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PROFILE OF THE SALIENT CHARACTERISTICS OF
NON-PROMOTED FIRST GRADE CHILDREN

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PROFILE OF THE SALIENT CHARACTERISTICS OF NON-PROMOTED FIRST GRADE CHILDREN

By

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ABSTRACT

PROFILE OF THE SALIENT CHARACTERISTICS OF
NON-PROMOTED FIRST GRADE CHILDREN

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Purpose of the Study

The purpose of the study was to collect, analyze, and compare data regarding selected characteristics of first grade children who were not promoted at the end of their first grade school year, 1977-78. A cluster of salient characteristics was then sought for the formulation of a profile to successfully discriminate between promoted and non-promoted children. The profile could then be useful for the early identification of high risk individuals within the school setting.

Design of the Study

The population for the study consisted of first grade children in eight public elementary schools located in a city of 130,000 residents in Central Michigan.

The sample selected included all first grade children in the eight schools who were selected by their

teachers for non-promotion at the conclusion of the 1977-78 school year. Sixty-five non-promoted children were identified in all.

A sample of 65 promoted first grade peers was selected randomly on a one-to-one basis in direct proportion to the number of non-promoted children from each classroom included in the sample. Both the promoted and non-promoted groups contained 33 boys and 32 girls, making a total of 130 children studied.

For the purpose of gathering data in an orderly and systematic manner, the Coded Checklist Inventory was developed to record pertinent information from student cumulative record files. Its format contained five major headings. These were: (1) personal characteristics, (2) family characteristics, (3) enrollment in special programs, (4) visual, auditory, and health deficiencies, and (5) Stanford Achievement Test scores.

All reference to name or possibility of identity at a later date was avoided by assigning the coded designation "NP" to non-promoted children and "P" to promoted children.

Major Findings

The statistical tests supported the following findings.

1. Minority children were non-promoted significantly more often than Caucasian children.
2. Non-promoted children were found to have a significantly poorer school attendance record than promoted children.
3. Non-promoted children came from families with more siblings significantly more often than promoted children.
4. The mean educational levels of both fathers and mothers of non-promoted children were significantly lower than those of the parents of promoted children.
5. Non-promoted children were the siblings of separated or divorced parents significantly more often than promoted children.
6. Non-promoted children were being reared with only one adult present in the home significantly more often than promoted children.
7. Non-promoted children were enrolled in remedial reading and counseling programs significantly more often than promoted children.
8. Non-promoted children were referred to school psychologists for diagnostic evaluations significantly more often than promoted children.
9. Referral to vision specialists on the basis of a school vision screening device was made significantly more often for non-promoted children.

10. Academic progress in reading and mathematics as measured by the Stanford Achievement Test was significantly lower for non-promoted children than promoted children.
11. The profile characteristics having greatest predictive value in discriminating between non-promoted and promoted first graders were:
    a. A tendency to be a member of a minority race.
    b. A tendency to come from a larger family.
    c. A tendency for the mother to have a lower educational level.
    d. A tendency to come from a home where parents are separated or divorced.
    e. A tendency to be academically low in reading.
    f. A tendency to be academically low in mathematics.

DEDICATION

To my wife, Victoria Anne,

who brings immeasurable joy into my life.

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A number of people have provided assistance and support throughout my doctoral program. Others have provided more inspiration and encouragement in bringing me to this point in my career than they may realize.

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CHAPTER I

THE PROBLEM

Background

As a result of the rapidly growing "back to the basics," movement, the issue of what to do with the student who does not or cannot measure up becomes a dilemma. One popular solution to the problem is simply to refuse to promote the student, thus placing a burden for competency directly and firmly on his shoulders. This position seems to have been taken by Samuel A. Owens, Superintendent of Greenville County Schools and Emporia City Schools in Virginia (1977); Albert Briggs, Superintendent of Schools on Chicago's West Side (1977); and Assistant Superintendent of Schools, H. Hurd Pope of Mobile County, Alabama (Bard, 1976).

Under the direction of Superintendent Owens, the Greenville County School System has implemented an extensive program of non-promotion of students in grades kindergarten through twelve who fail to meet minimum grade level competency standards as determined by standardized achievement tests administered twice per year. Since the non-promotion policy was initiated at the beginning of the 1973-74 school

year, 800 students were retained the first year, 1,100 the second year, and 695 the third year.

Briggs (1977) announced on June 1, 1977 the retention of 675 of 1,289 eighth graders in his school district because of low reading achievement. He also declared that henceforth no student in his jurisdiction would graduate from eighth grade until he had mastered at least sixth grade reading skills.

Pope (Bard, 1976), listing disenchantment with the policy of promoting students unable to academically cope with the next grade level as his rationale, announced new guidelines for promotion and non-promotion. Included in the guidelines was the intention of retaining 10 percent of poorly performing elementary students in their present grades.

Other areas of the country appear to be less severe in their stance. The State of California, for example, will refuse to issue a high school diploma after June 1980, unless a proficiency test has been passed. However, the law also requires that each school district test its students once between grades seven and nine, and twice between grades ten and eleven. Conferences and remedial work are then required to help the student, thereby not relieving the public school from responsibility, but making it a partner with the student and parents in achieving competency (Pipho, 1977).

Non-promotion of students is not a practice unique to the United States according to statistics compiled by the International Bureau of Education (1974), an affiliate of the United Nations Educational Scientific and Cultural Organization (UNESCO). A questionnaire was sent to the 148 member states and territories regarding the practice of retaining children. Fifty-eight members responded with sufficient information to provide data for analysis. Significantly, all reported practicing non-promotion of children. Grade retention rates ranged from 8.0 to 48.8 percent. The statistics showed that in many countries 25 to 50 percent of the children enrolled in first grade repeat the following year. Africa and Latin America reported the highest non-promotion rates.

An article by Sparkman (1978) in Parade Magazine stated that more than 400,000 of the 3.5 million American children who entered first grade in the fall of 1977 would be told, in the spring of 1978, that they would have to repeat first grade. Communication with Sparkman to determine the source of his estimate revealed that although no accurate statistics are recorded, the number was obtained in collaboration with the U.S. Commissioner of Education as a result of projected first and second grade enrollment statistics.

Contact with the Department of Research, branch office of the Superintendent of Instruction, State of Michigan, revealed that non-promotion statistics are not recorded per se at the state level either. However, a Department Research Assistant suggested that a rough approximation of the statistics could be found by using the Michigan Statistical Abstract (1977) and supplementing it with more current statistics provided by the Department. By this method, the desired data could be determined by comparing the total public and private school first grade enrollments in a given year with that of the second grade enrollment of the subsequent year. Non-promotion was estimated to be the major cause of decline in enrollment between first and second grade children for the years 1972-76; this was rather consistent at approximately the 3 percent level.

Because a trend toward non-promotion appears to be developing and causing more and more controversy, this study will explore selected characteristics of non-promoted first grade children. Comparisons of these characteristics will be made with those of their promoted peers and will attempt to discern a profile which could be of value in establishing special programs of supportive assistance.

Importance of the Study

Non-promotion has been practiced in the public schools for many years. Rationales vary considerably, but among the most commonly mentioned are: (1) social immaturity (Reinherz and Griffin, 1970), (2) lack of motivation, and (3) opportunity for the child to academically catch up to grade level (Bocks, 1966).

Non-promotion, influenced by the current trend toward student competency in education, again has become a controversy in the classroom. This in turn has created a need for the early identification of children especially vulnerable to non-promotion. If a specific cluster of salient characteristics can be identified among non-promoted first graders, perhaps children who are then determined to be high risk individuals could receive early detection, thus allowing for the development of programs providing special supportive assistance.

The author hopes that the results of this study will help to fulfill this need.

Purpose of the Study

The purpose of this study was to collect, analyze, and compare data regarding selected characteristics of first grade children who were not promoted at the end of their first grade school year, 1977-78. More specifically, the

purpose was to identify those characteristics with a high degree of occurrence among non-promoted first graders in an attempt to formulate a profile which could provide information for the early adoption of programs for special supportive assistance.

The population studied attended public elementary schools in a city of approximately 130,000 people located in central Michigan.

Research Questions

It was the purpose of this study to determine ways in which non-promoted first grade children differ significantly from promoted first grade children. The major research questions to be explored are:

1.0 Will personal and ethnic characteristics of identification differ significantly between promoted and non-promoted first grade children?

- 1.1 Will minority children be non-promoted significantly more often than Caucasian children?
- 1.2 Will boys be non-promoted significantly more often than girls?
- 1.3 Will the mean age in years and months at the time of entry into first grade differ significantly between promoted and non-promoted children?

1.4 Will non-promoted children have a significantly poorer school attendance record than promoted children?

1.5 Will position in the family differ significantly between promoted and non-promoted children?

1.6 Will the mean number of siblings per family differ significantly between promoted and non-promoted children?

2.0 Will family environmental and educational background of parents differ significantly between promoted and non-promoted first grade children?

2.1 Will the mean educational level of the fathers of non-promoted children differ significantly from those of promoted children.

2.2 Will the mean educational level of the mothers of non-promoted children differ significantly from those of promoted children?

2.3 Will non-promoted children be the siblings of working mothers significantly more often than promoted children?

2.4 Will non-promoted children be siblings of divorced or separated parents significantly more often than promoted children?

2.5 Will non-promoted children be the product of one parent or one guardian home significantly more often than promoted children?

3.0 Will non-promoted first grade children be enrolled in programs providing special corrective assistance significantly more often than promoted children?

3.1 Will non-promoted children be enrolled in speech therapy significantly more often than promoted children?

3.2 Will non-promoted children be enrolled in learning disability classes significantly more often than promoted children?

3.3 Will non-promoted children be enrolled in remedial reading classes significantly more often than promoted children?

3.4 Will non-promoted children be enrolled in counseling programs significantly more often than promoted children?

3.5 Will non-promoted children have been referred to the school psychologist for diagnostic evaluation significantly more often than promoted children.

4.0 Will non-promoted first grade children differ significantly from promoted children in regard to visual deficiencies, auditory deficiencies, or limiting health conditions?

4.1 Will non-promoted children have been referred to a vision specialist on the basis of deficiencies identified by a school vision screening device significantly more often than promoted children.

4.2 Will non-promoted children have been referred to a hearing specialist on the basis of deficiencies identified by a school hearing screening device significantly more often than promoted children.

4.3 Will non-promoted children have limiting health conditions requiring regular medical attention significantly more often than promoted children?

5.0 Will there be a significant difference in the mean scores of each specific sub-test on the Stanford Achievement Test (S.A.T.) administered at the end of first grade between promoted and non-promoted first grade children?

5.1 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Reading Comprehension"?

5.2 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Word Study Skills"?

5.3 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Mathematics Concepts"?

5.4 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Mathematics Computations"?

6.0 By employing the statistical method, discriminate analysis, can a profile of predictive value be developed that will differentiate non-promoted first grade children from those that have been promoted?

Generalizability

The non-promoted children in this study were first graders from 22 classrooms in 8 public elementary schools with a total first grade enrollment of 572 children. The promoted first grade children with whom they were compared were selected randomly on a one-to-one basis in direct proportion to the number of non-promoted children identified in each classroom. The city selected for the study is a city located in central Michigan with a population of approximately 130,000.

Since the primary source of information for this study was obtained from school permanent cumulative record files, it was assumed that all statistical reporting

recorded therein was accurate and current. It may be concluded that the findings in this study can be generalized to populations in other school systems with similar first grade enrollments having a similar diversity of educational and socioeconomic backgrounds.

Because the information is readily available and accessible to school personnel, the research approach and methodology may have the most generalizability. If this approach is helpful in identifying certain salient characteristics of non-promoted first graders, then it can be used in replication with a variety of populations and at additional grade levels.

Limitations

The primary limitations of this study are threefold. First, due to a limited sample, the findings are not necessarily widely generalizable; however, there will be no proof that they are not.

Second, the study will not attempt to determine the reasons for non-promotion in specific cases, but will direct itself toward the identification of certain salient characteristics possessed by the population as a whole. It may be beneficial for future research to delve into variability of non-promotion rationale.

Third, this study will not indicate specific measures or special programs of supportive assistance, if any, that should be undertaken. However, the findings will be discussed with regard to conditions that appear to be affecting non-promoted students so that educators might direct their attention to factors within their control.

Definition of Terms

The reader may better understand this study if certain terms are initially clarified.

