EXPECTATIONS OF TEACHERS
AND EDUCATION STUDENTS
FOR ACADEMIC ACHIEVEMENT
AMONG MIDDLE AND LOWER
CLASS CHILDREN

CENTRE FOR NEWFOUNDLAND STUDIES

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FORD ADAMS
EXPECTATIONS OF TEACHERS AND EDUCATION STUDENTS FOR ACADEMIC ACHIEVEMENT AMONG MIDDLE AND LOWER CLASS CHILDREN

by
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ABSTRACT

This study investigated the effects of student socio-economic status on teacher expectancy. Specifically, student academic achievement was used as evidence of differential teacher expectancy for students of lower and middle socio-economic status. Teacher experience was studied and differential effects on teacher assessment of students of differing social classes were examined. Also, the study investigated the interactive effects of teacher experience and student socio-economic status on teacher assessment of student academic performance.

Two hypothetical children, alike in all respects except socio-economic status, were described and presented to education students and experienced teachers. The children were given identical performance levels on a Social Studies quiz and teachers (both education students and experienced teachers) were asked to grade that performance. In a two-by-two experimental design, the education students were divided into two groups of 30 and each group was treated with a different socio-economic status description. The same procedure was carried out for the experienced teachers.

The results of an analysis of variance confirmed the presence of a teacher bias for students of different
socio-economic status when student performance is assessed. Students of lower socio-economic status were given lower grades than those of middle socio-economic status. A biasing effect was also found for teacher experience in that more experienced teachers gave lower grades than less experienced teachers. A study of the interactive effect of teacher experience and student social status failed to show significant results.
ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

You see, really and truly, apart from the things one can pick up (the 'dressing and the proper way of speaking and so on), the difference between a lady and a flowergirl is not how she behaves but how she's treated. I shall always be a flowergirl to Professor Higgins because he always treats me as a flowergirl, and always will; but I know I can be a lady to you, because you always treat me as a lady, and always will. (Shaw, 1926, p. 180)

Liza, the flowergirl, finds that no matter how she behaves, Professor Higgins always treats her as a flowergirl of the streets of London. In fact, Liza has become a well spoken lady, but that has not changed the professor's attitude toward her. Colonel Pickering, however, treats Liza as a lady and she will always be a lady to him but never a lady to Professor Higgins. She is bound, in both cases, by the other person's perception of her and there appears to be very little she can do to change the situation.

Shaw's three characters may be demonstrating the phenomenon of self-fulfilling prophecy. Self-fulfilling prophecy might be defined as the expectation of any phenomenon having an effect on whether or not that phenomenon occurs. Sometimes the predictor will, unwittingly, do things or change events so that the initial perceptions do not become disparate with the final outcome.
One theoretical explanation of what might be happening is that the cognitive dissonance experienced by the predictor, when events do not seem to be bearing out the prediction, may cause the predictor to act upon events in such a way as to reduce dissonance (Festinger, 1968). It should be noted that there has been much speculation as to how expectancy becomes self-fulfilling prophecy, but as yet there is no clear understanding of the process.

The concept of self-fulfilling prophecy has ramifications for education. The expectations of classroom teachers for their students may affect the way students are assessed on achievement. Therefore, it is paramount that the consequences and implications of expectancy be understood.

**Statement of the Problem**

The purpose of this study was to determine the degree to which student socio-economic status affects teacher assessment of student academic performance. More specifically, it investigated how much student socio-economic status affects teacher assessment of a written sample of a Grade Seven student's work in Social Studies. When given a sample of a Grade Seven student's performance in Social Studies, to what degree do teachers differentially grade that student depending on the biasing biographical socio-economic data presented with the sample?

This research study addressed itself to several questions related to student socio-economic status,
teacher expectancy, and student academic performance. These questions were as follows:

1. Do teachers (both education students and experienced teachers) differentially assess a child of low socio-economic status when compared to a child of middle socio-economic status on a sample of Grade Seven Social Studies performance?

2. Do education students, when compared to experienced teachers, differentially assess children of both low and middle socio-economic status (combined) on a sample of Grade Seven Social Studies performance?

3. Is there an interactive effect such that differential assessment, by senior education students versus experienced teachers, depends on the socio-economic status of the student being assessed?

**Rationale for the Study**

Self-fulfilling prophecy may be used synonymously with the term 'expectancy effect'. The expectancy effect among humans has been studied extensively, in many fields, since the early part of this century (Goffman, 1961; Jastrow, 1900; and Loranger, Prout, & White, 1961). These studies have looked at expectancy in areas of placebo drugs used with hospital patients and staff perceptions
of the effect of these drugs (Goffman, 1961; Loranger, Prout, & White, 1961; Stanton & Schwartz, 1954; and Zussman, 1967) as well as experimenter bias and induced expectancy among students for maze performance of rats (Rosenthal & Fode, 1963; and Rosenthal, 1966). Experimenter bias seems so potent that undergraduate experimenters, who were led to expect facial pictures to elicit failure responses from subjects, obtained these responses even when the faces were neutral (Rosenthal & Fode, 1966).

Similarly, experimenters, who were induced to expect their subjects to perceive animal percepts from inkblots, achieved significantly more of those responses (Masling, 1965). All of these studies tend to support the presence of a self-fulfilling prophecy at work among people expecting specific types of performance.

It should also be noted that induced rather than natural expectancy was the focus of some of these studies (Masling, 1965; Rosenthal & Fode, 1963; and Rosenthal, 1966).

Due to increased public interest in student failure, the field of education, in recent years, has seen many studies carried out in the area of teacher expectancy and student achievement (Claiborn, 1969; Goldsmith & Fry, 1971; José & Cody, 1971; and Rosenthal & Jacobson, 1968). Student failure may have causes ranging from physical disability to motivational factors; however, the preponderance of failure among children of lower socio-economic
families has caused educators and psychologists alike to search for further answers (Goldstein, 1967; and Rosenthal & Jacobson, 1968).

Meanwhile, the Title Acts of the United States Department of Health, Education, and Welfare, have tried to alleviate some of the failure, especially cumulative academic regression of lower socio-economic status children (Haryou, 1964). This has been attempted by providing more money and facilities to schools serving ghetto areas of American cities.

Despite studies carried out in attempts to ascertain reasons for student failure, little concrete evidence has emerged as to the contribution of different factors to the cumulative academic deficits of lower class children. However, there appears to be diverse theories as to the reasons for this cumulative deficit (Clark, 1963; Connant, 1961; Goldberg, 1963; Hines, 1964; Landers, 1964; Passow, 1963; Ravitz, 1963; Riessman, 1962; and Sexton, 1961).

Three major theories of student underachievement have emerged. These theories emphasize genetic, environmental, and teacher expectancy factors, of which teacher expectancy has received major study effort in recent years (Deutsch, 1963; Hyman, 1959; Persell, 1977; Riessman, 1962; and Wilson, 1970). It has been argued that teachers, being mostly of middle class background, tend to expect less of lower socio-economic children because of language,
values, and attitudinal differences in the classroom. These conflicts in turn lessen the achievement of poor children (Persell, 1977). It is felt that the disadvantaged child comes to school without the prerequisite conceptual and educational skills to achieve and that, despite sincere efforts, teacher expectancy assists in accumulating an academic deficit rather than in alleviating student problems.

Studies dealing with teacher expectancy proliferated after the Rosenthal and Jacobson (1968) Oak School Study, which dealt with induced expectancy effects for student intellectual growth. The positive results seem to have placed expectancy in a scapegoat position since people felt that here was the solution to many of the school's problems. Several replications and partial replications of the Oak School Study (Claiborn, 1969; Conn, Edwards, Rosenthal, & Crowne, 1968; Goldsmith & Fry, 1971; José & Cody, 1971; and Pedula, 1977) have found both significant and non-significant effects for expectancy and student intellectual growth.

It is important to note that some of these studies had questionable success in inducing expectations (Claiborn, 1969; and Goldsmith & Fry, 1971). José and Cody (1971) suggest that their induction was not successful and therefore the hypothesis of teacher expectancy affecting student intellectual growth cannot be disproven by such studies.
A point which needs clarification here is that of the difference between induced and natural expectancy. The two are different in that induced expectancy is a construct of the experimenter who is attempting to supercede the expectation that teachers already have for students with whom they are acquainted, while natural expectancy arises out of teacher-student contact and acquaintance.

