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ABSTRACT

Through a content analysis of the projective stories written by a randomly selected group of teachers at an all black Chicago high school, this study revealed teachers' perceptions of life at the school. The study demonstrated that ghetto teachers vary greatly in their perceptions and appraisals of their shared teaching environment, and that the differences are somewhat related to race and sex. The stories of black teachers were found to contain more student and group directed negative judgements than those of white teachers. In addition, the stories of female teachers were found to contain more negative statements than did those of the male teachers. (Author/APM)

INNER-CITY HIGH SCHOOL TEACHERS: THEIR PERCEPTIONS OF CLASSROOM LIFE AS REVEALED THROUGH A CONTENT ANALYSIS OF PROJECTIVE STORIES

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A teacher's behavior and attitudes are determined in part by the ethos of a particular school and the extent to which the teacher perceives himself as in conflict with this cultural climate. In most cases, the culture of the school and the teacher's values are more or less compatible, and the teacher can function with little conflict so that he simultaneously satisfies his own professional needs and the needs of students, school, and community. In many lower-class inner-city schools, however, the gulf between student life styles and the values of the teacher is vast, and this difference may have a profound, if not aberrant, effect on teacher attitudes and behavior In particular, middle-class teachers are apt to perceive between themselves and their students a high degree of conflict which not only limits the formation of educative teacher-student relationships but also reduces teacher morale.

The purpose of this study, then, is to examine, through a content analysis of teachers' projective stories, the patterns of observation which typify teachers' perceptions of classroom life at an all-black ghetto high school* in Chicago. Three questions provide the focus for this inquiry: (1) what "deeper," perhaps unacknowledged, tendencies characterize teachers' interpretations of classroom situations? (2) what kind of judgments and inferences do teachers commonly make as they respond to groups of students? and (3) do black and white, or male and female, teachers differ significantly in their perceptions of classroom events?

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*To insure anonymity, this school will henceforth be referred to as Urban High School.

The Setting

Urban High School is located in one of the poorest neighborhoods of Chicago's South Side. Approximately 2,300 students, with nearly 70 percent from families dependent on welfare or public assistance benefits, attend the school. Student achievement level is, on the average, decidedly below national norms; on standardized reading tests, the norm for Urban High students is the twelfth percentile, the lowest among City high schools. In general, the school evinces quite clearly and consistantly the problems of urban education which have been so thoroughly documented during the last decade and a half.* Teachers daily encounter problems in disciplining and motivating students whose culture, in the main, attaches minimal importance to acquiring an education geared to middle-class notions of achievement and success.

Subjects and Procedure

The Subjects

From the school's faculty of 140, twenty-two teachers (15 white and 7 black; 12 female and 10 male) were selected randomly to participate in this study. The subjects taught in various high school content areas: five taught English, two E.M.H., two social studies, two foreign language, three science, three mathematics, three physical education, one art, and one home economics.

Procedure

To obtain "data" on how these teachers commonly perceive the relationship between teacher and students, each teacher was asked to write a story based on a pen-and-ink sketch (see Figure 1) which portrayed a typical Urban High classroom scene. Subjects were encouraged to be creative and to write without concern for

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*The particular manifestations of the teacher-student conflict in the Urban High milieu are described elsewhere by the investigator (Parkay, 1974).

Figure 1. Sketch for Projective Test of Teachers' Perceptions of Classroom Life

conventions of spelling and grammar. Finally, to provide a focus for their ideas, four questions were suggested:

1. What is happening in the picture?
2. What has led up to this situation?
3. What is being thought?
4. What will happen?

The sketch shows what appears to be a white male teacher with his back to the viewer. Before him are six black students of high school age. Three appear to accept the teacher's position of authority--among the other students, however, one has his head on the desk; another gets up from his desk while apparantly making a comment to the teacher; and another stands while holding aloft a piece of paper and saying something, perhaps directed to a fellow student.

The Content Analysis of Teachers' Stories

The design of the study was based on the assumption that the teachers would "project" into the stories their typical emotional and ideational responses to classroom events in the ghetto. These responses would then be examined using methods of content analysis which Berelson (1952, p. 18) defines as ". . . a research technique for the objective, systematic, and quantitative description of the manifest content of communication." Thus, the first step in the analysis required that a method for quantifying the teachers' responses be formulated. Secondly, an objective and systematic method of categorization had to be developed.

