possessive of the teacher and sought greater reassurance than either white girls or white boys. These race differences are less marked in West. It was only in racially mixed classes in West that teachers considered black children significantly more dependent than white children. The analyses of the data from all classrooms in West did not show significant race effects, although the trends were the same as in the racially mixed classes in West and in classes generally in East.

Summary

The results provide clear and consistent answers to several of the questions we raised about the influence of pupil sex and race in teachers' judgments.

1. Race was consistently influential. Teachers in both communities felt that black children were less positively motivated academically, showed poorer classroom conduct, poorer personal behavior, and were less well adjusted emotionally. Teachers in East further felt that black children were more dependent on them as teachers. Teachers in racially mixed classrooms in West also agreed that black children were more dependent. It was only in judging chidlren's social adjustment, specifically their friendliness and level of classroom isolation, that teachers in both communities viewed black and white children similarly.

2. Sex was also important but on only three of the five types of judgments the teachers made. Teachers in both East and West felt that girls showed better conduct in the classroom, better personal behavior, and were more positively motivated academically. By contrast, boys and girls were judged as having very similar social and emotional adjustment and level of dependency on the teacher.

3. Sex and race effects were generally additive. The order of the four groups of children consistently showed that teachers made the most positive judgments of white girls who were followed by white boys and black girls. Black boys were always judged least positively. Sex and race did interact in the teachers' judgments in East on about half of the classroom conduct items. East teachers viewed white girls unusually positively relative to the other groups of children.

TABLE 6 - II

SUMMARY OF TEACHER JUDGMENTS OF BLACK AND WHITE BOYS AND GIRLS ON DEPENDENCY ITEMS: ALL CLASSROOMS, CLASSROOMS IN EAST, CLASSROOMS IN WEST

Dependency Judgments	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Seeks constant reassurance	3.79	3.88	3.56	3.47	4.41	3.95	3.55	3.47	3.66	3.87	3.59	3.54
	Race, $p < .0002$ Sex (NS) Interaction (NS)				Race, $p < .0001$ Sex (NS) Interaction (NS)				Race (NS) Sex (NS) Interaction (NS)			
Possessive of teacher	4.50	4.41	4.00	4.09	4.47	4.19	3.96	4.06	4.50	4.45	4.31	4.29
	Race, $p < .0001$ Sex (NS) Interaction (NS)				Race, $p < .01$ Sex (NS) Interaction (NS)				Race (NS) Sex (NS) Interaction (NS)			

4. Overall, the results showed only minimal impact of the two specific communities. Teachers in both communities showed the influence of the child's race in judging their pupils' classroom conduct, academic motivation, personal behavior, emotional (but not social) adjustment, and level of dependency. Pupil sex also influenced teacher judgments of children's classroom conduct, academic motivation, and personal behavior in both communities, although the effect of sex depended on the child's race more in East than in West. Teachers in East viewed white girls unusually positively and differentiated between white girls and boys more than between black girls and boys. This unusually positive view of white girls in East also resulted in exaggerated race differences in teacher judgments there. By and large, however, these results support the generality of the influence of pupil sex and race on teacher judgments. Teachers in both the predominantly middle-class and predominantly working-class school districts were influenced at least somewhat by the child's sex and consistently by the child's sex and race influences in judging children's behavior in the classroom.

5. Finally, the results from the racially mixed classrooms generally showed equally pronounced sex and race effects as were found in the analyses of the data from all classrooms. All the sex and race effects held in the total sample and in the racially mixed classes. Generally the average ratings of the four groups of students were virtually identical in data analyzed from all classrooms and from just the racially mixed classes. This means that the differences in teachers' judgments of black and white children in the total sample did not result simply from different teacher evaluations of exclusively black and exclusively white classes. Even when black and white children attended the same classes, black children were judged more negatively. Moreover, the almost identical judgments of black children in racially mixed and in all classrooms and of white children in the two settings indicates that these expectancies of teachers do not depend on racial composition of the classroom.

Influence of Additional Pupil Characteristics

We are interested in whether teachers would still judge white children and girls more positively if we controlled for children's performance on standard tests administered early in the school term. We expected test score performance to be one of the cues teachers use in judging black and white boys and girls but further expected pupil sex and race to significantly influence teacher judgments even after adjusting for test performance. We used verbal as well as nonverbal scores on the California Test of Mental Maturity as covariates and repeated the analyses of the effects of pupil race and sex. We did this for the two teacher judgment summary indices that seemed most relevant to school outcomes--judgments of the child's classroom conduct and academic motivation. What did we find?

TABLE 7 - II

TEACHER JUDGMENTS OF THE CLASSROOM CONDUCT OF BLACK AND WHITE BOYS AND GIRLS, CONTROLLING BEGINNING YEAR VERBAL AND NON-VERBAL TEST SCORES: ALL CLASSROOMS, CLASSROOMS IN EAST AND CLASSROOMS IN WEST

Classroom Conduct	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls (125)	White Boys (133)	Black Girls (250)	Black Boys (240)	White Girls (19)	White Boys (23)	Black Girls (218)	Black Boys (217)	White Girls (106)	White Boys (110)	Black Girls (32)	Black Boys (23)
Unadjusted Means*	4.47	3.87	3.84	3.40	4.47	3.90	3.83	3.43	4.47	3.87	3.84	3.17
Adjusted for verbal test scores	4.40	3.80	3.87	3.45	4.44	3.88	3.83	3.43	4.43	3.82	3.98	3.37
Adjusted for non-verbal test scores	4.45	3.85	3.84	3.42	4.46	3.89	3.83	3.43	4.45	3.84	3.92	3.24
F, Values, Covarying Verbal Scores:												
	F, Race Effect = 11.86 ($p < .0006$) F, Sex Effect = 23.12 ($p < .0001$) F, Interaction (NS)				F, Race Effect = 3.95 ($p < .05$) F, Sex Effect = 3.43 ($p < .06$) F, Interaction (NS)				F, Race Effect = 9.93 ($p < .001$) F, Sex Effect = 22.09 ($p < .0001$) F, Interaction (NS)			
F, Values Covarying Non-verbal Scores:												
	F, Race Effect = 17.31 ($p < .0001$) F, Sex Effect = 23.59 ($p < .0001$) F, Interaction (NS)				F, Race Effect = 4.29 ($p < .03$) F, Sex Effect = 3.51 ($p < .06$) F, Interaction (NS)				F, Race Effect = 16.09 ($p < .0001$) F, Sex Effect = 22.48 ($p < .0001$) F, Interaction (NS)			

*These unadjusted means are slightly different from those presented in Tables 1A, 1B and 1C because the N's in each group vary from the original analyses in which test scores were not controlled.

TABLE 8 - II

TEACHER JUDGMENTS OF THE ACADEMIC MOTIVATION OF BLACK AND WHITE BOYS AND GIRLS, CONTROLLING BEGINNING OF YEAR VERBAL AND NON-VERBAL TEST SCORES: ALL CLASSROOMS, CLASSROOMS IN EAST, CLASSROOMS IN WEST

Academic Motivation	All Classrooms				Classrooms In East				Classrooms In West			
	White Girls (125)	White Boys (133)	Black Girls (250)	Black Boys (240)	White Girls (19)	White Boys (23)	Black Girls (218)	Black Boys (217)	White Girls (106)	White Boys (110)	Black Girls (32)	Black Boys (23)
Unadjusted means	3.85	3.57	3.39	2.09	4.10	3.76	3.44	3.13	3.80	3.53	3.08	2.76
Adjusted for verbal test scores	3.55	3.30	3.53	3.25	3.86	3.61	3.46	3.15	3.70	3.43	3.43	3.26
Adjusted for non-verbal test scores	3.63	3.36	3.50	3.21	3.91	3.61	3.46	3.15	3.74	3.44	3.41	3.02
F Values, Covarying Verbal Scores:												
	F, Race Effect (NS) F, Sex Effect = 18.11 ($p < .0001$) F, Interaction (NS)				F, Race Effect = 10.59 ($p < .001$) F, Sex Effect = 4.74 ($p < .02$) F, Interaction (NS)				F, Race Effect = 2.89 ($p < .09$) F, Sex Effect = 3.49 ($p < .06$) F, Interaction (NS)			
F, Values, Covarying Nonverbal Scores:												
	F, Race Effect = 3.52 ($p < .06$) F, Sex Effect = 19.76 ($p < .0001$) F, Interaction (NS)				F, Race Effect = 11.90 ($p < .0006$) F, Sex Effect = 5.74 ($p < .01$) F, Interaction (NS)				F, Race Effect = 7.83 ($p < .005$) F, Sex Effect = 7.62 ($p < .006$) F, Interaction (NS)			

Since we have found such large differences in the way teachers judge children, at least as a function of the child's sex and race, we decided to examine the impact of the child's level of internality on teacher judgments as well as on teacher behavior. We did this by including a three-way classification of children on I-E (Internals-Moderates-Externals) first with race so as to test for a main effect of internal-external control and possible race--I-E interactions in teacher judgments. We then repeated I-E analysis with pupil sex to assess whether the more positive judgments of white children and girls would hold if children's level of internal-external control were controlled. What did we find?

The child's position on internal and external control did influence teacher judgments of classroom conduct, academic motivation, social-emotional adjustment and teacher dependency (See Tables 9 and 11). The internality of the child was less important in teachers' judgments of their pupils' personal behavior (IE was significant when sex was controlled - Table II) but not when race was controlled (Table 9). Teachers believed that internal children behaved better in the classroom, were more motivated academically, were emotionally and socially better adjusted, and were less dependent on them as teachers. The effect of the child's level of internality on teacher judgments held up in the analyses of the racially mixed classrooms as well as in the total sample of classrooms. (It was less significant in the separate analyses of East and West but primarily because of the reduced sample size.)

The impact of the child's classification on the internal-external control scale was not sufficient, however, to eliminate the influence of the child's race on teacher judgments (See Table 9 compared to Table 1A). Internal black children were judged more negatively than internal white children on all judgments the teachers made. Likewise, moderately internal black children were judged more negatively than moderately internal white children on all judgments. Even external black children were judged more negatively than external white children on all but their social-emotional adjustment. External black and white children were viewed as similarly well adjusted. The race effect on teacher judgment persisted in all of the analyses, the total sample of classrooms (See Table 9) and the racially mixed classrooms in both East and West (See Table 10).

In one sense this description of the results somewhat oversimplifies the combined meaning of the child's race and level of internality in teachers' judgments. The significant interaction between pupil race and I-E score in explaining teacher judgment of the child's social-emotional judgment illustrates the complexity that appears somewhat less strikingly with other judgments as well (See Table 9). External black children were judged as well (better in racially mixed classes) adjusted as internal black children. By contrast, external white children were judged, in the usual pattern, as more poorly adjusted than internal white children. Although race and I-E did not interact significantly in accounting for the other teacher judgments, teachers did not judge internal and external black chidlren as differently as they viewed internal and external white children. The child's level of internality did not influence the teachers' judgments of the classroom

TABLE 9 - II

TEACHER JUDGMENTS OF INTERNAL AND EXTERNAL BLACK AND WHITE CHILDREN: ALL CLASSROOMS

PUPIL BEHAVIOR INVENTORY	ALL CLASSROOMS						ALL RACIALLY MIXED CLASSROOMS					
	Internal		Moderate		External		Internal		Moderate		External	
Teacher Judgments of:	Black (81)	White (92)	Black (210)	White (91)	Black (223)	White (69)	Black (56)	White (68)	Black (115)	White (70)	Black (89)	White (47)
Classroom Conduct Range	3.66	4.34	3.60	4.12	3.40	4.00	3.68	4.42	3.65	4.23	3.43	3.97
	F, Race Effect = 71.95 ($p < .0001$)						F, Race Effect = 45.86 ($p < .0001$)					
	F, IE Effect = 5.94 ($p < .005$)						F, IE Effect = 4.34 ($p < .05$)					
	F, Interaction = (NS)						F, Interaction = (NS)					
Academic Motivation Range	3.53	3.96	3.22	3.66	3.10	3.39	3.41	4.01	3.12	3.68	3.10	3.38
	F, Race Effect = 27.93 ($p < .0001$)						F, Race Effect = 27.71 ($p < .0001$)					
	F, IE Effect = 16.51 ($p < .001$)						F, IE Effect = 9.14 ($p < .001$)					
	F, Interaction = (NS)						F, Interaction = (NS)					
Social-Emotional Adjustment Range	3.89	4.27	3.68	4.04	3.82	3.86	3.79	4.37	3.64	4.12	3.80	3.84
	F, Race Effect = 17.87 ($p < .0001$)						F, Race Effect = 21.48 ($p < .0001$)					
	F, IE Effect = 6.28 ($p < .003$)						F, IE Effect = 3.50 ($p < .05$)					
	F, Interaction = 3.32 ($p < .05$)						F, Interaction = 4.00 ($p < .025$)					
Dependency on the Teacher Range	3.92	4.21	3.79	4.23	3.71	3.92	4.02	4.40	3.89	4.32	3.80	3.94
	F, Race Effect = 22.32 ($p < .0001$)						F, Race Effect = 13.76 ($p < .001$)					
	F, IE Effect = 5.15 ($p < .01$)						F, IE Effect = 4.72 ($p < .01$)					
	F, Interaction = (NS)						F, Interaction = (NS)					
Personal Behavior Range	4.30	4.85	4.36	4.78	4.32	4.64	4.34	4.88	4.38	4.80	4.38	4.63
	F, Race Effect = 102.00 ($p < .0001$)						F, Race Effect = 63.51 ($p < .0001$)					
	F, IE Effect = (NS)						F, IE Effect = (NS)					
	F, Interaction = (NS)						F, Interaction = (NS)					

TABLE 10 - II

TEACHER JUDGMENTS OF INTERNAL AND EXTERNAL BLACK AND WHITE CHILDREN: CLASSROOMS EAST AND WEST

PUPIL BEHAVIOR INVENTORY	RACIALLY MIXED CLASSROOMS IN EAST						RACIALLY MIXED CLASSROOMS IN WEST					
	Internal		Moderate		External		Internal		Moderate		External	
Teacher Judgments of:	Black (42)	White (12)	Black (88)	White (16)	Black (74)	White (8)	Black (14)	White (56)	Black (27)	White (54)	Black (15)	White (39)
Classroom Conduct Range	3.58	4.35	3.70	4.15	3.55	3.90	3.98	4.43	3.46	4.25	3.09	3.98
	F, Race Effect = 10.32 ($p < .001$)						F, Race Effect = 21.37 ($p < .001$)					
	F, IE Effect = (NS)						F, IE Effect = 5.64 ($p < .02$)					
	F, Interaction = (NS)						F, Interaction = (NS)					
Academic Motivation Range	3.42	4.57	3.23	3.74	3.16	3.40	3.37	3.89	2.77	3.67	2.83	3.37
	F, Race Effect = 14.5 ($p < .001$)						F, Race Effect = 18.91 ($p < .0001$)					
	F, IE Effect = 6.62 ($p < .005$)						F, IE Effect = 4.08 ($p < .025$)					
	F, Interaction = (NS)						F, Interaction = (NS)					
Social-Emotional Adjustment Range	3.75	4.32	3.65	4.00	3.69	4.03	3.90	4.39	3.62	4.15	4.32	3.81
	F, Race Effect = 8.12 ($p < .005$)						F, Race Effect = (NS)					
	F, IE Effect = (NS)						F, IE Effect = (NS)					
	F, Interaction = (NS)						F, Interaction = 6.03 ($p < .005$)					
Dependency on the Teacher Range	3.98	4.60	3.92	4.28	3.76	3.88	4.14	4.38	3.80	4.33	4.00	3.95
	F, Race Effect = 15.16 ($p < .001$)						F, Race Effect = (NS)					
	F, IE Effect = (NS)						F, IE Effect = (NS)					
	F, Interaction = (NS)						F, Interaction = (NS)					
Personal Behavior Range	4.27	4.76	3.40	4.72	4.36	4.66	4.53	4.90	4.33	4.82	4.52	4.63
	F, Race Effect = 12.52 ($p < .001$)						F, Race Effect = 19.90 ($p < .0001$)					
	F, IE Effect = (NS)						F, IE Effect = (NS)					
	F, Interaction = (NS)						F, Interaction = (NS)					

TABLE 11 - II

TEACHER JUDGMENTS OF INTERNAL AND EXTERNAL BOYS AND GIRLS: IN ALL CLASSROOMS

PUPIL BEHAVIOR INVENTORY	ALL CLASSROOMS					
	Internal		Moderate		External	
Teacher Judgments of:	Boys (75)	Girls (100)	Boys (128)	Girls (164)	Boys (164)	Girls (129)
Classroom Conduct Range	3.85	4.16	3.52	3.96	3.38	3.76
	F, Sex Effect = 31.18 ($p <$					
	F, IE Effect = 12.82 ($p < .001$)					
	F, Interaction = (NS)					
Academic Motivation Range	3.76	3.78	3.18	3.52	3.33	3.05
	F, Sex Effect = 8.57 ($p < .005$)					
	F, IE Effect = 23.96 ($p < .001$)					
	F, Interaction = 2.14 ($p < .20$)					
Social Emotional Adjustment Range	4.18	4.04	3.76	3.82	3.86	3.80
	F, Sex Effect = (NS)					
	F, IE Effect = 10.67 ($p < .001$)					
	F, Interaction = (NS)					
Dependency on Teacher Range	4.13	4.05	3.95	3.90	3.77	3.76
	F, Sex Effect = (NS)					
	F, IE Effect = 7.97 ($p < .001$)					
	F, Interaction = (NS)					
Personal Behavior Range	4.58	4.60	4.45	4.51	4.35	4.46
	F, Sex Effect = (NS)					
	F, IE Effect = 5.73 ($p < .005$)					
	F, Interaction = (NS)					

conduct, academic motivation, or dependency of black children nearly as much as it did their judgments of white children. The minimization of the effect of black children's internal-external control on teacher judgment, and the lack of linearity even when it did influence teachers, were particularly striking in the analyses of the racially mixed classes (See Tables 9 and 10). Further support that children's level of internality was less important in the teachers' judgments of black than of white children was found in analyses where we looked at the impact of the child's internal-external control and sex just for black children in East and for white children in West (See Table 12). The child's level of internality influenced teacher judgments only of the academic motivation of black children in East while it influenced teacher judgments not only of the academic motivation but also of the classroom conduct, social-emotional adjustment, and personal behavior of white children in West. Thus, several different analyses all point to the same conclusion. Teacher judgments of black children were not very much influenced by individual pupil characteristics--in this instance by level of internal-external control--while teachers did distinguish among white children according to their individual differences in level of internal control.