The problem of inducing expectancy, among teachers and students who are well acquainted, is that of ensuring induction success. In most cases teacher-student familiarity may have "pegged" the student for academic performance to such an extent that the induction does not work. If the student is previously unknown to the teacher, then there is a much greater chance of induction success.

It has been shown that natural expectancies and their effects on academic achievement are quite common (Cahen, 1966; Flowers, 1966; Palardy, 1969; Seaver, 1971; Shrank, 1968; and Tuckman & Bierman, 1971) though expectancies may not affect student IQ gain. Induced expectancy studies, like that of Rosenthal and Jacobson (1968), attempted to demonstrate induction effects on student IQ gain but subsequent replication studies (Claiborn, 1969; Evans & Rosenthal, 1969; and José & Cody, 1971) failed to attain significant effects. However, induced expectancy does affect academic achievement (Baker & Crist, 1971;
The Expectancy Effect and its Mediation

Teacher natural expectancy, based on student factors such as sex, personality, socio-economic status, race, intelligence, and attractiveness has been shown to be related to subsequent achievement scores (Lockheed, 1976). Even though the correlation between expectancy and subsequent achievement may be low, when compared to IQ effects on achievement, it is still substantial enough that expectancy should not be overlooked as one of the determinants of student success or failure (Lockheed, 1976; and Clickman, 1976).

The presence of expectancy and subsequent achievement of the expected performance by students has led researchers on a quest for clues to the mediation of expectancy. Teachers may, in essence, verbally tell students what is expected of them but other expectations may be more subtly conveyed. These expectancies may be transmitted through facial expressions, gestural movements, vocal inflections, eye contact, and body contact (Ekman, Sorenson, & Friesen, 1969; Efron & Foley, 1947; and Kramer, 1963). Classroom structure and the placement of students, for example, may communicate expectancy (Adams & Biddle, 1970; Jackson, 1968; and Rist, 1970).

Non-verbal cues may indeed become more significant than verbal remarks as pupils attempt to ascertain
teacher feelings and attitudes from various cues. Pupils may discern incongruence between simultaneous teacher vocalized response and teacher attitudes by observing non-verbal behaviors (Galloway, 1977). The real impact of visual and audio cues, as they relate to the mediation of expectancy, is not clearly understood; however, it is suggested that the mediation of interpersonal biases occurs simultaneously at many different levels (Sheppard, 1978).

Factors Affecting Expectancy

Teacher expectancy is affected by many characteristics of the student and not all teachers are affected to the same degree by these characteristics or even by the same characteristics.

It has been shown that student race has a definite effect on teacher ratings of student achievement (Buford, 1973; Guskin, 1971; Harvey & Slatin, 1975; Henderson, 1973; Jensen & Rosenfeld, 1973; Pugh, 1974; and Williams & Whitehead, 1971). Such studies have shown that teachers expect higher performance from whites than from blacks. Often such expectation for whites are inappropriately high when compared to student IQ and previous academic achievement. The Jensen and Rosenfeld (1973) study showed that teachers expect highest for whites, next for blacks, and lowest for chicanos. In addition to these race biases, it has been indicated that language practices of ethnic children, when presented to teachers for evaluation, cause a
significant difference in teacher ratings and expectancies for students (Baratz & Baratz, 1970; Dillar, 1972; Jensen & Rosenfeld, 1973; Labov, 1973; and Williams & Whitehead, 1971). These studies suggest that race is a powerful determinant of teacher expectancy and of student achievement in our present-day world.

Physical characteristics of students such as attractiveness, when studied, have been shown to be significantly related to teacher predictions of student behavior (Clifford & Walster, 1973). Similarly, such factors of personality as attentiveness (Willis, 1973) and conduct (Adams & Lavoie, 1974) have indicated expectancy effects for student achievement.

There are indeed sex differences in achievement in that boys excel in gross motor movements, mechanical comprehension, spatial orientations, analytical ability, and quantitative reasoning, whereas girls excel in perceptual speed, perceptual accuracy, manual dexterity, memory, numerical computation, and verbal fluency (Anderson, 1972). However, girls tend to excel in scholastic achievement in early school grades but are surpassed by boys in almost all aspects in subsequent years. It appears that in high school girls are underestimated due to sex stereotyped expectancies while boys are overestimated in grade assessments. There appears to be a negative societal attitude towards female achievement (Anderson, 1972; Finn, 1972; Abramowitz,
Abramowitz, Jackson, & Gomes, 1973; and Goldberg, 1971).

Studies of teacher expectancy related to sex indicate that teachers hold higher expectations for boys in terms of student work habits and attitudes toward school (Adams & Lavoie, 1974). It has also been advanced that teacher evaluation of a (stimulus) female's competence is a function of attractiveness of the stimulus and sex role interests among both male and female subjects (Thornton & Linnstaedter, 1975). In the same light, sex bias and sex role stereotyping, in selection of candidates for programs, has been shown to plague vocational educators (Beach, 1977).

Studies of student social class, though few in number, have indicated that teacher expectancy is affected by that student attribute. Student perceptions of teacher feelings toward them indicate that teacher expectancy, when inferred from student percepts, is strongly related to social class (Davidson & Lang, 1960).

Studies of teacher behavior toward different socio-economic groups show that teachers of lower socio-economic status students deviated more from prescribed curricula to attend to non-academic problems of students (Brophy, Evertson, Crawford, & Sherman, 1975).

Investigation of teacher placement of students in groups has indicated misplacement of significant numbers of students based on social class variables and not ability, achievement, or work habits (Davis, 1974; and
Rist, 1970). Rist (1970) followed Kindergarten children from day one to the end of Grade Two, only to find that children remained in the same groups virtually regardless of increases in their performance.

In attempts to assess the effect of teacher expectancy as related to social class, it was discovered that teachers rated middle and lower class hypothetical children significantly different. This difference was based solely on social class data (Goodwin & Sanders, 1969; Harvey & Slatin, 1975; and Schwartz, 1965). In these studies teachers estimated potential academic and behavioral achievement whereas a study was needed that had teachers assess the real performance of students.

A study was needed since Schwartz (1965) did not include the student descriptions in her report, thus giving the reader absolutely no idea of how the descriptions read. Certain factors, in the descriptions, may have biased the results by affecting subjects' ratings of the hypothetical children. Also, the subjects, who rated both low and middle class descriptions, may have guessed the nature of the study. It is also possible that multiple treatments may have interfered with the subjects' ability to rate the descriptions. A study, which controlled for the effects of multiple treatments, was indeed warranted.

It was shown (Harvey & Slatin, 1975) that teachers of more experience, more easily prejudged the social
class of students without sufficient information to allow for accurate assessment. This compounding factor should be more closely studied to assess the interactive effect of teaching experience with teacher expectancy.

It seems clear that teacher expectations are affected by student socio-economic class. However, whether or not such expectations have a direct effect on student performance and on teacher evaluation of achievement is much more equivocal. The degree of relationship between teacher expectancy and student achievement needs to be studied in order to assess the magnitude of the effect of social class differences on subsequent achievement via teacher expectations.

Studying the degree of effect of socio-economic status, as one of the factors affecting achievement, cannot help but provide a clearer picture of the effect so that it might be fitted into the overall study of expectancy and student achievement.

This study was designed to assess the effects of student socio-economic status on teacher evaluation of student academic performance. Hypothetical students with identical case histories, except on socio-economic status, were presented to teachers in such a way that only expectancy and social class varied. No attempt was made to modify teacher expectancy but rather to present students, previously unfamiliar to the teachers, and to
measure the effect of teacher expectancy derived from biographical data presented. The study also compared inexperienced teachers and experienced teachers in an attempt to determine the effect of teaching experience on teacher expectancy.

This study contributes much to a clearer understanding of the intensity of the effect of one of the factors which affect teacher expectancy and, in turn, affect teacher evaluation of student performance. In determining significant levels of effect, a study of this sort has ramifications for teachers in all disciplines. One may have excellent instructional facilities and more than adequate testing devices, but to what avail are they if teachers make negative subjective assessments, of a significant nature, based on student socio-economic status?

**Hypotheses**

The hypotheses tested in this study were:

1. There is no significant difference between teacher (both senior education students and experienced teachers combined) assessments of a Grade Seven boy of low socio-economic status and a Grade Seven boy of middle socio-economic status on a sample of student performance on a Grade Seven Social Studies quiz. Ho: $\mu_1 = \mu_2$
2. There is no significant difference between senior education students' and experienced teachers' assessments of a Grade Seven boy's performance (both low and middle socio-economic status combined) on a Grade Seven Social Studies quiz. \( H_0: \mu_1 = \mu_2 \)

3. There is no significant interaction between teacher experience and student social class when teachers assess a Grade Seven student's performance on a Social Studies quiz.