The Unit of Analysis

The unit selected for coding was the single assertion about a subject. This approach, similar to one developed by Osgood, Saporta, and Nunnally (1956), translates all sentences into their component kernel sentences according to the principles of transformational grammar. Thus, each sentence, or transform, is reducible to one or more kernel sentences which fit the following pattern:

Noun Phrase / Verb Phrase. For example, the two sentences "Jason, in the back, wanted to give his answer even though he didn't raise his hand," and "Janice, a very mature junior, raised her hand so she could give her interpretation to the quote on the test," are translated to read:

1. Jason / is in the back.
2. Jason / wanted to give his answer.
3. Jason / didn't raise his hand.
4. Janice / is a very mature junior.
5. Janice / raised her hand.
6. Janice / gave her interpretation to the quote on the test.

In this manner, a total of 423 responses (with a mean story length of 19.2 units) was coded by the investigator.

The Categories

The development of classification categories was a crucial step in the design of this study, for, as Berelson (1952, p. 147) asserts, "Content analysis stands or falls by its categories." The final categorization system was developed according to several principles of category construction outlined by Holsti who states (1969, p. 95) that ". . . categories should reflect the purposes of the research, be exhaustive, be mutually exclusive, independent, and be derived from a single classification principle."

A two-phase classification process which generated a total of twenty categories was thus used to code the 423 responses contained in the teachers' stories. In the first phase of classification, responses were coded according to whom or what the statement was about. The following three divisions were developed:

I. Group or Situation-Directed: A statement is made about the class as a whole (three or more students) or about the situation in general. Included also are statements about less than the total group; for

example, "The rest of the class . . ." or "Everyone else . . . ."

II. Student-Directed: A statement is made about one or two particular students; for example, "The student with his head on the desk . . ." or "The two students who seem to be paying attention . . . ." Included also are statements attributed to the teacher in the sketch; for example, "'The girl is not interested,' thought the teacher."

III. Teacher-Directed: A statement is directed toward the teacher, or a student in the sketch makes a statement about the teacher. For example, "The teacher wished he were home," or "'Mr. Smith talks too much,' thought Mary."

Once the attitude object of a statement was determined, the comment was further classified according to the following six categories:

I. Descriptive: The unit of response is a direct, unevaluative statement about what "literally" appears to be represented in the sketch; for example, "The teacher is standing in front of the class," or "The student with his head on the desk . . . ."

II. Prescriptive: Statements in this category (developed by Squire [1964]) prescribe a certain course of action for those in the sketch; for example, "The teacher should talk less," or "The class should pay attention."

III. Inferential-Positive: Inferential statements present cause-effect relationships, background information, or general states of mind that are usually positioned prior to or independent of the actual events represented in the sketch. In general, inferential statements reflect an attempt to understand the forces influencing the situation.

An inferential statement was judged positive if it made an assertion in favor of the actor or the situation: for example, "The teacher

always looked forward to this class," or "It looks like the class can go on to be a worthwhile class period." An inference was also felt to be positive if it described the attitude object as conforming to norms commonly accepted for similar situations; for example, "Yesterday, the class began a unit on drama."

IV. Inferential-Negative: An inference was coded as negative if it made an assertion unfavorable to the actor or the situation, or if it implied tension or discord within the attitude object; for example, "The teacher has walked into class expecting trouble," or "Anything could have happened to cause this situation."

V. Judgmental-Positive: Judgments were recorded when the respondant's statement interpreted the action in the sketch. Positive judgments reflect an interpretation favorable to the actor or the situation; for example, "The class is learning a lot," or "The teacher seems alert and on duty." A response was also felt to be positive if it portrayed the attitude object as conforming to commonly accepted norms for similar situations; for example, "Cynthia was reading her answer from the last test," or "The teacher is talking."

VI. Judgmental-Negative: A negative judgment was recorded if the response was critical of the actor or the situation, or if it implied tension or discord within the attitude object; for example, "The class is in chaos," "The teacher is worried," or "The kids are not paying attention."

