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AN EVALUATION OF AN ORGANIZATIONALLY-FOCUSED
SCHOOL-BASED DELINQUENCY REDUCTION PROGRAM:
THE MILWOOD PROJECT

by

H. Preston Elrod

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Philosophy
Department of Sociology

Western Michigan University
Kalamazoo, Michigan
August 1989

AN EVALUATION OF AN ORGANIZATIONALLY-FOCUSED
SCHOOL-BASED DELINQUENCY REDUCTION PROGRAM:
THE MILWOOD PROJECT

H. Preston Elrod, Ph.D.

Western Michigan University, 1989

An extensive body of research exists which links various aspects of schooling to delinquency. Despite a small body of research suggesting that school-based delinquency reduction programs which employ democratic problem solving to alter the social organizational climates of schools are viable, few evaluations of such programs exist. The object of this research is to evaluate the effectiveness of a three year school-based delinquency reduction project designed to alter the social organizational structure of a public junior high school.

This research describes the development, implementation and evaluation of the project which was guided by three interrelated theoretical perspectives: (1) the role relationships perspective which was used to conceptualize a model school organization, (2) a critical perspective which was employed to understand how schools are organized to produce school problems and delinquency, and (3) the program development and evaluation model which served as a guide to democratic program development, implementation and evaluation.

The research design consists of a "self-selected" nonequivalent control group design and various school and attitudinal data were collected from students at the project school and a control school over three years. A set of theoretically derived hypotheses regarding relationships between various aspects of schooling and delinquency, as well as hypotheses predicting positive changes in the schools' social organizational climate during the project were made. Correlation analysis, t-tests to examine differences in the project school and control school over time, and the calculation of effect sizes were used to examine project outcomes.

With few exceptions, the results support the hypotheses and suggest the project significantly reduced school problems and delinquency. Discussion of those interventions which most likely produced positive school changes and implications for future research are presented.

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Elrod, H. Preston, Ph.D.

Western Michigan University, 1989

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I have, at times, been better at giving advice than taking it, and my advice to other graduate students has always been to pursue their degree full-time. I have, of course, given this advice while working part-time on my degree and working full-time as the Field Services Supervisor at the Kalamazoo County Juvenile Court. There have been many occasions that I wished I had taken my own advice, and there would have been more such occasions if not for the support, help, and encouragement of a number of people. In no small way they have made this possible.

To begin with, it is important that I recognize the staff and students at Milwood Junior High School. Many staff worked diligently through the project years to create a school capable of responding to all students, staff and parents. Particularly, I would like to thank Dr. Carl Burress, Counselor; Mr. Dale Steeby, Principal; Mr. Darrell Clay, Assistant Principal; Mr. Jim Kahler, Counselor; Ms. Joanne Andrews, Counselor; Mr. Brad Addis, MAP Teacher; Ms. Rosemary Haserodt, MAP Teacher; Ms. Kathy Hays, MAP Teacher; and Mr. Terry Mosher, In-school Suspension Center Teacher. They each played key roles in project development and implementation. Also, playing a central role in the development and operation of the project were project staff: Ms. Myrl Helwig, Project Secretary; Mr. Michael Thomas, Home-School Liaison; Mr. Felix

Felix Brooks, Graduate Assistant; Ms. Betty Moritz, In-School Suspension Center Aide; and Ms. Elizabeth Von Sprecken, Reading Specialist; as well as numerous student volunteers and parents. Without the dedication and hard work displayed by these people, our ideas would never have materialized into viable activities.

An undertaking such as the Milwood Project requires the participation of a range of people who play no direct roles in daily project activities, but whose support is nonetheless critical to successful project operations. These included members of the Kalamazoo Criminal Justice commission who sponsored the project, particularly its Director, Mr. Jim Fett; Mr. Henry Goodwyn, Assistant Superintendent of Schools; Mr. Norm Lyons, Kalamazoo Public Schools; Dr. Ted Kilty and Ms. Sharon Venderklok, Kalamazoo Public Schools Board of Education; Dr. Conrad Katzenmeyer, Research and Sponsored Programs, WMU; Mr. John Green, Grants and Contracts, WMU.

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H. Preston Elrod

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CHAPTER I

INTRODUCTION

Problem Statement

In 1987, the annual Phi Delta Kappa/Gallup Poll of the public's attitudes toward the public schools revealed that for the second year in a row, drug use was seen as the most important problem facing the public schools. This was only the third time in the seventeen years of that poll that discipline had not ranked as the public's number one concern (Gallup, 1986; Gallup & Clark, 1987). In 1984 the National Committee on Excellence in Education, in their report, A Nation At Risk, stated that the "rising tide of mediocrity . . . [in our public schools] threatens our very future as a nation and a people". Concerns regarding problems such as poor academic achievement, school misbehavior and school crime are nothing new and receives regular attention in the popular press. Unfortunately, much less attention has been given to systematic evaluations of school-based programs to alleviate such problems.

The following research is an evaluation of a federally funded school-based delinquency reduction project. This project--known as the Milwood Project--was a cooperative effort between Western Michigan University and the Kalamazoo Public Schools and was implemented in a public junior high school from 1981 to 1983. As

implemented the project provided a range of individual and school social organizational interventions which were intended to alter social relations within the school and the school's environment in ways which reduce the probability of school failure, school disruption and delinquency. In the following analysis, attention is given to the development, content and evaluation of the project's interventions as well as suggestions for future research on school-based delinquency reduction.

Wider Concerns

Domestic and international literature is replete with references to and analysis of the relationship between school performance and delinquency. Research has shown that poor school performance is directly related to delinquent behavior (Phillips & Kelly, 1979; Jensen, 1976; Elliott & Voss, 1974; Polk & Schafer, 1972; Reckless & Dinitz, 1972; Wolfgang, Figlio & Sellin, 1972). Low achievers are prone to feel as outsiders, which in turn, can decrease the probability of meaningful relationships and lessen the salience of informal controls within the school (Olofsson, 1971). Children identified as being disruptive in the classroom have been found to achieve at significantly lower levels than their peers (Swift & Spivak, 1973; Feldhusen, Thurston & Benning, 1973). Moreover, research indicates that immediate school variables such as poor report cards, the perceived irrelevance of many academic courses, and students' feeling that they have little control over their lives, play important

roles in school violence and vandalism (Boesel, Crain, Dunteman, Ianni, Martinolich, Moles, Spivak, Stalford, & Wayne, 1978; Gottfredson & Daiger, 1979; McPartland & McDill, 1977).

In postindustrial capitalist America, the school is being recognized as a key socializing institution which affects the lives of youth in ways which transcend the more obvious influences of academic knowledge acquisition (Elrod & Friday, 1986). In terms of intensity and length of exposure, education is considered, next to the family, the major force shaping the lives of youth (Friday & Elrod, 1980). Moreover, the importance of the school as a socializing institution goes beyond the time students spend in school. For many families, much of the interaction between youth and parents has to do with school related issues and peer associations are likely to be developed with those in similar positions in school (Johnson, Bird, & Little, 1979; Greenberg, 1977). As a primary socializing institution, the school can have either a positive or negative impact on the lives of youth. At its best, it is capable of counteracting a harmful family situation. At its worst, it can act as a stumbling block for those who come from a positive home environment (Friday & Halsey, 1977).

Recognizing the crucial role which the school plays in the life of youth, as well as the relationship between poor academic performance, school disruption and delinquency, many schools have developed programs ranging from "peer counseling and social work interventions through recreation, with the apparent intent of reducing the risk

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of delinquent involvement" (Gottfredson, 1986, p. 706). While there is some evidence to indicate that school based prevention programs are viable (Friday & Elrod, 1983; Gottfredson, Gottfredson, & Cook, 1983; Elrod & Friday, 1986; Gottfredson, 1986) few of these programs have been implemented in ways which allow for strong inferences about their effects (Gottfredson, 1986). Nor have evaluations of school based delinquency prevention programs generally focused on the characteristics of those programs and their environment which assist or impede program development and implementation; factors related to program success or failure. Moreover, while a number of writings have examined either the psychological or social-psychological dimensions of the school-delinquency equation (e.g., Gold, 1978; Feldhusen, et al., 1973; Kelly, 1971; Kelly & Balch, 1971) the social-psychological and organizational aspects of school which are related to delinquency (e.g., Schafer & Polk, 1967; Hargreaves, 1967; Schafer, Olexa, & Polk, 1970; Schafer & Olexa, 1971; Polk & Schafer, 1972; Kelly, 1974; Frease, 1973; Kelly, 1976; Kelly, 1977), and the wider structural forces which shape schooling in ways that create deviance (Liazos, 1978; Bowles, 1971; Bowles & Gintis, 1976), little attempt has been made to synthesize these various levels of analysis.