**Summary**

This chapter has provided an introduction to the area, a statement of purpose, a rationale for the study, as well as specifying the null hypotheses. In Chapter II the writer presents a detailed examination of the pertinent literature, and Chapter III serves to illustrate the research design and methodology used in the study. Chapter IV presents an in depth look at the results of the testing of hypotheses and a discussion of these results appears in Chapter V.
CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents a detailed review of the related literature with a focus on the following areas: the phenomenon of expectancy, expectancy mediation, and teacher expectancy. The section on teacher expectancy deals with the relationship between expectations and such variables as: student sex, student intelligence, race, attractiveness, personality, language practices, and socio-economic status.

The Phenomenon of Expectancy

In today's society, people, more often than not, tend to do what is expected of them. Much of human behavior is governed by widely shared norms or expectations that make possible the prediction of individual behavior in given situations. However, because of human differences it is much easier to predict behavior if we have some knowledge of an individual's behavioral history. Indeed, we may be able to go further and say that the sheer prediction of behavior may increase the accuracy of that prediction. This occurs because the prediction itself, through the manipulations of the predictor, becomes a
factor in determining the behavior of others (Festinger, 1957; and Kelley, 1950). This phenomenon has been labeled "self-fulfilling prophecy" or the "expectancy effect."

Considerable evidence exists to demonstrate the presence of an expectancy effect where the behavior of others, or the anticipation of behavior, is, in part, a determinant of any subsequent performance. Kelly (1955) feels that human behavioral processes are a product of the anticipation of events rather than solely a reaction to events. This belief is shared by Allport (1950) who theorized that one's expectation for behavior is communicated to the subject who reacts by eliciting the expected behavior. This response leads to the reinforcement of one's original expectations and an increased communication of expectancy follows. Thus, there may be a mutually reinforcing system operating between humans characterized by a closely knit feedback process.

As early as the turn of the century, the expectancy effect was demonstrated for increased performance among key punch operators (Jastrow, 1900). Workers, who were told their expected peak performance, attained only that level and had psychological difficulties when attempting higher performance. However, workers, who were not given a peak requirement, tended to surpass the other workers with ease.
Further evidence was provided when hospital staff were led to expect improvement for patients receiving placebo drugs. Seventy per cent of the patients receiving the pseudo drugs were felt to be helped by these drugs (Loranger, Prout, & White, 1961). Subsequent studies (Goffman, 1961; Stanton & Schwartz, 1954; and Zussman, 1957) have adequately supported such findings.

Carlsmith and Aronson (1963) shed some light on the power of expectancy when tasters, who expected certain kinds of taste, tried to match the actual taste to the expectancy. Other subjects became more satisfied with unpleasant task performance over pleasant task performance when the former was expected (Aronson, Carlsmith, & Darley, 1963). Even with animals, human subjects perceived better performance when they were led to believe rats were "bright" rather than "dull" (Rosenthal & Fode, 1963).

Again, in the area of experimenter bias, students in introductory psychology courses perceived expected failure or expected success in pictures of neutral faces. These perceptions were dependent on bias communicated by the experimenters (Rosenthal, 1966). Somehow, through subtle means, the experimenters conveyed their expectations to their subjects.

In a similar type of study, experimenters who were led to expect their subjects to perceive animal percepts from inkblots, gained more of the expected responses than
Expectancy Mediation

The mediation of expectancy has indeed proven to be a complex phenomenon and not, as yet, fully understood. It is believed that expectancy is communicated through non-verbal cues such as: gestural movements, facial expressions, eye contact, and body contact (Ekman, Sorenson, & Friesen, 1969; and Kramer, 1963). Galloway (1967) feels that non-verbal cues may, indeed, become more significant than verbal cues if we attempt to discern feelings and attitudes from these cues. However, the impact of non-verbal cues on the mediation of expectancy is not completely understood.

People seem to glean, from the situation, the expectancy of others and in turn try and accommodate that expectancy. There appears to be a desire among humans to behave in expected rather than unexpected ways. Often, cognitive dissonance is experienced when our expectations are too discrepant from what actually happens. The elimination of dissonance is achieved through discarding the original performance and replacing it with a more acceptable level (Festinger, 1957). This theory agrees with those of others who feel that humans desire an acceptable level of stability and predictability in their everyday world (Allport, 1950; Kelly, 1955; and Rotter, 1954).
Teacher Expectancy

Classroom teachers are not immune to the hazards of such a phenomenon as the expectancy effect. In their classrooms, teachers are subject to many perceptions of students which in turn create certain expectancies for student behavior and achievement. These expectancies are communicated to students who may or may not respond. The following sections examine teacher expectancy, factors affecting it, and how expectancy affects student achievement.

Sex of Student

Sex differences exist for performance among boys and girls and are exemplified by the fact that boys tend to excel in gross body movements, mechanical comprehension, analytical ability, spatial orientation, and quantitative reasoning, while girls perform better in perceptual speed, perceptual accuracy, memory, manual dexterity, verbal fluency, numerical computation, and language mechanics such as grammar and spelling (Anderson, 1972). Girls consistently excel in academic achievement (Borich & Peck, 1977) throughout earlier school years only to be surpassed by boys in subsequent years. This difference is carried over into all aspects of occupational and career achievement. From this pattern we also see that women are more predictable in their performance than men because their
academic achievement is more closely associated with their intelligence and ability scores while male performance is more variable (Anderson, 1972). One of the reasons for this phenomenon might be that teachers hold higher expectations for boys over girls for academics (Abramowitz, Abramowitz, Jackson, & Gomes, 1973; and Finn, 1972), work habits, and attitudes towards school (Adams & Lavoie, 1974). Boys' performance has also been shown to be evaluated more highly than that of girls (Finn, 1972).

In a study of sex differences in teacher-student interaction, Cosper (1977) discovered that female teachers called on more boys than girls and that boys were freer to move around the classroom than were girls. Post-interviews revealed that female teachers felt more able to establish rapport with boys.

In a similar study (Fagot, 1977), teachers interacted more with boys engaging in masculine preferred tasks and girls in feminine preferred tasks, thus indicating a definite sex biasing effect among classroom teachers.

Further studies (Goodwin & Sanders, 1969; and Williams, 1975) have shown that sex, among other characteristics, is significantly related to teacher expectancy and teacher behavior. Teacher evaluation of a stimulus person's competence was also found to be a direct function of attractiveness and sex role interests among both male and female subjects (Thornton & Linnstaedter, 1975).
Society at large appears to condone and reinforce such sex role stereotyping as evidenced by vocational schools' practice of sex biases in their selection of students for school programs (Beach, 1977).

**Student Intelligence**

It appears the most extensively studied area of expectancy is related to the effects of student intelligence on teacher behavior and subsequent student achievement. The most predominant of these studies is that of the Rosenthal and Jacobson (1968) Oak School Study in which teachers were induced to expect selected children to become "academic" bloomers. Subsequent assessment of student IQ gain showed that the control group gained eight points in IQ and the experimental group gained 20 IQ points. The experimenters saw this as evidence of a significant expectancy effect. It was also shown that younger children bloomed more than older children.

The findings of the Oak School Study have since been questioned (Claiborn, 1969; Elashoff & Snow, 1971; and Thorndike, 1968) on several points of procedure such as sampling, data analysis, overdramatization of evidence, misleading tables, maturational problems, and erroneous conclusions. Rosenthal and Rubin (1971) have successfully rebutted some of the attack but the central criticisms, of poor sampling and data analysis, tend to remain (Elashoff & Snow, 1971). However, the Rosenthal and Jacobson
research has stimulated several attempts at replication and partial replication.

In one such study (Claiborn, 1969), teachers were led to believe certain students would show much intellectual progress during the latter part of a school year. Results showed that teacher expectancy did not influence Flanagan's Test of General Ability (TOGA) post-test scores. The reason for negative findings, in this case, may be the fact that the induction was carried out in the spring, as in an earlier study (Pitt, 1956). Teachers would have already been too closely associated with the students for the induction to have an effect.

When another study (José & Cody, 1971) failed to attain significance for IQ gain, the experimenters suggested that the lateness of induction and its lack of success was the reason for the results obtained.