Family Educational Background

Family educational background is defined as the years of schooling successfully completed by both the fathers and mothers of the children in this study.

Family Environmental Background

For the purpose of this study, family environmental background will refer to the marital status of parents, employment status of the mother, and the number of parents living in the home.

Limiting Health Conditions

Limiting health conditions are defined as medical problems including allergies, asthma, convulsions, diabetes, epilepsy, or heart ailment which require the regular attention of a doctor.

Non-Promoted Child

The non-promoted child is defined as the child who is required to remain an additional year in a particular grade, thus repeating the year's work.

One-Parent Home

A one-parent home is defined as a home in which a child is being reared with only one adult present.

Programs Providing Special Corrective Assistance

Programs providing special corrective assistance are defined as those evaluative and remedial school services provided by trained specialists in the areas of speech, learning disabilities, remedial reading, counseling, and psychological evaluation.

Promoted Child

The promoted child is defined as the child who advances from one grade to the next chronologically without having to repeat a year's work.

Organization of Subsequent Chapters

The content of Chapter I has included the background to the problem, importance of the study, purpose of the study, research questions to be explored, generalizability of the findings, limitations of the study, and definitions of terms.

In Chapter II, pertinent research and literature relating to the subject content of this study will be reviewed.

In Chapter III, a description of the design and methodology used in the study will be discussed.

In Chapter IV, presentation of the data collected and analyzed will be reported and discussed.

In Chapter V, a summary of the study, appropriate conclusions, and recommendations for future research will be presented.

CHAPTER II

RELATED LITERATURE

Introduction

The purpose of this study is to attempt to identify various salient characteristics found in non-promoted first grade children. The review of the literature is organized under three main headings involving non-promotion. These headings are: (1) populations with high incidence of non-promotion, (2) the effects of non-promotion on academic progress, and (3) the social and emotional effects of non-promotion.

Populations With High Incidence of Non-Promotion

Before attempting to establish priorities for providing supportive assistance, it is important to identify those children who may be most vulnerable to non-promotion within the school setting, and to examine those populations that may no longer be in the classroom, but appear to have been strongly influenced as a result of grade retention.

Minority Children

Several studies have been done comparing the percentage of non-promoted minority children with non-promoted Caucasian children.

In an extensive study completed in 1971, involving five southwestern states, the Commission on Civil Rights (1972) found that Mexican-American first graders in the schools surveyed were much more likely to be retained than either Black or Caucasian youngsters. Black first graders were also retained significantly more often than their Caucasian peers. In the survey, 15 percent of all Mexican-American first graders were reported to have been retained compared with 8.9 percent Black and 6.0 percent Caucasian children.

Kelly (1967) studied Maricopa, Pinal, and Papago Indian children in southern Arizona and discovered that the grade retention rate for these children in grades one through three was nearly twice as great as that of all students in Arizona Public Schools. Indian children were retained at the rate of 9.97 percent as compared to the rate of 5.35 percent for all students in Arizona. These figures would seem to become even more significant considering that the rate listed for all students was taken from state educational statistics rather than from a randomly selected sample of public school children. One would

expect "all students" to include retained Indian children as well, thus causing the 5.35 percent to be unduly high.

Large Puerto Rican communities in the United States were studied by Hernandez and others (1976). Among the significant findings discovered was that one in four Puerto Rican children had repeated a grade by the ages of 13 to 15 in Boston, Patterson, Passaic, and Connecticut metropolitan areas. The rate in New York City was one in ten.

Abidin, Golladay, and Howerton (1971) while examining the dynamics of retention decisions made in North Carolina, revealed findings which caused them to react rather vehemently to non-promotion as an educational policy. The conclusion was reached after researching 85 retention cases that non-promotion is a highly "unjustifiable, discriminatory, noxious practice." This judgment was made on the basis of data showing that a Black male from a low socioeconomic family with a working mother stood a highly increased chance of being retained.

Although the researchers severely criticized non-promotion for its negative effects and its historical tendency to allow certain segments of the society to be insulated from the problems of individuals in the poverty group, no attempt was made to predict the study's generalizability to other segments of the American school population.

Lloyd (1972) in comparing reading achievement, intelligence quotients, and male/female children concluded that intelligence and socioeconomic status were more highly related to retention than race and sex.

Conflicting research was reported by Henderson (1970) at the University of Oregon Medical School. A total of 910 seven year old children were studied to determine significant race and sex differences in non-promotion. Approximately two-thirds of the sample studied were Caucasian while boys outnumbered girls 469 to 441. Results showed that White boys were retained at a significantly higher rate than Black boys, Black girls, or White girls. One factor, however, which may have influenced the study was socioeconomic status. The children studied were all offspring of mothers who presented themselves to the hospital for prenatal care while qualifying for economic dependency status.

Learning Disabled

Deficient reading ability is frequently discussed in educational journals as an important factor influencing non-promotion. Gold (1970) studied 372 children over a two-year period in a Title III funded learning center. Analysis was made of factors associated with the condition of developmental dyslexia. He found that 75 percent of the

children who were evaluated had repeated at least one full grade. The great majority were non-promoted in grade one with considerably less in grade two. The children were discovered to have come from a wide variety of socio-economic backgrounds.

Conduct

Caplan (1973) reported in a study of first graders concerning classroom conduct and non-promotion that although boys are retained at a higher rate than girls (about 4 to 1), retention of girls may be strongly influenced by behavior. Retained girls were rated by teachers as having significantly more disruptive classroom conduct than matched promoted girls. The two groups of boys did not differ in conduct.

Reinherz and Griffin (1970) studying first grade boys reported conflicting information. They found that the primary causes for the retention of their sample were for behavioral and emotional reasons, particularly immaturity. In this study, however, no definition of misconduct or behavior problem was given.

Socioeconomic and Educational Factors

It has long been felt that children from lower socioeconomic, educational environments have been at an academic disadvantage in the public schools (Lloyd, 1972).

Federal programs such as Head Start, Right to Read, and The Federal Education Acts have been enacted to assist disadvantaged children.

Research projects such as those undertaken by the Kentucky State Department of Education (1972), by Hernandez (1976), and Archambo and Briscoe (1970) attempt to identify and assess various deficiencies and to study the relationship between socioeconomic home environment and academic achievement.

A significant study relating non-promotion to socioeconomic home environment and educational status of parents was accomplished by Reinherz and Griffin (1970). Fifty-seven primary grade boys were studied who were repeating for the first time. Although the sample population included all socioeconomic levels, the results indicated that it was primarily the lower class children in the school system who were retained. In fact, 50 of the 57 families involved in the study fell into the two lowest socioeconomic groups on a five-leveled classification scale. Also, 53 percent of the fathers in the study group had not completed high school.

Additional revealing information reported was that 47 of the 57 families in the study had one or more members of the nuclear family group who had repeated a grade in school. The fathers of 37 children and the mothers of 39 children had been retained.

School Dropouts

The National Educational Association (1967) in a research summary bulletin entitled, "School Dropouts," identified grade failure as a characteristic greatly associated with dropping out of school.

Getson and Odgers (1964) corroborated those findings with a survey of more than 12,000 high school dropouts in Ohio. The researchers found that 66 percent of the male and 52.7 percent of the female dropouts in ninth grade had repeated at least one grade. The percentage decreased for later dropouts until by twelfth grade, 35.9 percent of the male and 17.3 percent of the female dropouts had repeated a grade. Total averages for all high school dropouts were 51.9 percent repeaters for the boys and 39.9 percent for the girls. Of the repeaters, 6,822 boys and 5,803 girls had been retained between grades one and six.

In an attempt to discover significant causation for leaving school early, Randall (1968) studied the characteristics of 138 dropouts and compared them to a matched population of students graduating. Discovered was the fact that 65.9 percent of the dropouts had been retained in one or more grades in school as compared to only 2.9 percent of the graduates. In addition, 20 percent of the dropouts had been retained in at least two grades as compared to 0 percent of the graduates.

Thomas and Knudsen (1965) reported even higher findings of non-promotion among dropouts in Louisiana and Florida. In Louisiana, 72 percent of all dropouts studied had repeated at least one grade, while 74 percent of the dropouts in Florida had repeated one grade. This compared to only 17.8 percent of the graduates.

Juvenile Delinquents

Kvaraceus (1958), in summarizing research on the juvenile delinquent for the National Education Association, compiled a list of 18 factors which he believes have been shown to influence or contribute significantly to delinquency. Fifth on the list is repetition of one or more school grades.

Research strongly supporting this premise was summarized by the School District of Philadelphia (1965). School records of 100 Philadelphia boys committed to penal or correctional institutions during a two-month period revealed that over 90 percent of the group had been retained in one or more grades.

Glueck and Glueck (1950) reported similar findings while studying 500 delinquent boys. A significant proportion, 84 percent or 422 boys, were reported to have repeated one or more grades in school.

Although an earlier study by Mercer (1930) found a smaller proportion of juvenile delinquents evaluated to have been retained, she still reported that 56 percent of 85 boys were chronologically older than their classmates for that reason. The conclusion was reached, whether or not justifiably so, that schools may be the producers of delinquents.

One of the most quoted and apparently highly regarded studies involving juvenile delinquents is entitled, Toward a Typology of Juvenile Offenders, by Sheldon and Eleanor Glueck (1970). In their research some 200 factors of a social, psychological, family environmental, and scholastic nature were analyzed for significance. One scholastic factor evaluated was years below grade level for age in school. Of the 594 juveniles studied, 198, or 33 percent, were two or more years below grade for their age. No information was recorded concerning juveniles only one year below grade level, but one can only surmise that the number would have been inordinately high.

Similar findings were reported by Reiss (1952) in a very large population of boys in Chicago. Of the 1,110 delinquents studied, 36 percent had repeated more than one grade in school. Once again, no information was made available concerning the percentage of delinquents having been non-promoted only one year.

Summary

Review of the related literature in this section has been concerned with populations with high incidence of non-promotion. Minority children appear to have been especially susceptible to retention in the past; however, considerable disagreement seems to exist concerning the identity of a specific minority group consistently non-promoted. The fact that low socioeconomic and educational factors seems to contribute to retention may in part resolve this conflict. Those particular factors combined with minority status of an individual may well be highly related.

Additional populations found to contain unusually large percentages of non-promoted individuals included learning disabled children, dropouts, and juvenile delinquents.

The Effects of Non-Promotion on Academic Progress

A common reason mentioned for retention is that the child is academically so far below grade level that he will never catch up unless given a second chance. To pass him would serve only to frustrate him more (Blocks, 1966; Owens and Ranick, 1977).

In a study of non-promoted elementary children, Wallihan (1955) tended to disagree and concluded that no

discernible evidence of improvement in reading occurs as a result of retention.

Charles Keyes (1911) working in New York City conducted a study lasting seven years and including 5,000 students. Each student's academic test scores were used in comparing his progress after the year of retention with those of the year before. Keyes made some rather significant discoveries:

1. One-fifth of the non-promoted children showed improvement during the repeated year.
2. Two-fifths showed no improvement.
3. Two-fifths actually did even poorer work or regressed.

Edith Peters (1925) concluded in her study that "non-promoted children become humiliated, discouraged, or callously indifferent when confronted by the repetition of work which had previously frustrated or bored them."

William Coffield (1956) contributed the following findings:

1. Failed pupils typically gain approximately six months in educational progress during the repeated year and still fail to achieve the norm for the grade involved.
2. Failed pupils typically gain one year, three months during the first two years after repeating and still fail the norm for the grade involved.
3. During the repeated year, educational progress is typically 4-6 months less than that of matched promoted pupils.

Abidin, Golladay, and Howerton (1971) also completed a longitudinal study involving the long-term effects of non-promotion. Retained first and second grade children were tested and observed, and then re-evaluated at the end of their sixth grade year. Data collected included achievement test scores, intelligence scores, teacher judgments of behavior, and academic promise. The major findings suggested that there was an actual deterioration in the retained group's academic achievement during the first six grades when compared with the promoted group. Further, intelligence test scores for this particular group were on the mean higher than for the promoted group before retention, but actually decreased to a mean of 11.2 points below the mean for the promoted group by the end of grade six.

In all fairness, however, it should be reported that the intelligence test administered was a group instrument and thus may have been influenced by reading ability.