Consequently, the development and evaluation of a school-based delinquency reduction program employing various methods and levels of analysis could provide needed insight regarding the school-delinquency relationship.

The development, implementation and evaluation of a school-based delinquency reduction program is a complex undertaking and the success or failure of such an undertaking is the result of innumerable factors, many of which are not easily identified or measured. Nevertheless, the following research is an attempt to construct a coherent picture of the results of an organizationally focused school-based delinquency program which operated in a public junior high school between 1980 and 1983. More specifically, this research is intended to describe the program development and implementation process, and to evaluate the results of this program within the context of the socio-political environment in which the school and the program operated. It is felt that this undertaking will provide needed theoretical and practical insights to those interested in potentially viable delinquency reduction strategies in general and to those specifically interested in the development of future school-based delinquency reduction programs.

Local Concerns

During the late 1970's, there was considerable public attention being given to the rising rate of crime and disruption in many public schools. A series of "Gallup Polls of Public Attitudes Toward Education" which had begun in 1969 indicated that school discipline was a primary public concern. Birch Bayh, Chairman of the subcommittee to investigate juvenile delinquency, had reported in 1977 that school violence and vandalism was a pervasive problem in many public

schools and the educational community should develop policies and strategies to develop a proper environment for learning. The Ninety-third Congress, as part of the Education Amendments of 1974, had required the Department of Health, Education and Welfare (HEW) to conduct a study to determine the amount and seriousness of school crime and how school crime could be prevented. The results of this study, "The Safe School Study Report to the Congress" conducted by the National Institute of Education (NIE) appeared in 1978 (Boesel, et al., 1978). Although this study received some criticism on methodological grounds, (Emrich, 1978), the general conclusions of this study were widely accepted and, according to Rubel (1978), somewhat surprising.

To begin with the NIE study found that, despite public perceptions of a pervasive problem, only about 8 percent of school administrators reported serious problems and that the rising levels of school violence and vandalism which were felt to exist in the 1960's and early 1970's had leveled off. Secondly, although the percentages of schools experiencing serious problems were primarily urban, in terms of the numbers of schools affected, more non-urban schools experienced problems than urban schools. Third, except for cases of trespassing and breaking and entering, the great majority of offenses committed at school were committed by students enrolled in the school. Moreover, attacks of students at school were generally committed by youths of similar age and sex. Fourth, schools themselves have some degree of control over these problems.

In Kalamazoo, Michigan, the site of the program described the this study (hereafter referred to as the Milwood Project), there was also considerable concern regarding school misbehavior and delinquency. This concern was reflected in local newspaper reports, letters to the editor and Juvenile Court pronouncements that drug use and delinquency had significantly increased (Friday & Elrod, 1986). While it seems reasonable to assume that general public awareness of school violence and vandalism as portrayed in the media, played some role in heightening the call for action at the local level, other factors appeared to have played more prominent roles.

A critical factor in both heightening local awareness among policy makers and coalescing a range of policy makers into action was the local Criminal Justice Commission. This commission was comprised of various criminal justice personnel such as police chiefs, judges, court staff, attorneys as well as political representatives, school personnel, human service agency personnel and social scientists. Collectively, the Commission was made up of people who were familiar with much of the existing research relating various aspects of the school experience to delinquency, problems being faced in some local schools, the extent of officially recorded delinquency within the community which had been increasing during the mid to late 70's, and public perceptions of the problem, as reflected in the media. In fact, by 1979, the problem appeared to be so acute the Commission had created a Special Committee to examine the problem of delinquency at the local level.

Since members of the Special Committee felt that a key institution in the development of any delinquency reduction effort was the public schools, a series of meetings with officials from the County's largest school system, the Kalamazoo Public Schools, was initiated. Originally these meetings were intended to solicit school system support for a youth needs assessment, the results of which would be used to design a local delinquency reduction effort. School system officials, however, while willing to meet, expressed little interest in this proposal.

In late 1979, the Chairman of the Commission's Special Committee on Delinquency and this writer, serving as his assistant (the eventual Principal Investigator and Site Director of the Milwood Project) became aware of the Office of Juvenile Justice and Delinquency Prevention's "Alternative Education Initiative." The "Program Announcement: Prevention of Delinquency Through Alternative Education" (1980) indicated that 11 million dollars were allocated to fund cost-effective projects which showed promise in reducing delinquency. At a subsequent meeting with school officials, the prospect of obtaining a sizeable grant to operate a school-based delinquency reduction program was discussed; this time with considerable more interest. Furthermore, school officials indicated that one school in particular might be interested in such a project.

Spurred by the possibility of funding for a delinquency reduction project, a series of meetings between key building staff--the building principal, a counselor and the student services leader--

and the project directors were held to develop the content of the proposal. Additional meetings were also held with groups of teachers to develop project interventions and with the Assistant Superintendent of Schools to formalize the commitment of both the Kalamazoo Public Schools and Western Michigan University to the project.

As the discussions moved from the central administrative level to the building level, school personnel were found to be quite open regarding those problems being experienced by the school. Truancy, classroom disruption, vandalism and poor academic performance were seen as immediate concerns. In addition, data collected from the schools, police records, along with social and demographic data, indicated that Kalamazoo, and Milwood Junior High School in particular, was an appropriate target for a school-based delinquency reduction effort.

When juvenile arrests in the State of Michigan were examined in 1980, it was found that arrests of youth for index offenses had declined by 15.2 percent from, 1971 to 1978 (Michigan State Police). However, during this same period, the estimated juvenile population had declined 9.4 percent (Governors Crime Prevention Coalition, 1979) indicating that the decline in the proportion of juveniles arrested is to some extent an artifact of a decline in the population at risk (Friday & Elrod, 1980).

Although no similar estimates of the youth population in the City of Kalamazoo were available in 1980, an examination of the school age population in Kalamazoo indicated that the school age

population, like that in the state in general, was declining. However, when juvenile arrest rates in Kalamazoo were examined, a marked divergence from the state-wide trend was found. While juvenile arrests in the State had shown a marked decline between 1974 and 1976, the total number of juvenile arrests in Kalamazoo had increased 35.7 percent between 1976 and 1977 and 6.3 percent between 1977 and 1978. Moreover, the proportion of juvenile arrests for all crimes had increased steadily between 1975 and 1978 with juveniles accounting for approximately one-third of all arrests in 1978 (Kalamazoo City Police, 1976-1978).

An examination of various problems within the public schools was also noteworthy. For instance, Milwood Junior High had experienced a 14.5 percent increase in the number of suspensions between the 1978-79 school year and the 1979-80 school years. From September 1979 to February 1980, Milwood Junior High accounted for approximately 24 percent of all school system suspensions which was second only to one of the city's two high schools which accounted for approximately 27 percent of all suspensions during that period. In addition, Milwood consistently displayed the highest percent of absent membership of all junior high schools during the 1976-77 to 1978-79 academic years. For instance, during the 1978-79 academic year, Milwood had an average absent membership of 13 percent which was, again, only exceeded by one of the city's two high schools (Friday & Elrod, 1980).

Although the preceding information was not available to the

general community there was general dissatisfaction with the operation of the Kalamazoo Public Schools during the late 1970's. As noted earlier, this was probably due in part to a heightened awareness of problems in public education in general, but it was, also, due to a general perception that the local school system was not accomplishing its mission. Many parents of school aged youth and others were keenly aware of problems within the schools and relations between the school system and the community were quite strained. In response to the growing criticism of the local school system, school officials attempted to retreat, avoid contact with the community as much as possible and "weather the storm." As a result, school officials were criticized for inaction, and elite arrogance (Friday & Elrod, 1986). School millage requests were soundly defeated, creating a fiscal crisis within the school system, School Board members were threatened with recall and the Superintendent of Schools came under increasing pressure to resign.