Two additional categories were included to code responses which did not meet the specifications of the preceding six categories:

VII. Narrative: Narrative responses are those which primarily function to advance the movement of the respondent's story; for example, "It is late in the afternoon," or "The bell rang."

VIII. Miscellaneous: Miscellaneous responses are those which do not contribute to an interpretation of the sketch; for example, "There is much room for conjecture," or "When has experiential background been measured?"

The above coding system yielded a total of 20 categories which were used to code the responses of the 22 teachers. As no units were coded for two of the categories, Group or Situation-Directed Description and Student-Directed Prescription, these categories are not included in the final data analysis.

Category Reliability

To determine the reliability of the coding system, an independent coder was trained by the investigator. Inter-judge agreement was then computed by check-coding three teachers' stories which were selected to represent the full spectrum of categories.

The following formula was initially used to compute the degree of agreement:

$$C.\ R. = \frac{2\ M}{N_1 + N_2}$$

where M is the number of coding decisions on which the two judges agree and N_1 and N_2 refer to the number of coding decisions made by each judge. Using this formula, an overall reliability of .87 was found.

To correct for the inter-judge agreement that might occur by chance, however, a second formula, developed by Scott (1955), was used to compute the index of reliability (π):

$$\pi = \frac{P_o - P_e}{1 - P_e}$$

In this formula, P_o is the percentage of observed agreement and P_e is the percentage of agreement expected by chance. Scott's formula resulted in an overall reliability of .85.

The Patterns of Response

The distribution of responses which were coded in each of the 18 categories as well as the corresponding mean percentages are presented in Table 1.

The data in Table 1 reveals that the majority of teacher responses were judgmental (actually, 66.4 percent of their responses were so coded), and the most frequent judgmental responses were negative and student-directed. Though more than 10 percent of the negative judgments were teacher-directed, the intent of these statements seemed most often to express the discomfort the teacher in the sketch was experiencing rather than a critical estimate of the teacher's actions.

Rather few responses (a total of 11.1 percent) were coded as inferential--a finding which suggests, perhaps, that the exigences of the classroom mitigate against the teacher making extensive inferences about the situation. Faced with a group of students, the teacher is "forced," it seems, to make judgments about <u>what</u> his students are doing; he may not be free to formulate inferences about <u>why</u> they act as they do.

The teachers' stories differed a great deal in regard to the frequency of positive and negative statements about the sketch. Using a modification of approaches suggested by Hafner and Kaplan (1960) and Dollard and Mower (1947), the investigator was able to compute a Negativity Quotient (N.Q.) for each story. A rough index of how each teacher perceived the sketch was computed through the use of the following formula:

$$\frac{\text{Negative Responses}}{\text{Negative Responses + Positive Responses}} = \text{N.Q.}$$

N.Q. scores for the 22 teachers ranged from .00 to 1.00, with a mean score of .66 and a standard deviation of .29.

In spite of the ambiguity of the sketch, some teachers wrote stories which were largely "negative," as the following paragraph illustrates:

Table 1

Distribution and Mean Percentages of Responses

In 22 Teachers' Projective Stories

	Response Category	Absolute Frequency	Percent
Group or Situation-Directed	1. Prescriptive	3	.7
	2. Inferential-Positive	5	1.2
	3. Inferential-Negative	20	4.7
	4. Judgmental-Positive	20	4.7
	5. Judgmental-Negative	52	12.3
Student-Directed	6. Descriptive	16	3.8
	7. Inferential-Positive	5	1.2
	8. Inferential-Negative	6	1.4
	9. Judgmental-Positive	37	8.7
	10. Judgmental-Negative	100	23.6
Teacher-Directed	11. Descriptive	3	.7
	12. Prescriptive	8	1.9
	13. Inferential-Positive	2	.5
	14. Inferential-Negative	9	2.1
	15. Judgmental-Positive	29	6.9
	16. Judgmental-Positive	43	10.2
	17. Narrative	45	10.6
	18. Miscellaneous	20	4.7
	TOTAL	423	99.9

What is being thought? The sleeping student is not thinking. The dancing student is thinking, "I'll fix that 'honkey' for failing me!" The yelling student is thinking, "I should have cut and gone with my friends." The front vegitating student is thinking, "Why don't I ever get A's from this 'jive' teacher." The back vegitating student is hallucinating off of his present "high." The student with her hand up is thinking, "When will he stop talking and answer my question?" The teacher is thinking, "I should have stayed home today. I can't wait to get back there and have a few drinks to quiet my nerves."