Other studies ran into the same problem of induction failure (Anderson & Rosenthal, 1968; Conn, Edwards, Rosenthal, & Crowne, 1968; Evans & Rosenthal, 1969; Fleming & Anttonen, 1971 (a & b); and Goldsmith & Fry, 1971). In the Goldsmith and Fry (1971) study, the experimenters were dubious of the results so a post hoc questionnaire was conducted and results showed that less than half of the teachers had believed the induction. This illustrates the extreme difficulty of inducing an expectancy for students with whom the teacher is acquainted and who may already have been "pegged" for performance (Pedula, 1977).
In studying experimenter induced expectancy effects on student achievement as opposed to effects on student intelligence gain, it was shown that induced expectancy did not affect student performance on the Stanford Achievement Test (SAT) (Dusek, 1973; and Persley, 1973). The experimenter interpreted these findings as evidence that teachers are good predictors of academic potential and do not bias the education of their children. Again, the success of the expectancy induction can be questioned as in earlier studies of IQ gain. The induction of expectancy is so precarious that some studies have found significant effects for one group and not for another (Flowers, 1966). Negative results tend to suggest that attempts to induce teacher expectations will fail if induction is too discrepant from observed behavior (Jeter, 1975).

Source credibility can also be an important factor in teacher acceptance of the expectancy induction. The opinions of the experimenter may not be as highly held as those of the school principal or another teacher (Jeter, 1975). Hence, failure to induce may be the cause of negative results rather than a failure of the expectancy to affect behavior.

**Teacher Behavior and Student Intelligence**

Much research has derived significance when studying the effects of expectancy for students on teacher behavior toward these students. A good point about these studies is
that natural expectancy, arising out of teacher-student acquaintance, was used rather than experimenter induced expectancy. Natural teacher expectations for "bright" and "dull" students were acquired (Brophy & Good, 1970; Good, 1970; Haberman, 1970; Jeter & Davis, 1973; Kranz, P., Weber, W., & Fishell, K., 1970; and Rothbart, Dalfen, & Barrett, 1971) and subsequent teacher-student interactions were studied using Bale's, Flander's, or Brophy and Good's systems of interaction analysis. Teachers were found to spend more time with "bright" students (Good, 1970; and Haberman, 1970) and to vary the quality of interaction (Brophy & Good, 1970) while Kranz, P., Weber, W., & Fishell, K. (1970) found that more substantive behavior, more positive appraisal, and more total teacher behavior was afforded to students of higher academic potential.

Beez (1970) found that tutors attempted to teach more symbols to "bright" preschoolers (labels randomly assigned) than to low ability children and that they rated "bright" students more favorably following the sessions. Caution should be observed here in that tutoring is indeed different from classroom teaching where teachers do not have time to attend to individual needs as a tutor might (Elashoff & Snow, 1971). However, it can be said that teacher behavior is indeed affected by the intelligence of the student even though it has been difficult to show that student IQ gain is directly affected by teacher expectancy.
Academic Achievement and Student Intelligence

Considerable more success has materialized with teacher expectancy and student academic performance studies than with expectancy and student IQ gain. Girls, enrolled in a special training program for institutionalized delinquents, showed significantly better performance for high expectancy over low expectancy groups on objective academic tests (Meichenbaum, Bowers, & Ross, 1969). Classroom observations also revealed that the "bloomers" significantly improved over the control group in terms of appropriate behavior.

College freshmen were randomly divided into high and low ability groups and teachers were informed that the groupings were appropriate. Test and course grade results showed that the highest and lowest groups differed significantly (Shrank, 1968). Similarly, teachers, when given randomly selected students placed in an unwarranted high ability group, referred greater numbers of the higher group students to higher group status for the following year when compared to referrals of regular students (Tuckman & Bierman, 1971).

Turning to a different type of research (Palardy, 1969), teachers filled out questionnaires indicating their opinions of student reading success. Teachers, who expected boys' success to equal girls', were matched with those who expected boys' success to be less than girls'.

Results showed that boys in the latter group scored much lower than girls in both groups on the SAT Primary Battery, Form X. These findings suggest possible differential reading achievement related to teacher expectancy.

Interestingly, archival records were used to compare the achievement of students with "good" or "bad" older siblings, depending on whether or not the same teacher had taught both students (Seaver, 1971). Grouping was based on student IQ, achievement test scores, and grade point average. It was shown that younger siblings of older "good" siblings scored higher when assigned to the same teacher and younger siblings of older "bad" siblings scored lower when taught by the same teacher. It is interesting to note that this study did not use contrived experiences but rather looked at real effects in totally natural situations.

Race

Jensen and Rosenfeld (1973), studied teacher evaluation of student ethnicity and social class with different modes of presentation of cues. Results showed that Anglos were rated most positively, blacks next, and chicanos last. In a similar study it was found that, when compared to the experimenter's own predicted achievement which was computed from cumulative records, teachers predicted greater achievement for Anglo-American students than was warranted (Buford, 1973). Teachers also underexpected for Mexican-Americans and blacks. When photographs were used for
teacher estimation of black and white student potential (Harvey & Slatin, 1975), visual cues were sufficient for teachers to predict white children's success and black children's failure. These findings have found credence in studies by Guskin (1971), Pugh (1974), and Williams and Whitehead (1971).

Interaction between teacher background and such student variables as test scores, classroom activity, race, and socio-economic status, in determining teacher expectations for first grade children, appears to cause teachers to rate low scoring blacks lower than low scoring whites (Henderson, 1973). An interesting finding is that blacks were rated lower than whites by both black and white teachers. This information suggests a possible racial bias in both black and white teachers toward black students.

There is some evidence indicating that race does not affect teacher assessment of students (Deitz & Purkey, 1969; and Roeber, 1970). In one of these studies (Deitz & Purkey, 1969), a hypothetical boy was described with a full resumé of his socio-economic status, academic standing, and discipline record. In the experimental group description, the word "Negro" was substituted for the word "boy." Results showed a non-significant difference between mean ratings and the authors concluded that the results threw into doubt the "assumption that teachers enter the classroom with differential expectation levels for students
based on the variable of race" (Deitz & Purkey, 1969, p. 694). However, these findings are questioned on the grounds that the description sheet, which was not presented with the report, may have "minimized the salience of race for teachers" (Persell, 1977, p. 102). Further evidence of this sort would be needed in order to refute the contention of race effects on expectancy.

**Attractiveness, Personality, and Language Practices**

Physical attractiveness of students has been shown to be unrelated to expectancy with moderately attractive students (Adams & Lavoie, 1974) while another study (Clifford & Walster, 1973) found attractive female students to be rated more positively for achievement by their teachers. More study is needed to clarify this situation.

Factors of personality such as attentiveness (Willis, 1973) and conduct (Adams & Lavoie, 1974) show significance of effects on teacher prediction of achievement.

Ethnic and class language practices, when evaluated on a language scale, have indicated that teachers stereotype students on the basis of class and ethnic specific language differences even when audio cues alone are presented (Rosenfeld, 1973). Language habit differences as a deficit in student-teacher relationships has been indicated by others in the field (Baratz & Baratz, 1970; Dillard, 1972; Labov, 1973; Persell, 1977; and Williams & Whitehead, 1971).
Socio-Economic Status and Expectancy

While some evidence exists to the contrary (Brown, 1970; and Long & Henderson, 1974), it is generally reputed that socio-economic status is one of the most powerful personality-social structure variables influencing educational achievement (Deutsch, 1963). Teachers not only expect less for lower class children, but they are also offended by lower class student behavior and tend to transfer out of lower class schools (Becker, 1952).

Studies of teacher behavior toward students, through interaction analysis, have indicated that teachers of higher social class students are eager, businesslike, and focus on the curriculum. Teachers of lower class groups are faced with student fear, anxiety, and alienation problems. They try to combat student fears with patience and determination while deviating extensively from the curriculum (Brophy, Evertson, Crawford, & Sherman, 1975). It is interesting to note that teachers can be very supportive of students while at the same time expecting less performance from them. However, when student perceptions of teacher feelings toward them were studied (Davidson & Lang, 1960), results indicated that children of middle and upper class groups perceive more favorable teacher feelings than those in lower class groups.

Placement of students in ability groups has presented evidence to the effect that significant numbers
of students are placed in groups not congruent with diagnostic test scores (Davis, 1974; and Rist, 1970). Despite the fact that teachers group students by using ability, achievement, and work habit information, misplaced students still suffer disproportionately from social class considerations.