Additional information of interest reported in the study was that teachers usually did not clearly indicate a rationale for retention beyond a brief comment. Analysis of those comments revealed the following motives for non-promotion: (1) 28 percent for reason of "immaturity" including both emotional and physical, (2) 32 percent for academic failure, (3) 16 percent for miscellaneous reasons

(e.g., entered school late, missed too much school, etc.), and (4) 24 percent specified no reason at all.

Cheyney (1933) reported at the end of his study that, "lack of readiness for the work of a given grade is largely due to a slow learning rate, which will not improve by repeating a grade section."

Clair Koons (1968) concluded that for every student benefiting from retention, two or more are not helped or actually regress.

Godfrey (1972) tested the credibility of the theory held by many teachers that retention helps a child to catch up academically. Twelve hundred sixth and seventh graders in 14 schools were tested and the data were analyzed to differentiate between repeaters and non-repeaters. Results indicated that promoted students had a mean reading level of 6.8 years, compared with 5.2 for students having been retained one year and 4.5 for students having repeated two or more grades. Similar findings were reported on mathematics achievement scores.

The conclusion was reached that retention of students obviously does not achieve the objective of helping the student to catch up academically.

Studies by Paul and Leigh (1971) and the Philadelphia Public Schools (1965) seem to confirm this position. In the light of their findings, Paul and Leigh lament the

disappointingly high retention rate of first graders in Kentucky. Results of their follow-up study revealed that a youngster who attempts first grade twice is not substantially better off than he was the first time.

Studies in the Philadelphia Schools revealed that repetition in the early grades not only fails to help the majority of children academically, but frequently creates additional problems. Major problems cited were difficulties caused by students being overaged and larger than their classmates.

Paramore, Plantec, and Hospodar (1973) directed a two-year volunteer tutoring experiment referred to as, Project Upswing, in Colorado, Mississippi, Missouri, and California. The project was designed to assist first graders capable of normal achievement who were identified by teachers as having learning difficulties. Despite the positive effects of the tutoring, a substantial number of the children were retained at the end of first grade. As a by-product of the tutoring evaluation, a study was made of the academic effects of non-promotion on the selected population. Although information was not available concerning rationale for retention, it was assumed that low reading ability was not the reason as no tested significant differences in mean reading scores were found between promoted and non-promoted groups. Both groups were determined to be performing within the average range.

A follow-up study at the end of the year of retention revealed the alarming fact that the non-promoted children had a tested mean loss of six points in standard score in reading and as a group had fallen back into the academic range classified as low average. The conclusion reached was that retention had a definite negative effect on reading skills. Speculation attributed the loss to, among other things, lower teacher expectancies.

Although unmeasured, the assumption was made that there might likewise be a corresponding loss of skills in other academic areas as well.

An extensive survey of studies into the effects of non-promotion upon school achievement was summarized by Saunders (1941) with the statement:

> It may be concluded that non-promotion of pupils in elementary schools in order to assure mastery of subject-matter does not often accomplish its objective. Children do not appear to learn more by repeating a grade by experience less growth in subject-matter achievement than they do when promoted. Therefore, a practice of non-promotion because a pupil does not learn sufficient subject-matter in the course of a school year, or for the purpose of learning subject-matter, is not justifiable.

More research appears to have been undertaken regarding non-promotion of students at the elementary levels than at the junior high and high school levels. A study accomplished by Gaite (1971), however, explores the effects of academic failure of 642 eighth through

eleventh graders. Results showed that there was very minimal improvement in the achievement of students who repeated a grade, and in some instances, no improvement was made at all. Repeating a whole grade appeared to be particularly wasteful when it meant a student had to repeat work that previously had been completed satisfactorily.

The researcher concluded that retention could not be justified on the basis of academic improvement. This conclusion was based on student performance on a scholastic achievement test. He further cautioned teachers and administrators to be very careful before predicting that repetition of a whole grade will result in improvement of performance.

Homogeneity

A second reason for non-promotion frequently mentioned is for the purpose of maintaining standards, thus leading to more homogeneity in the succeeding grades (Briggs, 1977; Bocks, 1966). The question may be asked, "What will next year's teacher think if I promote this child?"

Pertinent to this topic are William Coffield's (1956) findings. He reported that the general level of achievement of a school's seventh grade class is not significantly affected by the rigidity or leniency of its promotion policy. Furthermore, slow learning children

promoted and matched with slow learning children retained, ultimately perform at the same rate when tested at seventh grade level, despite the fact that the retained children have spent an additional year in school.

In addition, Wallihan (1955) concluded that despite a rigid policy of retention, uniformity of instructional groups in the upper grades definitely is not maintained.

Dobbs and Neville (1967) studied the academic effects of retention on 30 pairs of first and second grade children. Sixty children were selected who were determined to lack academic readiness in reading. Thirty of the children were promoted while the other thirty were retained. The results showed that the retained group fell below the control group in both reading and math during the school year following retention. The conclusion was reached that not only did retention fail to bring about more homogeneity, but it actually became a disadvantage to achievement.

Summary

Research reviewed in this section has dealt with studies attempting to assess the affects of non-promotion on academic progress.

Very few positive effects on academic progress were reported by researchers, and in fact, several reported results ranging from no improvement to substantial loss as measured by both achievement tests and intelligence scales.

Perhaps Jackson (1975) after completing an extensive review of more than 150 studies and related articles regarding non-promotion for the United States Commission on Civil Rights, best summarizes this section when he states:

> There is no reliable body of evidence to indicate that grade retention is more beneficial than grade promotion for students with serious academic or adjustment problems.
> Those educators who retain pupils in a grade do so without valid research evidence to indicate that such treatment will provide greater benefits to students with academic or adjustment difficulties than will promotion to the next grade.

The Social and Emotional Effects of Non-Promotion

Educators have expressed considerable disagreement concerning the social and emotional effects of non-promotion on the child. Opinions vary from the belief that it has a devastating effect on self-confidence (Koons, 1977; Godfrey, 1972) to the attitude that non-promotion actually increases self-confidence by allowing the child to mature (Owens and Ranick, 1977; Finlayson, 1977).

Social Adjustment

Morrison (1956) in exploring the social consequences of non-promotion, reported finding that the overaged child maintained a significantly lower choice status on a sociometric device than his peers. Also, most children were

overaged because of retention. Further findings indicated a low social acceptance which tended to be detrimental to the welfare of the child.

Goodlad (1954) in a study of first and second graders found that non-promoted children were relatively more rejected by their peers than promoted children. In addition, he found that non-promoted children were named significantly more often by classmates as persons least desirable for very best friends. Perhaps most revealing was the discovery of a tendency for non-promoted children to seek out one another as mutual friends while setting up "little cliques" within the larger group.

Long lasting negative effects of social acceptability by peers on overaged students were reported by Bedoian (1954). Bedoian's study seems especially significant in that his research deals with sixth graders who were retained at a young age. In addition, he paired overaged students with both underaged and at-age pupils. Very little difference was found in the social acceptance of the underaged and at-age students, but the overaged students were significantly less socially accepted.

Emotional Adjustment

Teachers frequently believe that retention may be traumatic and stressful at first, but that it will pass as soon as the child is again enrolled in school and becomes

more involved with work that is easier for him the second time around. This in turn will help him to build self-confidence.

Finlayson (1977) would tend to agree. In a two year longitudinal study of non-promoted first graders matched with borderline promotees and regularly promoted groups, he found that self-confidence as measured by the FACES Scale actually began to increase after non-promotion to the point that within two years it equaled that of the regularly promoted group. This caused him to conclude that non-promotion did not negatively effect self-confidence. Unexplained, however, was the fact that the borderline promoted population actually scored higher than either the promoted or non-promoted populations. Perhaps replication with more than 25 children per group would provide more information.

Conficting conclusions were reported in several studies. Goodlad (1954) found that non-promoted children were rated by their teachers significantly more often than promoted children as being bullies and as having a tendency to steal.

Sandin (1944) while studying the social and emotional adjustment of non-promoted pupils discovered that they were more likely to receive reproof and punishment from teachers for misbehavior than regularly promoted

children. This misbehavior was identified as whispering, daydreaming, inattentiveness, poking, tripping, and engaging in activities other than study.

Sandin further reported that in interviewing retained children he found 40 percent of them wishing to quit school as soon as possible with only a corresponding 14 percent of the regularly promoted pupils so desiring.

Farvey (1936) likewise reported poor emotional adjustment of retained children. In his study, the conclusion was reached that non-promotion tends to result in discouragement and antagonism toward school.

Finally, Peters (1925) concluded that non-promoted children tend to become sullen, indifferent, rebellious, or depressed depending upon personality patterns and that the result is less effective learning.

Self-Concept

The effects of non-promotion on self-concept are often debated. A few educators (Finlayson, 1977; Owens and Ranick, 1977) believe that a child's self-concept is actually enhanced by retention, and that socially promoting a child incapable of performing at the next grade level will cause humiliation and destruction of self-concept.

Other educators express concern and warn against negative effects, expressing the belief that there is little

that is more humiliating and embarrassing for a child than to remain behind while his peers advance to the next grade (Koons, 1977; Peters, 1925; Funk, 1969).

White and Howard (1973) attempted to discern the effects of retention on self-concept with the study of 95 children who had been retained between first and sixth grades. The Tennessee Self-Concept Scale was chosen as the instrument of measurement. Results indicated a high correlation between negative self-concept and retention. Analysis revealed that non-promoted students scored significantly lower than the control group on every sub-test except "Physical Self." In addition, those children who had failed to be promoted more than once were shown to have an even greater negative self-concept than children retained only once.

One possible limitation of the study, however, could involve the lack of a testing measure having been administered prior to retention. Seemingly, additional research could eliminate the possibility that negative self-concept was present at an earlier stage and thus contributed to retention, instead of vice-versa.

Similar conclusions were reached by Godfrey (1972) while exploring the effects of student feelings regarding self-worth. Twelve hundred students were evaluated by means of the Tennessee Self-Concept Scale. She reports

that non-promoted students tend to: (1) doubt their own self-worth, (2) have little confidence in themselves, (3) see themselves as inadequate in family and social situations, and (4) have an unfavorable view of their own behavior and moral worth.

Additional findings seemed to suggest that retention may result in poor school attitudes as well as student belief that goals of the average person would be impossible for them to attain.

Summary

Review of the literature in the last section of Chapter II explored the social and emotional effects of non-promotion. Generally, negative results were reported concerning social adjustment following retention, along with a decline of acceptance by peers and teachers.

Emotional adjustment also appears to frequently deteriorate after non-promotion with an increased observance of hostility, misbehavior, indifference toward school, and discouragement. In addition, two studies reported a measurable decline in self-concept.

On the basis of the current information available, it would appear that retaining students for the expressed purpose of improvement of social and emotional adjustment in school tends to have more negative effects than positive and thus would seem to be a questionable practice at best.

Chapter III will present the methodology employed in the study. The population of interest will be discussed, the sample delimited, procedures for collecting and analyzing data will be described, and methods of reporting will be defined.

CHAPTER III

METHODOLOGY

Introduction

This section describes and elaborates on the methodology used in conducting the study. The population and the sample are identified and defined. The data gathering procedures are outlined, and the research instrument employed is described. Finally, statistical treatment of the data is explained, and methods of reporting are expounded.

Population of Interest

The population under investigation consisted of first grade children in eight public elementary schools located in central Michigan. Total first grade enrollment in this city of approximately 130,000 residents was 2,387 children. First grade enrollment in the eight elementary schools investigated was 572 children, or roughly 25 percent of the total number of first graders in attendance in the district. Schools chosen for the study were done so on the basis of consent or an expressed desire on the part of elementary administrators to participate. The schools

involved are stationed in a variety of locations scattered throughout the city and thus range from inner-city schools to schools in upper-middle class neighborhoods. In addition, the city is currently conforming to federal bussing regulations and thus a relative balance of low socioeconomic and minority children has been established in all schools.

Selection of the Sample

The sample selected included all first grade children in the eight elementary schools who were selected by their teachers for non-promotion at the end of the 1977-78 school year. Sixty-five non-promoted children were identified in all.

A sample of 65 promoted first grade peers was selected randomly on a one-to-one basis in direct proportion to the number of non-promoted children from each classroom included in the sample.

The non-promoted sample contained 33 boys and 32 girls. Although chance was strictly involved, the promoted group also contained 33 boys and 32 girls. The total number of children involved in the study was 130.