We have just seen that the effect of the child's race on teacher judgments was powerful in that it persisted after the child's level of internal control was controlled and because it outweighed the impact of the child's sense of control in judgments teachers made of black children in East. What did the child's level of internality do to influence teacher judgments of boys and girls? Did sex continue to influence teacher judgments even after the child's I-E was controlled?

Analyses of the total sample of children indicate that the control for the child's level of internality did little to alter the impact of the pupil's sex of teacher judgments (See Table 11 compared to Table 1A). Sex was not as important as race of child in the first place. Sex influenced teacher judgments only of classroom conduct, academic motivation, and personal behavior. When the child's level of internality was controlled, girls continued to be viewed as more motivated academically and as showing better classroom conduct. The control for I-E did mute the sex effect in teacher judgments of children's personal behavior.

The separate analyses in East and West of the joint role of sex and level of internality were carried out just with black children in East and just with white children in West. (Controlling for both race and sex would have resulted in very small numbers in each cell among white children in East and black children in West). The results for white children in West are straightforward. Sex continued to influence teacher judgment on exactly the judgments where sex was important before controlling for the child's internal-external control, that is, classroom conduct, academic motivation, and personal behavior (See Table 12). Teachers in West felt that white girls were better behaved personally, showed better conduct in the classroom, and were more motivated academically than white boys. By contrast, the results for black children in East showed that sex continued to influence teachers

TABLE 12 - II

TEACHER JUDGMENTS OF INTERNAL AND EXTERNAL BOYS AND GIRLS: CLASSROOMS IN EAST AND WE

PUPIL BEHAVIOR INVENTORY	BLACK CHILDREN IN ALL CLASSROOMS IN EAST						WHITE CHILDREN IN ALL CLASSROOMS IN WEST					
	Internal		Moderate		External		Internal		Moderate		Externa	
Teacher Judgments of:	Boys (28)	Girls (40)	Boys (82)	Girls (101)	Boys (116)	Girls (93)	Boys (39)	Girls (41)	Boys (36)	Girls (39)	Boys (33)	Gi (2
Classroom Conduct Range	3.71	3.53	3.40	3.80	3.32	3.56	4.06	4.61	3.75	4.47	3.75	4.
		F, Sex Effect = (NS)						F, Sex Effect = 30.40 (p <.001)				
		F, IE Effect = (NS)						F, IE Effect = 2.67 (p <.10)				
		F, Interaction = (NS)						F, Interaction = (NS)				
Academic Motivation Range	3.54	3.59	3.15	3.41	3.00	3.27	3.92	3.83	3.31	3.97	3.28	3.
		F, Sex Effect = 3.40 (p <.10)						F, Sex Effect = 5.18 (p <.025)				
		F, IE Effect = 6.94 (p <.001)						F, IE Effect = 4.97 (p <.01)				
		F, Interaction = (NS)						F, Interaction = 3.45 (p <.05)				
Social Emotional Adjustment Range	4.06	3.78	3.68	3.70	3.84	3.71	4.36	4.19	3.92	4.18	3.78	3.
		F, Sex Effect = (NS)						F, Sex Effect = (NS)				
		F, IE Effect = (NS)						F, IE Effect = 4.89 (p <.01)				
		F, Interaction = 1.28						F, Interaction = 1.49				
Dependency on Teacher Range	4.00	3.80	3.77	3.80	3.71	3.68	4.24	4.11	4.32	4.14	3.89	3.
		F, Sex Effect = (NS)						F, Sex Effect = (NS)				
		F, IE Effect = (NS)						F, IE Effect = (NS)				
		F, Interaction = (NS)						F, Interaction = (NS)				
Personal Behavior Range	4.27	4.23	4.34	4.39	4.28	4.35	4.81	4.90	4.71	4.86	4.57	4.
		F, Sex Effect = (NS)						F, Sex Effect = 7.14 (p <.01)				
		F, IE Effect = (NS)						F, IE Effect = 6.41 (p <.005)				
		F, Interaction = (NS)						F, Interaction = (NS)				

judgments only of acadmeic motivation once level of internality was controlled. We should remember, however, that sex of child particularly influenced teachers in judging white children in East. When we examine the joint role of the child's sex and level of internality for just black children in East, sex would not be expected to operate very strongly since it was weaker in explaining teacher judgments of black than of white children in the first place. Furthermore, as we have already pointed out, the child's level of internality was not critical in explaining teacher judgment of black children in East. Overall, these analyses of just black children in East indicate that neither the child's level of internality nor sex helped teachers distinguish among black children on anything but academic motivation. Teachers in East were just not guided as much by black children's personal characteristics in judging their behavior in the classroom.

Influence of Sex of Teacher

Given that we could examine sex of teacher effects only on the judgments teachers in black classes in East made of boys and girls, we admittedly can provide very limited answers as to whether male and female teachers are equally affected in their judgments by sex of the pupil. And we have nothing to say about whether they are equally affected by pupil race.

In this limited data set the results do support that it is female but not male teachers who judge boys and girls differently. Female teachers considered girls better behaved in the classroom, more motivated academically, but less well adjusted than boys. Male teachers in these black classes viewed boys and girls similarly in all these respects--conduct, motivation, and adjustment (See Table 13).

Since sex of pupil mattered most in the total sample in teacher judgments of classroom conduct and academic motivation, these results from black classes in East suggest that when pupil sex most influenced teacher judgment, it did so for female but not male teachers. Male teachers just did not judge boys and girls at all differently.

TABLE 13 - II

JUDGMENTS OF BOYS AND GIRLS BY MALE AND FEMALE TEACHERS IN EAST: CHILDREN IN BLACK CLASSES ONLY

PUPIL BEHAVIOR INVENTORY	Judgments by Female Teachers		Judgments by Male Teachers	
Teacher Judgments of:	Girls (71)	Boys (76)	Girls (76)	Boys (87)
Classroom Conduct	3.56	3.29	3.47	3.47
	F = 3.50 (p = .06)		F(NS)	
Academic Motivation	3.37	3.04	3.33	3.17
	F = 4.94 (p = .03)		F(NS)	
Social-Emotional Adjustment	3.67	3.95	3.70	3.73
	F = 4.83 (p = .03)		F(NS)	
Dependency on Teacher	3.62	3.76	3.63	3.6r
	F(NS)		F(NS)	
Personal Behavior	4.29	4.29	4.29	4.27
	F(NS)		F(NS)	

Chapter III

Teacher Behavior Toward Black and White Boys and Girls

Just as the teacher expectancy research has focused primarily on the effects of teacher expectations, so the bulk of the previous work on teacher behavior has stressed its implications for childrens' achievement or attitudes toward school and their teachers. It is true that some theorists began to discuss teacher expectancy as an example of dyadic communication and offered models in which teacher expectancy was viewed as influencing teacher behavior which was cast, in turn, as the process by which expectancy influenced children. This resulted in research interest on the teacher expectancy-behavior relationship. Numerous studies began to investigate whether teachers behaved differently toward children they considered "bright" or "likely to achieve in school." There has been little concern, however, or with other influences on teacher behavior. A few previous studies have examined teacher personality or experience variables as influences on teaching style or interaction with pupils. But, strangely enough, very little research[1] has looked into pupil influences on teacher behavior. The previaling perspective in research on teacher-pupil interaction implied that teachers acted consistently toward all pupils in the classroom. We believe that to be naive. Teachers spend the majority of their time with only three or four pupils. If teachers do not spend equal time speaking with all children, it would be even more surprising if they equally reinforced all of them. Teachers probably positively reinforce certain types of pupils most of the time, but negatively reinforce other types of pupils most of the time, while they may not speak at all with still other types of pupils. In other words teachers probably differentiate their behavior toward children on some basis. This chapter explores whether pupil race, sex, and level of internality are among those bases. We are interested in whether teachers behave differently toward black and white boys and girls and toward internal and external children.

One reason that previous research has provided very little information about pupil influences is because most of it has depended on observational schemes that capture teacher behavior toward the class as a whole. A good example is the extensively used system developed by Flanders (1970). The Flanders' system provides seven categories for teacher talk, two for student talk, and one for silence or confusion. Four of the teacher talk categories are conceptualized as "indirect" behaviors--accepts feeling, praises or encourages, accepts or uses ideas of students, and asks questions. Three teacher talk categories purportedly measure "direct" behaviors--lecturing, giving directions or commands, and criticizing. Flanders theorizes and provides empirical support for the notion that teachers not only differ in how directly and indirectly they behave but that their differences further affect pupil performance,

[1] A notable exception is the work of Brophy and Good to which we refer explicitly below.

pupil attitudes, and pupil dependency on the teacher. A few studies have modified the Flanders system so that particular children are targeted for observation but most have continued to use it to measure teacher behavior without regard to which pupils the behavior is directed.

The work of Brophy and Good (1974) and their associates is a notable exception to this typical treatment of teacher behavior. Explicitly critical of "class perspective" observational systems, Brophy and Good developed a dyadic interaction observation system. They argue that many of the teacher behaviors that have been studied previously, in the Flanders' system for example, are directed at individuals and not at the class as a whole. Teachers typically praise and criticize individuals rather than the whole class. They further conclude that the few studies on intraclass differences in teacher pupil interaction demonstrated large individual differences, as well as regular group differences, within the classroom. The system Brophy and Good developed include the following categories: 1) response opportunities, 2) level of teacher question, 3) quality of child's response, 4) teacher feedback reactions (praise, etc.), 5) work related contacts, 6) behavior evaluations, and 7) procedural contacts. The research that has used this dyadic system selects particular children whose interactions with the teacher are to be observed. Because of their emphasis on teacher expectancy, Brophy and Good typically choose three children the teacher considers "likely to achieve" or "bright" and three children the teacher considers "not likely to achieve." Sometimes boys and girls are specifically chosen, making a total of twelve children in a given classroom whose interactions with the teacher are observed.

A great deal of the research work on pupil sex has depended on Brophy's and Good's observational system. One of the first of these studies was carried out in four first grade classrooms in rural Texas (Brophy and Good, 1970). Teachers ranked their pupils according to their achievement. The three highest and the three lowest of each sex were targeted for observation. Four hours of observation were carried out in each classroom. Teachers had significantly more contacts (total across all categories) with boys than with girls; they particularly directed more disciplinary contacts (criticism and disapproval) to boys.

But they also afforded boys more response opportunities. The authors suggest that boys are generally more salient in the teacher's perceptual field and they give them more attention of all sorts. A subsequent report of this same study clarifies that these sex differences do not exist when teachers are teaching reading but rather reflect what happens across total classroom activities (Good and Brophy, 1972). An earlier study by Davis and Slobodian (1967) likewise indicated that teachers did not discriminate in their behaviors toward boys and girls while teaching reading. The fact that boys read less well than girls in these early grades apparently does not result, in any simple fashion at last, from differential teacher behaviors explicitly in the reading sessions.

A later study carried out by Sikes, one of Brophy and Good's students, extends the investigation of sex differences to junior high pupil-teacher interaction. Sixteen junior high teachers, half male and half female, were observed for one hour a day for ten days beginning with the seventh week of class. Many differences in behaviors toward boys and girls were observed. Boys received more of all categories of behavior coded from the Brophy and Good system. They were given more response opportunities and more teacher affect, both positive and negative. Boys, in turn, initiated more questions and contacts with teachers and called out more answers and guessed more than girls. These behavioral differences in teachers and in the children existed even when comparing boys and girls considered high achievers by the teachers. Boys considered high achieving received more favorable teacher treatment and were more active themselves than girls considered high achieving (Good, Sikes and Brophy, 1973). Particularly interesting is the fact that teachers treated wrong answers given by boys and girls, even those they considered high achievers, differently. Wrong answers given by girls were more often negated by the teacher while teachers more often followed a wrong answer given by boys with a new question. Teachers also less often followed up correct answers given by girls with additional feedback. The pattern of not taking correct answers as seriously and giving fewer response opportunitites when answers are incorrect is more important than simple positive/negative reinforcement in accounting for achievement inhibition among girls. Girls are criticized and restricted less than boys but they also are given less positive reinforcement. And perhaps most important for eventual commitment to achievement, boys seem to be taken seriously both when they are wrong and when they are right.

Two other studies which did not use the Brophy and Good system also found sex differences in teacher behavior. One used a modification of the Flanders system to investigate whether any particular area in the classroom received a disproportionate share of teacher-pupil interaction (Delefes and Jackson, 1973). Although sex of student was not a primary concern in this study, the authors do report that teacher approval for males was contingent upon their level of participation in class while this was not true for females. Again, this seems to indicate greater seriousness about the academic performance of boys than girls. The other observed fourth, fifth and sixth grade teachers during sixteen 40 minute class sessions with a modified version of the French and Galloway IDER system of behavior analysis (Cosper, 1971). The pupils were all "gifted" but equally divided by sex. Teachers initiated significantly more talk with male than with female students; they exhibited more restricting and less encouraging behavior toward female than male students. And male students initiated more talk with teachers as well. Since the boys and girls were both characterized as "gifted," these sex differences cannot be explained by "objective ability" differences between the two groups.

Other than the two studies which indicated lack of differential behavior in teaching reading, we have found only one study that failed to find sizeable differences in teacher behavior toward boys and girls as well as in boys' and girls' responsiveness in the classroom. Jeter's

dissertation research using the Brophy and Good system to observe ten fourth grade social studies teachers did not find evidence of differential pupil-teacher interactions for boys and girls (Jeter, 1973).

By and large, this group of studies shows that teachers direct more attention to boys, even when teacher expectancy of pupil achievement is controlled and even when "objective" performance is controlled. Boys are criticized and disapproved more but they are also asked more questions, given greater feedback when correct, provided more response alternatives when incorrect, and given more positive reinforcement as well. They in turn initiate more contacts with the teacher; they are generally more active in class; they answer more questions and they more often guess. There is some evidence that these differences in boys' and girls' behaviors are more pronounced in math than in social studies, although they exist in social studies and in total classroom activities as well.

None of these studies explicitly examined whether these sex differences operated for minority children or only for white children. Most of the studies were done with white children, although the original research with first grade children by Brophy, Good, and associates did include a small number of black and Chicano children. However, the size of these groups was too small for reasonable analysis of the joint influence of sex and ethnic status. The research explicitly on pupil race or ethnic characteristics likewise has not examined the joint role of sex-ethnic influences. Thus, previous research does not show whether these differential behaviors toward boys and girls prevail in situations where other biases may influence teachers as well.

The one study that examined a large number of classrooms in several school districts was carried out by the U.S. Civil Rights Commission. Jackson and Cosca (1974) modified Flanders' system to code teacher behavior with reference to the ethnicity of the student to whom the behavior was directed. Four hundred ninety-four classrooms (fourth, eighth, tenth, and twelfth grades) in Anglo-Chicano mixed schools were observed for ten minutes each. Chicano and Anglo interaction measures for each class were converted to per pupil measures by dividing the total number of tallies by the number of students of that ethnicity. Anglo students received more praise; they were questioned more; and their ideas were used more than was true of Chicano students. These are three of the four categories Flanders identifies as "indirect" teaching behaviors. Anglo students also received more of all non-criticizing teacher talk, even those considered "direct" behaviors such as lecturing and directions. Anglo students likewise responded directly to teacher questions and initiated more talk with teachers than Chicano students did.

Four other studies refer to black and white children. One (Antonoplos, 1972) used a national survey and found that white pupils received more encouragement in terms of high approval-low disapproval reinforcement. The other three covered much more restricted situations. Barnes (1974) used the Brophy and Good system to observe social studies classrooms in a desegregated high school. Teachers made more direct contacts with white students than with black

students; white students were asked more "product" and sustaining-follow-up questions than black students; black students were asked more "choice" questions than white students. Otherwise, white and black students were treated similarly in this one school. Coble (1975) modified the Flanders system, much as Jackson and Cosca did, to code the race of the child to whom behavior was directed in 13 fourth grade classes. Four classes were black, six white, and three were racially mixed. Each classroom was observed in twenty minute sessions, twice weekly for three weeks. Teacher behavior in the three types of classrooms did not differ in any of the teacher talk categories except praise. Students in white classrooms received more praise than students in either black or racially mixed classes. Coble also analyzed behaviors toward black and white pupils in the three racially mixed classes. Black students received more "direct" teacher talk, particularly more criticism, than white students did. Teachers were later asked to judge each pupil in the class on nine characteristics, including "academic potential." When black and white students were classified into groups perceived by the teacher as high and low ability, Coble found that it was especially the "high ability" black students who were criticized by the teacher. They received more criticism than any of the other groups. High ability black students, however, initiated more talk than any other group of students in racially mixed classes, despite receiving more criticism than others. Coble's results are similar to findings reported by Rubovits and Maehr (1972). In a study using a micro-teaching situation they showed that teachers used more criticism with "gifted" blacks than with any other group of students. One set of pupils consisted of a black and a white "gifted" subject; the other a black and a white "non-gifted" subject. Although the black and white subjects did not differ in verbosity, teachers requested fewer statements from blacks than from whites; they ignored more statements of blacks than of whites; and they praised blacks less and criticized them more than whites. The ability dimension also produced effects, but race by ability interactions showed that the "gifted" subjects received more positive treatment when white but less positive treatment when black. "Gifted" blacks especially were criticized. These two studies add to those reported in Chapter II that likewise showed that minority children who are viewed as high ability or who perform better than "expected" are judged more negatively on other behavior ratings. Together these studies suggest that a reverse "pygmalion" effect characterizes the assessments and behavior toward "bright" black children. All of these studies, however, have been conducted in either laboratory settings or in just a few classrooms. Given the critical educational significance of their implications, these results very much need to be examined in a larger number of classrooms.

Previous research leaves many questions about pupil sex and race unanswered. It is not at all clear whether teachers behave differently toward black and white children only when comparisons are made of racially homogeneous classrooms or whether race effects persist in racially mixed classes as well. If pupil race does not influence teacher behavior in racially mixed classes, it might be argued that differences in the way black and white children are treated in public schools

result from characteristics associated with racially homogeneous environments, not explicitly from teacher bias toward black and white children in the same situation. We will explore that question by comparing the results from the 19 racially mixed classes with the results from the total set of 31 classrooms.

Previous studies have likewise not provided information about the joint influence of pupil sex and race nor have they examined the function of school district characteristics as conditioners of these sex and race effects. We do not know from previous work whether teachers behave differently toward boys and girls and toward black and white children both in districts serving working class families and in those serving mostly middle class families. We explored whether the race and sex influences on teacher behavior existed, as their effects on teacher judgments did, both communities.