Interestingly, the Rist (1970) study showed that group placements, which were, in this case, based on student social class and family background variables, were not reassessed at the end of Kindergarten. The same groups existed at the end of Grade Two. Rist suggests that the child's performance was not considered for Grade Two placements and that the child seemed to be "destined to remain in the same reading group" (Rist, 1970, p. 435). Evidence of this sort might indicate the power of the expectancy effect.

When we look at the prediction of both student success and academic potential, it becomes quite clear that social class affects these predictions (Cooper, Baron, & Lowe, 1975; and Goodwin & Sanders, 1969). Photographs of students presented to teachers had significant effects on the assessment of behavior categories for students of lower classes (Harvey & Slatin, 1975). Similarly, both inexperienced and experienced education students (Schwartz, 1965) rated hypothetical seven year old girls of low socio-economic status much lower than high socio-economic status girls regardless of high or low class school-in-neighborhood
combinations. Ratings were lower for both social behavior and academic potential.

Another interesting point is that teachers of more experience tend to more easily prejudge the social class of students than do teachers of less experience (Harvey & Slatin, 1965). This aspect of teacher behavior has not been adequately studied and surely, if teacher experience tends to lessen teacher sensitivity to the alleviation of social class problems, it needs to be evaluated more closely. If such a phenomenon exists, teachers should indeed be made aware of its existence and its negative potential.

The evidence presented has shown that teachers expect less for lower class children when compared to higher class children; however, the magnitude of effect has not been discussed. Lockheed (1976) suggests that teacher expectancy might vary subsequent student performance by at least one standard deviation. If expectancy can have such an effect, a more careful look at the phenomenon is warranted.

Schwartz (1965), in her study of hypothetical low and middle class girls, suggests replications of that study which attempted to control for social class variables affecting teacher expectancy. The present study attempted to seek the magnitude of the expectancy effect through the presentation of hypothetical boys. The Schwartz (1965) study appears to be a nearly ideal format since the teacher had had no prior expectancies for the students. This lack
of previous expectancy indeed assists in the preservation of as natural an expectation as possible. There was no attempt to change teacher expectancy and this method appears to be desirable since it is easier to create opinion than to change it (McCloskey, 1967).

Summary

Chapter II has presented a detailed examination of the literature related to the phenomenon of expectancy. It was shown that people respond to very subtle expectancies and that quite often people are not aware that any expectancy is being demonstrated. The research has also shown that expectancy is mediated through various media and often without the conscious intent of the mediator.

The research has demonstrated that factors affecting teacher expectancy include student:sex, intelligence, prior academic achievement, race, attractiveness, personality, language practices, and socio-economic status. Socio-economic status, however, has received special attention since it is the focus of the present research.

The presentation of literature has been made in an attempt to provide an empirical basis for the present research while developing a sound theoretical base for a study into the effect of student socio-economic status on teacher evaluation of student academic performance.
CHAPTER III

METHODOLOGY

Chapter III presents a detailed description of the methodology used in the study, including: research design, sample, instrumentation, validity and reliability, procedure, analysis technique, and limitations of the study.

Research Design

Two primary independent variables were treated in this study. The first was student socio-economic status which was manipulated to be low or middle class. The second variable, teacher experience, was manipulated by selecting two groups of subjects with different levels of experience.

Both main and interactive effects of the independent variables on the dependent variable, teacher assessment of student performance, were treated in a two-by-two factorial design as shown in Table 1. (Low teacher experience refers to senior education students while middle experience refers to teachers with five or more years of teaching experience.)
TABLE 1
Experimental Design

<table>
<thead>
<tr>
<th>Teacher Experience Level</th>
<th>Low</th>
<th>Middle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Socio-economic Status

<table>
<thead>
<tr>
<th>Low</th>
<th>Middle</th>
</tr>
</thead>
</table>

Dependent variable:
Teacher Assessment of Student Performance

Sample

Experienced Teachers

Letters were sent to school boards in the province of Newfoundland and Labrador, asking superintendents to furnish the experimenter with names and addresses of all teachers of Grade Seven Social Studies with five or more years of teaching experience (Appendix A). The teachers identified, from a province-wide response, were labeled "experienced teachers" for the purpose of the study. A random sample of 80 teachers was drawn from the list of teachers and 40 were randomly assigned to Group A which, of course, predisposed the makeup of Group B.

Since the study utilized a mailed questionnaire, the experimenter, while desiring sample groups of 30 each,
selected groups of 40 in order to allow for sample attrition. From the total number of questionnaires returned for each group, 30 were randomly selected for analysis. Of the total of 60 experienced teachers used in the analysis, there were 29 males and 1 female in Group A while Group B consisted of 24 males and 6 females.

In order to eliminate the possibility of teachers, in the same school, conferring on the questionnaire, only one of a group of teachers from a given school was randomly selected to be part of the population.

Education Students

Faculty of Education professors at Memorial University of Newfoundland were asked to hand out data sheets for students to complete (Appendix B). These data sheets (Appendix C) asked students of fourth and fifth year status to give their names, addresses, and telephone numbers if they had had no teaching experience. These students were made aware, by their professors, of their option to not participate in the study. Students identified in this manner were labeled "education students" for the purpose of the study.

Since the study dealt with Grade Seven Social Studies material, all education students in primary levels were eliminated from the population through use of faculty registration lists. Elementary education students were included in the sample since they were considered as being proximally close enough to the Grade Seven curriculum to be able to make
an adequate judgement of Grade Seven Social Studies materials. However, these subjects would not have been included if adequate numbers of secondary Social Studies education students had been available.

From the population of elementary and secondary education students, 80 subjects were randomly selected and 40 were assigned to Group C which, as in the case of the experienced teachers, predisposed the makeup of Group D. Again, these 40 subjects for each group were chosen to allow for sample attrition since 30 were desired for analysis purposes. Of the total number of questionnaires returned in each group, 30 were randomly selected for study purposes. Of the 60 education students used in the analysis, there were 14 males and 16 females in Group C while 13 males and 17 females made up Group D.

To prevent conference on the questionnaire, only one of the students living in the same dwelling was randomly selected for the population before the sampling commenced.

Instrumentation

Description Sheets

Two Grade Seven boys, both called Sheridan, were described under the headings of general information, personality, and family background. The descriptions were alike in all respects except socio-economic status. One student (Appendix D) was given a middle class socio-economic background, while the other student (Appendix E) was given a
lower class socio-economic background. The decision to use a middle rather than an upper class description was made because of the few numbers of these students in classrooms when compared to the numbers of middle and lower class children. It was felt that a study based on a distinction between upper and lower classes of students would have very little relevance to the classroom situation in which the majority of teachers and students work. The class differences in classrooms are not as far apart as a study of that sort would suggest and therefore the study would suffer from a lack of generalizability.

The intent was to have different groups of education students and teachers read one of the descriptions and rate the boy on a sample of academic performance. The subjects were reminded to study carefully the descriptions which intentionally emphasized socio-economic status information over the other information presented. Ratings for each boy were subsequently compared for all four groups.

**Social Studies Quiz**

A Social Studies quiz was developed on the topic of man's early discoveries of fire, the wheel, domestication, and farming (Appendix F). Four questions, which required non-specific types of higher order answers, were built into the quiz. These questions and their hypothetical answers were developed in consultation with subject area specialists. The answers were handwritten by the experimenter to suggest
The subjects were asked to keep in mind the description of the student while rating that student's performance on the quiz. The rating was done by the subject inserting a score in a space provided. The hypothetical answer was judged against a maximum score value for each of the answers. The score values given for each question were totaled for an overall score on the quiz.

**Validity and Reliability**

In order to determine whether the socio-economic descriptions, of the hypothetical boys, were sufficiently different to cause the perception of a real difference, a study of validity was carried out. The family background sections were isolated on a separate sheet (Appendix G) and 20 second-year education students were asked to rate where the description fell on a nine-category socio-economic scale (see again Appendix G).

The different levels of socio-economic status were assigned numbers from one to nine beginning with the lower-lower socio-economic category. A t-test of mean differences for dependent samples was applied to the data. The difference between ratings of the low and middle socio-economic descriptions resulted in a t-value of 82.37 which was significant far beyond the .01 level. This evidence clearly
indicates that the descriptions, when presented alone, were sufficiently different to cause a disparate perception by the subjects.

In order for these socio-economic descriptions to still have effect when competing information is presented on the description sheet, they were given more emphasis and were of greater length than the other sections. The socio-economic information was presented last on each sheet so that it might remain fresher in the subject's mind.