Others wrote stories which were exclusively "positive," as the following paragraph exemplifies:

A stimulating class is in session. The students are so enthusiastic that they want to get involved in the discussion (either by raising their hands or shouting out answers). The student at the left cannot believe the answer which the one girl who is standing made, and so he has his head down on the desk in disbelief.

To speculate on just why some teachers may perceive a classroom situation negatively while others may view it positively is beyond the scope of the present study. Suffice it to say, though, that the qualitative nature of teachers' perceptions has extensive implications for the way of life within classrooms and ultimately, no doubt, strongly determines the educativeness of teacher-student relationships.

Patterns of Response and Racial Differences

Table 2 displays the response patterns for 15 white and 7 black teachers across the 18 categories.

To compare the stories of black and white teachers, mean percentages in each of the 18 categories were compared through the use of a chi-square

Table 2

Distribution and Mean Percentages of Responses

In 15 White and 7 Black Teachers' Projective Stories

	Response Category	15 White Teachers No.	15 White Teachers %	7 Black Teachers No.	7 Black Teachers %
Group or Situation-Directed	1. Prescriptive	3	0.8	0	0.0
	2. Inferential-Positive	5	1.4	0	0.0
	3. Inferential-Negative	15	4.3	5	6.9
	4. Judgmental-Positive	16	4.6	4	5.5
	5. Judgmental-Negative	37	10.6	15	20.5
Student-Directed	6. Descriptive	14	4.0	2	2.7
	7. Inferential-Positive	5	1.4	0	0.0
	8. Inferential-Negative	6	1.7	0	0.0
	9. Judgmental-Positive	30	8.6	7	9.6
	10. Judgmental-Negative	80	22.9	20	27.4
Teacher-Directed	11. Descriptive	1	0.3	2	2.7
	12. Prescriptive	6	1.7	2	2.7
	13. Inferential-Positive	2	0.6	0	0.0
	14. Inferential-Negative	9	2.6	0	0.0
	15. Judgmental-Positive	25	7.1	4	5.5
	16. Judgmental-Negative	38	10.9	5	6.9
	17. Narrative	45	12.9	0	0.0
	18. Miscellaneous	13	3.7	7	9.6
	TOTAL	350	100.1	73	100.0

goodness-of-fit test. The resultant X^2 revealed an overall difference between black and white teachers' stories significant at beyond the .001 level.

One of the most apparant differences between the stories of black and white teachers, and independent of the 18-category coding system, is their dissimilarity in length. The stories of white teachers had a mean length of 23.3 statements per story, while those of black teachers had a mean length of 10.4 statements. A one-tailed, t-test revealed that this difference was significant at beyond the .025 level. As a partial explanation for this difference, it is possible that black teachers, aware that they were providing data for a white researcher, may not have felt sufficiently at ease to make more extensive responses to the sketch.

As an additional argument in support of the heightened racial awareness of black teachers, it was interesting to note that 43 percent of the black teachers' stories mentioned the apparant racial difference between teacher and students, while none of the white teachers' stories made any reference to the probable race of either teacher or students. In general, the black teachers' stories which did mention race seemed to imply that the racial and cultural difference between teacher and students ipso facto contributed to the teacher's lack of effectiveness.