By early 1980, when the funding proposal was submitted to the Office of Juvenile Justice and Delinquency Prevention, there was considerable pressure being applied to the schools to implement changes. These pressures resulted from both a general awareness of problems in public education, an awareness of local problems by many members of the community, the actions of a powerful political group--the Kalamazoo County Criminal Justice Commission--and the prospect of funding for change in a time of fiscal crisis. It was this social-political context which gave impetus to the development of the Milwood Project.

CHAPTER II

LITERATURE REVIEW

The examination of the relationship between schooling and delinquency has an extensive pedigree. As early as 1915, Healy, in his book, The Individual Delinquent, indicated that school performance must be recognized as a factor which is related to delinquency. However, Healy went on to state that ultimately the cause of poor school performance can be attributed to individual peculiarities of a mental or physical nature. Indeed, much of the early work which recognized a relationship between schooling and delinquency ultimately focused on individual student characteristics such as emotional, psychological, or IQ deficiencies as being the key variables in the school-delinquency relationship. However, by the 1950's and 1960's more sociologically based theories and research on the relationship between schooling and delinquency; as well as an emerging body of research on the relationship between learning disabilities and delinquency had appeared. These more sociologically based writings have focused on the ways in which various sociodemographic characteristics of students are related to schooling, school learning and delinquency; the relationship between the organizational characteristics of schools, school learning and delinquency; and the relationship between various combinations of school disruption, school involvement, attachment, commitment, school status, and delinquency. In addition, there are

a number of studies of school-based efforts to reduce delinquency.

The Relationship Between Schooling and Delinquency:
The Early Literature (1915 to 1955)

Aside from Healy (1915) a number of early writers were concerned with the relationship between individual characteristics, schooling and delinquency. As the fledgling field of mental testing developed, correlational studies between intelligence and delinquency became more prevalent (Silberg & Silberg, 1971). Due to the fact that many of these studies were methodologically flawed (Goodenough, 1954), a causal relationship between intelligence and delinquency was presumed to exist and persisted for some time (Silberg & Silberg, 1971).

Indeed, "educational retardation" was seen as a key factor in the production of delinquency in much of the early research which focused on the relationship between academic performance and delinquency. Contributing to this presumed relationship between intelligence, academic performance and delinquency, were studies which focused on identified or institutionalized delinquent populations. For instance, Miner (1919) reported that 86 percent of a sample of institutionalized delinquent youth were educationally retarded, and Doll (1921), in a study of delinquents in a New Jersey institution, reported that only 5 percent of those delinquents reached or exceeded the average score of public school youth on educational tests.

In a 1930 article, Mercer studied 85 white males referred to the Ohio Bureau of Juvenile Research for theft between February,

1927 and January, 1929. Despite the fact that only 6 percent of those youth referred were identified as school behavior problems, further analysis including psychological testing, revealed that the majority of those youth were experiencing school problems. Further, Mercer (1930) felt that these youth were an "inferior group" and proposed psychological testing as well as "special methods of instruction adapted to the needs of the inferior child" (p. 42) to improve school adjustment and curb delinquency.

In an early study which focused on the relationship between reading ability and delinquency, Fendrick and Bond (1936) examined the reading levels of a sample of 187 delinquent males between the ages of sixteen and nineteen who were committed to the New York City House of Refuge. They reported that on the average the delinquents were five years and eight months below their chronological age in reading and concluded that their results indicate a "strong relationship between school maladjustment and delinquency" (p. 242).

In another study of identified delinquents, Glueck and Glueck (1940) examined 1000 males brought before the Boston Juvenile Court and reported that the majority of those youth lacked the ability to do school work which also reflected "various intellectual and personality difficulties" (p. 11). Moreover, 59 percent of those youth were found to have below normal intelligence as measured by standardized tests and 13 percent were classified as feebleminded. Lastly, Glueck and Glueck reported that 64 percent of those youth brought before the Court were school truants.

Parker (1940) in a strictly theoretical article, expounded on a number of home and environmental problems which were viewed as being related to poor reading ability. In addition, Parker indicated that personality problems could result from poor reading ability. Poor reading ability was seen as resulting in feelings of inferiority and frustration for many youth. Also, attempts to relieve this frustration could lead to antisocial or regressive behavior.

In an early study which used a non-delinquent control group, Glueck and Glueck (1950) examined 500 male delinquents and a group of 500 male non-delinquents matched on age, general intelligence, national origin and residential neighborhood and reported that the delinquents were markedly more educationally retarded than the non-delinquents. In addition, they indicated that the delinquents were different from the non-delinquents in other important ways. For instance, the delinquents disliked subjects requiring verbal skills and persistency of effort preferring instead manual training. Also, the delinquents tended to express a violent dislike of school and they engaged in more misbehavior and school truancy. Although the Gluecks (1950) indicated that some of the delinquent's poor academic performance could be attributed to the fact that their families were more transient and were more likely to experience family disruption, they nevertheless saw the problem of poor school performance as indicating "the deep-rootedness of the emotional difficulties of the delinquents" (p. 154).

Although a majority of the early research indicating a relationship between schooling and delinquency ultimately focused on the individual characteristics of delinquents, there were some notable exceptions. In an early book, The Young Delinquent, Burt (1925) saw the school as both contributing to delinquency and capable of playing an effective delinquency prevention role. According to Burt, schools frequently provided an uncongenial environment for many youth, particularly males, which leads to a growing dislike for school and misbehavior. Also, many schools were viewed as being ill-equipped to meet the needs of some youth and rarely were schools seen as attempting to determine why youth failed. As a result, Burt (1925, p. 321) advocated transferring youth out of schools where they were having difficulty as a viable treatment strategy. In addition, since most delinquents were seen as possessing an "extraordinary lack of knowledge," remedial education programs were proposed as a logical intervention.

Similarly, Healy (1933) wrote that "School maladjustment and dissatisfaction we know from studies of many cases are at the root of considerable number of delinquent careers" (p. 80). Consequently, the school was seen as a logical place to begin delinquency prevention efforts. Unfortunately, from Healy's perspective, educators rarely recognized the potential role of the school in delinquency prevention.

In an early evaluation of the effectiveness of an educational program for delinquents, Lane and Witty (1934) analyzed the educational attainment of approximately 150 youth at the St. Charles,

Illinois, School for Boys. They found that the typical delinquent youth was almost three years below the norm in educational achievement when compared with other youth of similar age. However, they also found that the educational program at St. Charles was able to improve the educational functioning of these youth and they indicated that similar programs could be operated in the public schools to ameliorate those conditions which contribute to delinquency.

Hill (1935-36) studied 1500 male delinquents between the ages of 16 and 26 who were committed to the State Reformatory at Pontiac, Illinois and reported that almost 80 percent had not gone beyond the eighth grade. Also, less than 1 percent were found to be attending school when they committed the offense which led to their placement. Further, in studying a sub-sample of 165 of these youth who had attended school within four years of the study, Hill noted that 47 percent had poor scholastic records. However, Hill (1935) suggested that the reasons for school failure might rest with the school when he stated, "Those reasons for the common conditions of failure and retardation place most of the responsibility on the boys' deficiencies or lack of interest and on the home. Nothing was said of any possible responsibility on the part of teachers or school" (p. 56).

One of the earlier studies which attempted to use a non-delinquent control group to compare delinquents and non-delinquents was conducted by Healy and Bronner (1936). These researchers studied 133 different families located in Boston, New Haven and Detroit and compared delinquent and non-delinquent siblings. Unlike a number of other studies

conducted during this period, they discovered little difference between delinquents and non-delinquents in intelligence or academic ability. However, they did find that the delinquents were more likely to be truant from school and had more negative attitudes toward school.