Every rating of the middle class child was at a level of upper-middle class and above, while all ratings of the lower class child were at a level of lower-middle class or below. Since these ratings were consistently different across the sample, the instrument was considered as reliable.

**Procedure**

A week before the questionnaire was mailed to the subjects, all of them were contacted by letter and informed of the need for their cooperation in the study (Appendix H).

A second letter (Appendix I) accompanied the questionnaire, and informed the subjects of the alleged purpose of the study. The letter said that the study dealt with factors relating to teacher and education student ratings of pupil performance in different areas. Subjects were told that their specific area dealt with Social Studies and how teachers graded History for Grade Seven students.
An instruction sheet (see again Appendix I) was attached to the beginning of the questionnaire telling the subjects to read the description sheets carefully and to thoroughly familiarize themselves with the student. It was suggested that they think of Sheridan as their own student and to assess his performance on the quiz with that in mind.

As previously noted, there were four groups in this study. Group A, of the experienced teachers, was presented with the lower class description while Group B received the middle class description. Among the education students, Group C received the lower class boy while Group D was presented with the middle class description (Table 2).

TABLE 2
Treatments

<table>
<thead>
<tr>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
<th>Group D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced Teachers</td>
<td>Experienced Teachers</td>
<td>Education Students</td>
<td>Education Students</td>
</tr>
<tr>
<td>Low S.E.S.</td>
<td>Middle S.E.S.</td>
<td>Low S.E.S.</td>
<td>Middle S.E.S.</td>
</tr>
</tbody>
</table>

The ratings of the descriptions were completed by the subjects and the quiz was returned by mail.

In order to ensure a better return rate, a letter of reminder (Appendix J) was sent to all those who had not replied within a month from the time the questionnaire was sent to them.
Analysis

A two-by-two factorial analysis of variance was performed for both main and interactive effects of teacher experience level and student socio-economic status on teacher assessment of student performance.

Limitations of the Study

One might argue that, because the study was limited to descriptions of boys, it lacks generalizability since a study of girls might achieve slightly different results. However, a study by Schwartz (1965) did find significant effects in this area when using girls instead of boys in the stimulus descriptions.

As far as grade level is concerned, it might be said that the present study, which was limited to Grade Seven students, may not be applicable to other age groups. It might be pointed out that one study has already shown significance of effects of a socio-economic based expectancy among teachers for predicted academic and behavioral potential of seven year old children (Schwartz, 1965).

Only two descriptions were used and the study depends on the success or failure of these resumés to sufficiently bias teachers. The extent to which the subjects attended to the socio-economic parts of the description might also be posed as an important factor in the success of the study.
Another possible weakness might be found in the fact that many of the education students were in elementary programs and came from several disciplines. These differences may create more variance for predicted scores since the subjects may not have been able to rate Grade Seven Social Studies materials as well as experienced teachers. This factor may affect the ability to compare education student ratings with those of experienced teachers.

Every questionnaire suffers from subject reaction to non-confidentiality of responses. In order to allay fears of this nature, the subjects were informed that their names need not be written on the questionnaire and that all responses would be treated anonymously (see again Appendix I, p. 86).
CHAPTER IV

RESULTS

A two-by-two analysis of variance was performed on data obtained for the four groups in this study. Table 3 presents the means and standard deviations of all groups analyzed.

TABLE 3

Means and Standard Deviations for Education Students and Experienced Teachers by Low and Middle Socio-Economic Status

<table>
<thead>
<tr>
<th>Experience</th>
<th>Education Students</th>
<th>Experienced Teachers</th>
<th>All Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} )</td>
<td>S.D.</td>
<td>( \bar{X} )</td>
</tr>
<tr>
<td>SES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>39.03</td>
<td>5.97</td>
<td>33.00</td>
</tr>
<tr>
<td>Middle</td>
<td>42.05</td>
<td>5.32</td>
<td>40.50</td>
</tr>
<tr>
<td>Total</td>
<td>40.54</td>
<td>5.81</td>
<td>36.76</td>
</tr>
</tbody>
</table>

It is immediately apparent that the lowest group mean for student performance on the Social Studies quiz was that of experienced teachers assessing a child of low socio-economic status while the highest group mean resulted from education students assessing a middle class child. This score ranges from a group mean of 33.00 to 42.05.
The results of the analysis of variance appear in Table 4.

TABLE 4

Analysis of Variance for Socio-Economic Status and Teacher Experience

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Signif. of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SES</td>
<td>832</td>
<td>1</td>
<td>832</td>
<td>18.84</td>
<td>0.000</td>
</tr>
<tr>
<td>Teacher</td>
<td>429</td>
<td>1</td>
<td>429</td>
<td>9.72</td>
<td>0.002</td>
</tr>
<tr>
<td>SES x Teacher</td>
<td>152</td>
<td>1</td>
<td>152</td>
<td>3.44</td>
<td>0.066</td>
</tr>
<tr>
<td>Residual</td>
<td>5124</td>
<td>116</td>
<td>44.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypothesis I**

An F value of 18.84 for socio-economic status proved to be significant beyond the .01 level thus indicating that socio-economic status affected teacher ratings of student academic performance. The lower class child was rated lower than the middle class child by both education students and experienced teachers. As a result of this, hypothesis I, which said that teachers do not bias their assessments of students based on student social class, was rejected at the .01 level of significance.

**Hypothesis II**

For teacher experience, an F value of 9.72 proved to be significant beyond the .01 level and indicated that
teacher ratings of student academic performance is affected by teacher experience. The experienced teachers rated both classes of children (regardless of their socio-economic status) lower than did education students. Hypotheses II, which stated that teacher experience did not affect teacher ratings of students, was rejected at the .01 level of significance.

**Hypothesis III**

From Table 4 it can be seen that the interaction of experience with socio-economic status was found to be significant at the .066 level. Such a level of significance did not meet the requirements of this study; however, the nature and direction of interaction was of importance.

![Graph](image)

**Figure 1.** Graphic representation of the mean quiz scores for both lower and middle class children, as rated by experienced teachers and education students.
From Table 3 the group or cell means were taken and plotted in Figure 1 to give some idea of the nature of the interaction. An analysis of the graph clearly shows that the interaction was ordinal and that the main effects may be safely interpreted.

Hypothesis III, which said that there is no interaction between teacher experience and student social class, was not rejected at the .01 level of significance. However, it can be seen (Table 3) that a mean of 39.03 for education students' ratings of a lower class child was more than six points greater than the mean of 33.00 for experienced teacher ratings of the same child. When this is compared to ratings for the middle class child, it appears that the mean for education students (42.05) was much closer to and within one-and-one-half points of the mean for experienced teachers (40.50). This finding might mean that, upon further investigation, experienced teachers and education students agree more closely on the performance level attained by middle class children than that of lower class children.

The mean for experienced teacher ratings of the lower class child was only 33.00 while the mean for experienced teacher ratings of the middle class child was 7.50 points higher at 40.50. This difference in group ratings decreased when education students rate low (39.03) and middle (42.05) class children. It would appear that the
major part of the differences among teacher ratings of children may have been due to the low rating given the lower class child by experienced teachers.

Summary

In summary it can be said that the lower class child was rated lower than the middle class child by education students and experienced teachers alike. Experience also appeared to cause teachers to rate children lower on academic performance when compared to education students. The interactive effect of student social class and teacher experience reached a probability level of .06 and was in the positive direction. Further investigation might show that there is a larger difference between experienced teacher ratings of middle and lower class children than between education student ratings of middle and lower class children.
CHAPTER V

DISCUSSION

The purpose of this study was to determine the degree to which student socio-economic status affects teacher assessment of student academic performance. More specifically, the research addressed itself to several questions related to student socio-economic status, teacher expectancy, and student academic performance. These questions were as follows:

1. Do teachers differentially assess a child of low socio-economic status when compared to a child of middle socio-economic status?

2. Do education students, when compared to experienced teachers, differentially assess children of both low and middle socio-economic status?

3. Is there an interactive effect such that differential assessment, by senior education students versus experienced teachers, depends on the socio-economic status of the student being assessed?

For the purpose of study four groups were chosen and compared. Two groups of senior education students were compared to two groups of experienced teachers. One group of education students was presented with a hypothetical
sketch of a lower class child while the other group received a middle class child description. The same procedure was exacted for the experienced teachers. The subjects read the student data sheet and related the child's performance on a hypothetical Social Studies quiz.