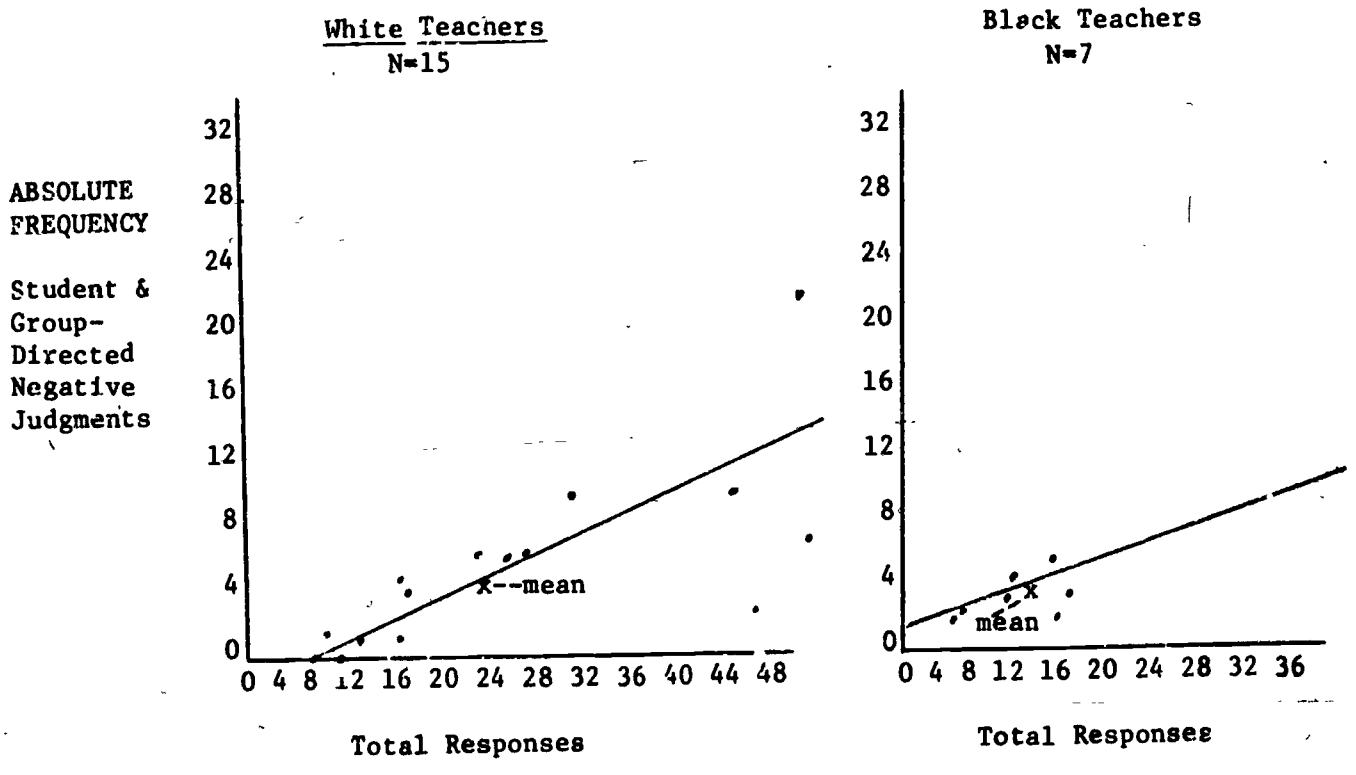
An index of black and white teachers' involvement in the writing of projective stories is reflected not only in the length of their stories but also in the proportion of statements each group devoted to narration. In the narrative category, the stories of white teachers had a mean of 12.9 percent, indicating considerable involvement with the task of composing a story; however, the stories of black teachers contained no narrative responses, which suggests a relative lack of involvement in the composition task.

Contrary to what one might expect, the stories of black teachers contained a greater percentage of student and group-directed negative judgments than did

the stories of white teachers. It seems that the shared cultural background of black teachers and black students encouraged more, not fewer, negative judgments of individual students or the group. The negative judgments of black teachers represented 47.9 percent of their total responses, while white teachers devoted 33.5 percent to negative judgments about the students or the group. The significance of this difference was tested by assuming the null hypothesis and using a chi-square test. A value of X^2 was obtained high enough to reject the null hypothesis at the .02 level. The estimated regression lines for the student and group or situation-directed negative judgments of black and white teachers are shown in Figure 2.

Figure 2

Estimated Regression Lines for Student and Group-Directed Negative Judgments in 15 White and 7 Black Teachers' Projective Stories



While White teachers devoted 10.9 percent of their responses to teacher-directed negative judgments, and 6.9 percent of the black teachers' responses were so directed, a one-tailed, t-test failed to reveal any compelling statistical significance for this difference. However, it seems reasonable to assume that the white teachers identified more with the apparantly white teacher in the sketch and therefore tended to "project" greater discomfort onto the teacher.