Kvaraceus (1945) in his book, Juvenile Delinquency and the School, examined the role of the school in the prevention and control of delinquency. In studying delinquents referred to the Passaic, New Jersey, Children's Bureau, Kvaraceus found that these youth had often repeated one term in school, received lower grades than other youth, had been truant, came from mobile families, exhibited school behavior problems and expressed dislike for school. Moreover, referrals to the Children's Bureau tapered off during the summer when youth were not attending school. As a result, Kvaraceus (1945) indicated that "the school, through its continued routine and impersonal treatment of some pupils, becomes an active agent in the genesis of aggressive behavior" (p. 136).

The Relationship Between Schooling and Delinquency:
1950 to 1987

The Sociodemographic Characteristics of Students, Schooling, School Leaving and Delinquency.

Although a few of the studies which appeared before the 1950's presented at least a rudimentary description of how school failure might lead to delinquency or how the school itself might play a role in the generation of delinquency, it was not until the publication of Cohen's (1955) book, Delinquent Boys, that a more explicit theory

of how school failure might lead to delinquency appeared (Phillips & Kelly, 1979). According to Cohen (1955) the school is one situation where youth of all social classes come together and compete for status. However, working-class youth are in a disadvantaged position in this competition because status is defined in middle-class terms. Since a major function of the school is to "'promote', 'encourage', 'motivate', 'stimulate', in brief reward middle-class ambition and conformity to middle-class expectations, the school also serves to condemn and punish the non-conformist'" (p. 113). Since those who come from working-class backgrounds are least equipped to succeed, they were viewed as comprising a disproportionate number of youth who have both conduct and academic problems in school.

According to Cohen (1955), a way of dealing with the problems of adjustment or failure is the development of a delinquent subculture. In order to maintain their self-respect, youth deal with the problem of adjustment or failure to succeed by collectively repudiating the validity of the conventional status system and substituting new status criteria which these youth can meet. These newly acquired values tend to be the very values which lead to the youth being defined as a failure and are, thus, contrary to the values of the conventional system.

Following Cohen's (1955) lead a number of subsequent researchers suggested that social-class plays a role in determining school adjustment and delinquency (Toby, 1957; Gold, 1963; Short, 1964; Stinchcombe, 1964; Palmore & Hammond, 1964; Elliott, 1966; Bachman, Green, &

Wirtaner, 1971; Wolfgang et al., 1972). For instance, Toby (1957) indicated that lower-class youth frequently come from families which do not encourage education. Consequently, these youth enter school with little preparation and support which makes school success difficult. For these youth, schooling becomes an imposition which is not in line with their interests. Because these youth do not succeed academically, they are held back or placed in slow tracks which serves to perpetuate a negative cycle of failure and withdrawal from school. The result is truancy and school discipline problems. In addition, poor school performance leaves these youth unprepared for successful occupational roles. Uncommitted to both jobs and schools, these youth associate with other unsuccessful youth which often leads to delinquent behavior as these youth strive to seek the approval of their peers. For these youth "the gang offers a heroic rather than an economic basis for self-respect" (Toby, 1957, p. 15).

In another study focusing on lower-class youth, Gold (1963) reported the results of a study conducted in Flint, Michigan. According to Gold, social position was linked to schooling and delinquency in a number of ways. To begin with, school facilities were found to be poorer in lower-class neighborhoods and lower social class neighborhoods were associated with higher rates of delinquency. Further, when delinquents were compared to non-delinquents, delinquents reported less favorable attitudes towards school, although both delinquents and non-delinquents regarded school as important to their futures.

Short (1964) in a study of delinquent males in Chicago, found

that male gang members had high rates of school failure compared with lower-class non-gang members and middle-class youth. Gang members were more likely to perceive educational opportunities as closed to them while lower-class non-gang members and middle-class youth were more likely to perceive educational opportunities as open to them. Also, while all three groups--gang youth, lower-class non-gang members and middle-class youth--tended to express high educational aspirations, the highest rates of delinquency were among those youth who felt that educational opportunities were closed to them.

In a study of a California high school, Stinchcombe (1964) concluded that the problem of school misbehavior and rebellion is "largely a reaction to the school itself and to its promises, not a failure of the family or community" (p. 179). According to Stinchcombe's analysis, the problems of order in the schools and delinquency results from a lack of articulation between academic work and the concerns of students. However, the school by itself was seen as being unable to improve this situation because society cannot promise youth much that is meaningful.

Gold's (1970) study of the transition of youth from junior to senior high school reported on the relationship between social class and delinquency. Gold (1970) noted that "lower status boys, but not girls, engaged more frequently and more seriously in delinquent behavior" (p. 73). Also, males were found to receive lower grades than females and lower status males, as determined by father's occupation, received the poorest grades. Moreover, poor academic performance

was found to be closely related to delinquency.

Also, studies have been reported which examined the relationship between social class, dropping out of school and delinquency. Following Cohen's (1955) theoretical formulation that the unequal competition which lower-class males face in achieving school rewards leads youth to find a delinquent solution, Elliott (1966) hypothesized that delinquency among out-of-school youth would be lower than in-school youth. After examining data collected from 713 tenth grade males entering the two largest high schools in a large western city in 1959, Elliott concluded that the highest rate of delinquency was among lower socioeconomic status male dropouts prior to their leaving school and was lowest for this same group after dropping out. Moreover, the delinquency rates of higher socioeconomic status males was not significantly changed by school leaving. Also, among delinquents who dropped out of school, their delinquency rate was higher while they were in school than after dropping out.

Another study which examined the effects of social class, dropping out and delinquency was conducted by Bachman et al., (1971). These researchers studied a panel of over 2,000 adolescent males to determine if dropping out was a symptom of basic problems or if dropping out led to further problems. In reporting their findings, Bachman et al., (1971) indicated that dropping out was symptomatic of a number of background and ability characteristics, school experiences, personality traits and behaviors which resulted in a "serious mismatch between some individuals and the typical high school environment" (Bachman et al.,

1971, p. 171). Aside from displaying higher rates of delinquency and school misbehavior, dropouts frequently came from large families, broken homes and had parents who were punitively oriented.

In addition to the previous studies which have, in some way, examined the relationship between social class, schooling and delinquency, a few studies have explored the possible relationships between social class, race, schooling and delinquency. In a study of 319 youth born in New Haven in 1942 through 1944 and who were found on Aid to Dependent Children (ADC) rolls in 1950, Palmore and Hammond (1964) examined Cloward and Ohlin's (1960) concept of delinquent subculture. Their results indicated that three powerful predictors of delinquency were evident: race, sex and school performance. However, they also found that: "(1) a deviant family background increases Negro, but not white, delinquency. (2) A deviant neighborhood increases male, but not female, delinquency. (3) Either kind of deviant influence increases delinquency more among those failing in school than among those succeeding" (p. 851). Thus, Palmore and Hammond, provide some support for the notion that residing in a black, lower class deviant neighborhood increases the likelihood of delinquency, especially when youth fail in school.

Despite the findings of these previous studies, more recent research has discounted the relationship between social class, schooling and delinquency. Hirschi (1969) reported that there was only a weak association between social class, as measured by fathers' occupation, fathers' education and area socioeconomic status and delinquency

among his sample of 5,545 students in Contra Costa County, California. Hirschi concluded that "the beliefs and values that feed delinquency are not peculiar to any social class or (nondelinquent) segment of the population" (p. 230). Also, Kelly and Balch (1971), in a study intended to empirically investigate Cohen's (1955) formulation of a relationship between social class, academic performance, self-evaluation, school involvement, school avoidance and delinquency, surveyed 1,227 male high school sophomores in western Oregon. In contradiction to Cohen's (1955) theoretical formulation, Kelly and Balch (1971) found no relationship between social class and delinquency.