The results of this study indicate that teachers bias their assessment of students based on student social class. These results agree with the findings of Schwartz (1965) which show that regardless of whether a lower class child attended a middle or lower class school she was rated lower than the middle class child in the same school. This study also supported the view expressed by educators and social scientists that school personnel tend to expect less in achievement from lower class children than from middle class children (Brophy, Crawford, Evertson, & Sherman, 1975; Harvey & Slatin, 1975; Haryou, 1964; Persell, 1977; and Schwartz, 1965).

The question of whether lower class students achieve less well than middle class students was not at issue here since both children exhibited the same performance. If such discrepancies of assessment, as found in this study, exist when children perform at the same level then surely the treatment differential must be even further exaggerated when children exhibit achievement differences based on social class inequalities.
Do teachers disregard information such as IQ scores or do they consider them as subordinate to social class differences among children? Do they believe that the deprived socio-economic background of the child will prevent the utilization of that child's abilities? Is the conflict of class values so great that teachers are unable to see the child as he really is?

One of the problems which arises with teacher expectancy as it relates to social class is that many studies have shown that lower class children enter school without many of the experiences and skills of middle class children and that most teachers are very aware of these deficiencies. Subsequently, teachers naturally expect the deprived child to perform less well and lower standards are set for that child. The child is rewarded for achieving lower levels and he eventually settles into the pigeonhole set up for him.

So teachers expect less! Are these negative expectations realistic? Apparently not, since this study has shown that even with the same performance levels the lower class child was rewarded on a lower level than the middle class child. Even though the inadequate development of skills has never been proven to constitute a real barrier to learning, it did interfere with student academic success because of teacher attitudinal differences toward these children. If teacher attitudes toward students and
student social class affect the grade assessments assigned children, as this study seemed to indicate, then it is quite possible that the impact of such biases are felt in all areas of teacher-student interaction and should indeed be studied (Adams & Lavoie, 1974; Galloway, 1977; Brophy, Evertson, Crawford, & Sherman, 1975; and Rist, 1970).

How do we, as educators, counter such differential treatment of children when most of it may indeed be unintentional? We are faced with a compound problem. Firstly, teachers may not be aware that the situation exists and, secondly, the alleviation of unintended bias may prove to be a difficult task. One possible step may be to give workshops in which teachers are made aware of the presence of socio-economic bias. Teachers need to be taught how to detect this bias and, following that, how it may be overcome. This type of assistance may help teachers to set more appropriate standards of achievement for all of their students, regardless of background.

This study also indicated that teacher experience affected the grade assessments of students. Students were given better grades by education students than by experienced teachers. This phenomenon may be a result of education students being more idealistic than experienced teachers. Education students rate both lower and middle class students high while experienced teachers might be able to develop a truer picture of the student. Possibly,
experience causes teachers to become more demanding of students and this, in turn, creates a progressive trend in public education. Today's children are expected to know much more than those of two decades ago and, considering the explosion of knowledge, it becomes apparent that necessity requires students to acquire greater amounts of more technical information. Seen in this light, the more exacting assessment of students by experienced teachers may be desirable.

Although significance, for interaction, was only approximated in this study, there is still some indication that experienced teachers may not only give lower grades than the more idealistic education students, but they may also be more prejudiced toward the lower class child than the education students. It may be true that, with more experience, teachers become more stereotypical. However, this finding was rather equivocal and the phenomenon needs to be studied more closely in order to ascertain the nature of this type of interaction. If indeed such a phenomenon exists, then teachers may need to be informed of the interactive process of experience with stereotypical behavior.

The increase in prejudice against lower class children among experienced teachers may be the result of teachers having dealt with large numbers of children whom they have been able to fit into certain categories. As a result of this type of experience the teacher may feel
more competent in his categorization of children which may, in turn, lead to hasty decisions of which some are bound to be wrong. Teachers may need to be assisted in overcoming what may be, in most cases, unintentional differential treatment of children.

Conclusion

This writer undertook to investigate the effects of teacher expectancy for school children of lower and middle socio-economic status on teacher assessment of student performance. Some teachers were led to believe that the child they were evaluating was from a lower socio-economic background while others were led to believe that the child was of middle socio-economic status. Performance for both children was identical and education student rating of that performance was compared to that of experienced teachers.

In summary, the results confirm that student social class negatively affects teacher assessment of student performance in that children of lower socio-economic status receive lower grades than children of middle socio-economic status, for equivalent work performance. Teacher experience also affects the grade levels assigned students in that more experienced teachers give lower grades to students of both low and middle socio-economic status.

Teacher experience failed to show significant interactive effects with student social class for grade
points assessed although the approximation of significance provides some basis for speculation regarding that phenomenon.

The results of this study imply that students of lower socio-economic status families are not getting fair treatment when teachers assess their academic performance. Teachers should be made aware of this situation and attempts should be made to alleviate the problem. Further research is suggested in order to learn why teachers perpetuate such an odious practice.

Results showing experienced teachers as assessing poorer grades for lower socio-economic status children, when compared to senior education student assessments, may indicate that something undesirable has happened to teachers in their first few years in the field. Teachers should be made aware of this situation. Further research should be conducted to ascertain why such a phenomenon persists. Indeed, much more research is needed in order to understand the nature of the stereotyping of students of different social classes by classroom teachers.
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APPENDIX A

LETTER TO SUPERINTENDENTS
Dear Superintendent:

I am a graduate student at Memorial University of Newfoundland. Presently I am doing research for a Master of Education Thesis and will be requiring assistance from people in the field of Education. One group of people sampled in the research will be grade seven Social Studies Teachers with five or more years of teaching experience.

I would appreciate it very much if you would commission someone in your District Office to compile a list of names and addresses of teachers, with your Board, who have five or more years of experience in the field and teach Grade Seven Social Studies. (Either History or Geography).

In order to get this study off the ground in January, speed is of the essence. It would be appreciated if prompt attention were lent to this matter. Please send the compiled list to:

Ford Adams,
Box 8232,
St. John's, Nfld.

Thanks for your cooperation.

Ford Adams
APPENDIX B

LETTER TO PROFESSORS
Dear Professor:

Please find enclosed a number of sheets requiring data on fourth and fifth year Education Students.

I am a graduate student in Education and am doing research requiring sampling of fourth and fifth year Education Students at Memorial. Please have these sheets filled out by students in your classes.

Attach the completed sheets to the outside of your door and I will pick them up in a couple of days.

Thanks for your cooperation.

Ford Adams
STUDENT DATA SHEET

Answer these questions only if you are either a fourth or fifth year education student with no teaching experience.

Name:

Address for January through April, 1979:

Telephone:

Student Number:
APPENDIX D

MIDDLE CLASS DESCRIPTION SHEET
Description Sheet
SHERIDAN

General Information

Sheridan is a twelve year old boy who is enrolled in Grade Seven. He is 150 cm tall, weighs 41 kg and has blue eyes and blonde hair. Sheridan has a Stanford-Binet Intelligence Test score of 103; a score of 100 is considered average on the Stanford-Binet scale. He attends a new Junior High School which has approximately 400 students enrolled.

Personality

Sheridan is a pleasant child and makes friends readily. He is well behaved and his teacher reports only one incident where he had to be reprimanded for fighting on the playground with another boy. Sheridan, like many of the boys his age, is shy around the girls at school.

Family Background

Sheridan lives with his parents and his brothers, Brian, age 9 and Jeffery, age 6, in a large roomy bungalow in a new section of town. The boys' father has a degree in Commerce and is a bank manager. He earned over $30,000 last year. Their mother has a degree in Social Work but since the birth of her first child she has been a full time housewife. She feels that the children must get proper care and that she is the one to give it to them.
Sheridan's family has a mobile summer home and frequently takes summer vacations outside the Province. Sheridan has a trail bike and Brian has a Mini-Bike. All of the children are members of a local boys' tennis club. They appear to be better dressed than many of their classmates.

Please turn to the next page and assess Sheridan's performance on the History Quiz.
APPENDIX E

LOWER CLASS DESCRIPTION SHEET
Description Sheet
SHERIDAN

General Information

Sheridan is a twelve year old boy who is enrolled in Grade Seven. He is 150 cm tall, weighs 41 kg and has blue eyes and blonde hair. Sheridan has a Stanford-Binet Intelligence Test score of 103; a score of 100 is considered average on the Stanford-Binet scale. He attends a new Junior High School which has approximately 400 students enrolled.

Personality

Sheridan is a pleasant child and makes friends readily. He is well behaved and his teacher reports only one incident where he had to be reprimanded for fighting on the playground with another boy. Sheridan, like many of the boys his age, is shy around the girls at school.