The subjects sampled were enrolled in 22 classrooms with a mean of 26 children per class. The number of non-promoted children per classroom ranged from 0 to 7, with a mean number of 2.96. An overall 11.4 percent of the total first grade population was determined to be non-promoted.

Procedures

Each elementary school administrator was asked personally by the researcher for permission to conduct the study. The purpose of the study was explained and all procedural questions answered.

Since the primary source of data for this study was derived from student permanent cumulative record files, a request for examination was made and an appointment scheduled. In cases where the administrator felt that it was impossible to grant permission to an unauthorized person to examine the records, a staff member was designated to read the necessary information to the researcher.

In addition, a brief meeting was requested following collection of data with each first grade teacher, the school counselor, or the administrator. The purpose of the meeting was to verify to the best of knowledge that the data collected by the researcher was current and accurate.

Assurance was given that all information of a personal nature obtained from the files would be held in the highest confidence and that names of children, teachers, administrators, and schools would all remain anonymous.

Data Gathering Instrument

For the purpose of gathering data in an orderly and systematic manner, the Coded Checklist Inventory was developed to record pertinent information (see Appendix A). Names of schools were not identified on the checklist. Selected participants received a coded number, thus eliminating any reference to name or possibility of identity at a later date. Non-promoted children received the coded designation "NP," beginning with the number 1 and continuing through 65. Promoted children received the coded designation "P," and were assigned numbers beginning with 101 and continuing through 165.

The format of the Coded Checklist Inventory contained five major headings. These were: (1) personal characteristics, (2) family characteristics, (3) enrollment in special programs, (4) physically limiting conditions, and (5) Stanford Achievement Test scores (S.A.T.).

Personal characteristics included sex, ethnic origin, age at the time of entry into first grade, number of siblings in the family, rank among siblings, and days absent from school.

Family characteristics included years of education for both mother and father, marital status of parents, employment status of mother, and the number of adults rearing the child in the home.

Enrollment in special programs included speech, learning disabilities, remedial reading, counseling, and psychological evaluation.

Physically limiting conditions included vision, hearing, and health difficulties requiring regular medical attention.

Finally, the last section included the following S.A.T. sub-tests and scores: (1) Reading Comprehension, (2) Word Study Skills, (3) Mathematics Concepts, (4) Mathematics Computations, (5) Total Reading, and (6) Total Mathematics. Additional S.A.T. Primary Battery I sub-test scores were not available due to the fact that only the four sub-tests listed are administered by the school district to first graders.

Method of Reporting Results

The information recorded on each checklist inventory was tabulated on a coding form. The coded data were then transferred by keypunch to IBM computer cards.

The analysis of results was reported in the form of t-tests, chi-square tables, and discriminate analysis. T-tests were used in situations where both a qualitative independent variable and a quantitative dependent variable were present. They permitted the researcher to compare statistical means to determine the probability that the

differences between the means were real differences rather than chance differences.

The chi-square tests were used as a means to look at relationships between two or more qualitative variables. They were used to compare obtained frequencies on specific variables with expected frequencies, thus providing an indication of probability that significant differences were actually found.

For the purpose of developing a profile of the typical non-promoted child, discriminate analysis was employed to statistically distinguish between the two groups. A collection of discriminating variables was selected to measure characteristics in which the groups were expected to differ. The variables were then mathematically combined, and analysis was made by formation of linear combinations of discriminating variables.

The level of significance for all tests was set at .05.

Research Questions

The following questions were constructed to guide the study:

1.0 Will personal and ethnic characteristics of identification differ significantly between promoted and non-promoted first grade children?

1.1 Will minority children be non-promoted significantly more often than Caucasian children?

1.2 Will boys be non-promoted significantly more often than girls?

1.3 Will the mean age in years and months at the time of entry into first grade differ significantly between promoted and non-promoted children?

1.4 Will non-promoted children have a significantly poorer school attendance record than promoted children?

1.5 Will position in the family differ significantly between promoted and non-promoted children?

1.6 Will the mean number of siblings per family differ significantly between promoted and non-promoted children?

2.0 Will family environmental and educational background of parents differ significantly between promoted and non-promoted first grade children?

2.1 Will the mean educational level of the fathers of non-promoted children differ significantly from those of promoted children?

2.2 Will the mean educational level of the mothers of non-promoted children differ significantly from those of promoted children?

2.3 Will non-promoted children be the siblings of working mothers significantly more often than promoted children?

2.4 Will non-promoted children be the siblings of divorced or separated parents significantly more often than promoted children?

2.5 Will non-promoted children be the product of a one parent or one guardian home significantly more often than promoted children?

3.0 Will non-promoted first grade children be enrolled in programs providing special corrective assistance significantly more often than promoted children?

3.1 Will non-promoted children be enrolled in speech therapy significantly more often than promoted children?

3.2 Will non-promoted children be enrolled in learning disability classes significantly more often than promoted children?

3.3 Will non-promoted children be enrolled in remedial reading classes significantly more often than promoted children?

3.4 Will non-promoted children be enrolled in counseling programs significantly more often than promoted children?

3.5 Will non-promoted children have been referred to the school psychologist for diagnostic evaluation significantly more often than promoted children?

4.0 Will non-promoted first grade children differ significantly from promoted children in regard to visual deficiencies, auditory deficiencies, or limiting health conditions?

4.1 Will non-promoted children have been referred to a vision speialist on the basis of deficiencies identified by a school vision screening device significantly more often than promoted children?

4.2 Will non-promoted children have been referred to a hearing specialist on the basis of deficiencies identified by a school hearing screening device significantly more often than promoted children?

5.0 Will there be a significant difference in the mean scores of each specific sub-test on the Stanford Achievement Test administered at the end of first grade between promoted and non-promoted first grade children?

5.1 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Reading Comprehension"?

5.2 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Word Study Skills"?

5.3 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Mathematics Concepts"?

5.4 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Mathematics Computations"?

6.0 By employing the statistical method, discriminate analysis, can a profile of predictive value be developed that will differentiate non-promoted first grade children from those that have been promoted?

Summary

A description of the methodology involved in conducting the study was presented in this chapter.

The population consisted of children attending eight public elementary schools located in central Michigan. The selected sample consisted of 65 first graders non-promoted at the end of the 1977-78 school year. They

were compared with 65 of their first grade promoted peers selected randomly on a one-to-one basis in direct proportion to the number of non-promoted children in each classroom.

The procedure for obtaining the data was explained. The data gathering instrument was discussed, and a description was given of the five major sections of the format. Methods of reporting the results in the form of t-tests, chi-square tables, and discriminate analysis were delineated. Finally, the research questions were stated.

In Chapter IV, the data will be organized, presented, and analyzed.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The purpose of this study was to collect, analyze, and compare data regarding selected characteristics of first grade children who were not promoted at the end of their first grade school year, 1977-78. A cluster of salient characteristics was then sought for the formulation of a profile which would successfully discriminate between promoted and non-promoted children. A profile serving as a predictive device could be beneficial in helping to identify high risk individuals early, and thereby permitting the development of programs to provide special supportive assistance.

In this chapter, the statistical analyses of data related to the major research questions will be presented.

Research Questions and Statistical Analyses

Personal and Ethnic Characteristics

1.0 Will personal and ethnic characteristics of identification differ significantly between promoted and non-promoted first grade children?

Analyses of six personal and ethnic characteristics (secondary questions 1.1 through 1.6) were accomplished by the use of chi-square tables and t-tests in answering question 1.0. Three characteristics: ethnic origin, school attendance, and number of siblings per family were found to be significant, while three: sex, entry age in first grade, and position in family were found not to be significant.

Each secondary questions relating to personal and ethnic characteristics will be addressed specifically. The appropriate form of statistic applied for analysis will be listed, and the findings interpreted for significance.

1.1 Will minority children be non-promoted significantly more often than Caucasian children?

Chi-square was used statistically to test the proportion of minority children retained compared to Caucasian children. The raw chi-square score was calculated as 15.852 with a probability level of .0001. The results were statistically significant thereby providing evidence that minority children were retained more often than Caucasian children. Percentages are reported in Table 4.1

Further breakdown of the data revealed additional findings reported in Table 4.2.

Table 4.1 Promotion Status and Ethnic Origin

Promoted Status	Ethnic Origin		Number of Children
	Caucasian (%)	Minority (%)	
Promoted	80.0	20.0	65
Non-promoted	44.6	55.4	65

Chi-square = 15.852; d.f. = 1; ($p < .0001$).

Table 4.2 Promotion Status and Ethnic Origin

Promotion Status	Ethnic Origin					Total
	White	Black	Spanish	Indian	Japanese	
Promoted	52	6	5	1	1	65
Non-promoted	29	20	14	2	0	65

1.2 Will boys be non-promoted significantly more often than girls?

Chi-square was also used to statistically test for sex differences between the promoted and non-promoted groups of children. The non-promoted group of children contained 33 boys and 32 girls. The identical numbers were also found among the randomly selected group. The raw chi-square score

was calculated as .03078 with a probability level of .860, which was not statistically significant.

1.3 Will the mean age in years and months at the time of entry into first grade differ significantly between promoted and non-promoted children?

The t-test was used to statistically test the mean age differences upon entry into first grade between promoted and non-promoted children. The t-value of 1.12 with a probability level of .264 was not statistically significant. Means, medians, and modes for the differences are presented in Table 4.3.

Table 4.3 Means, Medians, and Modes for Differences in Entry Age in First Grade Between Promoted and Non-Promoted Children

Entry Age	Promoted	Non-Promoted
Mean	6 years-3 months	6 years-3 months
Median	6 years-4 months	6 years-3 months
Mode	6 years-7 months	6 years-3 months
Range	5 years-8 months to 6 years-11 months	5 years-9 months to 6 years-10 months

1.4 Will non-promoted children have a significantly poorer school attendance record than promoted children?

The mean differences in days absent from school between promoted and non-promoted children were statistically tested with the t-test. Non-promoted children were absent a mean number of 16.24 days, while promoted children missed a mean of 9.45 days. The t-value of -3.48 with a probability level of .001 was statistically significant. Means for differences are presented in Table 4.4.

1.5 Will position in the family differ significantly between promoted and non-promoted children?

Chi-square was used to statistically test the difference for position among siblings in the family between promoted and non-promoted children. The raw chi-square score was calculated as 7.394 with a probability level of .286, which was not statistically significant.

1.6 Will the mean number of siblings per family differ significantly between promoted and non-promoted children?

The t-test was used to statistically test the differences between the mean number of siblings in the family of non-promoted children as compared to promoted children. Non-promoted children were found to come from families with

Table 4.4 Means for Differences in Days Absent from School and Number of Siblings Per Family

	Promoted	Non-Promoted	t-Value
Days absent	9.45	16.24	-3.48**
Number of siblings	2.37	3.03	-2.63*

*($p < .01$).

**($p < .001$).

a mean of 3.03 children per family, compared to promoted children from families with a mean of 2.37 children. The t-value of -2.63 with a probability level of .01 was statistically significant. Means for differences are presented in Table 4.4.

Summary

Six personal and ethnic characteristics of 65 non-promoted first graders were studied and compared with those of 65 promoted first graders. Differences in the data were computed and analyzed for statistical significance.

Three characteristics, ethnic origin, absence from school, and number of siblings per family were found to be statistically significant. Thus it would appear that the non-promoted first grader would tend more often than the promoted first grader to be a minority child, to come from a larger family, and to be absent more frequently from school.

Three characteristics, sex, entry age in first grade, and rank among siblings in the family were not found to be statistically significant.

Family Environment and Educational Background

2.0 Will family environment and educational background of parents differ significantly between promoted and non-promoted children?

In answering the research question, a total of five variables were analyzed for significance. Those variables were: (1) educational levels of fathers, (2) educational levels of mothers, (3) employment status of mothers, (4) marital status of parents, and (5) number of adults rearing the child in the home. Of the five, all were found to be statistically significant except employment status of mothers.

Each secondary question relating to family environment and educational background will be specifically addressed, analyzed, and interpreted for significance.

2.1 Will the mean educational level of the fathers of non-promoted children differ significantly from those of promoted children?

The t-test was used to statistically test mean educational level differences between fathers of promoted children and fathers of non-promoted children. Fathers of

promoted children were found to have completed a mean of 13.31 years of education, compared to a mean of 10.96 years for the fathers of non-promoted children. The t-value of 4.66 with a probability level of .000 was statistically significant. Means for differences are presented in Table 4.5.