Finally, we have found no studies that investigate whether children's personality differences, such as their level of internality, might mute these sex and race influences on teacher behaviors. We examine whether teachers behaved differently toward boys and girls who expressed equally high sense of control. Previous work indicates that sex and race effects continue to operate even after teacher expectancy and pupil performance are controlled but the role of pupil personality has by and large not been examined. We report results on teacher behavior toward internal and external children and on level of internality as a possible conditioner of teacher behavior toward boys and girls. We could not investigate the joint influence of pupil race and level of internality because the small number of white children in East and black children in West whose interactions with the teacher were observed makes classifying them further by level of internality impossible. The numbers in each cell would simply have been too small. This also means that we look at the joint influence of sex and level of internality, controlling pupil race and community. Results on teacher behavior toward internal and external boys and girls are presented separately for black children in East and for white children in West.

The influence of teacher characteristics (experience, personality, and teaching orientation) on their classroom behavior has received considerable attention in previous research. The research tradition tht has focussed on the teacher's behavior toward the class as a whole has tended to view differences between teachers as the result of their differences in personality or experience. Many of the studies using the Flanders' system have investigated personal correlates of direct and indirect teaching behaviors, although with contradictory results. Results from studies of personality correlates (for example, dogmatism, warmth, introversion-extroversion, anxiety, ego orientation, internal-external control) have been particularly unimpressive. Most studies have found no more significant correlations than would be expected by chance. Evidence of differences in style, leadership orientation, and educational philosophy of direct and indirect teachers is somewhat more impressive (Dieken and Fox, 1973; Aspy and Hutson, 1972; Aspy and Roeback, 1972).

Differences in the behavior of male and female teachers has not been studied extensively despite the concern frequently expressed in educational circles about the presumed negative effects, especially on male students, of having preponderantly female teachers in the early grades. The few studies that have examined whether male and female teachers differ in their expectations of boys and girls were mostly equivocal, although the most extensive of them (Ricks and Pike, 1973) showed that sex stereotyping of boys and girls was somewhat more characteristic of female than of male teachers. The research of Brophy, Good, and their associates on teacher behaviors shows when they have examined sex of teacher, male and female teachers behaved similarly in their treatment of boys and girls. Both male and female teachers treated boys and girls differently (Good, Sikes, and Brophy, 1973). These authors conclude that previous writers describing the special problems of boys in the puplic school environment have overemphasized the fact that the teachers are female and placed too little emphasis on the fact that they are teachers. They suggest that institutional roles cause teachers of both sexes to establish a set that makes them preoccupied with and excessively sensitive to the need to control disruptive classroom behavior and to act on sex-role expectations of both boys and girls.

Specific Questions About Teacher Behavior Explored in This Study

1. Do teachers behave differently toward black and white children? Do these race effects persist in racially mixed classrooms?

2. Do teachers behave differently toward boys and girls?

3. Do these sex and race differences exist in both East and West?

4. Do teachers behave differently toward internal and external children?

5. Does the effect of the child's sex persist even when the child's level of internality is controlled?

Procedures

Twelve children in each of 31 classes were selected for teacher-pupil interaction observations. (Full data from 370 of these 372 children are analyzed and reported below.) The twelve pupils were selected because they represented high, moderate, and low positions on internal and external contorl. The observation study included in: East--eight white girls, 14 white boys, 108 black girls (51 in racially mixed classes), 108 black boys (47 in racially mixed classes); West--54 white girls (35 in racially mixed classes), 53 white boys (47 in racially mixed classes), 12 black girls and 13 black boys.

The teacher's and pupil's verbal behavior were recorded using a modification of the Flanders' interaction analysis system. Every three seconds the observer coded the verbal activity during that interval

into one of ten categories. The observers recorded the verbal behavior between the teacher and the total class in general and also with twelve specific pupils in each class. The observers did not know which of the twelve children had been previously classified as high, middle, and low on the Internal-External Control Scale, although they obviously knew which were boys, girls, black, and white. About half of the observations were done while the teacher was teaching math, the other half carried out during social studies.

The coders were trained using the Flander's training procedures. They were trained until they attained the Flanders standard of .85 inter-observor reliability (Scott's reliability coefficients). Following the usual Flanders procedure, reliability checks were also maintained throughout the data-gathering period. The classrooms were randomly assigned to the observors on a weekly basis and each classroom's observations were spread across the period from January to May that it took to complete the observations in the classrooms. Tallying verbal behavior every three seconds, a total of six to eight hours of observation data were gathered for each teacher. This amount of observation is far more than is typical of studies of classroom interaction, particularly where interactions with specifically targeted children are observed as well as interactions with the total class. The ten categories were defined exactly as in Flanders (1965).

Teacher Talk Categories

1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feelings may be positive or negative. Predicting or recalling feeli are included.

2. PRAISES OR ENCOURAGES:[3] praises or encoura.. student action or behavior. Jokes that release tension, but not at expense of another individual; nodding head, or saying "um hm?" or "go on" are included.

3. ACCEPTS OR USES IDEAS OF STUDENTS: clarifying, building, or developing ideas suggested by a student. As teacher brings more of his own ideas into play, shift to category five.

4. ASKS QUESTIONS: asking a question about content or procedure with the intent that a student answer.

5. LECTURING: giving facts or opinions about content or procedures; expressing his own ideas, asking rhetorical questions.

6. GIVING DIRECTIONS: directions, commands, or orders to which a student is expected to comply.

7. CRITICIZING OR JUSTIFYING AUTHORITY:[4] statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he doing; extreme self-reference.

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3 & 4 There is NO scale implied by numbering the categories. Each number is classificatory; it designates a particular kind of communication event. To write these numbers down during observation is to enumerate, not to judge a position on a scale.

Student Talk Categories

8. STUDENT TALK--RESPONSE: talk by students in response to teacher Teacher initiates the contact or solicits student statement.

9. STUDENT TALK--INITIATION: talk by students which they initiate. If "calling on" student is only to indicate who may talk next, observer must decide whether student wanted to talk. If he did, use this category.

10. SILENCE OR CONFUSION: pauses, short periods of silence and periods of confusion in which communication cannot be understood by the observer.

Since the total number of tallies, and the amount of talk the teacher exhibited, varied across teachers, the analyses we report in this chapter control for such classroom differences. Each of the twelve targeted children's tallies in each teacher talk category was divided by that teacher's total amount of talk. This means we are comparing whether boys and girls, and black and white children, received different proportions of their teacher's verbal behavior.

The Influence of Pupil Race and Sex

Race and sex influences need to be discussed separately, primarily because the race results depended on community while the sex results held in both communities. The chart below, which summaries the significant main effects of pupil sex and race in the two communities, shows that the same teacher behaviors were tied to pupil sex in both communities, while the apttern of race results differed in East and West.

CHART A

SIGNIFICANT MAIN EFFECTS OF PUPIL SEX AND RACE IN TEACHER BEHAVIOR

	East		West	
Praise	Race (SS)			
Use of Students' ideas	Race (SS,M)	Sex (M)		Sex (M)
Questioning		Sex (M)	Race (M)	Sex (M)
Lecturing	Race (M)		Race (SS,M)	
Giving Directions	Race (SS)	Sex (SS,M)	Race (SS)	
Criticism		Sex (SS,M)	Race (SS)	Sex (SS,M)

*SS = Social Studies
M = Math

The effect of pupil race, but not sex, also depended on whether the analyses were carried out for all classroom or for racially mixed classes. The effect of pupil race was sharper in racially mixed classes in West but considerably weaker in racially mixed classes in East The results on pupil race were altogether more complicated and require greater caution in interpretation since they depended both on community and on classroom setting.

Pupil Sex

First, let us discuss the simpler set of results on teacher behavior toward boys and girls. Teachers in both communities criticized boys more than girls (See Table 1 and 2 for East, 3 and 4 for West). This was true in both math and social studies. They also asked boys more questions, although only in math. Boys' ideas were likewise used more, significantly more in math in East and more in social studies in West. (It is important to note that use of ideas was so strongly tied to pupil race in East that it far outweighed the influence of sex in teacher behaviors in social studies and was also clearly stronger than the effect of pupil sex in teaching math as well.) Boys were also given more directions than girls, although this was a significant sex difference only in East The only teaching behaviors that were not sex-linked in either community nor in teaching either subject matter were lecturing and praise.

The consistency in these results made pooling the data from the two communities a sensible strategy in analyzing sex influences. The main effect of pupil sex was significant in the pooled data in teacher's use of student's ideas, questioning, giving directions, criticism, and praise (although praise was not sex-linked in the analyses of the data from the separate communities) (See Table 5).

Student talk showed the influence of pupil sex less than teacher behavior did. In the separate analyses of East and West the comparisons of boys and girls generally did not show significant sex effects, although in each comparison the average responsiveness of boys tended to be higher for boys than for girls (See Tables 6 and 7). Given that the results were comparable in the two communities, it was appropriate to pool the data. With the larger N, the analyses then indicated significant sex effects (See Table 8). Boys responded more than girls directly to teachers when math was being taught. They were asked more questions by teachers and they responded more often. Boys also initiated more talk in both math and social studies.

Pupil Race

What did the results on pupil race show? Race effects were sharper in West and the pattern differed in the two communities as well. In East black children's ideas were used less in both math and social studies (See Tables 1 and 2). They were also praised less in social studies. Both of these effects were less sharp in racially mixed classes because black boys' ideas were used more and they were praised more in racially mixed classes than was true generally in East. The direct behaviors were not as strongly race linked. Black children were not criticized more than white children in either subject matter. But they were lectured more in math and given more directions in social

TABLE 1 - III

BEHAVIOR OF EAST TEACHERS TOWARD BLACK AND WHITE BOYS AND GIRLS IN MATH

EAST	ALL CLASSROOMS				RACIALLY MIXED CLASSROOMS			
Teacher Behavior	White Girls (8)	White Boys (14)	Black Girls (108)	Black Boys (108)	White Girls (8)	White Boys (14)	Black Girls (51)	Black Boys (47)
Praise	.16	.14	.08	.13	.16	.14	.09	13
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Use of Ideas	.20	.29	.11	.16	.20	.29	.14	.26
	F, Race Effect = 7.9 ($p < .005$) F, Sex Effect = 2.88 ($p < .09$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 4.64 ($p < .03$) F, Interaction = NS			
Questionning	.34	.37	.34	.61	.34	.37	.33	.57
	F, Race Effect = NS F, Sex Effect = 2.90 ($p < .09$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 2.80 ($p < .10$) F, Interaction = NS			
Lecturing	.14	.17	.33	.55	.14	.17	.23	.30
	F, Race Effect = 4.24 ($p < .04$) F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Giving Directions	.17	.29	.18	.34	.18	.32	.19	.34
	F, Race Effect = NS F, Sex Effect = 5.38 ($p < .02$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 4.41 ($p < .04$) F, Interaction = NS			
Criticism	.009	.08	.05	.08	.009	.08	.05	.09
	F, Race Effect = NS F, Sex Effect = 2.77 ($p < .097$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 2.76 ($p < .10$) F, Interaction = NS			

TABLE 2 -III

BEHAVIOR OF EAST TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS IN SOCIAL STUDIES

EAST	ALL CLASSROOMS				RACIALLY MIXED CLASSROOMS			
Teacher Behavior	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
	(8)	(14)	(108)	(108)	(8)	(14)	(51)	(47)
Praise	.12	.15	.06	.08	.12	.15	.06	.11
	F, Race Effec = 4.63 ($p < .03$)				F, Race Effect = NS			
	F, Sex Effect = NS				F, Sex Effect = NS			
	F, Interaction = NS				F, Interaction = NS			
Use of Ideas	.42	.51	.15	.24	.43	.51	.18	.35
	F, Race Effect = 14.62 ($p < .0002$)				F, Race Effect = 4.61 ($p < .03$)			
	F, Sex Effect = NS				F, Sex Effect = NS			
	F, Interaction = NS				F, Interaction = NS			
Questionning	.18	.31	.30	.38	.18	.31	.32	.43
	F, Race Effect = NS				F, Race Effect = NS			
	F, Sex Effect = NS				F, Sex Effect = NS			
	F, Interaction = NS				F, Interaction = NS			
Lecturing	.13	.07	.16	.21	.07	.13	.11	.11
	F, Race Effect = NS				F, Race Effect = NS			
	F, Sex Effect = NS				F, Sex Effect = NS			
	F, Interaction = NS				F, Interaction = NS			
Giving Directions	.08	.11	.11	.22	.08	.13	.11	.22
	F, Race Effect = 4.03 ($p < .05$)				F, Race Effect = NS			
	F, Sex Effect = 3.46 ($p < .06$)				F, Sex Effect = NS			
	F, Interaction = NS				F, Interaction = NS			
Criticism	.000	.01	.007	.004	.000	.05	.01	.03
	F, Race Effect = NS				F, Race Effect = NS			
	F, Sex Effect = NS				F, Sex Effect = 2,75 ($p < .10$)			
	F, Interaction = NS				F, Interaction = NS			

TABLE 3 - III

BEHAVIOR OF WEST TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS IN MATH

WEST	ALL CLASSROOMS				RACIALLY MIXED CLASSROOMS			
Teacher Behavior	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
	(54)	(53)	(12)	(13)	(35)	(36)	(12)	(13)
Praise	.08	.12	.11	.13	.11	.15	.11	.13
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Use of Ideas	.18	.23	.09	.13	.15	.24	.09	.13
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Questionning	.38	.51	.50	.68	.39	.50	.50	.68
	F, Race Effect = 3.27 ($p < .07$) F, Sex Effect = 3.45 ($p < .07$) F, Interaction = NS				F, Race Effect = 2.47 ($p < .12$) F, Sex Effect = 2.46 ($p < .12$) F, Interaction = NS			
Lecturing	.33	.30	.44	.49	.24	.27	.44	.49
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = 4.28 ($p < .04$) F, Sex Effect = NS F, Interaction = NS			
Giving Directions	.16	.23	.17	.26	.21	.27	.17	.26
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Criticism	.02	.04	.01	.07	.02	.05	.01	.07
	F, Race Effect = NS F, Sex Effect = 7.0 ($p < .009$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 8.28 ($p < .005$) F, Interaction = NS			

TABLE 4 - III

BEHAVIOR OF WEST TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS IN SOCIAL STUDIES

WEST	ALL CLASSROOMS				RACIALLY MIXED CLASSROOMS			
Teacher Behavior	White Girls (53)	White Boys (53)	Black Girls (13)	Black Boys (13)	White Girls (34)	White Boys (36)	Black Girls (13)	Black Boys (13)
Praise	.09	.01	.10	.07	.08	.10	.10	.07
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Use of Ideas	.15	.19	.09	.20	.14	.14	.09	.20
	F, Race Effect = NS F, Sex Effect = 4.03 ($p < .05$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Questionning	.35	.49	.38	.47	.28	.39	.38	.47
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Lecturing	.23	.20	.30	.41	.12	.10	.30	.41
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = 5.49 ($p < .02$) F, Sex Effect = NS F, Interaction = NS			
Giving Directions	.10	.13	.24	.23	.09	.08	.24	.24
	F, Race Effect = 6.5 ($p < .01$) F, Sex Effect = NS F, Interaction = NS				F, Race Effect = 8.39 ($p < .004$) F, Sex Effect = NS F, Interaction = NS			
Criticism	.01	.08	.008	.10	.004	.03	.008	.10
	F, Race Effect = NS F, Sex Effect = 5.39 ($p < .02$) F, Interaction = NS				F, Race Effect = 5.04 ($p < .03$) F, Sex Effect = 10.55 ($p < .002$) F, Interaction = 4.17 ($p < .04$)			

TABLE 5 - III

BEHAVIOR OF ALL TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS IN TOTAL SAMPLE

TOTAL SAMPLE

Teacher Behavior	MATH				SOCIAL STUDIES			
	White Girls (62)	White Boys (67)	Black Girls (120)	Black Boys (121)	White Girls (61)	White Boys (67)	Black Girls (121)	Black Boys (121)
Praise	.09	.13	.08	.13	.09	.10	.07	.09
	F, Race Effect = NS F, Sex Effect = 6.97 ($p < .009$) F, Interaction = NS				F, Race Effect = 2.85 ($p < .10$) F, Sex Effect = NS F, Interaction = NS			
Use of Ideas	.18	.24	.11	.16	.19	.25	.14	.23
	F, Race Effect = 8.64 ($p < .004$) F, Sex Effect = 4.02 ($p < .05$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 6.48 ($p < .10$) F, Interaction = NS			
Questionning	.37	.48	.36	.62	.33	.45	.31	.39
	E, Race Effect = 2.41 ($p < .12$) F, Sex Effect = 20.12 (p 0) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 7.81 ($p < .10$) F, Interaction = NS			
Lecturing	.31	.27	.34	.55	.21	.19	.17	.23
	F, Race Effect = 6.0 ($p < .02$) F, Sex Effect = NS F, Interarction = 3.74 ($p < .05$)				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Giving Directions	.17	.25	.17	.29	.10	.15	.10	.12
	F, Race Effect = NS F, Sex Effect = 12.59 ($p < .0004$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Criticism	.02	.05	.05	.08	.01	.07	.02	.05
	F, Race Effect = 5.02 ($p < .02$) F, Sex Effect = 6.69 ($p < .01$) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 12.15 ($p < .10$) F, Interaction = NS			

TABLE 6 - III

RESPONSES OF EAST TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS

EAST	ALL CLASSROOMS				RACIALLY MIXED CLASSROOMS			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Responses in Math								
Direct Reseponse to Teachers	.24	.25	.25	.36	.24	.25	.24	.40
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 3.17 (p .07) F, Interaction = NS			
Student Initiated Response to Teachers	.13	.26	.20	.31	.13	.26	.13	.34
	F, Race Effect = NS F, Sex Effect = 3.28 (p <.07) F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 4.20 (p .04) F, Interaction = NS			
Responses in Social Studies								
Direct Reseponse to Teachers	.25	.32	.30	.36	.25	.31	.29	.34
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Student Initiated Response to Teachers	.21	.35	.17	.30	.21	.35	.11	.35
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = 3.47 (p .07) F, Interaction = NS			

TABLE 7 - III

RESPONSES OF WEST TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS

WEST	ALL CLASSROOMS				RACIALLY MIXED CLASSROOMS			
	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys
Responses in Math								
Direct Reseponse to Teachers	.27	.30	.21	.30	.31	.30	.21	.30
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Student Initiated Response to Teachers	.21	.30	.24	.20	.22	.36	.24	.20
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Responses in Social Studies								
Direct Reseponse to Teachers	.37	.24	.27	.31	.35	.23	.27	.31
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Student Initiated Response to Teachers	.27	.26	.17	.34	.30	.24	.17	.34
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS				F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			

TABLE 8 - IT1

RESPONSES OF TEACHERS TOWARD BLACK AND WHITE, BOYS AND GIRLS IN TOTAL SAMPLE

TOTAL SAMPLE

MATH

	White Girls	White Boys	Black Girls	Black Boys
Responses in Math				
Direct Reseponse to Teachers	.27	.29	.25	.35
	F, Race Effect = NS F, Sex Effect = 6.44 ($p < .01$) F, Interaction = NS			
Student Initiated Response to Teachers	.20	.29	.20	.30
	F, Race Effect = NS F, Sex Effect = 6.69 ($p < .01$) F, Interaction = NS			
Responses in Social Studies				
Direct Response to Teachers	.36	.26	.30	.35
	F, Race Effect = NS F, Sex Effect = NS F, Interaction = NS			
Student Initiated Response to Teachers	.26	.28	.18	.31
	F, Race Effect = NS F, Sex Effect = 3.41 ($p < .10$) F, Interaction = NS			

studies. These differences, like those in the positive, indirect teacher behaviors, were less pronounced in racially mixed classes and again because black boys especially were treated differently in racially mixed classes than generally in East. They particularly were lectured less in racially mixed classes, thus muting race differences in those classes in East. Overall, the pattern in East, especially in comparing what happened to black and white children in all classrooms, shows that black children got fewer positives and somewhat more directed attention (lecturing and directions).