When the Negativity Quotients of black and white teachers' stories were compared, it was found that the stories of black teachers had a mean N.Q. of .74 and those of white teachers had a mean N.Q. of .61. A one-tailed, t-test, however, revealed that this difference was not significant, and the null hypothesis was thus accepted.

Patterns of Response and Sex Differences

Table 3 shows the response patterns for the projective stories of 12 female and 10 male teachers. The stories of male and female teachers were compared across the entire 18 categories and found to be significantly different. A chi-square test rejected the null hypothesis at beyond the .001 level. It was noted, too, that the contrast between the stories of males and females was more pronounced than that between black and white teachers; the X^2 value obtained in the male-female comparison was more than twice the value obtained for the black-white comparison.

When the length of male and female stories was compared, only a slight difference was noted. The stories of 12 female teachers averaged 19.08 units of response, while the stories of 10 males averaged 19.40 units of response.

The mean Negativity Quotient for female teachers' stories was found to be .74, and the mean N.Q. for male stories was found to be .55. A chi-square test, however, revealed that this difference was significant only at the .10 level.

Table 3

Distribution and Mean Percentages of Responses

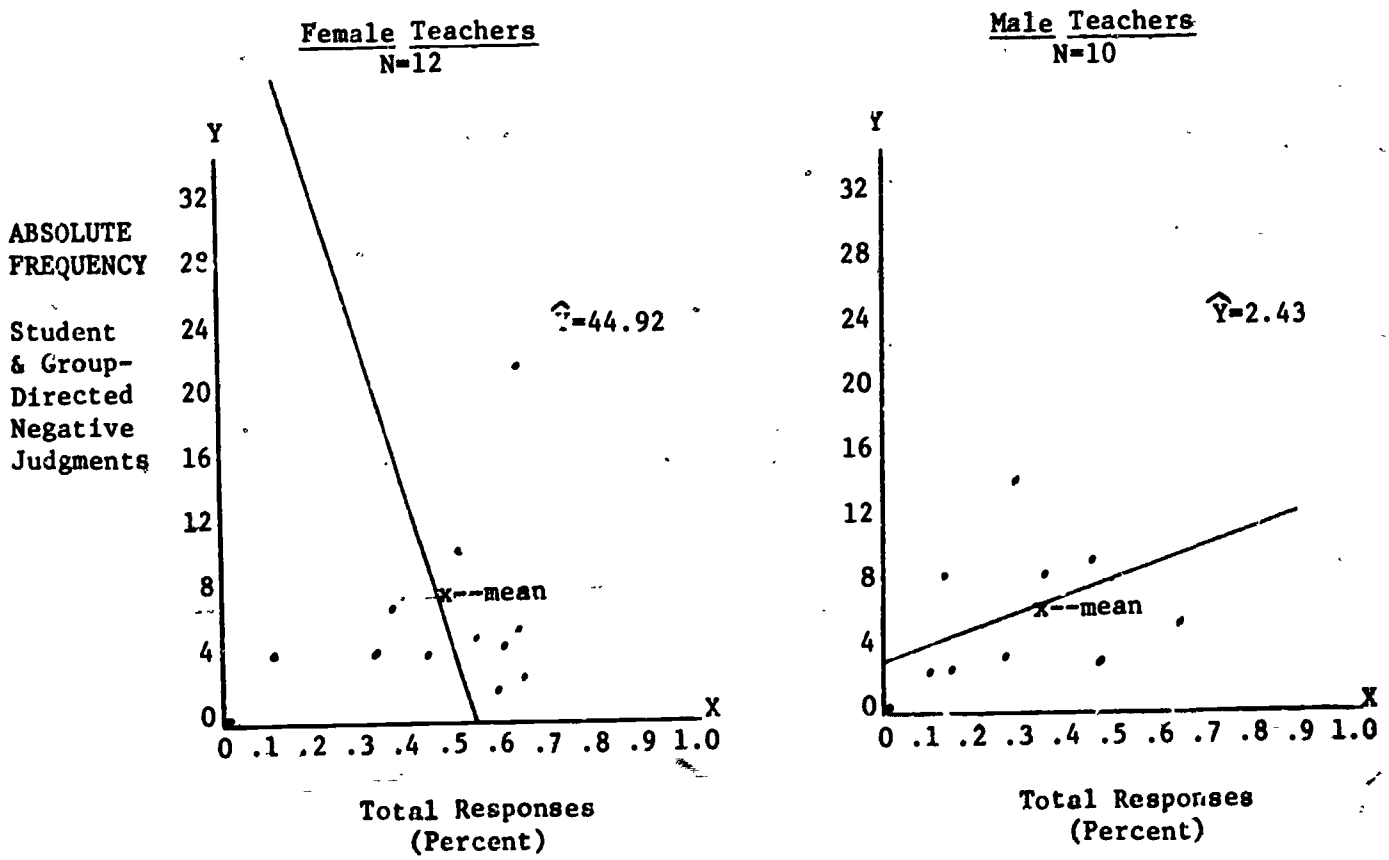
In 12 Female and 10 Male Teachers' Projective Stories