A number of studies focusing on the relationship between tracking and delinquency, found that controlling for social class failed to influence observed relationships between tracking and delinquent behavior. Schafer, Olexa and Polk (1970) found that even when controlling for social class, both males and females in the general education track of two midwestern high schools were more likely to have been suspended, to have dropped out of school before graduation, to have not been involved in school activities and to have been officially labeled a delinquent than youth in the college bound track. In another study of tracking and delinquency, Schafer and Olexa (1971) found differences between youth in college-prep and non-college-prep tracks when controlling for social class. Students in the non-college-prep tracks were found to be disproportionately involved in school misconduct, to have been suspended from school, to drop out of school

and to have a juvenile court record. Similarly, two studies conducted by Kelly (1974, 1975) which examined the relationships between status origins, tracking and self-report delinquency among students in New York State concluded that track position, as opposed to social class was a much better predictor of delinquency.

Studies which have examined the relationship between academic performance and delinquency have also found social class to have little bearing on delinquency. For instance, Rhodes and Reiss (1969) conducted a study of students enrolled in grades seven through twelve in all public and selected private junior and senior high schools in Davidson County, Tennessee in order to examine the relationships between English grades and apathy, truancy and delinquency. Their results indicate only small effects on the relationship between English grades and official delinquency when controlling for the occupational level of the family, as measured by father's or household head's occupation, or the socioeconomic composition of the school. However, Kelly (1971), in a study of a sample of adolescent males in western Oregon, reported a relationship between academic status, self-evaluation, school avoidance and delinquency which remained strong when controlling for social class. Similarly, Kelly and Balch (1971) found that controlling for social class had little influence on the inverse relationships between academic performance, school avoidance and delinquency.

In another study which sheds some light on the social class school achievement and delinquency relationship, (Empey, Lubeck, &

LaPorte, 1971) examined a sample of 482 serious delinquents and 185 delinquents in Los Angeles and Utah in order to test a theoretical model linking social class, achievement, strain, identification with delinquent peers and official delinquency. More specifically, the theoretical model tested in this study postulated that lower social class leads to decreased achievement which results in increased strain which leads to identification with delinquent peers which leads to delinquency. Through the use of gamma to test various bivariate relationships between variables as well as path analysis, Empey et al., (1971) reported that social class was not found to be strongly related to achievement, strain, negative peer identification or delinquency. Also, in a test of the same model on a group of delinquent youth randomly assigned to an institutional setting or a community-based alternative and a nondelinquent sample, Empey and Lubeck (1971) again reported that social class was not related to achievement, strain, negative peer identification or delinquency.

Polk and Richmond (1972) collected data on a sample of approximately 803 male students in attendance at a comprehensive high school in the Pacific northwest (population size approximately 50,000). They collected various questionnaire data as well as information from school records and from juvenile court files in an effort to examine the relationship between social class, school achievement and delinquency. As Polk and Richmond note, school failure was only weakly related to social class. Consequently, they indicated that social class did not appear to be an important factor in accounting

for student differences in academic achievement. However, grades were found to be strongly related to delinquency. Moreover, an examination of delinquency by grades and social class revealed that social class produced almost no effect on the relationship between grades and delinquency.

Another study which employed social class as a control was conducted by Kelly and Pink (1973) in an effort to explore the relationship between school commitment, school rebellion and delinquency. Data were collected from a sample of 284 subjects and included demographic, school, community, work, school and juvenile court information. The results of this study indicated that commitment to school was inversely related to both rebellion and delinquency. Moreover, these relationships remained when social class was held constant.

McPartland and McDill (1977) also examined relationships between social class, schooling and school problems. These researchers conducted a large scale study employing data collected from a survey of 20,345 high school students in twenty public high schools, from survey data of 3,450 students in the eleventh and twelfth grades in fourteen urban high schools in Baltimore and Washington, D.C., from survey data of 7,361 students in six high schools and ten middle schools in suburban Maryland and data from a national sample of schools found in the Equality of Educational Opportunity survey (Coleman, Campbell, Hobson, McPartland, Weinfield, Wood, & York, 1966). Through the use of multiple regression analysis, McPartland and McDill (1977) reported that background variables such as parental education, father's

occupation, material wealth of the home, explained little of the variance in school misbehavior and school crime.

In an effort to explore the relationship between social class, schooling and delinquency, Hartnagel and Tanner (1982) examined data obtained from a probability sample of 733 students selected from three junior and two senior high schools in Edmonton, Alberta. Similar to previous studies, social class was not found to be significantly related to school rebellion or delinquency, although it was related to student drinking in one junior high school. As a result, Hartnagel and Tanner (1982) felt that a class background approach to delinquency receives less support than a school status approach.

Another sociodemographic characteristic of students which has received some attention in the school-delinquency literature is race. Palmore and Hammond's (1964) study of youth on Aid to Dependent Children rolls (ADC), indicated that a deviant family background increases delinquency among black youth but has no effect on delinquency among white youth. However, they, also, reported that success in school helps insulate youth from delinquency. Also, Wolfgang et al., (1972) collected data on a cohort of approximately 10,000 males residing in Philadelphia in order to examine the relationships among a number of variables such as race, socioeconomic status, types of schools attended, residential and school mobility, highest grade completed, IQ, achievement level and delinquent status. The results indicated that both race and socioeconomic status were strongly related to delinquency. In addition, Wolfgang et al., (1972) reported an

inverse relationship between achievement and delinquency which was primarily attributed to race. As a result, non-white delinquents were viewed as occupying a disadvantaged social position characterized by greater residential and school mobility, lower grade point averages and lower IQ scores.

Other studies which have examined the race, schooling and delinquency relationship have found that race is not as strongly related to delinquency as school factors. For instance, Hirschi (1969) reported large differences in official delinquency but small differences in self-reported delinquency among blacks and whites in his sample of youth in Contra Costa County, California. However, when controlling for aptitude test scores, differences in official delinquency were substantially reduced. Consequently, Hirschi concluded that differences in academic achievement plays a major role in explaining differences in delinquency between blacks and whites.

In a re-examination of the data collected by Wolfgang et al., (1972), Jensen (1976) further explored the relationship between race, achievement and delinquency. The analysis presented by Wolfgang et al., (1972) had indicated that race and socioeconomic status are more strongly related to delinquency than other variables included in their study, and the relationships between variables such as academic achievement and delinquency were spurious because those variables are also closely associated with race and socioeconomic status. Jensen's (1976) analysis, however, led to rather different findings. According to Jensen (1976), the relationship between

achievement and delinquency is not spurious because achievement was found to be as strongly related to delinquency as are race and social class.

The Relationship Between the Organizational Characteristics of Schools, School Leaving and Delinquency

A number of studies have examined the relationship between various organizational characteristics of schools and delinquency. Bachman et al., (1971) examined a nationally representative sample of over 2000 adolescent males to determine if dropping out of school was a symptom of other basic problems and limitations faced by some youth and if dropping out leads to other problems. Employing a panel design, data were collected from youth at four different time periods and consisted of questionnaire and interview data from youth, school principals, counselors and teachers. In analyzing their results, Bachman et al., (1971) found that dropouts reported much higher levels of delinquency than youth who stayed in school, although dropouts, as a group, reported higher levels of delinquency while in school when compared to youth who were not dropouts. Consequently, there was no indication that delinquency among dropouts increased as a result of leaving school.

Mukherjee (1971) examined the rates of delinquency for youth in school and those not attending school in a cohort of youth born in Philadelphia in 1945. Unlike Bachman et al., (1971), the results of this study indicated that the rate of delinquency was considerably

higher for those in school than for those not in school. Moreover, it was found that even though those who dropped out of school early have a high delinquency rate, their delinquent involvement decreases markedly after leaving school (cited in McKissack, 1973, p. 357).

Also, in a study of the relationship between school attendance and the commission of property offenses in New Zealand, McKissack (1973) reported a marked drop in such offenses when youth left school, although youth to some extent continued to involve themselves in some property offending, particularly if youth were unemployed. For youth who remained in school, they were more likely to report higher rates of minor, low expertise offenses such as shoplifting and street thefts.

In their book Delinquency and Dropout, Elliottt and Voss (1974) collected data on 2,617 students attending eight California metropolitan schools. Employing a longitudinal design, observations were obtained for youth in the ninth grade and additional data were collected each year until the usual date of graduation from school for each cohort. In analyzing the relationship between delinquency and dropout, it was found that "delinquency is causally involved in dropout, and dropout in turn leads to decreasing involvement in delinquency." Consequently, Elliottt and Voss (1974) indicated that "the school is the critical generating milieu for delinquency" (p. 203).