The results in West were different in two senses. Pupil race mattered more, rather than less, in racially mixed classes in West. (See Tables 3 and 4.) The pattern of results also differed in the two communities. In West the two most clearly positive teacher behaviors were not race-linked. Teachers did not praise or use the ideas of white children more than black children, as was the case in East. But black children did seem to receive more directed attention, particularly in social studies. They were lectured more, given more directions, and criticized more in social studies; they were also lectured more and questioned more in math. Most of these differences in the treatment of black and white children were more striking in racially mixed classes because white children in those classes were given even fewer of these direct teacher behaviors than was true generally of white children in West. While these results could imply that black children were treated more negatively than white children in West, it should be remembered that black children's ideas were used and they were praised as much as white children at the same time that they were given more directed attention. This contrasts with the situation in East where black children received both fewer positives and more of the direct teacher behaviors.

Pooling the data from the two communities masks the significance of these community conditioners. The results in East on teacher's use of student's ideas and praise were stong enough that the effect of pupil race was significant in the total sample analysis as well (See Table 5). But this clouds the equivalent treatment black and white children received vis-a-vis use of ideas and praise in West. The greater questioning and criticism that black children received in West were likewise strong enough to show race effects in the total sample, despite the lack of clear differences in East.

The student talk categories were not related to pupil race. Black and white children responded directly to the teacher and initiated talk in the classroom approximately equally (See Tables 6-8). This was true in both social studies and math and in both communities. Thus, despite the fact that teachers behaved differently toward black and white children, the children responded verbally much the same. In West this means that the more directed attention that black children received did not draw more direct responses from them. In East this means that the more negative treatment black children received, especially the fact that their ideas were used less, did not make them less responsive in the classroom.

The Influence of Pupil Level of Internality

Since teachers were influenced by pupil race somewhat differently in the two communities, further analyses to check whether pupil personality differences might reduce the impact of pupil race had to be carried out separately for East and for West. However, classifying the few white children in East and the few black children in West still further according to their level of internality would have resulted in very small analysis groups for comparison with the much larger sample of black children in East and white children in West. Therefore, we could not examine the joint effects of pupil race and level of internality in East and West.

We did investigate whether the sex effects that we originally found in teacher behavior persisted after pupil level of internality was controlled. This was done in East just for black children and in West just for white children.

All of the pupil sex effects in teacher behavior that we found before controlling for pupil level of internality still existed just among black children in East and whtie children in West. Even after adjusting for the child's level of internal-external control, teachers questioned, criticized, and directed boys more than girls. They also used boy's ideas more, although this difference between boys and girls in West was somewhat smaller after taking account of pupil level of internality. In addition, teacher praise in both social studies and math was more stikingly tied to pupil sex in East in these analyses than it was before. Boys were praised more than girls in both subject matters. Generally, therefore, these analyses showed that controlling for individual differences in level of internality did not appreciably alter the previous sex effects. Teachers continued to give more attention to boys, both positive and direct, even after adjusting for pupil classification as an internal, moderate, or external child.

What about main effets of pupil level of internality in accounting for teacher behavior? Did teachers behave differently toward children classified as internal, moderate, and external? The answer depended greatly on community and on subject matter. Pupil level of internality was clearly more important in West than in East, just as it influenced teacher judgment more in West than in East, just as it influenced teacher judgment more in West than in East (See Chapter II). Differences in teacher behavior toward internal and external children, even in West, also occurred only in math. Teachers did not behave differently toward internal and external children in social studies. Chart B summarizes these main effects.

CHART B

SIGNIFICANT MAIN EFFECTS OF PUPIL LEVEL OF INTERNALITY IN TEACHER BEHAVIOR

Main Effects in West	Main or Interaction Effects in East	No Effects
Praise in math	Sex-IE interaction for criticism in math	Praise in social studies
Use of ideas in math		Use in social studies
Lecturing in math		Questioning in social studies
Directions in math		Lecturing in social studies
		Criticism in social studies
		Student response in both social studies and math

The results from the analyses of teacher behavior in math in West were very consistent, however (See Table 9). External children received most of the teacher's attention, both positive and negative, direct and indirect. They were praised the most; their ideas were used most; they were lectured most; and they were given somewhat more directions and commands. The greater attention to external children occurred among both boys and girls.

Pupil level of internality did not influence any of these teacher behaviors in East. The difference in the results for the two communities mean that when the data from both communities were pooled in a 2 x 2 x 3 (sex, race, and I-E) analyses, pupil race and level of internality resulted in significant interaction effects. Pupil internal-external control influenced teacher behavior among white children but not among black children. These significant race, I-E interactions occurred explicitly on the four teacher behaviors in math (praise, use of ideas, lecturing, and directions) that showed the influence of pupil internality among white children in West but not among black children in East. This finding that teachers in West but not East were influenced by pupil difference in internal-external control parallels the results from the analyses of teacher judgment. Teacher in West but not East used the pupil's level of internality in judging children, although they judged internal children more positively while they gave external children more attention. Teachers in East were not influenced very much by pupil I-E in either their judgments of children or their behavior toward them. What this means is that pupil race outweighs the significance of at least this one personality characteristic in teacher's judgments and behavior toward black children in East.

TABLE 9 - III

SUMMARY OF SIGNIFICANT MAIN EFFECTS OF PUPIL I-E ON TEACHER BEHAVIOR IN MATH IN WEST, WHITE CHILDREN ONLY

Teacher Behavior In Math	Girls			Boys		
	Internal	Moderate	External	Internal	Moderate	External
Praise	.68	.04	.12	.09	.09	.17
	F, Sex Effect (NS) F, IE Effect = 2.90 ($p<.10$)					
Use of Students' Ideas	.17	.13	.23	.13	.16	.39
	F, Sex Effect (NS) F, IE Effect = 2.29 ($p<.20$)					
Lecturing	.29	.15	.56	.28	.14	.47
	F, Sex Effect (NS) F, IE Effect = 5.10 ($p<.01$					
Directions, Commands	.16	.13	.21	.17	.20	.32
	F, Sex Effect (NS) F, IE Effect (NS) (but both contrasts of E with I and E with M sig. $<.05$)					

The one result using pupil internality that did occur in the analyses of black children in East, and did not hold in the analyses of white children in West, contradicted the general pattern in West in which external children received greater attention. A significant sex-pupil I-E interaction with teacher criticism in math showed that pupil internality influenced teacher behavior toward boys, not girls, and that it was internal black boys in East who were criticized most (See Table 10). Boys generally were criticized more than girls but internal boys especially received criticism in math.

Two aspects of these community conditioners should be stressed. Teachers of white children in West were influenced more by pupil level of internal control and they gave more attention to external children, both boys and girls. Teachers of black children in East were influenced less by their pupils' level of internality in the first place and when they did behave differently toward internal and external children, it was internal boys they particularly criticized. Criticism was not tied to pupil internality in West at all. This particular finding suggests the same phenomenon that others have observed about negative treatment of black children who are viewed as bright or who contradict teacher expectancies or, in this instance, are particularly internal.

Summary

The effect of pupil sex was comparable in both communities. There was evidence of differential treatment of boys and girls in all categories of the Flanders' system, except in lecturing. If we think of the sex effect as particularly strong when it appeared in both communities and in both subject matters, the results indicated that pupil sex mattered more in teacher behavior than in pupil behavior and most in the teacher's criticism, followed by questioning, use of student's ideas, and directions, and least in praise.

The impact of pupil sex was always the same. When pupil sex influenced teacher behavior, boys always received more of the teacher's verbal behavior, both positive and negative, indirect and direct. Teachers exerted more control over boys but they also used their ideas more as well as praised them at least somewhat more. Boys in turn were more active in the verbal environment of the classroom.

The greater attention that boys received occurred among both black and white children. Since most previous research on teacher behavior toward boys and girls has been carried out with white children, it has not clarified whether teachers are as guided by pupil sex with black as with white children. Our results showed that teachers behaved differently toward black boys and girls at least as much as (if not more than) toward white boys and girls. The analyses just of black children in East where we examined the joint effects of pupil sex and level of internality confirmed the same sex effects that the overall analyses of pupil sex had demonstrated and also showed more strikingly that teachers praised boys more than girls. The comparable impact of pupil

TABLE 10 - III

EFFECT OF PUPIL SEX AND I-E ON TEACHER CRITICISM IN MATH IN EAST, BLACK CHILDREN ONLY

	Girls			Boys		
	Internal	Moderate	External	Internal	Moderate	External
Criticism in Math	.02	.07	.04	.15	.06	.08

F, Sex Effect = 7.09 ($p < .01$)
F, IE Effect (NS)
F, Sex-IE Interaction = 3.79 ($p < .025$)

sex on teacher behavior toward black and white children differs from the results we reported in Chapter II about teacher judgment. Pupil sex did not influence the judgments teachers made of black children in East as much as it influenced their views of white children in West. Thus, the same types of analyses of teacher behavior and teacher judgment showed that pupil sex influenced teacher judgments of black children less than of white children while it was a little more important in the behaviors of teachers toward black children in East than toward white children in West.

Pupil level of internality influenced the impact of pupil sex on teacher behavior very little. Even after controlling for pupil differences in their sense of control, teachers behaved differently toward boys and girls.

Overall, the effects of pupil race turned out to be more complicated than the effects of pupil sex. The influence of pupil race on teacher behavior depended both on community and on race composition of the classes. Its effect was sharper in racially mixed classes in West because white children in such classes were given even fewer of the direct behaviors than white children generally received less often than black children in West anyway. The effect of pupil race was less sharp in racially mixed classes in East because black boys in such classes were treated more positively and were lectured less than was true generally of black boys in East, thus muting the differences between black and white children in racially mixed classes in East.

The pattern of race results also differed in the two communities. In East black children received fewer positives (use of their ideas) and somewhat more direct behaviors (lecturing and directions). The strongest race effect in East was differential use of black and white pupils ideas. Teachers used black children's ideas less in both math and social studies, and, although pupil sex also influenced teachers (at least in math), pupil race clearly outweighed the influence of pupil sex in teachers' use of children's ideas. In West black children were treated more directly (lecturing, directions, criticism, and questioning) but they were also treated as positively as white children. Their ideas were used and they were praised approximately as much as white children.

The effect of the child's internal and external control depended greatly on both subject matter and community. Pupil differences in level of internal control influenced teacher behavior in math but not in social studies and much more in West (analyses of white children only) than in East (analyses of black children only). Teachers in West lectured and directed but also praised and used the ideas of external more than of internal children. This was true of both girls and boys.

The fact that pupil differences in level of internality so little influenced teacher behavior toward black children in East parallels the fact that level of internality influenced teacher judgment of black children very little as well. Teachers in East judged black

Chapter IV

Teacher Judgment and Behavior

In the previous two chapters we looked at the judgments teachers made of black and white boys and girls and at their behavior toward these four groups of children. Teachers consistently judged black children and boys less positively than white children and girls. They also behaved more directly with black children in both communities; teachers in East also gave black children less praise and used their ideas less. Behavior thus appeared to follow teacher judgments of black children. By contrast, the behavior of teachers toward boys and girls was less consistent with their judgments. Teachers were more direct with boys and they criticized them more; but they also used boys' ideas more, especially in math, however much they viewed boys as more disruptive and less academically motivated than girls. These connections between judgment and behavior are only suggestive, however. This chapter examines them explicitly.

Previous research on the effects of teachers' judgments of children on their behavior toward them leaves little doubt that at least certain judgments influence the way children are treated. Previous work has been stimulated largely by the controversy resulting from Rosenthal and Jacobson's investigation of teacher expectancy effects. Some attempted replications demonstrated the achievement effects reported by Rosenthal and Jacobson (1968) while others did not. Many people began to argue that the contradictions could not be resolved unless teacher behavior was also examined. If teacher expectancies did not influence how teachers behaved toward children, surely children should not show the impact of teacher expectancy in their academic performance. But if teachers communicated their expectancies through their behavior, children might well show in their achievement that they "received the teacher's message." Even those writers who felt that the bulk of the evidence supported expectancy effects on achievement turned to studies of teacher behavior to clarify the dynamics by which they occurred.

The context of previous work means that almost all previous studies have focussed on just one set of teacher judgments, those that relate conceptually to the expectancy phenomenon. Typically these studies have asked teachers to rank their pupils according to their expected achievement, ability, or academic performance. Pupil-teacher interaction has then been observed for a small number of pupils ranked at the top and at the bottom of the class. The studies that have explicitly tried to replicate the original Rosenthal and Jacobson design have induced expectancies in teachers about pupils they have not yet taught[1] and then

[1]Unfortunately a number of the teacher expectancy studies have not managed to collect expectancy data early in the school year. Even worse, some of the studies where bogus expectancies were given to teachers were given to them after they had taught the children for as much as a term. This obviously reduces the likelihood of showing expectancy effects.

observed the behavior toward pupils defined as likely to do well (bloomers) and those not expected to do unusually well. The micro-teaching studies have followed this approach as well but have observed the behavior of teachers (or student teachers or college student subjects) working with the "high" or "low" expectancy children in an experimental task rather than in the normal classroom. We have reviewed thirty-one studies from this tradition of research. They provide very strong evidence that teachers do indeed behave differently toward children they consider "bright" or "likely to achieve" and those they do not expect to perform well in school. Twenty-six of the thirty-one studies show an effect of teacher expectancy on teacher behavior. Four of the five (Caliborn, 1969; Jose and Cody, 1971; Grieger, 1971; Haberman, 1970) that failed to show behavior effects did not measure actual expectancies in the normal classroom situation but rather experimentally induced teacher expectancies.[2] All four also reported that teachers indicated that they had not really believed the bogus expectancies given them. Even studies that have depended on inducing teacher expectancies have typically found effects on the ways teachers behaved if the manipulation of expectancies was believed by the teachers.

Teacher behavioral effects can generally be classified by the four mechanisms that Rosenthal (1974) delineates: climate, feedback, input, and output. Teachers who have been led to expect superior performance from some of their pupils appear to create a warmer socio-emotional climate for these "brighter" pupils (Meichenbaum, et al., 1969). Teachers also appear to give the high expectancy students more differentiated feedback as to how they have been performing. This is seen in two ways. Teachers given greater attention to pupils they consider "bright" or "likely to achieve" (Anderson and Rosenthal, 1968; Rothbart, et al., 1971; Rubovits and Maehr, 1972; Willis, 1970; Jeter, 1973). They also praise the high expectancy pupils more, especially when correct, at the same time that they criticize them less (Antonoplos, 1972; Brophy and Good, 1970; Flowers, 1966; Good, 1970; Rubovits and Maehr, 1972; Willis, 1970; Good and Brophy, 1972; Jeter, 1973; Medinnus and Unruh, 1970; Rogers, 1971). Teachers also seem to provide greater input and output for the high expectancy pupils. They attempt to teach more and provide more demanding tasks to children of whom they expect more (Beez, 1970; Brown, 1970; Lawlor and Lawlor, 1973). They also appear to give these "special" students greater opportunities to respond (Brophy and Good, 1970; Good and Brophy, 1972; Good, 1970; Rubovits and Maehr, 1971; Rubovits and Maehr, 1973; Rowe, 1972; Cornbleth, et al., 1974).

Generally, these effects have been observed through the teacher's verbal behavior, although Brophy and Good's work has captured some nonverbal effects as well. The greater response opportunities afforded the high expectancy pupils results not only from greater questioning by the teacher but also from the teacher waiting longer for a response from them before turning to another child. This seems to be a critical

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[2] The one study in a natural situation that showed no teacher behavior effect was only partially a "natural" situation (Jansen, et al., 1972). The actual expectancies teachers held for their own pupils were measured but teacher behavior was observed while teachers were carrying out a task provided by the experimenter-observer rather than during their normal classroom teaching.

aspect of the communication of teacher expectancies. Rowe (1972) has also demonstrated that teachers can be taught to wait longer for responses from children they consider less bright. Such children then begin to respond more often and teacher expectancies change. Waiting is not the only nonverbal mechanism for communicating expectancies. Chaikin, et at., (1974) also show that tutors who were led to expect that their tutees were bright (IQ>130) leaned forward more, leaned backward less, looked more directly at their tutees, nodded their heads up and down more, and smiled more in the tutoring sessions than either the tutors who were given no ability expectations of their tutees or those who were told that their tutees had IQ scores of only 85.

What don't we know from previous work? Very little is known about the behavioral effects of judgments other than of the child's brightness or expected performance. Teachers make many other judgments of children. Some teacher behaviors may reflect their views of children as badly behaved rather than as "bright" rather than "dull." Very few studies have examined the impact of these other judgments teachers make of their pupils. We have located only three that provide any information at all. Two used the Brophy and Good observation system. Martin (1972) asked five second grade teachers to rank pupils according to the extent that they presented behavior problems in school. Four boys and four girls from the top and the bottom of the list were chosen for observation in each classroom. Boys who were behavior problems received more teacher contacts than either non-problem boys or either group of girls. Martin suggests that teachers use these contacts to control behavior of this group of boys, thus not allowing them the same freedom or lapses of attention which are afforded other children. This is strikingly differently behavior from that given to children, either boys or girls, who are considered "unlikely to achieve" or "not bright." Studies using the Brophy and Good system have shown that the low expectancy children are ignored rather than attended to, given fewer response opportunitites and praised less often when correct. They are criticized more often when incorrect but they are not given controlling behaviors.