2.2 Will the mean educational level of the mothers of non-promoted children differ significantly from those of promoted children?

The mean differences in years of education completed between mothers of promoted and non-promoted children were statistically tested with the t-test. Mothers of promoted children were found to have completed a mean of 12.77 years of education, compared to a mean of 10.22 years for mothers of non-promoted children. The t-value of 5.53 with a probability level of .000 was statistically significant. Means for differences are presented in Table 4.5.

2.3 Will non-promoted children be the siblings of working mothers significantly more often than promoted children?

Chi-square was used to statistically test the proportion of non-promoted children with mothers employed outside the home compared to the mothers of promoted children. A total of 21 promoted children had mothers reportedly employed outside the home, corresponding to the mothers

Table 4.5 Means for Differences in Educational Levels of Fathers and Mothers

	Mean Number of Years		
	Promoted	Non-Promoted	t-Value
Fathers	13.31	10.96	4.66*
Mothers	12.27	10.22	5.53*

*($p < .000$).

of only 15 non-promoted children. The raw chi-square score was calculated as .999 with a probability level of .318. The results were not statistically significant.

2.4 Will non-promoted children be the siblings of divorced or separated parents significantly more often than promoted children?

The differences between marital status of parents of promoted and non-promoted children were statistically tested with chi-square. A total of 38 parents out of a possible 64 parents of non-promoted children were reported to be either separated or divorced (one parent was deceased). Fourteen parents of promoted children were reported to be separated or divorced. The raw chi-square score was calculated as 17.647 with a probability level of .0000. The results were statistically significant. Percentages are presented in Table 4.6.

Table 4.6 Marital Status of Parents

Promotion Status	Marital Status: Married (%)	Marital Status: Separated or Divorced (%)	Number of Children
Promoted	78.5	21.5	65
Non-promoted	40.6	59.4	65

Chi-square = 17.647; d.f. = 1; ($p < .0000$).

2.5 Will non-promoted children be the product of a one parent or one guardian home significantly more often than promoted children?

Chi-square was used to statistically test the differences between the number of non-promoted children being reared with only one adult present in the home, compared to promoted children. Thirty-one non-promoted children reportedly were being reared by one adult, compared to only 9 promoted children. The raw chi-square score was calculated as 15.925 with a probability level of .0001. The results were statistically significant. Percentages are presented in Table 4.7.

Table 4.7 Number of Adults in the Home Rearing the Child

Promotion Status	Number of Adults		Number of Children
	One (%)	Two (%)	
Promoted	13.8	86.2	65
Non-promoted	47.7	52.3	65

Chi-square = 15.925; d.f. = 1; ($p < .0001$).

Summary

Five variables dealing with family environment and educational background were studied. Statistically significant differences were found to exist between promoted and non-promoted first graders on all but one of the variables. Non-promoted first graders tended more often to come from homes where both the father and the mother had a lower educational status than the promoted first graders. In addition, parents of non-promoted children were more often separated or divorced, and the non-promoted child was more likely to reside in a home with only one adult present.

Employment status of the mother was not found to be statistically significant.

Programs of Assistance

3.0 Will non-promoted first grade children be enrolled in programs providing special corrective assistance significantly more often than promoted children?

In response to this research question, a total of five variables were analyzed for significance. The five included speech therapy, learning disabilities, remedial reading, counseling, and psychological evaluation. Of the five, three were found to be significant. The three were remedial reading, counseling, and psychological testing.

Each secondary question relating to the major research question will be presented, discussed, analyzed, and interpreted for significance.

3.1 Will non-promoted children be enrolled in speech therapy significantly more often than promoted children?

Chi-square was used to statistically test the number of non-promoted children enrolled in speech therapy compared with promoted children. Ten of the 65 non-promoted children were found to be enrolled in speech therapy, compared to 4 of the 65 promoted children. The raw chi-square score was calculated as 2.001 with a probability level of .1572. The results were not statistically significant.

3.2 Will non-promoted children be enrolled in learning disability classes significantly more often than promoted children?

The differences in enrollment in learning disabilities classes between promoted and non-promoted children were statistically tested with chi-square. Only 3 non-promoted children were enrolled in learning disabilities classes with a corresponding number of 0 promoted children. The raw chi-square score was calculated as 1.365 with a probability level of .2427. The results were not statistically significant.

3.3 Will non-promoted children be enrolled in remedial reading classes significantly more often than promoted children?

Promoted and non-promoted children were compared statistically on enrollment in remedial reading clases by the chi-square test. Thirty-eight non-promoted children and only 1 promoted child were found to be enrolled. The raw chi-square score was calculated as 47.473 with a probability level of .0000. The results were statistically significant. Percentages are reported in Table 4.8.

Table 4.8 Enrollment in Remedial Reading

Promotion Status	Remedial Reading: Yes (%)	Remedial Reading: No (%)	Number of Children
Promoted	1.5	98.5	65
Non-promoted	58.5	41.5	65

Chi-square = 47.473; d.f. = 1; ($p < .000$).

3.4 Will non-promoted children be enrolled in counseling programs significantly more often than promoted children?

Chi-square was used to statistically test children on the basis of enrollment in counseling programs. The number of non-promoted children enrolled was compared to the number of promoted children enrolled. Eleven non-promoted children were enrolled in counseling programs while no promoted children were. The raw chi-square score was calculated as 9.931 with a probability level of .0000. The results were statistically significant. Percentages are reported in Table 4.9.

Table 4.9 Enrollment in Counseling Programs

Promotion Status	Counseling Program: Yes (%)	Counseling Program: No (%)	Number of Children
Promoted	0.0	100.0	65
Non-promoted	16.9	83.1	65

Chi-square = 9.931; d.f. = 1; ($p < .0000$).

3.5 Will non-promoted children have been referred to the school psychologist for diagnostic evaluation significantly more often than promoted children?

Promoted and non-promoted children were compared statistically on the basis of referral to a school psychologist for diagnostic evaluation. The chi-square test was used to differentiate between the two groups. Collection of data revealed 25 cases of referral from the non-promoted group and 0 from the promoted group. The raw chi-square score was calculated as 28.526 with a probability level of .0000. The results were statistically significant. Percentages are reported in Table 4.10.

Table 4.10 Referral to School Psychologist

Promotion Status	Psychologist Yes (%)	Psychologist No (%)	Number of Children
Promoted	0.0	100.0	65
Non-promoted	38.5	61.5	65

Chi-square = 28.526; d.f. = 1; ($p < .0000$).

Summary

Promoted and non-promoted children were compared on the basis of enrollment in programs providing special corrective assistance and psychological evaluative referrals. Statistically significant differences were found to exist between the two groups on three of the five variables. Non-promoted children were enrolled in remedial reading, were enrolled in a counseling program, and had been referred for psychological evaluation significantly more often than promoted children. Differences involving enrollment in speech therapy and learning disabilities programs were not statistically significant.

Visual, Auditory, and Health Deficiencies

4.0 Will non-promoted first grade children differ significantly from promoted children in regard to visual deficiencies, auditory deficiencies, or limiting health conditions?

In responding to this research question, a total of three variables were analyzed for significance. The three included referrals made by the school to vision specialists, referrals to hearing specialists, and limiting health conditions requiring regular medical attention. Of the three variables analyzed, only vision was significant.

Each secondary question relating to the major research question will be presented, discussed, analyzed, and interpreted for significance.

4.1 Will non-promoted children have been referred to a vision specialist on the basis of deficiencies identified by a school vision screening device significantly more often than promoted children?

Chi-square was used to statistically test children on the basis of referral to a vision specialist. The number of non-promoted children referred was compared to the number of promoted children referred. Nine non-promoted children were referred in comparison to 2 promoted children. The raw

chi-square score was calculated as 3.575 with a probability level of .05. The results were statistically significant. Percentages are reported in Table 4.11.

Table 4.11 Vision Referrals

Promotion Status	Referred: Yes (%)	Referred: No (%)	Number of Children
Promoted	3.1	96.9	65
Non-promoted	13.8	86.2	65

Chi square = 3.575; d.f. = 1; ($p < .05$).

4.2 Will non-promoted children have been referred to a hearing specialist on the basis of deficiencies identified by a school hearing screening device significantly more often than promoted children?

Promoted and non-promoted children were compared statistically on the basis of school referrals to hearing specialists. The chi-square test was used to differentiate between the two groups. An equal number of referrals (15) was made for each group. The raw chi-square score was calculated as .143 with a probability level of .835. The results were not statistically significant.

4.3 Will non-promoted children have limiting health conditions requiring regular medical attention significantly more often than promoted children?

The differences in numbers of promoted and non-promoted children with limiting health conditions requiring regular medical attention were statistically tested by chi-square. Nine promoted children were identified with limiting conditions as were 6 non-promoted children. The raw chi-square was calculated as .301 with a probability level of .5830. The results were not statistically significant.

Summary

Of the three variables compared between promoted and non-promoted first graders, only referral by school personnel to a vision specialist was statistically significant. Non-promoted children were found to be referred significantly more often. The other two variables, referral to a hearing specialist and limiting health conditions were not found to differ significantly between the two groups.

Stanford Achievement Test Scores

5.0 Will there be a significant difference in the mean scores of each specific subtest on the Stanford Achievement Test administered at the end of first grade between promoted and non-promoted first grade children?

Only four sub-tests of the S.A.T. were administered to first graders in the particular school district where the sample was taken. The four included: (1) Reading Comprehension, (2) Word Study Skills, (3) Mathematical Concepts, and (4) Mathematics Computations. Differences in the mean scores between promoted and non-promoted children were statistically tested on each sub-test. The t-test was used to determine significance. The results showed that all four sub-tests were statistically significant.

Each sub-test will be addressed, and a presentation of the analysis of each mean score will be made.

5.1 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Reading Comprehension"?

The t-test was used to statistically test mean differences on the sub-test, "Reading Comprehension," between promoted and non-promoted children. Promoted children were found to have a mean grade equivalency score of 2.57, compared to a mean of 1.19 for non-promoted children. The t-value of 11.05 with a probability level of .000 was statistically significant. Means for differences are presented in Table 4.12.

5.2 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Word Study Skills"?

The mean differences on the sub-test, "Word Study Skills," between promoted and non-promoted children were statistically tested with the t-test. The mean grade equivalent for promoted children was found to be 2.87, compared to a mean of 1.4 for non-promoted children. The t-value of 8.56 with a probability level of .000 was statistically significant. Means for differences are presented in Table 4.12.

5.3 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Mathematics Concepts"?

The t-test was used to statistically test the mean differences between promoted and non-promoted children on the sub-test, "Mathematics Concepts." The mean grade equivalent for promoted children was found to be 2.86, compared to a mean of 1.59 for non-promoted children. The t-value of 8.21 with a probability level of .000 was statistically significant. Means for differences are presented in Table 4.12.

5.4 Will the mean score for non-promoted children differ significantly from promoted children on the sub-test, "Mathematics Computations"?

The mean differences on the sub-test, "Mathematics Computations," between promoted and non-promoted children were statistically tested with the t-test. The mean grade

Table 4.12 Means for Sub-Test and Composite S.A.T. Scores

Sub-Tests and Totals	Mean S.A.T. Scores		t-Value
	Promoted	Non-Promoted	
Reading Comprehension	2.57	1.19	11.05*
Word Study Skills	2.87	1.40	8.56*
Math Concepts	2.86	1.59	8.21*
Math Computations	2.56	1.52	9.53*
Total Reading	2.71	1.25	10.11*
Total Math	2.68	1.51	9.55*

*($p < .000$).

equivalent for promoted children was found to be 2.54, compared to a mean of 1.52 for non-promoted children. The t-value of 9.53 with a probability level of .000 was statistically significant. Means for differences are presented in Table 4.12.

Summary

A comparison was made of the mean scores on four sub-tests of the S.A.T. between promoted and non-promoted first graders. The four sub-tests were administered at the end of first grade. On each sub-test, the non-promoted group was found to perform poorer than the promoted group. Analysis of the mean scores showed all four sub-tests were

statistically significant. The sub-tests were, "Reading Comprehension," "Word Study Skills," "Mathematics Concepts," and "Mathematics Computations."

A further breakdown of S.A.T. scores between promoted and non-promoted groups of children as well as between the sexes in each group is presented in Figures 1 and 2.