The Relationship Between School Status and Delinquency

Youth are accorded status in various ways within the school.

Youth are accorded status via academic performance, membership in clubs and organizations, participation in athletics and through other extracurricular and curricular involvements. Another manifestation of status within the school which may be either implicit or explicit is track assignment. Assuming a prominent place in the school-delinquency literature has been the examination of school status, indicated by academic achievement and track, and delinquency. For instance, Gold's (1963) study of youth in Flint, Michigan, reported that delinquents earned lower grade averages than nondelinquents despite the fact that these youths' IQ scores differed by no more than ten points. Also, Palmore and Hammond's (1964) study of lower class youth on Aid to Dependent Children rolls in New Haven indicated that the most important factors related to delinquency were race, sex, and school performance. Moreover, they concluded that school success tended to insulate black youth from environmental factors such as family deviance and deviant neighborhoods which were also closely related to delinquency.

Hirschi (1969), also, examined the relationship between academic achievement and delinquency. Hirschi, found a strong relationship between achievement test scores and official delinquency as well as differences between black and white students in delinquency. However, after examining differences in delinquency by race and aptitude test scores, Hirschi concluded that differences in academic achievement play a major role in explaining differences in delinquency between blacks and whites. Also, student's perceptions of themselves as

competent students were inversely related to delinquency as was the amount of time devoted to homework.

Rhodes and Reiss (1969) explored the relationship between students' English grade and delinquency among students enrolled in grades seven through twelve in Davidson County, Tennessee. The results of this study indicated that there was a relationship between earning low grades in English and apathy towards school. In addition, Rhodes and Reiss reported a relationship between low grades in English, truancy, juvenile court involvement and serious delinquency.

Gold (1970) explored delinquency among a selected sample of 522 youths aged thirteen to sixteen residing in Flint, Michigan in an effort to examine various social and academic forces which affect youth. While males tended to receive lower grades than females, lower status males, as determined by father's occupation, received the poorest grades. In addition, poor academic performance was associated with high rates of delinquency among males.

Kelly (1971), in a study of a sample of adolescent males in western Oregon, examined the relationship between academic status (the independent variable), self-evaluation (an intervening variable) and school avoidance and misbehavior (the dependent variable). The results of this study indicated that academic status was directly related to self-evaluation and inversely related to school avoidance and misbehavior. However, self-evaluation was only weakly related to school avoidance and misbehavior among youth who had high self-evaluations and failed. Moreover, the relationship between academic

status, self-evaluation, school avoidance and delinquency remained strong even when controlling for social class. As a result, Kelly indicated that academic status deserves closer attention as an indicator of school status even in situations where formal tracking does not take place.

In a study designed to test Cohen's (1955) formulation of a relationship between social class, academic performance, self-evaluation and delinquency, Kelly and Balch (1971) surveyed 1,227 male high school sophomores in western Oregon. Although they found no relationship between social class and delinquency they did find that academic performance was inversely related to school avoidance and delinquency as well as school self-evaluation, affect toward school and involvement in school activities. Similarly, Empey and Lubeck (1971) conducted a study designed to test the relationships between social class, school achievement, strain, identification with delinquent peers and official delinquency. Results of this study indicated that lack of achievement as measured by poor school grades was associated with delinquent peers and identification with delinquent peers was related to delinquency.

Empey et al., (1971) in their book, Explaining Delinquency, also reported a relationship between academic performance and delinquency. Data were collected from a purposive sample of 482 serious delinquents and 185 delinquents in Los Angeles and Utah in order to test a theoretical model linking social class, achievement, strain, identification with delinquent peers and delinquency. Their results

indicated that poor school performance was associated with various indicators of strain such as dropout, lowered self-estimates of maturity, smartness, leadership and lowered perceptions of future occupational possibilities. Additionally, lack of achievement, strain and identification with delinquent peers were found to be associated with delinquency.

Polk and Richmond (1972), also, examined the relationship between academic performance and delinquency. After analyzing student questionnaires, school and official delinquency data collected on a sample of 803 males at a pacific northwest high school, they reported an inverse relationship between grades and delinquency regardless of student's social class. Thus, they indicated that this finding "serves to emphasize once again the extent to which trouble appears as a direct consequence of academic failure" (Polk & Richmond, 1972, p. 68).

Feldhusen et al., (1973), in a longitudinal study of 1150 youth in a Wisconsin county, attempted to identify various correlates of aggressive and disruptive behavior in school and delinquency. Youth in this study who were classified as aggressive-disruptive in school, compared to youth who were classified as pro-social, tended to have slightly lower IQ's and significantly lower reading and arithmetic achievement test scores. Moreover, differences in achievement between these two groups grew as these youth moved through school. In addition, the aggressive-disruptive group were more likely to drop out of school, score lower on teacher ratings of personal and social adjustment and exhibited more behavior problems than pro-socials.

In reporting the results of a longitudinal study of 2,617 students attending eight California metropolitan schools, Elliott and Voss (1974) indicated a relationship between academic performance and delinquency. For males, those variables which best predicted delinquency were limited academic achievement, school normlessness, association with delinquent peers and commitment to peers. For females, parental rejection, school normlessness, association with delinquent peers and commitment to peers, best predicted delinquency, although academic failure, normlessness and social isolation were also predictive of female delinquency.

McPartland and McDill (1977), in exploring the effects of various school characteristics, student background characteristics and school size on school violence and disruption, also, shed light on the academic performance and delinquency relationship. Through the use of multiple regression analysis, McPartland and McDill examined the amount of variance in school offenses explained by school experiences such as grades. Their findings indicated that grades were directly related to the probability of student offenses.

In a 1979 article, Phillips and Kelly conducted an extensive review of the literature on the relationship between school failure and delinquency. These authors suggested that there are two conflicting models of the relationship between school failure and delinquency. One model posits that school failure is an antecedent to delinquency. The alternative model suggests that delinquency precedes school failure. After reviewing a large number of studies on the relationship

between delinquency and school failure, Phillips and Kelly (1979) concluded, "It appears, then, that the available data support the school failure delinquency model over the reverse" (p. 204). Data which supported their conclusion included studies indicating a decline in delinquency after dropping out of school (Elliott, 1966; Mukherjee, 1971; Elliott & Voss, 1974), studies indicating a reduction in arrest rates which roughly coincide with the school leaving age (Mays, 1954; McKissack, 1973; Wolfgang et al., 1972) or during summer recess (Kvaraceus, 1945); studies which indicated that classroom misbehavior does not change the relationship between delinquency and low grades (Hirschi, 1969; Phillips, 1974) and longitudinal studies, which, although inconclusive, do not refute the school failure delinquency model (Elliott & Voss, 1974; Berry & Polk, 1971)

A later study which examined in part the relationship between school failure and delinquency was conducted by Rankin (1980) who analyzed data collected from interviews of public school students in Wayne County, Michigan in order to determine the relationships between various school factors and delinquency by age and sex. Employing multivariate contingency table analysis, Rankin attempted to develop a model of delinquency by examining the relationships between academic achievement, attitudes toward school, involvement in extracurricular activities, grade level, sex and self-reported delinquency. Unlike much previous research (e.g., Gold, 1963; Rhodes & Reiss, 1969; Frease, 1973), Rankin found no relationship between being held back a grade and delinquency. However, only 19 percent of his sample reported

being held back a grade. Rankin did, however, find that youth who reported that their chances of graduating were "very bad," "bad," or "fair," were more likely to be delinquent than those who felt their chances of graduating were "very good." Consequently, Rankin felt that these results support the argument that delinquency results from immediate problems (e.g., stigma) associated with a youth's perception of low academic achievement.

Also, Wiatrowski, Hansell, Massey, and Wilson (1982), after analyzing data from the Youth in Transition Study, (Bachman et al., 1971), found that seniors' reports of attachment to school and grades produced strong negative direct effects on delinquency during their senior year. Also, similar but weaker effects on the frequency and seriousness of delinquency were found one year after high school.