A study by Good and Brophy (1972) sharpens thes differential pattern of behavior. Four judgments were measured. Teachers picked three children for each of the following groups: attachment--"If you could keep on student another year for the sheer joy of it whom would you pick?"; concern--"If you could devote all your attention to a child who concerns you a great deal, whom would you pick?"; indifference--"If a parent were to drop in unannounced for a conference, whose child would you be least prepared to talk about?"; rejection--"If your class was to be reduced by one child whom would you be relieved to have removed?" Teachers did not behave in particularly distinctive ways with the attachment children but they did with the other three groups. Teachers provided more opportunities for the "concern" children to answer questions, both in general class activities and in reading groups; they also sought out concern children for more private contacts, both procedural and work related; they responded to their failures more favorably than to the failures of other students. The "indifference" children received fewer

response opportunities than their classmates but this was due largely to their failure to seek response opportunities rather than to teacher discrimination. Teachers asked these students direct questions as often as other students. However, teachers did initiate individual contacts less frequently with this group. The "rejection" children, by contrast, were very active children. They called out more answers than other children; they created more procedure and work contacts with their teachers. The teachers seemed to avoid public contacts with them but they initiated more private contacts with them than with other children. Teachers gave them many fewer response opportunities while teaching the whole class; they gave them fewer reading turns; they frequently failed to give feedback to these students after their reading turns and after they had responded to questions, suggesting that the teachers wanted to move on quickly to someone else. And while the teachers initiated more individual contacts with these rejection students, they criticized them more than other children during these private contacts. These results revealed very different behaviors as a function of the teacher's view of the child.

A third study was carried out in England in five first year primary school classes (Garner and Bing, 1973). Teachers were asked to rate eleven characteristics of their pupils. Observations were then made of nine teacher-pupil interactions. Cluster analysis of the judgment and behavior measures showed that children fell into six major groups. Pupils who were not distinctive in the teacher's judgment of either personality or conduct received fewer than average contacts from the teacher. These children (clusters three and five) were <u>not noticed</u>. Pupils who were judged as <u>hard workers</u> (cluster two) or <u>badly behaved</u> (cluster four) received the most contacts. Other clusters fell between the children who were not noticed and those with whom the teacher was most active. This study indicates that teachers clearly distinguished their behavior toward poorly behaved and poorly motivated and in fact treated the poorly behaved much like they behaved toward children they viewed as hard workers.

These few studies, together with those strictly concerned with behavior toward high and low expectancy pupils, suggest that teachers are more active with both those children they consider "brighter" and those they view as "behavior problems." But the quality of the teacher's greater activity toward these two groups is not altogether clear from previous work. Research procedures for selecting children to be observed have also drawn lines between the two groups more sharply than teachers may actually do. In this chapter we examine the relationships between six categories of teacher behavior and judgments of children as well or poorly motivated, on the one hand, and as well or poorly behaved in the classroom, on the other.

Even the previous research on teacher behavior toward high and low expectancy children may have oversimplified the impact of teacher judgments. The consistency in the results is impressive but in fact most studies have been carried out with white children and in very few classrooms. Even the issue of whether pupil sex conditions the

impact of judgment on the behavior of teachers has been largely unexplored. The only studies that have explicitly examined teacher behavior effects separately for boys and girls have been done by Brophy and Good or their students. Generally the teacher behavior effects appear to hold for both boys and girls (or at least interactions are not reported), although Brophy and Good (1970) did find that the greater criticism the low expectancy children received was particularly marked for boys. Boys who were ranked at the bottom of the class in expected achievement were unusually criticized. Martin (1972), also using the Brophy and Good system likewise found interactions between pupil sex and teacher judgments of behavior. It was the boys considered behavior problems who received the most contact, particularly controlling contact, from the teachers. Teachers were no more active with girls who were considered behavior problems than with those they viewed as well behaved. Although few in number, these studies suggest that teacher judgments may influence teacher behavior more with boys than with girls. We explore that possibility by including pupil sex in all analyses of the relationship between teacher behavior and teacher judgment. Moreover, we examine whether pupil sex conditions that relationship particularly when the judgment concerns classroom conduct rather than academic motivation.

The influence of pupil race has been almost totally ignored. A few studies have been carried out either exclusively (or primarily) with black children and thus comparisons of judgment-behavior relationships for black and white children could not be done (Rist, 1972; McQueen, 1971; Martin, 1972; Rogers, 1971). Most studies have been conducted exclusively with white children. Good and Brophy (1972) did include on classroom described as composed of lower class black children in their study of differential behavior toward attachment, concern, indifference, and rejection children. They report that the findings for that classroom were similar to the two predominantly white classrooms. Cornbleth, et al., (1974) also included one classroom with Chicano and black pupils but no comparisons of teacher judgment-behavior relationships in that classroom and in the white classrooms are reported. Only two studies explicitly have examined pupil race as a conditioner of the relationship between teacher judgment and behavior. We mentioned both in Chapter III. Both (Rubovits and Maehr, 1973; Coble, 1975) found that pupil race did condition how teachers behaved toward children considered "bright." Black pupils who were considered bright or gifted were criticized by the teacher while low expectancy white pupils received the greatest criticism. These two studies add to those reported in Chapter II that likewise showed that minority children who were viewed as high ability or who performed better than expected were judged more negatively on other behavior ratings. Together these studies suggest that a reverse "pygmalion" effect may characterize teachers' attitudes and behaviors toward "bright" black children. All of these studies, however, have been conducted in either laboratory settings or in just a few classrooms. Given the critical educational significance of their implications, these results very much need to be examined in a larger number of classrooms. They certainly show that it is far too simple to assume that the consistent and strong results that have been reported in

studies with white children necessarily hold for the effect of teachers' judgments on their behavior toward black children. This chapter reports analyses of the total sample of classrooms in which pupil race was explicitly included. It also reports analyses of the teacher judgment-teacher behavior relationships separately for black chidlren in East and white children in West. Generally, these analyses indicat very different relationships between teachers' judgments of classroom conduct and their behavior toward black and white boys.

Specific Questions About Teacher Judgment Teacher Behavior Explored in this Study

1. Are certain teacher behaviors uniquely tied to their judgments of pupil classroom conduct? Are certain behaviors uniquely tied to their judgments of pupil academic motivation? Are certain behaviors independent of both types of judgments?

2. Do pupil sex and pupil race condition the relationships between teacher judgment and teacher behavior?

Procedures

Children were classified into three groups according to their teachers' judgments of their classroom conduct and again according to their academic motivation. Three sets of analyses of variance were then performed using the six categories of teacher behavior and two categories of student talk as dependent variables. One set of analyses used the data from all children in the total sample with pupil sex, pupil race, and three levels of classroom conduct (and then three levels of academic motivation) as independent variables. The other two sets of analyses separated the data from East and from West. The small number of white children in East and black children in West prohibited further classifying them into three judgment groups. Therefore, we used the data only from black children in East and from white children in West for these other two sets of analyses in which pupil sex and three levels of classroom conduct (then academic motivation) are independent variables. Finally, each of these three sets of analyses were run for pupil-teacher interaction in math and then in social studies. Each set thus involved thirty-two analyses of variance: six teacher behaviors and two student behaviors in math and in social studies (16), first using teacher judgment of classroom conduct and then teacher judgment of academic motivation (32).

The results of these analyses are reported in Tables 1-8; each table summarizes all the analyses for a given teacher behavior or category of student talk. The F ratios included in the tables concern only the effects that involve teacher judgment, either as main or interaction effects.

The sheer number of analyses invites excessive concern with details. We have chosen, therefore, to focus on results that speak directly to the two sets of questions of interest in this chapter rather than to discuss each table separately.

CHART A - IV

DIFFERENTIAL RELATIONSHIPS OF TEACHER-PUPIL INTERACTION TO JUDGMENTS OF CLASSROOM CONDUCT AND OF ACADEMIC MOTIVATION

	Teacher Judgments of Pupil	
TEACHER BEHAVIORS	Classroom Conduct	Academic Motivation
Criticism		
Math	Main Effect[1]	No Effect
Social Studies	Main Effect	No Effect
Use of Student's Ideas		
Math	Effect for some children in all three analyses	Main Effect
Social Studies	Effect for some children in two of three analyses	Main Effect
Praise		
Math	No Effect	Effect for some children in two of three analyses
Social Studies	No Effect	No Effect
Questioning		
Math	No Effect	Effect for some children in all three analyses
Social Studies	No Effect	Effect for some children in two of three analyses
Lecturing		
Math	Main Effect	Effect for some children in one of three analyses
Social Studies	Effect for some children in two of three analyses	Effect for some children in one of three analyses
Directions		
Math	Effect for some children in all three analyses	Effect for some children in two of three analyses
Social Studies	Effect for some children in all three analyses	No Effect
PUPIL BEHAVIORS		
Student Initiated Talk		
Math	Effect for some children in all three analyses	Main Effect
Social Studies	Main Effect	Main Effect
Student Response to Questioning		
Math	No Effect	Main Effect
Social Studies	No Effect	Main Effect

[1] Main effects are indicated if they appeared in any of the analyses, although not necessarily in all three sets of analyses.

Unique Patterns of Teacher Judgments and Teacher Behaviors

Criticism was uniquely tied to teachers' judgments of their pupils' classroom conduct. Criticism was not at all related to their judgments of children's academic motivation (See Table I and Chart A). In the total sample and among black children in East, classroom conduct judgments showed a main effect in teacher criticism, although the sex-judgment interactions also indicated that teachers particularly criticized boys whom they felt showed poor classroom conduct. In West, it was only boys in the poor conduct group who were particularly criticized.

Praise and questioning, by contrast, were related to teacher judgments of pupil academic motivation and not at all to judgments of classroom conduct (See Tables 3 and 4 and Chart A). Although academic motivation judgments typically did not show main effects for either of these teacher behaviors, they related to both praise and questioning for at least certain groups of children. In West, boys who were viewed as highly motivated were praised and questioned more than other children in math, more even than girls who were seen as equally highly motivated. In East, motivational judgments related to how much teachers questioned both boys and girls. The more motivated the teacher saw the child the more the teacher questioned him or her in both social studies and in math.

Use of students' ideas was also more clearly a function of teachers' views of pupil academic motivation than of pupil classroom conduct. Motivation judgments showed a main effect in use of students' ideas (total sample and in East) while classroom conduct judgments related only to use of boys' ideas and in opposite ways for black and white boys (See Table 2 and Chart A). Teachers especially used the ideas of children they considered most motivated. In East this was true of both boys and girls in math and even more clearly in social studies. In West, while teaching math, teachers used the ideas of boys they considered highly motivated. By contrast, classroom conduct judgments did not influence teachers' use of girls' ideas anywhere in either subject matter. Classroom conduct judgments influence behavior toward boys very differently in East and in West. In East teachers particularly used the ideas of the boys they viewed as most disruptive while in West teachers especially used the ideas of the well behaved boys. (We will return to this interaction later in discussing sex and race conditioners together.)

Lecturing and giving directions, while related to both sets of judgments for at least some children, reflected classroom conduct more than academic motivation judgments (See Tables 5 and 6 and Chart A). Classroom conduct showed significant effects in accounting for lecturing in four of the six analyses, while academic judgments were significant in only two. Likewise, classroom conduct judgments showed significant effects in explaining directions in all six analyses, while academic judgments were again significant in only two. All of these effects characterized teacher behavior especially toward boys. Teachers in East lectured and gave more directions in both subject matters to boys they considered poorly behaved. (They also

TABLE 1 - IV

RELATIONSHIP OF TEACHER JUDGMENTS TO CRITICISM OF PUPILS[1]

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in Rest		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
	Teacher Criticism							
Social Studies								
Poor Conduct	.02	.06	.00	.17	.02	.05	.00	.18
Moderate	.03	.06	.02	.02	.03	.05	.02	.03
Good Conduct	.01	.01	.01	.02	.01	.01	.01	.02
	F,CC=4.16($p<.05$) F,Sex x CC=4.65($p<.01$) F,Sex x Race x CC=2.67($p<.10$)				F,CC=2.29($p<.10$)		F,Sex x CC=2.68($p<.10$)	
Math								
Poor Conduct	.04	.[illegible]	.01	.07	.04	.13	.01	.06
Moderate	.07	.[illegible]	.04	.05	.08	.05	.04	.02
Good Conduct	.02	.03	.02	.03	.02	.03	.02	.04
	F,CC=2.98($p<.05$) F,Sex x CC=2.68($p<.10$)				F,CC=3.61($p<.05$)		No Judgment Effects	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.01	.07	.01	.09	.01	.05	.01	.10
Moderate	.03	.04	.01	.11	.03	.04	.01	.13
Good Motivation	.02	.03	.01	.02	.02	.03	.01	.01
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
Math								
Poor Motivation	.06	.07	.03	.05	.07	.07	.03	.05
Moderate	.05	.11	.02	.03	.06	.11	.02	.02
Good Motivation	.03	.05	.02	.07	.03	.05	.02	.05
	No Judgment Effects				No Judgment Effects		No Judgment Effects	

[1] These tables include only the significant F values for effects that involve the judgment (main effects of judgment or interactions of judgment and pupil sex or race).

TABLE 2 - IV

RELATIONSHIP OF TEACHER JUDGMENTS TO USE OF PUPIL'S IDEAS

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.13	.29	.15	.34	.13	.31	.15	.22
Moderate	.15	.17	.24	.26	.16	.15	.20	.20
Good Conduct	.15	.16	.15	.16	.16	.16	.11	.14
	F,Sex x CC=2.52(p<.10)				F,Sex x CC = 2.56(p<.10)		No Judgment Effects	
Math								
Poor Conduct	.07	.29	.14	.16	.06	.29	.14	.16
Moderate	.11	.12	.19	.22	.11	.12	.19	.17
Good Conduct	.13	.09	.18	.35	.14	.09	.18	.37
	F,Race x Sex x CC=2.87(p<.10)				F,Sex x CC = 6.63(p < .005)		F,Sex x CC=2.41(p<.10)	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.11	.17	.12	.22	.12	.18	.12	.21
Moderate	.11	.19	.16	.25	.11	.19	.17	.22
Good Motivation	.19	.32	.24	.27	.20	.31	.16	.23
	F, AM=4.43(p<.025)				F,AM=3.89(p<.025)		No Judgment Effects	
Math								
Poor Motivation	.06	.10	.17	.16	.05	.10	.16	.15
Moderate	.13	.17	.22	.16	.13	.16	.23	.17
Good Motivation	.12	.14	.15	.41	.12	.14	.15	.43
	F,AM=3.54(p < .05) F,Sex x AM=3.22(p<.05)				F,AM=3.46(p<.05)		F,Sex x AM=2.46(p<.10)	

TABLE 3 - IV

RELATIONSHIP OF TEACHER JUDGMENTS TO PRAISE OF PUPILS

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.06	.08	.07	.10	.04	.09	.07	.08
Moderate	.07	.06	.12	.08	.06	.05	.11	.09
Good Conduct	.07	.07	.07	.11	.08	.07	.08	.11
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
Math								
Poor Conduct	.07	.13	.07	.09	.06	.13	.07	.09
Moderate	.09	.10	.06	.11	.09	.10	.06	.11
Good Conduct	.08	.12	.10	.16	.08	.12	.10	.16
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.06	.06	.09	.07	.05	.06	.09	.07
Moderate	.06	.07	.09	.10	.05	.07	.09	.10
Good Motivation	.08	.07	.09	.13	.06	.08	.08	.11
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
Math								
Poor Motivation	.08	.13	.06	.10	.05	.13	.06	.10
Moderate	.09	.13	.13	.10	.10	.13	.11	.09
Good Motivation	.08	.07	.07	.16	.08	.07	.07	.19
	F,Sex=4.36($p<.05$) F,Race x Sex x AM=2.59($p<.10$)				No Judgment Effects		F,Sex x AM=2.40($p<.10$)	

TABLE 4 - IV

RELATIONSHIP OF TEACHER JUDGMENT TO QUESTIONING OF PUPILS

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.30	.45	.38	.52	.29	.46	.39	.53
Moderate	.35	.38	.27	.52	.34	.33	.28	.56
Good Conduct	.26	.3[illegible]	.38	.37	.26	.35	.39	.41
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
Math								
Poor Conduct	.39	.72	.45	.46	.33	.72	.45	.48
Moderate	.36	.60	.29	.55	.37	.60	.30	.55
Good Conduct	.34	.48	.42	.45	.32	.48	.41	.51
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.26	.34	.28	.49	.23	.31	.29	.49
Moderate	.33	.31	.44	.48	.31	.32	.47	.50
Good Motivation	.32	.53	.31	.46	.32	.52	.31	.52
	F,AM=2.49($p<.10$) F,RacexAM=3.17($p<.01$) F,Sex x AM=3.72($p<.01$)				F,AM=3.42($p<.05$)		No Judgment Effects	
Math								
Poor Motivation	.28	.60	.31	.47	.21	.56	.31	.51
Moderate	.33	.76	.53	.41	.34	.48	.53	.40
Good Motivation	.42	.47	.33	.58	.41	.75	.31	.66
	F,Race x Sex x AM=7.33($p<.001$)				F,AM=3.13($p<.05$) F,Sex x AM=4.67($p<.01$)		F,Sex x AM=4.65($p<.01$)	

TABLE 5 - IV

RELATIONSHIP OF TEACHER JUDGMENT TO LECTURING OF PUPILS

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.14	.34	.17	.32	.15	.37	.17	.32
Moderate	.22	.23	.23	.14	.18	.13	.24	.17
Good Conduct	.15	.08	.22	.04	.14	.08	.24	.09
	F,Sex x CC=2.89(p<.10)				F,Sex x CC=3.12(p<.05)		No Judgment Effects	
Math								
Poor Conduct	.52	.67	.24	.22	.53	.72	.24	.23
Moderate	.27	.54	.27	.30	.24	.52	.28	.32
Good Conduct	.32	.43	.37	.33	.31	.43	.41	.37
	F,RacexCC=2.36(p<.10)				F,CC=3.29(p<.05)		No Judgment Effects	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.13	.36	.18	.24	.13	.34	.18	.27
Moderate	.20	.20	.27	.24	.14	.19	.29	.26
Good Motivation	.19	.12	.20	.11	.19	.12	.21	.06
	No Judgment Effects				F,Sex x AM=2.28(p<.10)		No Judgment Effects	
Math								
Poor Motivation	.24	.63	.30	.32	.24	.65	.20	.34
Moderate	.34	.61	.38	.22	.31	.61	.40	.23
Good Motivation	.39	.40	.28	.32	.39	.49	.31	.36
	No Judgment Effects				F,Sex x AM=1.63(p<.20)		No Judgment Effects	