Family Background

Sheridan lives with his parents and his brothers, Brian, age 9 and Jeffery, age 6, in an old two storey house without proper insulation and a floor furnace is the sole source of heat.

Sheridan's father left school with only a Grade Six education and has had trouble getting jobs because of this, especially in late years. He is now a truck driver for a local trucking company and last year his total income was less than $9,000.
Sheridan's mother left school in Grade Eight to get married and has been a full time housewife since that time.

The family does not get much of a chance to take a good vacation and the boys spend most of their summer playing street hockey. The children are clean, though poorly dressed, when compared to the rest of their classmates.

Please turn to the next page and assess Sheridan's performance on the History Quiz.
APPENDIX F

SOCIAL STUDIES QUIZ
History Quiz

Grade Seven

Topic: Discoveries

Section A. Answer all questions. Value 15

1. Pretend that man never discovered fire. Tell at least three ways in which life would be different for people.

If we didn't have fire we couldn't live here in Newfoundland. It would be too cold and we wouldn't have any way to cook our food. Iron is melted with fire and that is how we get our cars. What would we do with all the roofs if we didn't have cars and trucks?

Score

Value 15

2. Suppose we did not know about the wheel. Discuss three ways or more in which man's development would have been different.

If people in the old days did not have any wheels they would not have been any carts to ride on. I am sure we wouldn't have cars and machines if there were no wheels. All the factories even the shipbuilders are made with all kinds of wheels because I went with dad to one in Marytown one time.

Score
3. Man has taken wild animals and reared them himself. Write about several ways in which this affected his food supply.

In the old days he had to hunt animals but when he learned to look after them he didn't have to hunt them. If all the people in the world still killed wild animals there would be none left and we would have to eat all bread or something. Now we can have plenty meat because we look after the cows, pigs, and chickens.

Value 15

4. People used to hunt and gather food but today most countries farm in order to get food. Tell about several ways in which farming has affected people's development into large societies.

If we still went from place to place looking for food we wouldn't be able to live in the cities. Farming lets us stay in one place and not run around looking for food. If we had to gather plants from the woods in Newfoundland we wouldn't live very long. My grandmother grows potatoes and turnips every summer.

Value 15

Please detach the Quiz from the other sheets and return to me in the self-addressed envelope.

Thanks for your cooperation.
APPENDIX G

ISOLATED FAMILY BACKGROUND

SHEET AND CHECKLIST
Description Sheet

Family Background (A)

Sheridan lives with his parents and his brothers, Brian, age 9 and Jeffery, age 6, in a large roomy bungalow in a new section of town. The boys' father has a degree in Commerce and is a bank manager. He earned over $30,000 last year. Their mother has a degree in Social Work but since the birth of her first child she has been a full time housewife. She feels that the children must get proper care and that she is the one to give it to them.

Sheridan's family has a mobile summer home and frequently takes summer vacations outside the Province. Sheridan has a trail bike and Brian has a Mini-Bike. All of the children are members of a local boys' tennis club. They appear to be better dressed than many of their classmates.

Family Background (B)

Sheridan lives with his parents and his brothers, Brian, age 9 and Jeffery, age 6, in an old two storey house without proper insulation and a floor furnace is the sole source of heat.

Sheridan's father left school with only a Grade Six education and has had trouble getting jobs because of this, especially in late years. He is now a truck driver for a local trucking company and last year his total income was less than $9,000.
Sheridan's mother left school in Grade Eight to get married and has been a full time housewife since that time. The family does not get much of a chance to take a good vacation and the boys spend most of their summer playing street hockey. The children are clean, though poorly dressed, when compared to the rest of their classmates.
CHECKLIST

The descriptions you have before you are going to be given to teachers and education students as part of a study which attempts to assess how teachers grade students based on social class differences.

In order to determine whether or not these descriptions are sufficiently different to cause teachers to see a social class difference, I have come to you for help. Any information received from you is totally confidential in the sense that no identification accompanies your response.

Please read the Family Background sections A and B and then rate where you think these students lie on the socio-economic scale below.

<table>
<thead>
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<th>Class</th>
<th>Check (✓)</th>
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</thead>
<tbody>
<tr>
<td>Description A</td>
<td>Description B</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Lower-Lower</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX H

LETTER TO SUBJECTS
Dear Teacher/Student Teacher:

I am a graduate student at Memorial University of Newfoundland. Presently I am doing research for a Master of Education Thesis and will be requiring assistance from people in the field of education. I would appreciate it if you would help me in this study.

In a week I will be sending you material dealing with teacher ratings of student performance in subject areas.

Please consider this study as being of the utmost importance to the experimenter. I would greatly appreciate it if you promptly judged the material and returned it to me.

I have written you beforehand in hopes that you will not place the materials aside when you receive them. I do need your help.

Thank you for your cooperation.

Sincerely,

Ford Adams
APPENDIX I

SAMPLE QUESTIONNAIRE
Dear Teacher/Student Teacher:

As I indicated to you in my previous letter, I am hopeful that you will consent to participate in my research project. Your participation will involve nothing more than the completion of the enclosed task and I can assure you that there will be no further involvement. In fact, since all of the responses in this study will be analysed as group data, your response will be treated anonymously. Of course, as you can appreciate, your reply sheet has a number solely to permit me to contact those who fail to reply.

This study deals with factors relating to teacher and student teacher ratings of student performance in different areas. Your specific subject area deals with Social Studies and how teachers grade History for Grade Seven Students.

The following pages contain an instruction sheet and other relevant materials that are related to my topic. I would greatly appreciate it if you would complete the pages and return them to me in the self-addressed envelope at your earliest convenience.

Thank you,

Ford Adams
Instructions

Please read carefully the student biographical information, entitled Description Sheet, found on the next page. You may want to re-read the description several times to ensure that you have thoroughly familiarized yourself with this student. Try to think of him as your own student.

After you have read the description, turn to the following page and assess the sample of this student's performance on part of a History Quiz. Score the student according to the value of each question and place your score in the block provided.
Description Sheet

SHERIDAN

General Information

Sheridan is a twelve year old boy who is enrolled in Grade Seven. He is 150 cm tall, weighs 41 kg and has blue eyes and blonde hair. Sheridan has a Stanford-Binet Intelligence Test score of 103; a score of 100 is considered average on the Stanford-Binet scale. He attends a new Junior High School which has approximately 400 students enrolled.

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Please turn to the next page and assess Sheridan's performance on the History Quiz.
History Quiz

Grade Seven  Topic: Discoveries

Section A. Answer all questions. Value 15

1. Pretend that man never discovered fire. Tell at least three ways in which life would be different for people.

If we didn't have fire we couldn't live here in Newfoundland. It would be too cold and we wouldn't have any way to cook our food. Iron is melted with fire and that is how we get our cars. What would we do with all the rooves if we didn't have cars and trucks?

Score

Value 15

2. Suppose we did not know about the wheel. Discuss three ways or more in which man's development would have been different.

If people in the old days did not have any wheels there would not have been any carts to ride on. I am sure we wouldn't have cars and machines if there were no wheels. All the factories were made with all kinds of wheels because I went with dad to one in Marytown one time.

Score
3. Man has taken wild animals and reared them himself. Write about several ways in which this affected his food supply.

In the old days he had to hunt animals but when he learned to look after them he didn't have to hunt them. If all the people in the world still killed wild animals there would be none left and we would have to eat all bread or something. Now we can have plenty meat because we look after the cows, pigs, and chickens.

4. People used to hunt and gather food but today most countries farm in order to get food. Tell about several ways in which farming has affected people's development into large societies.

If we still went from place to place looking for food we wouldn't be able to live in the cities. Farming lets us stay in one place and not run around looking for food. If we had to gather plants from the woods in Newfoundland we wouldn't live very long. My grandmother grows potatoes and turnips every summer.

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
Please detach the Quiz from the other sheets and return to me in the self-addressed envelope.

Thanks for your cooperation.
APPENDIX J

LETTER OF REMINDER TO SUBJECTS
Dear Teacher/Student Teacher

A short time ago you received some materials concerning my study into teacher assessments of student performance in Social Studies. A few people have not yet returned the completed quiz and my study cannot proceed until those replies are received. It will only take five minutes of your time to answer the quiz and I would greatly appreciate it if you completed those materials and mailed them to me.

Please appreciate the importance of this study to me and that a little of your time can save me a whole lot of inconvenience.

Please consider my request.

Sincerely yours,

Ford Adams