Another manifestation of school status which has received much attention is the assignment of students to different educational tracks (streams) and how this tracking results in opposing subcultures and delinquent involvement. Acting as a participant-observer, Hargreaves (1967) examined the behavior and attitudes of male students in different streams and their relationships with one another and teachers in an English Modern Secondary School over the course of a year. Compared with youth in the lowest stream, high stream youth reported considerably less involvement in juvenile court. Moreover, in examining those youth who were engaged in the most premeditated delinquent behavior, it was discovered that this group contained a core of youth whose behavior and attitudes were contrary to the

school's values. Delinquent youth were rewarded by peer approval for deviating from teacher expectations and were frequently involved in conflict with teachers. Hargreaves (1967), also, noted a number of ways which the school and school staff contributed to the problems experienced within the school. For instance, teachers frequently blamed student's homes for problems experienced at school and explained students behaviors in terms of popular psychology or sociology, and low stream teachers were less motivated to stimulate their students. Over time low stream students tended to do progressively worse in academics and their relationships with both teachers and high stream youth became more negative. Also, upper stream students were more likely to be picked for various extracurricular school activities. According to Hargreaves, streaming resulted in the development of opposing subcultures which tended to accentuate the streaming system.

In another study which examined differences between students in different tracks, Schafer et al., (1970) examined data on students in two midwestern high schools. Even when controlling for IQ, social class, and prior academic performance, both males and females in the general education track were more likely to have been suspended, to have dropped out of school before graduation, to have been uninvolved in school activities, and to have been officially labeled delinquent than youth in the college prep track. As a result, the differences were attributed, at least in part, to the school's tracking system.

Schafer and Olexa (1971), in a study of youth who entered two midwestern three-year high schools in 1961, examined various school

outcomes for youth in college-prep and non-college prep tracks. According to their results, students in the non-college-prep track were found to have been disproportionately involved in school misconduct, to have been suspended from school and were nine times more likely to drop out of school than college-prep students. In addition, when juvenile court records were examined, sixteen percent of the non-college-prep youth had delinquent records, compared to only six percent of the college-prep students. This was true for both males and females. Finally, Schafer and Olexa reported that this relationship held when simultaneously controlling for father's occupation, IQ and previous academic achievement.

In a study of 173 male and female seniors in two western New York state high schools, Kelly (1974) examined the relationship between tracking (measured in this study by student's report of their placement in college-prep or general education program) and delinquency. Even when controlling for sex and social class, Kelly reported that track position was a strong predictor of delinquent activity, thus, lending support to other work suggesting that track or "school status" is an important determinant of delinquent behavior.

In a follow-up of his previous study Kelly (1974, 1975) examined the relationship between status origins, track position and self-report delinquency. According to Kelly (1975), the results of this study support the "hypothesis that, relative to one's background, one's location in the academic hierarchy is the strongest and most consistent predictor of self-report, delinquent involvement" (p.

269). While sex was found to be related to self-report delinquency and status origins was found to be weakly related to delinquency, track position emerged as the best predictor of self-report delinquency even when controlling for sex and status origins. In conclusion, Kelly (1975) suggested that these findings along with other research in this area, indicate the importance of the further development of a "school status" theory of delinquency and that such a development "should incorporate a major concern for the nature of the school experience, particularly in terms of the typing processes and ceremonies that take place between, for example, student-teacher, and student-administrator" (p. 269).

Hartnagel and Tanner (1982), also, provides some empirical support for a relationship between tracking and delinquency in their Canadian study. After analyzing their data, Hartnagel and Tanner (1982) indicated that a school status model best reflects their data. Moreover, they reported that student's academic program was found to be related to more violent forms of delinquency.

One study which failed to demonstrate a clear link between tracking and delinquency at the high school level was conducted by Wiatrowski et al., (1982). These researchers examined data from the Youth in Transition study, (Bachman, 1971), in order to explore the relationship between curriculum tracking and delinquency. According to Wiatrowski et al., (1982) previous research had indicated a correlation between curriculum track and delinquency and students in non-college tracks were seen as suffering from losses in school status,

decreased commitment to educational goals, and lower self-esteem which increases the likelihood of delinquency. On the other hand, students in college bound tracks were seen as more likely to associate with peers who have high educational aspirations and who do not support delinquent values or behavior. However, previous studies were seen as methodologically weak in that they relied on zero order correlations and failed to consider the relationship of multiple factors and their relationship to delinquency. Further, these studies were generally cross-sectional which ignore changes over time and few controlled for initial levels of delinquency which may have existed prior to school tracking. Unlike previous research, tracking was not strongly correlated with delinquency among students in the tenth grade, in their senior year or one year after high school. Moreover, tracking was not found to affect delinquency when prior levels of delinquency were controlled. While these results indicate that tracking and delinquency are not strongly related in high school, Wiatrowski et al., (1982) noted, "These results suggest that research about the influence of schools on delinquency needs to search for possible causes of delinquent behavior in junior high school and earlier, because most tracking probably occurs in junior high school, that is, when its effects on delinquency may be strongest" (p. 158).

The Relationship Between School Involvement, Commitment, Attachment and Delinquency

A number of studies have focused on the relationship of factors

such as involvement, commitment and attachment to schooling and delinquency. Polk and Halferty (1966) examined the relationship between adolescent commitment to school and delinquency among a sample of male youth in the pacific northwest. Their results indicated that delinquency among some youth was related to a lack of commitment to school and adult success and identification with a pattern of peer rebellion. Further, Polk and Halferty stated that the uncommitted delinquent typically withdraws from school, receives poor grades and does not participate in school activities.

Hirschi (1969) in his book, Causes of Delinquency, analyzed data from a sample of youth in Contra Costa County, California in developing a control theory of delinquency. Data were collected from a student questionnaire, school records and police records. The relationships between a number of independent variables such as race and sex as well as attachment to parents, school and peers; commitment to conventional lines of action; involvement in conventional activities; belief in conventional values and delinquency were examined. Hirschi indicated that youth who lacked attachment to school were more likely to engage in delinquent behavior and youth who were attached to school were less likely to engage in delinquency regardless of the intimacy of ties to their father. Also, commitment to education was found to be related to low levels of delinquency when compared to youth expressing low commitment to education and involvement in school work was inversely related to delinquency at all grade point levels.

Kelly and Balch (1971) in their study of male high school sophomores in western Oregon reported similar results to those of Hirschi (1969). Kelly and Balch (1971) found no relationship between social class and delinquency. However, they did find that academic performance, school self-evaluation, affect toward school and school involvement were related to school avoidance and delinquency.

Another study intended to explore the relationship between school commitment, rebellion and delinquency was conducted by Kelly and Pink (1973) in a medium-sized county in the pacific northwest. A total of 309 subjects were selected from a 25 percent random sample of all male sophomores enrolled in county schools which produced 284 completed interviews. These interviews resulted in data covering a range of demographic, school, community, work and peer variables as well as school data such as grade point averages and juvenile court involvement. The results of the data analysis revealed that as commitment decreased, rebellion and delinquency increased. Moreover, these relationships held regardless of social class.

In a study intended to replicate and extend Hirschi's (1969) control theory, Hindelang (1973) analyzed data collected from students in grades six through twelve in one school in rural New York. Hindelang's findings in regards to schooling reflected those of Hirschi (1969). Youth who were attached to the school reported lower levels of delinquent activity than youth who expressed little attachment to school. Also, youth having a commitment to schooling were found to be less inclined to involve themselves in delinquency and there were

fewer reports of delinquent activity among youth who spent more time on homework (an indicator of school involvement).

Hartnagel and Tanner, (1982) also provides support for the relationship between commitment to school and delinquency. Among junior high students, low school commitment was the only significant predictor of theft and violence and was the major determinant of school rebellion. Low commitment to school was associated with theft, vandalism, drinking and school rebellion, although school commitment was not found to be related to more violent forms of delinquency.