TABLE 6 - IV

RELATIONSHIP OF TEACHER JUDGMENT TO GIVING DIRECTIONS TO PUPILS

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.06	.14	.07	.17	.06	.13	.07	.20
Moderate	.12	.13	.06	.12	.10	.08	.07	.10
Good Conduct	.09	.07	.14	.09	.07	.07	.14	.08
	F,Sex x CC=3.37($p<.05$)				F,Sex x CC=2.40($p<.10$)		F,Sex x CC=3.42($p<.05$)	
Math								
Poor Conduct	.14	.33	.11	.34	.12	.36	.11	.35
Moderate	.17	.32	.22	.19	.19	.31	.22	.13
Good Conduct	.16	.18	.14	.22	.16	.18	.15	.18
	F,Sex x CC=2.73($p<.10$)				F,Sex x CC=2.84($p<.10$)		F,Sex x CC=2.83($p<.10$)	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	I don't have a table of means							
Moderate								
Good Motivation								
	No Judgment Effects				No Judgment Effects		No Judgment Effects	
Math								
Poor Motivation	.18	.26	.14	.29	.17	.28	.14	.32
Moderate	.12	.35	.20	.22	.12	.36	.20	.21
Good Motivation	.19	.17	.15	.26	.18	.15	.16	.14
	F,Race x Sex x AM=3.08($p<.05$)				F,Sex x AM=6.06($p<.005$)		No Judgment Effects	

TABLE 7 - IV

RELATIONSHIP OF TEACHER JUDGMENT TO STUDENT RESPONSE TO DIRECT QUESTIONING

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.29	.34	.38	.27	.20	.35	.38	.25
Moderate	.31	.31	.23	.23	.31	.29	.23	.21
Good Conduct	.29	.43	.45	.27	.31	.43	.49	.27
		No Judgment Effects			No Judgment Effects		No Judgment Effects	
Math								
Poor Conduct	.22	.38	.39	.29	.21	.39	.39	.30
Moderate	.28	.33	.17	.30	.29	.35	.17	.29
Good Conduct	.23	.32	.30	.29	.24	.32	.31	.32
		No Judgment Effects			No Judgment Effects		No Judgment Effects	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.21	.27	.33	.21	.19	.26	.33	.22
Moderate	.29	.30	.41	.23	.30	.29	.44	.22
Good Motivation	.34	.52	.35	.34	.35	.53	.36	.31
		$F_{AM}=4.73$ ($p<.01$)			$F_{AM}=8.41$ ($p<.001$)		No Judgment Effects	
Math								
Poor Motivation	.16	.29	.26	.28	.14	.29	.26	.30
Moderate	.30	.39	.31	.29	.31	.38	.32	.29
Good Motivation	.25	.38	.25	.31	.26	.38	.26	.34
		$F_{AM}=3.20$ ($p<.05$)			$F_{AM}=5.53$ ($p<.005$)		No Judgment Effects	

TABLE 8 -- IV

RELATIONSHIP OF TEACHER JUDGMENT TO STUDENT INITIATED RESPONSE

CLASSROOM CONDUCT JUDGMENTS	Total Sample				Black Children in East		White Children in West	
	Black Girls	Black Boys	White Girls	White Boys	Black Girls	Black Boys	White Girls	White Boys
Social Studies								
Poor Conduct	.21	.43	.28	.37	.20	.43	.28	.27
Moderate	.20	.27	.24	.18	.21	.28	.23	.17
Good Conduct	.13	.17	.28	.29	.13	.17	.29	.32
	F,CC=2.39(p<.10)				F,CC=3.30(p<.05)		No Judgment Effects	
Math								
Poor Conduct	.23	.45	.26	.16	.23	.48	.26	.14
Moderate	.22	.21	.15	.31	.22	.22	.15	.28
Good Conduct	.17	.19	.21	.44	.16	.19	.23	.51
	F,RacexCC=4.07(p<.025) F,Race x Sex x CC=4.40(p<.025)				F,CC=7.11(p<.001) F,Sex x CC=3.44(p<.05)		F,Sex x CC=1.87(p<.20)	
ACADEMIC MOTIVATION JUDGMENTS								
Social Studies								
Poor Motivation	.22	.28	.15	.23	.10	.29	.15	.24
Moderate	.15	.29	.33	.25	.15	.28	.34	.27
Good Motivation	.23	.38	.30	.40	.24	.36	.30	.27
	F,AM=3.52(p<.05)				No Judgment Effects		No Judgment Effects	
Math								
Poor Motivation	.14	.25	.14	.11	.15	.28	.14	.11
Moderate	.22	.35	.24	.22	.22	.25	.25	.24
Good Motivation	.22	.27	.21	.58	.21	.26	.23	.63
	F,AM=5.95(p<.005) F,RacexAM=3.75(p<.025) F,Race x Sex x AM=4.79(p<.01)				No Judgment Effects		F,AM=4.65(p<.01) F,Sex x AM=2.93(p<.05	

lectured the poor conduct girls more than other girls in math.) In West teachers gave more directions in both subject matters to the boys they felt showed poor conduct. Academic motivation judgments, by contrast, influenced these teacher behaviors only in East and only toward boys. Teachers lectured boys viewed as less well motivated in both subject matters and also gave them more directions in math.

Two different patterns of teacher judgments and teacher behaviors then emerged in the results. Judgments of academic motivation particularly influenced the indirect or positive behaviors--use of ideas, praise, and questioning. Judgments of classroom conduct particularly influenced the negative or more controlling behaviors--criticism, lecturing, and giving directions. While these patterns make a great deal of sense, other research has provided only minimal insight about quality of interaction, specifically that the greater attention teachers give both to children they consider brighter (or more motivated) and to those they feel behave badly differs so greatly in quality. The greater attention given to the more poorly behaved is restrictive in nature. (An important exception which we will discuss in greater detail below is the positive as well as restrictive behavior toward black boys in East.) The greater attention given to the more motivated is largely supportive, positively reinforcing and academically demanding.

Did the responsiveness of students also reflect teacher judgments? It was less clearly tied to judgments of classroom conduct than to judgments of academic motivation. The children who were considered poorly and well behaved did not differ in how much they responded to direct questioning. Classroom conduct judgments related to student initiation of talk only among boys, then in opposite ways in East and West. By contrast, relationships between teacher judgments of pupil academic motivation related to both categories of student talk and it was always the most motivated who stood out. These relationships were stronger with student response to direct questioning in East: children who were viewed as highly motivated responded more than other children when asked direct questions. Relationships were stronger with student initiation of talk in West; the boys who were viewed as highly motivated particularly stood out as initiating the most talk in math.

Interactions of Pupil Sex-Teacher Judgments

These analyses showed many pupil sex-teacher judgment interactions. Although previous research has given scant attention to the conditioning role of pupil sex, the few studies that have carried out analyses for boys and for girls have suggested that judgments of teachers influence their behavior in much the same way for both sex groups. The major contrary evidence is that especially heavy criticism is given to low expectancy boys (Brophy and Good, 1970) and to poor conduct boys (Martin, 1972). Otherwise, teachers' achievement expectations and behavioral judgments of children seem to have influenced how they acted toward both boys and girls. Our results show a very different picture.

CHART B - IV

CONDITIONING EFFECTS OF PUPIL SEX

Relationships that Exist for Both Boys and Girls	Relationships that Exist for Boys But Not Girls (Or Much Stronger for Boys)	Relationships that Exist for Girls But Not Boys
Teacher Behavior Effects of Teacher Judgment of Classroom Conduct		
Criticism: Total sample in math and social studies; black children in East in social studies	Criticism: black children in East in math; white children in West in social studies	NONE
	Use of Student's Ideas: black children in East in math and social studies; white children in West in math	
	Directions: total sample, black children in East and white children in West in both social studies and math	
Lecturing: black children in East in math	Lecturing: black children in East in social studies	
	Student Initiated Response: black children in East and white children in West in math	
Teacher Behavior Effects of Teacher Judgment of Academic Motivation		
Use of Student's Ideas: Total sample and black children in East in both math and social studies	Use of Student's Ideas: white children in West in math	NONE
	Questioning: white children in West in math	
	Lecturing: black children in East in both math and social studies	
	Directions: black children in East in math	
	Praise: white children in West in math	
Student Reseponse to Direct Questioning: total sample and black children in East in both math and social studies		
Student Initiated Response: total sample in math and social studies	Student Initiated Response: white children in West in math	

CHART C - IV

SUMMARY OF RELATIONSHIPS BETWEEN TEACHER JUDGMENTS AND BEHAVIOR FOR BLACK GIRLS AND BLACK BOYS IN EAST, WHITE GIRLS AND WHITE BOYS IN WEST

Black Girls	Black Boys	White Girls	White Boys
Behavior Effects of Classroom Conduct Judgments			
Criticism: social studies, math	Criticism: social studies, math	NONE	Criticism: social studies
	Use of Ideas: social studies, math		Use of Ideas: math
	Directions: social studies, math		Directions: social studies, math
Lecturing: math	Lecturing: social studies, math		
Student Initiated Response: social studies	Student Initiated Response: social studies, math		Student Initiated Response: math
Behavior Effects of Academic Motivation Judgments			
Questioning: social studies, math	Questioning: social studies, math	NONE	Questioning: math
Use of Ideas: social studies, math	Use of Ideas: social studies, math		Use of Ideas: math
	Lecturing: social studies, math		
	Direccions: math		Directions: math
			Praise: math
Student Response to Direct Questions: social studies, math	Student Response to Direct Questions: social studies, math		
			Student Initiated Response: math

CHART D - IV

MODERATING ROLE OF TEACHER JUDGMENTS ON BEHAVIOR TOWARD BOYS AND GIRLS

	EAST		WEST	
	Boys and Girls Treated Similarly	Boys Given More More than Girls	Boys and Girls Treated Similarly	Boys Given More More than Girls
IMPACT OF CLASSROOM CONDUCT JUDGMENTS	Criticized when moderately or very good	Criticized when disruptive	Criticized when moderately or very good	Criticized when disruptive
	Directed when moderately or very good	Directed when disruptive	Directed when moderately or very good	Directed when disruptive
	Lectured when moderately or very good	Lectured when disruptive	LECTURING NOT RELATED TO CLASSROOM JUDGMENTS IN WEST	
	Ideas used when moderately or very good	Ideas used when disruptive	Ideas used when disruptive or only moderately good	Ideas used when very good
IMPACT OF ACADEMIC MOTIVATION JUDGMENTS	Questioned when highly motivated	Questioned when less motivated	Questioned when moderate or poorly motivated	Questioned when highly motivated
	Ideas used when motivation equal, all groups		Ideas used when moderately or poorly motivated	Ideas used when highly motivated
	PRAISE NOT RELATED TO TEACHER JUDGMENTS IN EAST		Praised when moderately or poorly motivated	Praised when highly motivated
	Lectured when highly motivated	Lectured when moderately or poorly motivated	LECTURING NOT RELATED TO ACADEMIC JUDGMENTS IN EAST	
	Directed when highly motivated	Directed when moderately or poorly motivated	DIRECTIONS NOT RELATED TO ACADEMIC JUDGMENTS IN EAST	

used. Controlling the motivation judgments muted sex differences, at least among children considered highly motivated. Boys who were viewed as only moderately or poorly motivated were still questioned, lectured, and directed more than girls whom the teachers viewed as equally poorly motivated. But when boys and girls were seen as highly motivated, teachers treated them much the same. Again, this indicates that teachers' views of boys--in this instance as more poorly motivated than girls--especially influenced their behavior toward those particular boys who most fulfilled their expectations of boys. Teachers seemed to restrict and direct boys more than girls whom they considered just as poorly motivated.

Controlling the teachers' judgments of boys and girls' academic motivation even more powerfully affected sex differences in teachers' use of ideas in East. Teachers saw boys as less motivated but used their ideas more. When girls and boys of equal motivation were compared, teachers used their ideas approximately equally. In West these judgments of academic motivation influenced the behavior of teachers only toward boys and they primarily influenced indirect teacher behaviors--use of ideas, questioning, and praise. Given this pattern of judgment-behavior relationships in West, the effect of controlling teacher judgment of academic motivation was to mute sex differences among the less motivated children (rather than among the most motivated children as happened in East). It was only among the white children in West whom teachers viewed as highly motivated that boys and girls were treated differently. Highly motivated boys were praised, questioned, and their ideas used more than was true of the girls whom teachers saw as equally highly motivated. This is a discouraging picture for achieving equal positive treatment of girls and boys. The presumed edge that girls enjoy by being viewed more motivated in no way advantages them in the teacher's interaction with them. It was particularly the highly motivated girls who received less praise, less questioning, and whose ideas were used less than boys. Boys may be viewed as less motivated but those boys whom teachers did consider highly motivated had an unusual edge in obtaining the teacher's positive attention.

Patterns of Relationships for Black Children in East and for White Children in West

The pupil race effects reported in Chapter II depended on community. Black children in East received fewer positives and more direct behavior from their teachers. Black children in West were given more direct behaviors but they were also praised and their ideas were used nearly as much as white children. These different patterns of behavior toward black and white children in the two communities meant that testing for interactions fo pupil race and teacher judgment on the behavior of teachers would have to be done separately with the data from East and from West. The strong conditioning effects of pupil sex further meant that all three variables, pupil sex, pupil race, and teacher judgment, would need to be included. However, the small number of white boys and girls in East and small number of black boys and girls in West prohibited performing three factor analyses in the separate communities. Further

classifying these small groups into the three levels of teacher judgment would have resulted in very small cells. We are restricted, therefore, in commenting on different patterns of teacher judgment-behavior relationships among black children in East and among white children in West. This unfortunately confounds race effects with community effects.

One difference in the results from the two communities has already been noted in discussing pupil sex. The judgments of teachers simply never influenced their behavior toward white girls in West, while at least some judgment-behavior relationships held for black girls as well as black boys in East (See Chart C).

The most intriguing differences in the teacher judgment-behavior relationships in the two communities concern the influence of teacher judgment on use of black and white boys' ideas. Judgments of classroom conduct and academic motivation related the same way to the teacher's use of ideas for white boys in West. Those white boys who were viewed as the most motivated and as showing the best conduct had their ideas used in math much more than other boys. By contrast, teacher judgment of classroom conduct and academic motivation related in opposite ways to the teacher's use of ideas for black boys in East. Teachers used the ideas of boys who were viewed the most disruptive in both social studies and math but they used the ideas of boys considered the most motivated academically, significantly so in social studies but somewhat more so in math as well. Apparently it is particularly the highly motivated black boy whose behavior nonetheless bothers the teacher whose ideas are really taken seriously. While this might sound positive, we should remember that other results showed that black boys who were viewed as showing the worst conduct were particularly restricted in the classrooms in East. They were lectured considerably more; they were given many more commands and directions. By contrast, the group of boys in West whose ideas were used most were being taken seriously at the same time that they were <u>not</u> being restricted since they were viewed as both more motivated and as showing the best conduct. Use of ideas was not the only teacher behavior that these well behaved and highly motivated boys disproportionately received. They were praised and questioned more as well. The patterns of academic motivation and classroom conduct judgments thus result in very different behavioral effects for black boys in East and white boys in West.

These differences in the pattern of relationships for black boys in East and white boys in West are particularly striking when the two judgments are combined to form two groups of boys, those viewed as <u>motivated but disruptive</u> and those viewed as <u>both motivated and well behaved</u>.[4] Table 9 gives the pupil-teacher interactions of these two groups of boys in each community. It shows that the <u>direct teacher behaviors go to the motivated but disruptive in both communities while</u>

[4]The motivated but disruptive boys were viewed as the bottom third in classroom conduct and the top thirds in academic motivation. The motivated and good boys were viewed as in the top two thirds in classroom conduct and top third in academic motivation.

TABLE 9-.1V

COMPARISON OF TEACHER-PUPIL INTERACTIONS OF MOTIVATED BUT DISRUPTIVE AND MOTIVATED BUT GOOD BOYS

	Black Boys in East		White Boys in West	
	Motivated but Disruptive (21)	Motivated and Good (26)	Motivated but Disruptive (8)	Motivated and Good (20)
Use of Ideas:				
Social studies	.43	.21	.17	.46
	p <.01		p <.04	
Math	.46	.17	.12	.42
	p <.001		p <.06	
Praise				
Social studies	.10	.06	.09	.16
	NS		NS	
Math	.12	.06	.04	.16
	NS		p <.09	
Questioning				
Social studies	.50	.45	.53	.45
	NS		NS	
Math	.82	.39	.31	.61
	p <.001		p <.10	
Lecturing				
Social studies	.25	.10	.41	.06
	NS		p <.03	
Math	.79	.36	.33	.19
	p <.06		NS	
Direction				
Social studies	.13	.08	.17	.08
	NS		NS	
Math	.37	.15	.28	.25
	p <.01		NS	
Criticism				
Social studies	.03	.04	.28	.01
	NS		p <.006	
Math	.16	.04	.04	.06
	p <.002		NS	
Verbal Initiation				
Social studies	.53	.29	.26	.62
	p <.05		p <.06	
Math	.54	.19	.25	.61
	p <.005		p <.10	

the indirect, positive teacher behaviors function in opposite ways in East and West. Thus, the behavioral patterns associated with the group whose ideas were disproportionately used were very different in East and West. The white boys whose ideas were used in West were motivated and good; they were also praised and questioned more in math and were lectured and criticized less in social studies. The black boys whose ideas were used most in East, by contrast, were viewed as motivated but disruptive. Those boys, however, did not receive disproportionately more praise; in addition, rather than being lectured and criticized less, they received more lecturing, more criticism and more directions. Student initiation of talk likewise followed these opposite patterns in the two communities. In West the motivated, well-behaved white boys who especially received positive attention from their teachers initiated more talk in both subject matters. In East the motivated but disruptive boys whose teachers tried to control them through direct behaviors but who also used their ideas were the most active in their classrooms.