	Response Category	12 Female Teachers No.	12 Female Teachers %	10 Male Teachers No.	10 Male Teachers %
Group or Situation-Directed	1. Prescriptive	0	0.0	3	1.5
	2. Inferential-Positive	0	0.0	5	2.6
	3. Inferential-Negative	17	7.4	3	1.5
	4. Judgmental-Positive	7	3.1	13	6.7
	5. Judgmental-Negative	33	14.9	19	9.8
Student-Directed	6. Descriptive	10	4.4	6	3.1
	7. Inferential-Positive	4	1.7	1	0.5
	8. Inferential-Negative	5	2.2	1	0.5
	9. Judgmental-Positive	25	10.9	12	6.2
	10. Judgmental-Negative	62	27.1	38	19.6
Teacher-Directed	11. Descriptive	1	0.4	2	1.0
	12. Prescriptive	6	2.6	2	1.0
	13. Inferential-Positive	2	0.9	0	0.0
	14. Inferential-Negative	3	1.3	6	3.1
	15. Judgmental-Positive	11	4.8	18	9.3
	16. Judgmental-Negative	21	9.2	22	11.3
	17. Narrative	7	3.1	38	19.6
	18. Miscellaneous	15	6.6	5	2.6
	TOTAL	229	100.1	194	99.9

As the mean N.Q. scores imply, the stories of female teachers were found to contain a somewhat higher frequency of negative judgments which were student and group or situation-directed. Female teachers' stories devoted 41.5 percent of their total responses to these negative interpretations, while 29.4 percent of the male responses were devoted to negative judgments about the students, the group, or the situation. According to a chi-square test, this difference was significant at beyond the .05 level. A graphic portrayal of this dissimilarity is shown in Figure 3 which plots the regression lines for student and group-directed negative judgments of the male and female teachers.

Figure 3.

Regression Lines for Student and Group-Directed Negative Judgments in 12 Female and 10 Male Teachers' Projective Stories



A more pronounounced dissimilarity between the negative perceptions of male and female teachers was found by comparing their mean percentages for negative judgments and inferences which were either group or student-directed. In each of these four negative categories, the stories of female teachers were coded as having a substantially higher frequency. Within the four categories, a combined mean percentage of 51.6 was found for the female teachers and 31.4 for the male teachers. This difference, according to a chi-square test, was found to be significant at the .02 level. It thus appears that female teachers--at least within this group of 22 teachers and within the Urban High setting--tend to formulate perceptions of their teaching environment that are more negative than those formulated by male teachers. Whether or not this difference indicates that female teachers are in greater conflict with their students and with the school's milieu is, however, largely a matter of conjecture.

Conclusions

Through a content analysis of teachers' projective stories, this study explored the patterns of observation which characterize teachers' perceptions of events in the ghetto classroom. The method revealed certain patterns of responses which appear to be salient for particular groups. Black teachers, it was found, tended to be more negative in their appraisals of a hypothetical classroom situation than were white teachers. Similarly, the perceptions of female teachers were generally more negative than those of male teachers.

Such differences as were noted in this study, however, need to be interpreted cautiously. Though the quantitative analysis of data demonstrated several statistically significant relationships, these differences in most instances are difficult to interpret; to state why teachers differ would be largely a matter of conjecture. The way an individual perceives his environment is a very complex, difficult-to-measure psychological phenomenon--one that is directly related to infinite variations in individual personality traits and experiential backgrounds.

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