Profile of Predictive Value

6.0 By employing the statistical method, discriminate analysis, can a profile of predictive value be developed that will differentiate non-promoted first grade children from those that have been promoted?

The Direct Method, or default technique, of discriminate analysis was employed as the first step in distinguishing between promoted and non-promoted children. This method involved the placement of all variables studied into the computer for analysis. This process provided a list of function coefficients, thus allowing the researcher to identify variables which were the best discriminators between the two groups. A complete list of all variables analyzed is presented in Appendix B.

Next, the Stepwise Selection Method of discriminate analysis was used. Variables were selected for further

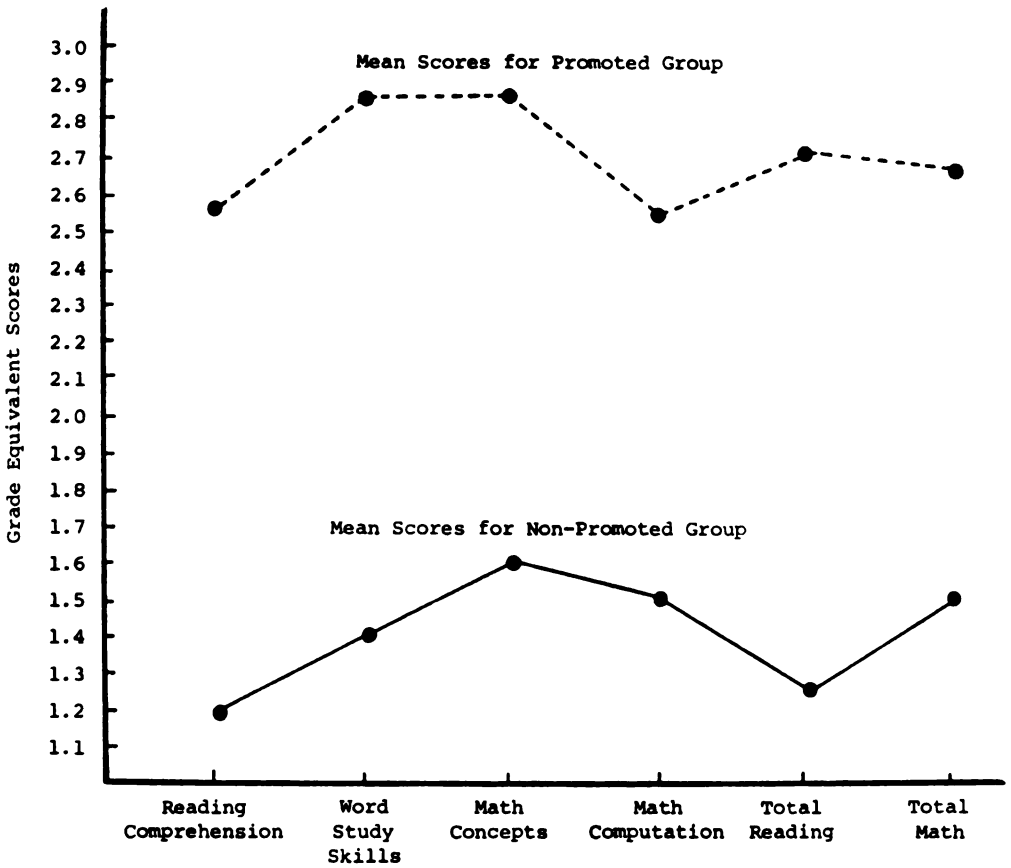

Figure 1. Graphed S.A.T. Mean Scores for Promoted and Non-Promoted Groups.

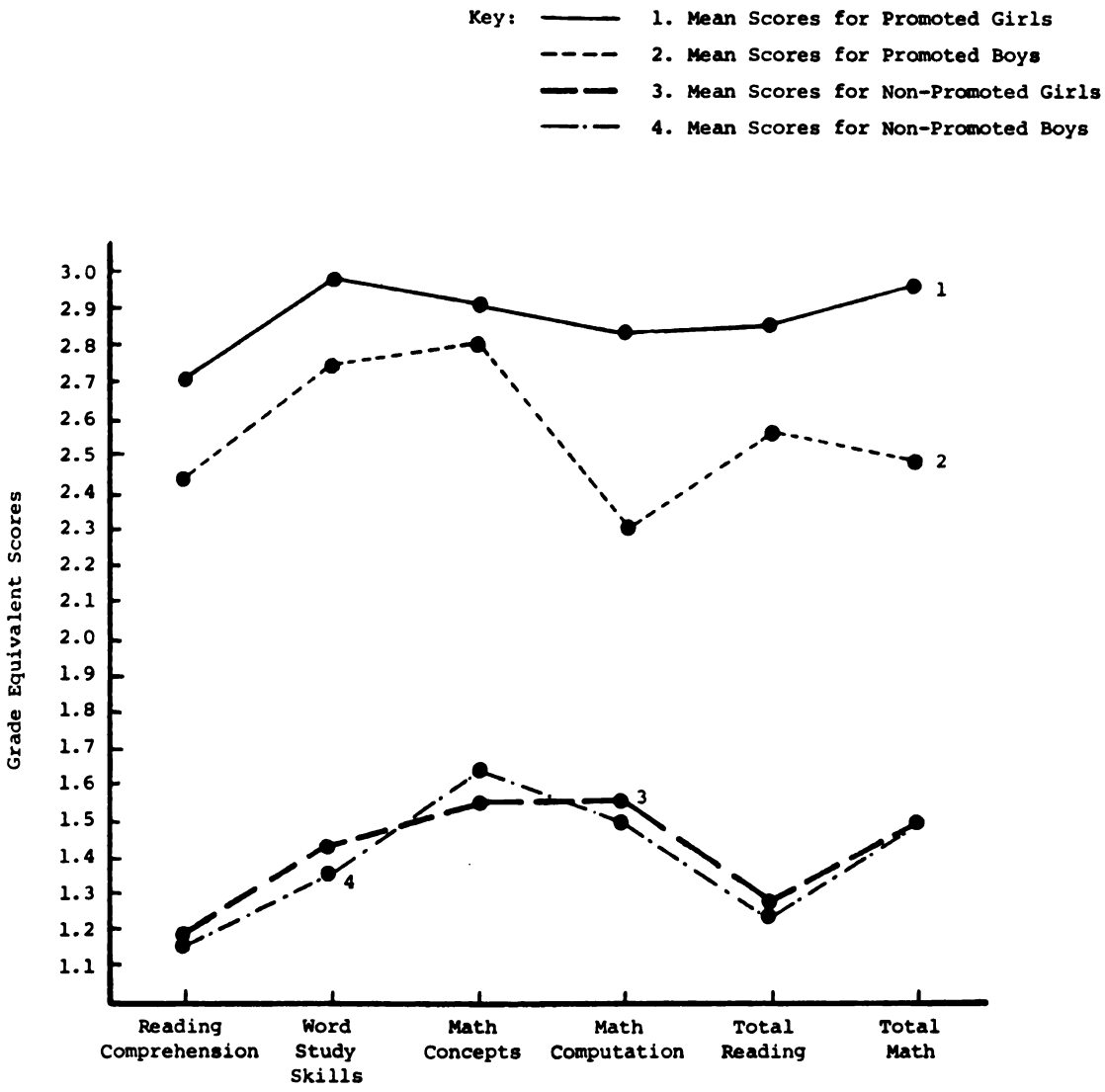

Figure 2. Graphed S.A.T. Mean Scores for Promoted and Non-Promoted Children Distinguished by Sex.

analyses on the basis of their discriminating powers in step one. A "weeding out" process was then begun and repeated several times. Each time, variables found to be the weakest discriminators, or to overlap in information were eliminated. By sequentially selecting the best discriminators at each stage, a reduced set of variables was found which successfully predicted with 93.5 percent accuracy children who would not be promoted. Those variables were: (1) ethnic origin, (2) number of siblings per family, (3) educational level of the mother, (4) marital status of parents, (5) S.A.T. Total Reading Score, and (6) S.A.T. Total Mathematics Score.

The canonical correlation for these variables was calculated as .73006, while Wilks' lambda was computed as .46701. Transformation of Wilks' lambda into a chi-square statistic, provided a raw chi-square score calculated as 92.893 with a probability level of .000. The results were statistically significant. Prediction results are presented in Table 4.13.

Table 4.13 Prediction Results for Promoted and Non-Promoted First Graders

Promotion Status	Predictability of Group Membership: Correctly Predicted (%)	Predictability of Group Membership: Incorrectly Predicted (%)	Number of Children
Non-promoted	93.5	6.5	62
Promoted	75.4	24.6	65

Chi-square = 92.893; d.f. = 6; ($p < .000$).

Summary

Discriminate analysis was employed to distinguish between promoted and non-promoted children. Variables were analyzed for their discriminating power. Weaker and overlapping variables were eliminated until a statistically significant reduced set of variables was found. The level of accuracy attained in predicting retention of first graders was computed at 93.5 percent. The variables with the greatest predictability were: (1) ethnic origin, (2) number of siblings per family, (3) education level of mother, (4) marital status, (5) S.A.T. Total Reading Score, and (6) S.A.T. Total Mathematics Score.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this study was to collect, analyze, and compare data regarding selected characteristics of first grade children who were not promoted at the end of their first grade school year, 1977-78. A cluster of salient characteristics was then sought for the formulation of a profile which would successfully discriminate between promoted and non-promoted children. A profile serving as a predictive device could be beneficial in assisting with the early identification of high risk individuals, and thereby permitting the development of programs to provide special supportive assistance.

In this chapter, major results of the study, implications and recommendations for further research will be presented.

Major Results and Discussions

Within the limits of setting, population sampling, and methodology, the findings of this study are presented. Specific results are reported under headings of each major

research question explored. The level of significance for all tests was set at .05.

1.0 Personal and Ethnic Characteristics

Promoted and non-promoted first graders differed significantly with regard to three personal and ethnic characteristics. Those characteristics were: (1) ethnic origin, (2) school attendance, and (3) number of siblings per family.

Of the non-promoted children studied, 55.4 percent were minority children. This compared with a 20 percent minority rate in the promoted group. The findings that minority children were retained more often than Caucasian children is in agreement with studies by Kelly (1967), Hernandez and Others (1976), the Commission of Civil Rights (1972), and Abidin, Golladay, and Howerton (1971). Conflicting information was reported by Henderson (1970), who reported that Caucasian males were retained in disproportionate numbers.

The mean number of days absent from school was significant between promoted and non-promoted children. Non-promoted children were absent a mean number of 16.24 days, compared to 9.45 for promoted children.

Non-promoted children also came from families with more siblings. Mean family size for non-promoted children

was 3.03 children per family, compared to a mean of 2.37 for promoted children.

Personal characteristics found not to differ significantly between promoted and non-promoted groups were sex, entry age in first grade, and rank among siblings.

Of the 65 non-promoted children studied, 33 were identified as boys and 32 as girls. These results are different from findings reported by Abidin, Golladay, and Howerton (1971), Henderson (1970), and Caplan (1973). However, no two of their studies appear to be in complete agreement. Abidin, Golladay, and Howerton identified Black males as the most likely to be retained, Henderson identified White males, and Caplan reported all males at a rate of four-to-one over girls.

Although the researcher is not aware of additional studies comparing non-promotion and entry age into first grade, teachers frequently associated poor first grade performance leading to retention with late birthdates. Promoted children in this study were found to be on the mean slightly older, but not enough to be statistically significant.

2.0 Family Environment and Educational Background

Promoted and non-promoted first graders differed significantly with regard to four family environmental and

educational variables. Those variables were: (1) educational level of father, (2) educational level of mother, (3) marital status of parents, and (4) number of adults rearing the child in the home.

The mean educational level for fathers of non-promoted children was found to be 10.96 years, compared to a mean of 13.31 years for fathers of the promoted group. Although the mean of 13.31 years could well be above the national mean for fathers of promoted first graders, the population from which the sample was taken may tend to influence the statistic. The population investigated resided in a city of 130,000 in which one of the largest universities in the nation is located. In addition, several other institutions of higher learning are found in the immediate area.

The mean educational level for mothers of non-promoted children was found to be 10.22 years. In contrast, mothers of promoted children had completed a mean of 12.27 years of schooling.

The findings concerning lower educational status of parents of retained children are similar to those reported by Reinherz and Griffin (1970). They studied 57 retained boys and found that 53 percent of their fathers had not completed high school.