Although these results do not exactly parallel the reverse pygmalion effects that have been reported by others for teacher behavior toward high expectancy minority children, they suggest a similar dynamic. Others have reported that black and white children who are viewed as bright or likely to achieve are treated very differently. Bright white children receive less criticism, as the expectancy hypothesis suggests they should. Bright black children receive more criticism. Our results likewise show that black and white boys perceived as highly motivated are treated very differently, primarily as a function of the way their conduct is also viewed.

Summary

These results provide reasonably clear answers to questions raised by previous research.

1. Certain teacher behaviors were uniquely, or more strongly, tied to their judgments of pupil classroom conduct; others were more strongly connected to their judgments of pupil academic motivation. The results show two different patterns of teacher judgments and teacher behavior. Judgments of academic motivation particularly influenced the indirect or positive behaviors, use of ideas, praise, and questioning. Judgments of classroom conduct particularly influenced the negative or more controlling behaviors, criticism, lecturing and giving directions. Previous research has provided only minimal evidence that the greater attention teachers give both to children they consider brighter (or more motivated) and to those they feel behave badly differs so greatly in quality. The greater attention given to the more poorly behaved children in our study was restrictive in nature. The greater attention given to the more motivated was largely supportive, positively reinforcing, and academically demanding.

2. The large number of pupil sex-teacher judgment interactions and the different patterns of results for black children in East and white children in West show that previous research results are not as general as sometimes implied.

3. The pupil sex-teacher judgment interactions consistently showed that teacher judgments influenced teacher behavior more toward boys than toward girls. None of the judgment-behavior relationships were significant among white girls in West; fewer were significant among black girls than among black boys in East. Teachers treated some girls more positively than others in both communities; they tried to control some girls more than others in both communities. But their views of the girls' classroom conduct and academic motivation did not go very far in explaining why.

4. These pupil sex-teacher judgment interactions also qualify previous evidence (including our own reported in Chapter 3). that teachers behave so differently toward boys and girls. They do but only to certain groups of boys and girls. In East the moderating role of teacher judgments showed that it was only among children viewed as disruptive and as poorly (or moderately) motivated that teachers treated boys and girls differently. The girls whom teachers felt were disruptive apparently bothered them less than the boys judged as disruptive. At least they did not try as hard to keep them (the girls) in line with criticism, lecturing, and commands. Girls considered poorly motivated likewise were not questioned, lectured, or directed as much as boys viewed as poorly motivated. But when boys and girls were viewed as well behaved and highly motivated, teachers in East treated them much the same. Thus, it was particularly when boys fit the stereotype of boys by showing bad conduct and poorer motivation that teachers tried harder to control boys than girls. In West teacher judgments of classroom conduct also conditioned teacher behavior toward boys and girls in much this same way. Teachers especially tried to control the boys who most fulfilled their expectations of boys as badly behaved by giving them more of the direct behaviors. But when boys and girls were viewed as well behaved, teachers treated them similarly. Academic motivation judgments, by contrast, showed that it was only among children viewed as highly, rather than poorly, motivated that boys and girls were treated differently, in this instance in the positive, indirect behaviors. The presumed edge that girls enjoy by being viewed more motivated in no way advanted them in the teacher's interaction with them. It was particularly the highly motivated girls who received less praise, less questioning, and whose ideas were used less than boys. Although boys generally were considered less motivated, those boys whom teachers did judge as highly motivated had an unusual edge in obtaining the teacher's positive attention.

5. The different relationships among black boys in East and among white boys in West likewise indicate that behavioral effects of teacher judgment depend a lot on the particular teaching situation. In this instance our results add to previous hints from expectancy studies about opposite, or at least unusual, expectancy effects for black children. Previous work suggests that black children who are viewed as

bright (or likely to achieve or perform better than expected) are unduly criticized and viewed negatively on other behavior ratings. Our results also show that black and white boys perceived as highly motivated were treated very differently, primarily as a function of the way their conduct was also viewed. The motivated, well behaved white boys received an unusual amount of positive attention. The motivated, well behaved black boys, by contrast, seemed to get lost in an environment where teachers were so focussed on potential disruption that their attention disproportionately went to children they considered disruptive. Teachers in East did not treat the motivated, well behaved black boys negatively; they just did not give them either positive or negative attention. The black boys who especially stood out in East were the youngsters who apparently bothered their teachers but whose motivation nonetheless merited positive involvement as well. The critical difference in the dynamics in the two teaching situations seems to center on the threat of disruption. Disruption simply seemed to be much more important to teachers of black boys in East then to teachers of white boys in West.

Chapter V

Teacher Locus of Control

In the previous chapters we have investigated the relationships among pupils' race, sex, and locus of control and teachers' judgment of them and behavior toward them. As the title of our grant implies, we are also interested in personal characteristics of the teachers, specifically, the teachers' locus of control. Rotter's initial notion of locus of control was that it was a unitary factor; however, our work, especially with black youth, indicates that locus of control may be multi-dimensional. Most studies emphasize the positive aspects of an internal orientation; however, we feel that there may be some negative aspects to an internal orientation, especially for black children. For this reason, we measure the teachers on locus of control and then examine the relationships between the several factors and teachers' judgment of pupils, behavior toward the pupils, and pupils' characteristics. Although it has not been demonstrated that these factors hold for the white population -- and most of our teachers were white -- we felt that it was still important to see if the teachers did differentiate themselves on these factors and if any differentiation was related to their judgment, behavior, and pupil success.

The first factor, control ideology, refers to people generally. These items seemed to measure the respondents' ideology or general beliefs about the role of internal and external forces in determining success or failure in the culture at large. Endorsing the internal alternative on these items means rejecting the notion that success follows from luck, the right breaks, or knowing the right people, and accepting a traditional protestant ethic explanation. Such a person believes that hard work, effort, skill and ability are the important determinants of success in life (Gurin, et al., 1969). An example of an internal item from this scale is as follows, -- "In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test (Gurin, et al. 1969)." Whereas, the external response would be "Many times exam questions tend to be so unrelated to course work that studying is really useless (Gurin, et al., 1969)."

The questions in the second factor of our scale, personal control, are all phrased in the first person. Individuals who consistently choose the internal alternative believe that they can control what happens in their own lives. They have strong convictions about their own competency, in contrast to a belief that external forces have a major effect on their lives. An example of an internal item from this scale is "When I make plans, I am almost certain that I can make them work (Gurin, et al., 1969)". The contrasting external response reads, "It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow (Gurin, et al., 1969)."

Factor three, system modifiability, measures the extent to which racial discrimination, war, and world affairs can be controlled or changed. An internal score on this factor represents the belief that investment of political and economic effort can make a difference in modifying the social

system; an external score reflects the conviction that phenomena such as war and discrimination, by being either inexplicable or a basic part of human nature, are inevitable and unchangeable. Here is an example of an internal item on the scale -- "The racial situation in America may be very complex; but, with enough money and effort, it is possible to get rid of racial discrimination." (Gurin, et al., 1969). In contrast, the external item is "We'll never completely get rid of discrimination. It's part of human nature." (Gurin, et al., 1969).

The fourth factor, race ideology, consists of 14 items that are directly race related. In general, the internal items support the idea that blacks are to blame for what happens to them, while the external items seem, at least, to give some credence to the idea that some of the blame lies in the system. An example of an internal item is "It's lack of skill and abilities that keep many blacks from getting a job; it's not just that they're black. When a black is trained to do somehting, he is able to get a job." (Gurin, et. al., 1969). The contrasting external item is "Many qualified blacks can't get a good job. White people with the same skills wouldn't have any trouble." (Gurin, et al., 1969).

All items in factor four refer to blacks. These items, under separate factor analysis, were further factored into four factors. The first factor in this group is called individual collective action; it contrasts individual efforts and mobility with group action as a means of overcoming discimination. An example of an internal item is as follows -- "The best way to handle problems of discrimination is for each individual black to make sure he gets the best training possible for what he wants to do? (Gurin, et al., 1969). An example of the external item would be "Only if blacks pull together in civil rights groups and activities can anything really be done about discrimination." (Gurin, et al., 1969).

The next factor, discrimination modifiability, measures whether individuals believe that one can eliminate discrimination through social and political intervention. An internal item on the scale is "The so-called white backlash shows once again that whites are so opposed to blacks getting their rights that it's practically impossible to end discrimination in America." (Gurin, et al., 1969).

The next factor, individual-system blame, measures the explanation for social and economic failure among blacks. Choosing the internal response on these items means resting the burden for failure on blacks themselves, specifically -- on their lack of skill, ability, training, effort, or proper behavior. Choosing the external alternative means attributing the responsibility for failure to the social system because of lack of opportunities and because of racial discrimination. Following is an internal example from this scale -- "Many blacks have only themselves to blame for not doing better in life. If they tried harder they'd do better." (Gurin, et al., 1969).

Our final factor measures racial militancy. It poses alternate forms of collective action for the individual to choose. The external response

is a preference for protest and pressure activities. On the other hand, the internal response is a preference for less militant approaches, such as relying on conversation and negotiations between black and white leaders on bi-racial councils. An example of an internal response is that "Discrimination may effect all blacks, but that the best way to handle it is for each individual black to act like any other American -- to work hard, get a good education, and mind his own business, (Gurin, et. al., 1969) while the external response is "Discrimination affects all blacks. The only way to handle it is for blacks to organize together and demands rights for all blacks." (Gurin, et. al., 1969).

A questionnaire on Locus of Control was administered to the teachers. Of the 34 teachers, 32 completed the questionnaire. An internal response was coded as a 1 while an external response was coded as a 2. As can be seen from Table 1, most of the teachers responded in an interanl fashion. Median splits were used to designate internal and external teachers. There was no differentiation between teachers from East and West; therefore the results will be recorded for the group as a whole.

Teacher Locus of Control and Teacher Judgment

Several analyses on teachers' judgment of classroom conduct, academic motivation, socio-emotional state, teacher dependency, and personal behavior were done for black girls, black boys, white girls, and white boys, with teachers distinguished as internal or external on control ideology, personal control, system modifiability, and race ideology.

Table 2 presents the results of these analyses of variance. It can be noted that there was only one difference for black girls, that is, when teachers were divided into internals and externals on system modifiability, internal teachers perceived the black girls higher on socio-emotional state than did external teachers. For black boys, external teachers perceived black boys higher than did internal teachers for classroom conduct and personal behavior, when teachers were divided on control ideology. When system modifiability was the factor, external teachers perceived black boys higher in academic motivation than did internal teachers. When teachers were divided on control ideology, the internal teachers saw the white girls as less dependent than did the external teachers. However, when system modifiability was the factor, internal teachers saw girls higher in classroom conduct, socio-emotional state, and personal behavior, than did external teachers. The judgment of white boys seems to be most related to teachers' sense of personal control, especially control ideology. When teachers were divided into internal and external on control ideology, internal teachers saw white boys higher in classroom conduct, academic motivation, socio-emotional state, and teacher dependency than did external teachers. When teachers were divided on the basis of system modifiability it was only on personal behavior that internal teachers perceived the black boys as higher than did external teachers. These tables seem to indicate that when teachers are divided on their locus of control, their judgment of whites is extremely related to their locus of control and that internal teachers seem to judge

TABLE 1 - V

Minimum and Maximum Scores, Means, Standard Deviations, and Medians for Teachers for Eight Factors of Locus of Control

Factor	Minimum	Maximum	Mean	Standard Deviation	Median
Control Ideology	14.0	24.0	17.94	3.04	17.5
Personal Control	5.0	10.0	6.09	1.40	5.5
System Modifiability	4.0	8.0	5.69	1.06	5.5
Race Ideology	10.0	20.0	13.72	2.76	14.5
Individual Collective Action	2.0	4.0	2.66	0.83	2.5
Decrimination Modifiability	3.0	6.0	3.88	0.79	3.5
Individual System Blame	4.0	8.0	5.44	1.16	5.5
Racial Militancy	4.0	8.0	5.59	1.43	5.5

TABLE 2 - V

Internal and External Teachers' Judgment[a]

of Black and White Girls and Boys

Factor	Black Girls	Black Boys	White Girls	White Boys
Control Ideology				
Classroom Conduct		E > I		I > E
Academic Motivation				I > E
Social Emotional				I > E
Teacher Dependency			I > E	I > E
Personal Behavior		E > I		
System Modifiability				
Classroom Conduct			I > E	
Academic Motivation		E > I		
Social Emotional	I > E		I > E	
Teacher Dependency				
Personal Behavior			I > E	I > E

[a] There were no significant differences for Personal Control and Race Ideology.

whites more positively on classroom conduct, teacher dependency, personal behavior, and sociol-emotional state than do external teachers. For blacks, especially black boys, it appears that external teachers judge them higher on classroom conduct, personal behavior, and sociol-emotional state than do internal teachers. Thus, teachers who believe that by working hard and putting forth a great deal of effort you can "make it" judge whites' behaviors -- especially those of white boys, -- more positively than do teachers who believe that other forces might prevent one's progress. In addition, individuals who believe that discrimination, war, and world affairs can be controlled or changed judge the behavior of whites -- especially white girls - more positively than do individuals or teachers who believe that these things cannot be changed. In contrast, externals -- those who believe that there may be other forces working against an individual to decide his/her fate and that maybe the system cannot be changed -- judge black boys more positively than do those who believe that one's fate is a function of the individual and that the system may be modified.

To further investigate this issue, two-by-two-by-two analyses of variance were performed, using the PBI factors as the dependent variables for each condition of locus of control for the teachers. These results are summarized in Table 3. Only the results for the interaction effects are reported here, since the main effects have been reported in previous tables. The most revealing feature of Table 3 is the relationship between teacher locus of control and race of the pupil. Overwhelmingly internal teachers judge white pupils higher than black pupils in pupil behaviors. There were no significant interactions for individual versus collective action, individual system blame, race ideology, and racial militancy. External teachers, however, do not seem to differentiate between the pupils. The only exception is when they are divided on discrimination modifiability; here we see that external teachers judge black students more positively than whites in academic motivation. It might be these external teachers feel that the blacks must be academically more motivated than are whites in order to do as well as they are doing in a system that operates, to a great extent, against blacks.

When we look at the relationships between internal and external control and sex we obtain interesting information. In terms of controls ideology, external teachers rate girls higher than boys. This might be a function of the beginning of the women's movement and the belief that there are factors other than ability that are affecting whether girls succeed or not. If this study were to be run today, perhaps we would have a stronger effect than we're experiencing with these older data. The idea that the women's movement is affecting our data gets some support from the interaction effects between internal and external teachers' beliefs, race and sex. Again we see, in general, that white girls are rated higher in most areas than are the rest of the groups. This does seem to be an effect which indicates, in general, that externals and internals both judge white girls more positively than they do the other groups. This is especially true for the externals who believe that we have to adjust and control the system. Our final breakdown in looking at the effects of teacher judgment includes the interaciton of teacher locus of control, pupil locus of control, pupil

TABLE 3 - V

Teacher Judgment: Interaction Effects of Teacher Locus of Control[a], Pupil Race and Pupil Sex

Factor	IE * Race	IE * Sex	IE * Race *Sex
Control Ideology			
Classroom Conduct	W > B for I		
Academic Motivation	W > B for I	G > B for E	
Social Emotional	W > B for I	G > B for E	
Teacher Depending	W > B for I		
Personal Behavior	W > B for I		
Personal Control			
Social Emotional	W > B for I		WB > others for E
Personal Behavior	W > B for I		
System Modifiability			
Academic Motivation	W > B for I		WG > WB > BG > BB for I WG > others for E
Social Emotional	W > B for I		W > B for I WG > others for E
Teacher Depending	W > B for I		
Individual vs. Collective Action			
Teacher Depending			WG > others for I W > B for E
Discrimination Modifiability			
Academic Motivation	W > B for I B > W for E		
Social Emotional	W > B for I		WB, WG > BG, BB for I WG > BB > WB > BG for E
Teacher Depending	W > B for I		
Individual System Blame			
Teacher Depending		G > B for I B > G for E	

[a] There were no significant interactions for race ideology, and racial militancy

race, and pupil sex. In this analysis we are including only the data for control ideology. This factor seemed to be most relevant in looking at what is occurring, and it is expedient that we use only these data in our table.

Table 4 includes the results of the two-by-two-by-two-by-two analyses of variance on mixed classes, black classes, and white classes. In general, what we find is that internals rate pupils higher on classroom conduct, academic motivation, social-economic state, teacher dependency, and personal behavior than do externals. We also find that internals rate whites higher than blacks, especially in mixed classes. However, when we look at black classes, it appears that externals rate pupils more positively in most cases than do internals. We find some interaction effects, but what the analysis appears to show is that it is consistent with other results -- that internal teachers seem to distinguish more between black and white students than do external teachers. External teachers seem to be more diffuse. Now we must admit that our external teachers are not really external in terms of our scale. Perhaps it would be better to call them moderate. But nevertheless, they seem to make less distinction between black and white students and between girl and boy students than do internal teachers.

Probably the best conclusion we could make from this group of analyses is that internal teachers tend to favor white boys, that white girls are favored, but that there is a differentiation between the internal and external teachers in terms of their reaction to the acknowledgement that the system might be able to help white girls, that black boys are seen more positively by external teachers than by internal teachers, and that black girls are not seen positively by either group of teachers.

The Relationship between Teachers' Locus of Control and Their Judgments of Black and White Girls and Boys

We now turn to the question, "Is this judgment not effective in their actions toward black and white boys and girls?" Using the results of interaction analysis we examined the relationship between locus of control and teacher behavior in mathematics classes for race and sex of pupils. The teachers' verbal behaviors in mathematics classes which were examined were; praise, use of ideas, questioning, lecturing, giving directions, and criticisms.

A summary of the results of these analyses is presented in Table 5. These analyses were done separately for blacks and whites -- boys and girls. It may be noted that when teachers were divided on control ideology, external teachers used the ideas of black boys and questioned them more than did internal teachers.

External teachers used the ideas of white girls more than did internal teachers; however, internal teachers used the ideas of white boys more than did external teachers. This becomes especially important, since studies, including our present research, find a strong, positive relationship between

TABLE 4 - V

Teacher Judgment: Interaction Effects of Teacher Locus of Control, Pupil Locus of Control, Pupil Race and Pupil Sex in Mixed, Black, and White Classroom

Factor	Mixed	Black	White
Classroom Conduct			
Teacher IE		E > I	
Teacher * Race	W > B for I Tea		
Academic Motivation			
Teacher IE		E > I	
Teacher * Sex		G > B for E	
Social Emotional			
Teacher IE	I > E		I E
TIE * PIE * Sex		B > G for I	
		IG > EB > IB, EG for E	
TIE * Sex			B > G for I
			G > B for E
Teacher Dependency			
Teacher IE	I > E	I > E	I > E
Teacher IE * PIE	I > E for I Tea		
Teacher IE * Race	W > B for I Tea		
Personal Behavior			
Teacher IE	E > I	E > I	
Teacher IE * Race	W > B for I		

TABLE 5 - V

Internal and External Teachers' Behavior Toward
Black and White Girls and Boys

Behavior	Black Girls	Black Boys	White Girls	White Girls
Control Ideology				
Use of Ideas M		E > I	E > I	I > E
Questioning M		E > I		
Personal Control				
Use of Ideas M				I > E
Questioning M	E > I	E > I	E > I	E > I
Lecturing M	I > E			
Criticism M			I > E	I > E
Directions M				I > E
System Modifiability				
Use of Ideas M	E > I		E > I	
Questioning M			E > I	E > I
Directions M			E > I	
Race Ideology				
Use of Ideas M	I > E			

use of ideas and achievement. The teacher who is internal in control ideology puts the responsibility for success entirely on the individual. These teachers are less likely to use the ideas of black boys and white girls than are the external teachers. It is not surprising that we do not find any results for black girls, since the teacher verbal behavior toward black girls is so infrequent.

When teachers were divided into internals and externals on the personal control factor, external teachers were more likely to question all four groups than were internal teachers. Internal teachers were more likely to use the ideas of white boys than were external teachers. These two categories -- asking questions and using pupils' ideas -- are included in what Flanders calls indirect teacher verbal behavior. They have been shown to relate strongly to high pupil achievement and positive pupil attitudes. Internal teachers were more likely to lecture to black girls than were external teachers, they were more likely to criticise white boys and girls than were external teachers, and they were more likely to give directions to white boys than were external teachers. These categories are included in what Flanders calls direct teacher verbal behavior. In contrast to indirect teacher verbal behavior, direct teacher verbal behavior is highly related to lower attitudes and achievement. Teachers who are internal in personal control believe that they can control what happens in their own lives, while externals believe that sometimes that which happens to them is a matter of good or bad fortune. System modifiability measures the extent to which a person believes that war, racial discrimination, and world affairs can be controlled or changed. External teachers are more likely to believe that these phenomena are a part of human nature and unchangeable, while internal teachers believe that effort can make a difference in modifying the social system. When teachers were divided on their system modifiable scores, the external teachers were more likely to use the ideas of black and white girls, question white girls and boys, and give directions to white girls than were internal teachers.

When teachers were divided into internals and externals on their race ideology scores, the only behavior that was significant was that interanls used the ideas of black girls more than did externals. On this factor internals placed the blame for social or economic failures on blacks themselves. They flet that the burden for failure of blacks was on lack of skill, ability, effort, etc.

Teacher Behavior: Interaction Effects of Teacher Locus of Control, Pupil Race, and Pupil Sex

The previous section examined the relationship between teacher locus of control and teacher behavior separately for black and white boys and girls. In this section specific attention is paid to the interaction effects of teacher locus of control, pupil race, and pupil sex. The teacher verbal behaviors that were examined were use of ideas, praise, and criticism in mathematics. Table 6 summarizes the results of these analyses.

When teachers were divided into internals and externals on control

TABLE 6 - V

Teacher Behavior[a]: Interaction Effects of Teacher Locus of Control[b], Pupil Race and Pupil Sex

Behavior	IE * Race	IE * Sex	IE * Race * Sex
Control Ideology			
Use of Ideas		G > B for E B > G for I	
Personal Control			
Use of Ideas	W > B for I	B > G for I	
System Modifiability			
Use of Ideas		B > G for I	WB > WG & BG for I W > B for E
Race Ideology			
Criticism	B > W for I		
Individual Collective Action			
Praise	W > B for I B > W for E		
Use of Ideas		B > G for I	
Criticism	B > W for I		
Discrimination Modifiability			
Praise	W > B for I B > W for E		
Use of Ideas		B > G for I	WB > BB, BG, WG for I WG, WB > BB, BG for E
Racial Militancy			
Praise	W > B for I B > W for E		
Use of Ideas	W > B for E		

[a] Only teacher praise, use of ideas and criticism in math are reported.

[b] There were no significant interactions for Individual System Blame.

ideology, use of ideas was the only verbal behavior that yielded significant results. Externals were more likely to use the ideas of girls than of boys, while internals were more likely to use the ideas of boys than of girls.

When teachers were divided into internals and externals on personal control, again use of ideas was the only behavior that yielded significant results. There was both a sex and a race interaction effect. Internals were more likely to use the ideas of whites than of blacks; and internals were likely to use the ideas of boys rather than those of girls. There were no significant effects for externals.

System modifiability was the next locus of control factor examined. Here again, use of ideas was the only behavior that exhibited significant results. Boys were more likely to have their ideas used by internal teachers than were girls. However, the race effects did seem to be influential when one looked at the second order interaction. White boys' ideas were used significantly more by internals than were the ideas of white girls and black girls; while, in general, externals used the ideas of whites more than they used the ideas of blacks. This probably accounts for the fact that we did not get a significant locus of control X race effect.

When race ideology was used to discriminate between internals and externals, criticism was the only behavior that yielded significant results. Blacks were more likely to be criticised by internal teachers than were whites.

As in the previous chapter, race ideology was further broken down into four factors: individual system blame, individual collective action, discrimination modifiability, and race militancy. There were no significant interactions for individual system blame.

When teachers were divided into internals and externals on individual collective action, all three of the behaviors examined yielded significant interaction effects. Whites were more likely to be praised by internals than were blacks, while blacks were more likely to be praised by externals than were whites. Internals were also more likely to criticise blacks than they were to criticise white pupils. Again, internals were more likely to use the ideas of boys than to use the ideas of girls.

Discrimination modifiability division into internal and external locus of control had significant results for praise and use of ideas. As with individual collective action, whites were more likely to be praised by internals than were blacks, and blacks were more likely to be praised by externals than were whites. Also, boys' ideas were more likely to be used by internals than were girls. However, this is not a simple interaction we find that internals use the ideas of white boys more than they use the ideas of black boys, black girls, and white girls, respectively. On the other hand, externals use the ideas of white girls and white boys more than they use the ideas of black boys and black girls respectively.

Consistent with the other results, when we divide teachers into inter-

nal and external on their racial militancy scores, we find that whites are more likely to be praised than are blacks when the teacher is internal, while blacks are more likely to be praised when the teacher is external. However, when use of ideas is the behavior examined, external teachers are more likely to use the ideas of whites than they are to use the ideas of blacks.

When we look at the results of these analyses, it appears that internal teachers are more likely to favor and to have more positive behavior toward white pupils than toward black pupils. In addition, they are more likely to favor boys than girls. It does appear that external teachers do not discriminate as much as do internal teachers; but that when they do, they generally favor or have more positive behavior toward blacks than toward whites.

In addition to having more positive behavior toward whites than toward blacks, internal teachers also seem to exhibit more negative behaviors toward blacks than toward whites to the extent that they are more likely to criticise the blacks than they are the white pupils.

Teacher Locus of Control and Teacher Behavior Toward Black and White, Internal and External, Boys and Girls in Mixed, White, and Black Classrooms

Teachers were divided into internal and external on the control ideology factor. We did an analysis of criticism in mixed classes, black classes, and white classes. The only significant results that were not reported in Table 5 occurred in the mixed classes. Internal teachers praised external pupils more than they praised any of the other classes of pupils. In addition, internal teachers used the ideas of boys more than those of girls.

In general, it appears that locus of control is reflected less in teacher verbal behavior than in teachers' judgment of pupils. This does not mean, however, that locus of control is not related to teacher behavior. In general, it appears that internal teachers discriminate among pupils more than do external teachers, and they tend to exhibit more positive behaviors toward whites, especially white boys, and more negative behaviors toward blacks than do external teachers.

Pupil Attributes and Teacher Locus of Control

In the previous sections we have examined the relationships between teachers' locus of control, their judgment of pupils, and their behavior toward pupils. Now we are interested in the relationship between teachers' locus of control and pupils' achievement, attitudes, and feelings. Included in the battery of tests that were administered to the pupils were the Arithmetic Computation Section of the Metropolitan Achievement Test, a test of how attractive the pupils perceive the teacher, and a test of fear of failure. The scores on the Arithmetic Computation Test will hereafter be referred to as Math Scores. This test was administered in the middle of the

year and at the end of the year. The teacher attractiveness test is a 53-item test upon which students respond "strongly agree" to "strongly disagree" on such items as "I would like to have this teacher again next year," "This teacher treats everybody farily," etc. On the fear of failure test pupils responded from "strongly agree" to "strongly disagree" on items about how they felt in the classroom. A typical example would be "I worry when I take tests," Both the teacher attractiveness test and fear of failure test were given at the beginning of the year (Time One), the middle of the year (Time Two), and at the end of the year (Time Three). In the analysis of the data, change scores were developed for these three measures -- arithmetic computation, teacher attractiveness, and fear of failure. The math change score is the resulting from the subtraction of the math score at Time Two from the math score at Time Three. The teacher attractiveness change score is the result of subtracting the teacher attractiveness score of Time One from the teacher attractiveness score at Time Three. And the fear of failure score is the result of subtracting fear of failure score of Time One from the fear of failure score, Time Three.

Separate analyses were done for black and white girls and boys with the four major locus of control factors. The results of these analyses are summarized in Table 7: When control ideology was the factor upon which teachers were divided into internals and externals, black girls with external teachers had the higher math scores at the end of the year and also had greater math change scores. Black boys with external teachers had higher math scores in the middle of the year than did black boys with internal teachers. There was no relationship found between mathematics scores and teachers' control ideology locus of control for whites. At the beginning of the year for white girls, in the middle of the year and at the end of the year for black girls, and at the end of the year for black boys, internal teachers were perceived as more attractive than were external teachers. The perception by white boys of the attractiveness of the teacher was not based on the teacher's locus of control. Fear of failure, however, was related to the teacher's locus control for white boys. At the beginning of the year and at the end of the year white boys reported greater fear of failure when they had external teachers than when they had internal teachers. Also both white and black boys had greater fear of failure change, in a postive direction, with internal teachers than they did with external teachers. That is, they became less fearful of failure with internal teachers than with external teachers.

When teachers were divided into internals and externals on the basis of their personal control score, girls of external teachers had higher math scores than did girls of internal teachers at the end of the year. Blacks had more positive math change scores when they were taught by external teachers than when they were taught by internal teachers. There were no significant achievement differences for white boys. At the beginning of the year, internal teachers were perceived as more attractive by black boys than were external teachers. At all three time periods, white boys were more fearful of failure if they were attending classes of external teachers than when they were enrolled in classes of internal teachers. White girls became less fearful of failing when they were enrolled in classrooms of internal

TABLE 7 - V

Attributes of Black and White Girls and Boys
with Internal and External Teachers

Attribute	Black Girls	Black Boys	White Girls	White Boys
Control Ideology				
Math II		E > I		
Math III	E > I			
Math Change	E > I			
Tea. Attract. I			I > E	
Tea. Attract. II	I > E			
Tea. Attract. III	I > E	I > E		
Fear of Fail. I				E > I
Fear of Fail. II				E > I
Fear of Fail. Change		I > E		I > E
Personal Control				
Math III	E > I		E > I	
Math Change	E > I	E > I		
Tea. Attract. I		I > E		
Fear of Fail. I				E > I
Fear of Fail. II				E > I
Fear of Fail. III				E > I
Fear of Fail. Change			I > E	
System Modifiability				
Math Change	E > I	E > I	E > I	
Fear of Fail. I		I > E	E > I	E > I
Fear of Fail. II		I > E		
Fear of Fail. III		I > E		E > I
Fear of Fail. Change	E > I			
Race Idology				
Math Change			I > E	I > E

rather than of external teachers. Fear of failure and locus of control were not related for blacks.

When teachers were divided on system modifiability, blacks and white girls had greater achievement gains in math when they were in classroom of external teachers than when they were in classrooms of internal teachers. Black boys at the beginning, middle, and end of the year had greater fear of failure when they were taught by internal teachers than when they were taught by external teachers. Whites had greater fear of failure at the beginning of the year if they were in classrooms of external teachers than if they were in classrooms of internal teachers; and white boys also had greater fear of failure at the end of the year when they were being taught by external teachers than when they were being taught by internal teachers. For black girls, their change in fear of failure (to less fear) from the beginning of the year to the end of the year was greater with external teachers than it was with internal teachers.

When teachers were divided on the basis of their race ideology scores, whites had more positive changes in mathematics when they were taught by internal teachers than when they were taught by external teachers.

These results suggest that when blacks and white girls are taught by external teachers they have higher math achievement scores than when they are taught by internal teachers. The locus of control of the teacher does not seem to have an effect on the math achievement of white boys. In general, blacks and white girls appear to perceive internal teachers as more attractive than they perceive external teachers. In the case of fear of failure, whites, and especially white boys, seemed more fearful of failure when they were in the classrooms of external teachers than when they were in the classrooms of internal teachers. However, black boys seem to experience more fear of failure in classrooms of internal teachers than in classrooms of external teachers.

The Interaction of Teacher Locus of Control, Pupil Race, and Pupil Sex

In the previous section, black and white boys' and girls' data were analyzed separately. In this section, teachers were divided into internal and external on the basis of their scores on the eight locus of control factors. As is revealed in Table 8, there were no significant interactions for control ideology, race ideology, discrimination modifiability, and individual system blame. The only dependent variables used in these analyses were fear of failure at Time Three and teacher attractiveness at Time Three. When teachers were divided into internal and external locus of control on their personal control scores, black pupils experienced more fear of failure than did white pupils when they were enrolled in classrooms of internal teachers. When teachers were divided on their system modifiability scores, internal teachers were perceived as more attractive than external teachers for white students, while external teachers were seen as more attractive than internal teachers for black students. When individual collective action was used to divide the teachers, internal teachers were perceived as

TABLE 8 - V

Pupil Attributes: Interaction Effects of Teacher Locus of Control[a], Pupil Race and Pupil Sex

Attribute	IE * Race	IE * Sex	IE * Race * Sex
	Personal Control		
Fear of Fail. III	B > W for I		
	System Modifiability		
Tea. Attract. III	I > E for W E > I for B		
	Individual - Collective Action		
Tea. Attract. III			I > E for White Girls E > I for Black Girls
	Racial Militancy		
Tea. Attract. III		E > I for Girls I > E for Boys	

[a] There were no significant interactions for control Ideology, Race Ideology, Discrimination Modifiability, or Individual System Blame.

more attractive than external teachers by white girls, whereas external teachers were perceived as more attractive than internal teachers by black girls. When racial militancy was used to divide the teachers, external teachers were perceived as more attractive by girls than were internal teachers; and internal teachers were seen as more attractive by boys than were external teachers.

When teachers were divided into internal and external locus of control on the basis of their control ideology scores, and when mixed, black, and white classrooms were examined on Time Three math scores, on Time Three teacher attractiveness scores, and fear of failure scores, there were a few significant results. In black classrooms pupils with external teachers had higher Time Three math achievement scores than did pupils with internal teachers. In both mixed and black classrooms, internal teachers were seen as more attractive than were external teachers.

Summary

It does appear that teacher locus of control is related to teachers' judgment of pupils, their behavior towards the pupils; and the attributes of the pupils. It may be that some of the results that we have obtained are related to the method of measurement. More of the relationships seem to be between teachers' judgment of pupils and teachers' locus of control. However, both of these factors were measured by a paper-and-pencil test given to the teachers. The relationship between teachers' behavior and their locus of control appears less strong, and even weaker is the relationship between pupils' attributes and teachers locus of control.

What do all these analyses mean? In spite of the weakness in the design and the analyses, we would still like to speculate on the meaning of the results. Ideally, we would have preferred to have found no differences. Ideally, teachers, regardless of their perception of their lives and of the world and how it is controlled and changed, would not manifest differences in their behavior and judgment of pupils on the basis of race or sex. We have at least some indication that this ideal situation does not exist. The teachers do indeed distinguish among pupils on the basis of characteristics that cannot be changed. Since we cannot change the race or sex of pupils, then should we prescribe certain teachers for certain children? Not only would that be socially undesirable and logistically impossible, but also our evidence is not strong enough to even suggest such a radical move. Rather it seems that this report could be used in a logical manner to sensitize school systems and schools of teacher education. If teathers and prospective teachers are indeed discriminating between pupils on the basis of their sex and race as a function of the teachers' own personal beliefs, then it would seem reasonable that the teachers should be aware of their judgments and behaviors and of the effect on students. It is our belief and experience that teachers are more than eager to improve their teaching and to be fair toward their pupils. If teachers were informed that they may be predisposed to certain judgments and behaviors as a function of their beliefs, they might give added attention to these predispositions and concentrate on eliminating any negative behaviors and judgments that might result from those predispositions.

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Appendix A

Pupil Behavior Inventory

Student Name:_____ Sex_____ Teacher I.D._____

Student I.D._____

Please write in for each item the letter(s) of the rating chosen for this pupil (see alternatives in box). It is not necessary to spend a great deal of time in assessing the pupil. Please answer all items, even if you are uncertain or have little information. If you cannot answer an item, please write in "don't know."

ALTERNATIVE RATINGS

VF--Very frequently
F---Frequently
S---Sometimes
I---Infrequently
VI--Very infrequently

		LEAVE BLANK
1.	Shows initiative	2
2.	Blames others for trouble	1
3.	Resistant to teacher	1
4.	Alert and interested in school work	2
5.	Attempts to manipulate adults	1
6.	Appears depressed	3
7.	Learning retained well	2
8.	Absent from school	5
9.	Withdrawn and uncommunicative	3
10.	Completes assignments	6
11.	Influences others toward troublemaking	1
12.	Has an imaginary friend	5
13.	Seeks constant reassurance	1
14.	Bossy	6
15.	Impulsive	1
16.	Has a vivid imagination	6
17.	Acts more mature than peers	6
18.	Requires continuous supervision	1
19.	Aggressive toward peers	1
20.	Disobedient	1
21.	Speech easily understood	6
22.	Friendly and well-received by other pupils	3
23.	Easily led into trouble	1
24.	Resentful of criticism or discipline	1
25.	Hesitant to try, or gives up easily	2
26.	Uninterested in subject matter	2
27.	Disrupts classroom procedures	1
28.	Swears or uses obscene words	5
29.	Appears generally happy	3
30.	Engages in imaginary play with others	6
31.	Possessive of teacher	4
32.	Teases or provokes students	1
33.	Isolated, few or no friends	3
34.	Shows positive leadership	2