A marked difference was found in the marital status between parents of promoted and non-promoted first graders. Results revealed that 59.4 percent of the parents of non-promoted children were either separated or divorced as compared to 21.5 percent of parents of the promoted group.

Non-promoted children were also being reared with only one adult present in the home significantly more often than promoted children. Promoted children came from homes where two adults were present in all but 9 of the 65 cases studied. On the other hand, 31 of 65 non-promoted children came from homes with only one adult present.

Promoted and non-promoted children did not differ significantly with regard to employment status of mother. In fact, a slightly larger number (5) of the mothers of promoted children were employed outside the home than mothers of non-promoted children. This is in conflict with the findings of Abidin, Golladay, and Howerton (1971), who reported that a large percentage of the mothers of non-promoted children in North Carolina were employed outside the home.

3.0 Programs of Assistance

Promoted and non-promoted first graders differed on three variables with regard to identification by teachers as children needing the assistance of special programs. Those variables were: (1) enrollment in remedial reading,

(2) enrollment in a counseling program, and (3) referral to a school psychologist for evaluation.

Thirty-eight of 65 non-promoted children attended a remedial reading class. In comparison, only one promoted child was enrolled. Teachers reported that most of the children were placed in the remedial class after a period of failing to progress in the classroom. Placement in remedial reading tended to occur within the first semester. Three schools reported early placement on the basis of a readiness test administered at the end of kindergarten. Children scoring in the lowest 15th percentile were automatically enrolled in remedial reading in first grade. Readiness tests have become optional within the school district, however, and were rarely found to be recorded in the permanent file.

Differences were found between promoted and non-promoted children in regard to enrollment in counseling programs and referral to school psychologists. Eleven non-promoted children were enrolled in counseling programs. However, there were no promoted children from the group reported to be enrolled. In addition, 25 of the 65 non-promoted children had been referred for psychological evaluation, compared with 0 promoted children.

Promoted and non-promoted children did <u>not</u> differ significantly with regard to enrollment in speech therapy

classes, or learning disabilities classes. The possibility exists, however, that the results of these findings were influenced by specific programs unique to the schools in which the population was enrolled. Speech therapy was provided on a limited basis with one speech therapist assigned to a minimum of three schools. Teachers reported that only the most severe problem cases were seen by a therapist. Ten non-promoted children were enrolled in speech therapy while four promoted children were enrolled. Considering the circumstances, replication with a population provided with more thorough therapy services could produce different results.

In addition, learning disability services on an out-patient basis in the schools were extremely minimal. In some schools, no programs existed at all. From all grade levels, children diagnosed as having severe learning disabilities tended to be transported to a central location and enrolled in all-day programs.

4.0 Visual, Auditory, and Health Deficiencies

Promoted and non-promoted first grade children were found to differ significantly with regard to visual deficiencies identified by a school vision screening device. The screening device used to detect deficiencies was the Massachusetts Test of Vision. Nine non-promoted children

were referred to a vision specialist on the basis of the test, compared to two from the promoted group.

No significant differences were found between promoted and non-promoted children regarding hearing deficiencies, or limiting health conditions. The screening device used for hearing was the Pure-Tone Audiometer.

Although there were no significant differences, the researcher was somewhat surprised to find 30 cases of hearing referrals from the total population of 130 children. Fifteen cases were non-promoted children while 15 were promoted children. Nearly all the referrals were followed up with medical evaluations from doctors confirming the deficiencies. Medical diagnosis tended to indicate difficulties involving tonsils, adenoids, and fluid in the inner ear.

5.0 Stanford Achievement Test Scores

Promoted and non-promoted first graders differed significantly with regard to mean scores attained on four sub-tests of the S.A.T. administered at the end of first grade. The four sub-tests were: (1) Reading Comprehension, (2) Word Study Skills, (3) Mathematics Concepts, and (4) Mathematics Computations (Table 4.12). These particular sub-tests were all that were administered to first graders in the school district where the sample was taken.

While the mean scores for non-promoted children in mathematics were well below those for promoted children, an even greater discrepancy existed between mean scores in reading. These results tended to support the findings of Gold (1970) regarding a relationship between deficient reading ability and non-promotion. Gold studied 372 subjects attending a Title III learning center and found that 75 percent of the children had repeated a grade.

Conflicting information, however, was reported by Paramore, Plantec, and Hospodar (1973). Children who were retained after having been tutored by trained volunteers for a period of one school year were tested and found to have no significant differences in mean reading scores from promoted peers. They concluded that low reading ability was not a factor in the retention of children in their particular sample.

6.0 Profile of Predictive Value

Discriminate analysis was employed to distinguish between promoted and non-promoted children in an attempt to formulate a profile of predictive value. Programs of special supportive assistance could then be developed if high risk individuals were identified early.

Variables studied were analyzed for discriminating power. Weaker and overlapping variables were discarded. Finally, a reduced set of statistically significant

variables was derived. The variables were: (1) ethnic origin, (2) number of siblings per family, (3) educational level of mother, (4) marital status of parents, (5) S.A.T. Total Reading score, and (6) S.A.T. Total Mathematics score. The variables were statistically determined to have a 93.5 percent predictability level for identification of high risk first graders.

Mean educational level of fathers of non-promoted children was also found to be very low. However, information lacking on the educational status of 13 fathers due to separation or divorce considerably reduced the variable's power to discriminate.

Results indicated that the non-promoted first graders tended to have the following profile of characteristics which best distinguished them from the promoted group:

1. They tended to be a member of a minority race.
2. They tended to come from a larger family.
3. Their mothers tended to have a lower educational level.
4. They tended to come from a home where their parents were either separated or divorced.
5. They tended to be academically low in reading.
6. They tended to be academically low in mathematics.

Implications of the Findings

The implications of this study are many. At this point, the investigator will go beyond his data to share his reflections. The reader may accept or reject his comments.

During the course of the study, certain comments made by teachers of children being non-promoted were gathered. The rationale most frequently given for retention appeared to be for reasons of immaturity and lack of readiness. Rarely, however, did tangible evidence appear to be presented to support the judgment. One school even provided teachers with a mimeographed bulletin to parents stating that it would be advantageous for their children to repeat first grade due to immaturity and lack of readiness. That particular school retained more than a dozen first graders. The following questions might be posed: Is the above-mentioned rationale purely subjective? Does immaturity indicate slow physical maturation, mental maturation, or both? Can maturity and readiness be measured accurately? If so, is it being measured adequately?

Review of the literature would seem to indicate a generally negative attitude toward non-promotion as an educational policy. Considering the possible long-term effects, it would appear that programs of special assistance

attempting to prevent as much retention as possible would be in order. However, before development of beneficial programs is accomplished, there would appear to be a need for school districts to define their retained populations and to identify specific characteristics of those populations. Sound decision making is often associated with having maximum information available to make decisions.

Monetarily, the cost of non-promotion is not inexpensive. Each time a child is retained, an additional year is added to the cost of his public education. In the district where this study was conducted, the Board of Education listed the current yearly cost of educating a child at $1,694. At that rate, the total cost of retention for the 65 children studied approximates $110,110. Considering that only about 25 percent of the total first grade population in the school district was investigated, the cost district wide could be monumental. It would appear then, that lack of funds should not inhibit the development of programs to provide special supportive assistance.

The fact that teachers did recognize the need for special help for many of the children ultimately retained, can be evidenced by the significant numbers enrolled in remedial reading, counseling programs, and referred to the school psychologist. However, records verified that nearly all of the children were referred only after having spent the greatest part of a semester failing in the classroom.

Throughout the study the researcher could not help but be reminded of similarities between groups of non-promoted children and other populations of youth. Many of the significant characteristics found in this study would not appear to be unique to non-promoted children specifically, but rather to disadvantaged children in general.

The National Educational Association (1967) in a research summary bulletin, identified many of the same characteristics among school dropouts. Similar findings were also reported by Randall (1968). In addition, researchers including Kvarceus (1958), and Glueck and Glueck (1950) while studying juvenile delinquents have reported the following among significant characteristics found: (1) low educational level of parents, (2) siblings from larger than average families, (3) high divorce and abandonment rates among parents, (4) high percentage of minority children, (5) high absenteeism from school, and (6) academic failure in multiple school subjects.

Recommendations for Future Research

1. The research should be replicated in other regions of the country and at additional grade levels to determine the generalizability of the significant salient characteristics identified in this study.

2. The rationale for non-promotion needs to be studied. Do schools tend to have standard policies concerning retention? Does retention tend to be based on subjective judgment? Who makes the final decision to retain? If standard non-promotion policies exist, are teachers, parents, and administrators all involved in their formulation?

3. There is a need to investigate the effects of non-promotion on academic progress when the child has a part in the decision to repeat a grade.

4. There is need for research exploring the possibility that teacher perceptions and expectancies may influence the decision to retain a child.

5. Since emotional immaturity seems to frequently be discussed a a reason for non-promotion, a study needs to be made to determine if a criteria can be developed which would adequately measure level of maturity.

6. Research is needed to compare teacher personal characteristics (e.g., age, sex, educational philosophy, style of teaching, etc.) with the tendency to retain children.

7. Research is needed concerning the development of programs which could provide special supportive assistance once high risk children have been identified. Since non-promoted children appear frequently to be disadvantaged

would application for federal research grants be appropriate?

8. Greater research efforts are needed to determine the long-range effects of non-promotion on the self-concepts and social adjustments of students. In retrospect, for example, would high school students retained in the primary grades perceive their retention as having been a traumatic experience?

9. There is need for research investigating a possible relationship between student attitudes toward school and non-promotion as perceived by teachers.

APPENDICES

APPENDIX A

CODED CHECKLIST INVENTORY

APPENDIX A

CODED CHECKLIST INVENTORY

N.P. No._____ Date of Birth_____

PERSONAL CHARACTERISTICS:

Sex: M F Attendance: days present____ days absent____

Number of siblings in family____ Rank among siblings____

Entry age in 1st grade: years____ months____ Ethnic origin_____

FAMILY CHARACTERISTICS:

Years of education: father____ mother____

Mother employed outside home: yes____ no____

Marital status of parents: married____ divorced/separated____

Parents in the home: one____ two____ other adults____

ENROLLMENT IN SPECIAL PROGRAMS:

Speech____ Learning disabilities____ Remedial reading____

Counseling____ Referral to school psychologist____

VISUAL, AUDITORY, AND HEALTH DEFICIENCIES:

Vision: normal____ referred____ Hearing: normal____ referred____

Limiting conditions: allergies____ diabetes____ epilepsy____

heart ailment____ other_____

STANFORD ACHIEVEMENT TEST:

Reading Comprehension_____ Mathematics Concepts_____

Word Study Skills_____ Mathematics Computations_____

Total Reading_____ Total Mathematics_____

APPENDIX B

SUMMARY OF ALL VARIABLES STUDIED

APPENDIX B

SUMMARY OF ALL VARIABLES STUDIED

Variables		Non-Promoted	Promoted
1.1	Ethnic origin: minority children	55.4%	20%
	Caucasian children	44.6%	80%
1.2	Sex: boys	33	33
	girls	32	32
1.3	Mean entry age in 1st grade	6 yrs., 3 mo.	same
1.4	Mean days absent from school	16.34	9.45
1.5	Rank among siblings: first	41.5%	38.5%
	second	26.2%	36.9%
	third	12.3%	15.4%
1.6	Mean number of siblings per family	3.03	2.37
2.1	Mean educational level of fathers	10.96 yrs.	13.31 yrs.
2.2	Mean educational level of mothers	10.22 yrs.	12.27 yrs.
2.3	Mothers employed outside home	25.4%	35.6%
2.4	Separated or divorced parents	59.4%	21.5%
2.5	One adult rearing child	47.7%	13.8%
3.1	Enrolled in speech	15.4%	6.2%
3.2	Enrolled in learning disabilities	4.6%	0%
3.3	Enrolled in remedial reading	41.5%	1.5%
3.4	Enrolled in a counseling program	16.9%	0%
3.5	Referred to school psychologist	38.5%	0%
4.1	Vision referrals	13.8%	3.1%
4.2	Hearing referrals	23.1%	23.1%
4.3	Limiting health conditions	9.2%	13.8%
Mean S.A.T. Grade Equivalent Scores			
5.1	Reading Comprehension	1.19	2.57
5.2	Word Study Skills	1.40	2.87
5.3	Math Concepts	1.59	2.86
5.4	Math Computations	1.51	2.56
5.5	Total Reading	1.25	2.71
5.6	Total Math	1.51	2.68

BIBLIOGRAPHY

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Abeson, Alan. A Continuing Summary of Pending and Completed Litigation Regarding the Education of Handicapped Children. Arlington, Va.: Information Center on Exceptional Children, ED 067 779, October 1972.

Abindin, Richard, Golladay, Wendy, and Howerton, Anna. "Elementary School Retention: An Unjustifiable Discriminatory and Noxious Educational Policy." Journal of School Psychology 9 (1971): 410-417.

Ames, Louise B., and Gillespie, Clyde. "The Cure for Overplacement." Instructor 80 (October 1972): 81-83.

Archambo, Judith P., and Briscoe, May E. "Rural Child Care Project, 1968-69 Research Evaluation." Kentucky Child Welfare Research Foundation, Incorporated. Washington, D.C.: Office of Economic Opportunity, ED 055 682, 1970.

Bard, Bernard. "Why Our Schools Are Failing." Parents' Magazine, 1976, pp. 40-41, 63-64.

Bedoian, Vagharsh. "Social Acceptability and Social Rejection of the Underage, At-age, and Overage Pupils in the Sixth Grade." Journal of Educational Research 47 (March 1954): 513-520.

Bocks, William M. "Non-Promotion: A Year to Grow?" Educational Leadership 34 (February 1977): 379-382.

Bocks, William M. "The Relationship of Teacher Chacteristics to Belief Changes Following Introduction of Non-Promotion Research Evidence." Ph.D. dissertation, Michigan State University, 1966.

Boshier, R. "The Effect of Academic Failure on Self-Concept and Maladjustment Indices." Journal of Educational Research 65 (1972): 347-351.

Boys Club of New York. A Suggested Guidance Program for Combating School Drop-Outs. New York, ED 001 735, 1966.

Briggs, Albert A. "Over Half of West Side 8th Graders Fail to Meet Reading Standards." Chicago Tribune, 1 June 1977, Section 1, p. 1.

Caplan, Paula J. "The Role of Classroom Conduct in the Promotion and Retention of Elementary School Children." Journal of Experimental Education 41 (1973): 8-11.

Casavantes, Edward J. "Reading Achievement and In-Grade Retention Rate Differentials for Mexican-American and Black Students in Selected States of the Southwest." Ph.D. dissertation, University of Southern California, 1975.

Chansky, N. M. "Progress of Promoted and Repeating Grade I Failures." Journal of Experimental Education 32 (1964): 225-237.

Cheyney, W. Walker, and Boyer, Philip A. A study reported in mimeographed form. Extracts quoted in Elementary School Journal 33 (May 1933): 647-651.

Coffield, William H., and Blommers, Paul. "Effects of Non-Promotion of Educational Achievement in the Elementary School." Journal of Educational Psychology 47 (1956): 235-250.

Coleman, James. "The Concept of Equality of Educational Opportunity." Harvard Educational Review 38 (Winter 1968): 7-22.

Commission on Civil Rights. "The Unfinished Education: Outcomes for Minorities in the Five Southwestern States." Washington, D.C.: Mexican American Educational Series, ED 056 821, 1971.

Counts, George E., and Others. "Grades Earned in Repeated Courses." Journal of Experimental Education 42 (Spring 1974): 11-16.

De Burciaga, Cecilia P. Toward Quality Education for Mexican Americans. Washington, D.C.: Commission on Civil Rights, ED 086 407, 1974.

Dobbs, Virginia, and Neville, Donald. "The Effects of Non-Promotion on the Achievement of Groups Matched from Retained First Graders and Promoted Second Graders." Journal of Educational Research 60 (1967): 472-475.

Farvey, E. S. "Regarding Repeaters: Sad Effect of Failure Upon the Child." Nations School 18 (1936): 37-39.

Finlayson, Harry J. "Non-Promotion and Self-Concept Development." Phi Delta Kappan 59 (November 1977): 205-206.

Funk, Hal D. "Non-Promotion Teaches Children They Are Inferior." Education Digest 35 (November 1969): 38-39.

Gaite, A. J. H. On the Validity of Non-Promotion as an Educational Procedure. Madison, Wis.: University of Wisconsin, ED 04 643, May 1971.

Gilchrist, Edward P. "The Extent to Which Praise and Reproof Affect a Pupil's Work." School and Society 4 (December 1916): 872-874.

Glueck, Sheldon, and Glueck, Eleanor. Toward a Typology of Juvenile Offenders. New York: Grune and Stratton, Inc., 1970, pp. 68, 106, 112.

Glueck, Sheldon, and Glueck, Eleanor. Unraveling Juvenile Delinquency. Cambridge, Mass.: Harvard University Press, 1950.

Godfrey, Ernestine. "The Tragedy of Failure." Education Digest 37 (January 1972): 34-35.

Gold, Lawrence, and Huebner, Dale M. "An Investigation of the Incidence of Developmental Dyslexia and Selected Factors Associated with the Condition: Results of a Two-Year Study." Paper presented at the International Reading Association Conference, Anaheim, California, May 6-9, 1970. ED 040 828.

Goodlad, John I. "Some Effects of Promotion and Non-Promotion Upon the Social and Personal Adjustment of Children." Journal of Experimental Education 22 (June 1954): 301-329.

Hargroves, Jeannette. Final Report on the Pupil Assignment and Promotion Study. Washington, D.C.: Office of Education, 1974. ED 094 885.

Henderson, Norman B., and Others. "The Differential Rate of Promotion from the First Grade in School for White and Negro, Male and Female Seven Year Old Children." Paper presented at the Western Psychological Association Convention, Los Angeles, California, ED 042 823, 1970.

Hernandez, Jose, and Others. "Social Factors in Educational Attainment Among Puerto Ricans in U.S. Metropolitan Areas, 1970." ASPIRA, Inc., New York. The first in a series of reports on Puerto Ricans and Education, ED 141 421, 1976.

Hurlock, Elizabeth B. "An Evaluation of Certain Incentives Used in School Work." Journal of Educational Psychology 16 (March 1925): 145-159.

International Bureau of Education. United Nations Educational Scientific and Cultural Organization. "A Statistical Study of Wastage at School." Geneva, Switzerland: Studies and Surveys in Comparative Education Series, ED 083 303, 1972.

Jackson, Gregg B. "The Research Evidence on the Effects of Grade Retention." Review of Educational Research 45 (February 1975): 613-635.

Kvaraceus, William C. "Juvenile Delinquency." What Research Says to the Teacher 15. Washington, D.C.: Department of Classroom Teachers, American Educational Research Association of the National Education Association, 1958.

Kelly, William H. "A Study of Southern Arizona School-Age Indian Children, 1966-1967." Tucson: Bureau of Ethnic Research, Arizona University, ED 024 485, 1967.

Kentucky State Department of Education. Kindergarten Education in Kentucky. Frankfort, Ky., ED 087 560, October 1972.

Keyes, Charles Henry. "Progress Through the Grades of City Schools." New York: Bureau of Publications, Teachers College, Columbia University, 1911.

Koons, Clair L. "Non-Promotion: A Dead-End Road." Phi Delta Kappan, May 1977, pp. 701-702.

Koons, Clair L. "Non-Promotion of First and Second Grade Students and Subsequent Reading Performance." Ph.D. dissertation, University of Tulsa, 1968.

Kowitz, G. T., and Armstrong, C. M. "The Effect of Promotion Policy on Academic Achievement." Elementary School Journal, May 1961, pp. 435-443.

Lansing School District. Facts and Figures. Lansing, Mich.: Board of Education, 1977-78.

Lloyd, Dee Norman. "Reading Achievement and Its Relationship to Academic Performance; Part Three: Relationships of Family Background and Third Grade Performance to Sixth Grade Reading Achievement." Rockville, Md.: National Institute of Mental Health, ED 064 704, 1972.

Lorton, Larry. "Reorganizing for Learning at McKinley School--An Experiment in Multi-Unit Instruction." Paper presented at the 58th American Educational Research Association Annual Meeting, New Orleans, Louisiana, ED 075 911, February 1973.

McBeath, Marcia. "Should We Mold the Child to Fit the Pants?" Review of Educational Research 45 (February 1975): 613-635.

Mercer, Mary L. "School Adjustment as a Factor in Juvenile Delinquency." Journal of Juvenile Research 14 (1930): 41-43.

Michigan Statistical Abstract. East Lansing: Michigan State University, Division of Research, Graduate School of Business Administration, 1977, pp. 208-209.

Mooney, John, and Mooney, Helen. "Fail Is a Four-Letter Word." Catholic School Journal 70 (March 1970): 16-17.

Morrison, Ida, and Perry, Ida. "Acceptance of Overage Children by Their Classmates." Elementary School Journal, January 1956, pp. 217-220.

Nachman, Leonard R., Getson, Russell F., and Odgers, John G. Ohio Study of High School Dropouts. Columbus, Ohio: Division of Guidance and Testing, Ohio State Department of Education, ED 029 049, July 1964.

National Educational Association, Research Division. "School Dropouts." Research Summary S-1. Washington, D.C., 1967.

Owens, Samuel A., and Ranick, Deborah L. "The Greenville Program: A Commonsense Approach to Basics." Phi Delta Kappan, March 1977, pp. 531-533.

Paramore, B., Plantec, P., and Hospodar, J. Project Upswing After Two Years: An Evaluation. Silver Springs, Md.: Operations Research, Inc., ED 099 820, December 1973.

Peters, Edith C. "A Substitute for Failure." Educational Research Bulletin 4 (April 1925): 183.

Pipho, Chris. "Minimal Competency Testing: A Look at State Standards." Educational Leadership, April 1977, pp. 516-520.

Randall, Charles V., and Others. A Study of Early School Leavers and Significant Causes. Bloomington, Minn.: Bloomington Public Schools, ED 014 086, 1968.

Reinherz, Helen, and Griffin, Carol Lee. "The Second Time Around: Achievement and Progress of Boys Who Repeated One of the First Three Grades." School Counselor 17 (January 1970): 213-218.

Reiss, Albert J., Jr. "Social Correlates of Psychological Types of Delinquency." American Sociological Review 17 (December 1952): 710-718.

Rodgers, William A. "Retention as a School Policy." Urban Review 4 (May 1970): 29-30.

Sandin, Adolph. "Social and Emotional Adjustments of Regularly Promoted and Non-Promoted Pupils." New York: Bureau of Publications, Teachers College, Columbia University, 1944.

Saunders, Carleton M. "Promotion or Failure for the Elementary School Child." New York: Bureau of Publications, Teachers College, Columbia University, 1941.

School District of Philadelphia. School Failure--A Summary of Research Findings, Bulletin 586. Philadelphia: Department of Educational Research, ED 001 637, 1965.

School District of Philadelphia. The Promotion/Retention Dilemma: What Research Tells Us. Report No. 7416. Philadelphia: Division of Research and Evaluation, Department of Superintendent, ED 099 412, December 1973.

Sparkman, Brandon B. "Johnny Can Read If You Help." Parade Magazine, Detroit Free Press, 23 April 1978, p. 4.

Stevens, J. Joseph. "The Development and Testing of a Model for the Identification of Potential School Dropouts." Ph.D. dissertation, Colorado State College, Greeley, 1965.

Street, Paul, and Leigh, Terrence. "Suffer the Little Kentucky First-Graders." Bulletin of School Service 43 (March 1971): 5-18.

Thomas, Shailer, and Knudsen, Dean D. "The Relationship Between Non-Promotion and the Dropout Problem." Theory Into Practice 4 (June 1965): 90-94.

Walker, William E. "The Slow Progress Student in Graded and Non-Graded Programs." Peabody Journal of Education 50 (April 1973): 191-210.

Wallihan, Robert. "A Comparative Study of Retardation in the Primary Grades of the San Diego, California, City Schools." Ph.D. dissertation, University of Colorado, 1955.

Webb, Warren W., and Pate, John E. "Predicting Failure in the Primary Grades." Educational and Psychological Measurement 30 (1970): 459-462.

White, Kinnard, and Howard, James Lee. "Failure to Be Promoted and Self-Concept Among Elementary School Children." Elementary School Guidance and Counseling 7 (March 1973): 182-187.