The Effects of the Organizational Characteristics of Schools on School Disruption and Delinquency

While a number of studies already cited indicate that specific organizational characteristics of schools such as tracking are related to delinquency (Hargreaves, 1967; Schafer et al., 1970; Schafer & Olexa, 1971; Kelly, 1974, 1975; Hartnagel & Tanner, 1982), a few studies have examined a range of school organizational characteristics and their relationship to school disruption and delinquency. Schafer and Polk (1967), in an appendix to the "Task Force Report: Juvenile Delinquency and Youth Crime" prepared for the President's Commission on Law Enforcement and Administration of Justice, reviewed available research on the relationship between schooling and delinquency and concluded that various conditions in schools, particularly as they affect lower-class youth, increase the likelihood of delinquent involvement. Those conditions were: (1) conditions in schools which

contribute to educational failure, (2) belief in the limited potential of disadvantaged pupils, (3) irrelevant instruction, (4) inappropriate teaching methods, (5) testing, grouping and tracking, (6) inadequate compensatory and remedial education, (7) inferior teachers and facilities in low income schools, (8) school-community distance, (9) lack of perceived pay-off of education by students, (10) economic and racial segregation, (11) low commitment on the part of students, (12) weak behavior control systems in schools, (13) educational lag and lack of local support for schools, and (14) problems in implementing innovations in schools.

In their book, Schools and Delinquency, Polk and Schafer (1972) reviewed a considerable amount of previous research relating to the relationship between various aspects of schooling and delinquency, and reported the results of a series of research studies they conducted during the early 1960's. Following closely the idea of a delinquent subculture developed by Cohen (1955), Polk and Schafer (1972) indicated that:

School experiences may function as an important determinant in the generation and maintenance of delinquency. We call attention to the possibility that the organizational logic and ideology of our schools assures that there will be delinquency. (p. 4)

Further, Polk and Schafer (1972) made it clear that their focus was on the structure of the school not individual problems. Using their own data as well as research conducted with others (Schafer & Olexa, 1971; Polk & Richmond, 1972; Polk & Halferty, 1966), Polk and Schafer (1972) indicated that various organizational characteristics of schools

such as tracking, school conditions which lead to school failure and the development of school cultures which lack commitment to school and adult success are closely related to delinquency.

Boesel et al., (1978) in "Violent Schools-Safe Schools: The Safe School Study Report to the Congress," conducted by the National Institute of Education, reported the results of a large scale study intended to explore the extent of crime and disruption in U.S. schools. The "Safe School Study" has been widely reviewed (Rubel, 1978; Emrich, 1978; Gottfredson & Daiger, 1979) and critiqued on methodological grounds (Emrich, 1978; Gottfredson & Daiger, 1979), and its general findings have been widely accepted (Emrich, 1978). Through the use of multivariate analysis, Boesel et al., (1978) reported a number of school characteristics which are related to school violence and property loss. Their results indicated that such organizational characteristics as the size and impersonality of schools, weak enforcement of school and classroom rules, arbitrary rules and staff punitiveness, few incentives or the inequitable distribution of rewards, the perception of schooling as irrelevant, and student alienation resulting from students feeling they have no control over their lives, increase the probability of school violence and property loss. Moreover, while a number of community and student body characteristics such as high community crime rates and male to female ratios were found to be associated with school violence and property loss, it was indicated that those school characteristics noted above can be controlled by schools.

In a re-analysis of data collected as part of the "Safe School Study," Gottfredson and Daiger (1979) provided additional insight on those school characteristics which are likely to contribute to school disruption. Their findings indicated that school characteristics such as "staffing, size, and resources; governance and educational climate; and social climate make a difference in the amount of teacher victimization in the school" (Gottfredson & Daiger, 1979, p. 150). At the junior high level, increases in teaching resources and students' perceptions of clear and fair rule enforcement were associated with lower reports of teacher victimization, while increases in school size, teachers perceptions that parents and students should have a say in school operations and punitive attitudes on the part of teachers were related to higher reports of teacher victimization.

According to Gottfredson and Daiger (1979), at the senior high level the greater the number of students taught by a teacher, the use of ambiguous sanctions by teachers (e.g., lowering grades as a form of discipline), and the extent of punitive attitudes among teachers, the greater the amount of teacher victimization. On the other hand, characteristics associated with low levels of teacher victimization at the senior high level were increases in teaching resources, teacher-administration cooperation and students' belief in conventional social rules. Also, a number of school characteristics were found to be associated with student victimization. At the junior high level, the more teachers expressed confusion about the development of school policies and favored students having a say in school

operations, the greater the student victimization, while increases in student reports of fair and clear school rules were associated with decreases in student victimization. At the high school level, only one school characteristic was found to be significantly related to student victimization. The more high school students reported that school rules were fair and clear, the less they reported being victimized.

Rutter, Maughon, Mortimore, Ouston, and Smith, (1979) conducted a study of twelve London secondary schools to determine how schools varied with respect to various student outcomes. This study compared data collected from a cohort of ten year olds in one inner London borough in 1970. Data included information on subjects' intellectual levels, reading attainment, family circumstances, behavior, parents' occupation and birth places of parents and children. Further, comparable data were collected from these students in 1974. Since the intent of this study was to examine school differences, controls for the kinds of students admitted by the twenty schools in the study were employed. According to Rutter et al., (1979), "The analysis showed that the variations between schools in children's behavior and their delinquency rates could not be explained in terms of the children's test or questionnaire scores at the end of their period in primary school just prior to secondary transfer. Also, they could not be accounted for in terms of the children's family characteristics or the primary school they had attended" (p. 28). As a result, Rutter et al., (1979) focused additional attention on twelve schools in

order to examine the school's affects on student outcomes. Their results indicated that even after controlling for school differences in intake, large statistically significant differences between schools were found in student attendance, student's behavior in school, academic attainment and delinquency. Moreover, school process measures--measures of the social organizational characteristics of the school which create an environment for teaching and learning--were highly correlated with student behavior and academic attainment, and to a slightly less extent to attendance and delinquency. Thus, the differences between schools were related to their characteristics as social institutions such as the degree of academic emphasis, teacher actions, the availability of incentives and rewards, a good environment for students and participation in the life of the school, and not to differences in physical factors such as school size, age of buildings, available space, class size, or internal organization such as student grouping for teaching purposes.

The Relationship Between IQ and Delinquency:
A Review of More Recent Research

One factor which may lead to poor school performance, or which may be indirectly related to delinquency is IQ. As noted earlier in this chapter, writing on the relationship between mental ability and delinquency goes back at least until 1915 (Healy, 1915) and plays a prominent role in much of the early research on delinquency (Silberg & Silberg, 1971). More recent research, although presenting mixed

results, has continued to explore the IQ-delinquency relationship. In one of the more recent and seemingly influential articles, Hirschi and Hindelang (1977) indicated that a number of factors have tended to obscure the relationship between IQ and delinquency. According to Hirschi and Hindelang (1977) a paradigmatic shift from a medical model to a sociological model of crime which occurred in the 1930's and 1940's along with a number of other factors such as: (1) an inability of research to substantiate earlier claims of a strong relationship between IQ and criminality, (2) negative reviews of the relationship between IQ and crime by Sutherland (1931) and others, (3) concerns over the measurement of IQ and delinquency, (4) incorrect interpretations of research findings, and (5) speculation regarding other factors which might account for the relationship between IQ and criminality, masked the relationship between IQ and crime. Moreover, they noted that recent research suggests that the relationship between IQ and crime is at least as strong as the relation of either class or race to official delinquency, and it is stronger than either class or race to self-report delinquency. According to Hirschi and Hindelang, IQ has an effect on delinquency independent of class and race and state that its effect is mediated through a number of school variables.

Wiatrowski et al., (1982), in reporting their analysis of data collected for the youth in Transition Study (Bachman et al., 1971) examined both the direct and indirect effects of a number of independent variables, including ability, on delinquency in a longitudinal

study of 1620 subjects. Data were collected on students as they entered the tenth grade, at the end of the eleventh grade, just prior to graduation and one year after graduation. Their findings indicated that changes in students' delinquency between their sophomore year and one year after graduation were negatively affected by students' mental abilities. However, the direct affects of mental ability or IQ were not as marked as the total affects which indicated the influence of mediating variables, thus, supporting the earlier work of Hirschi and Hindelang (1977).

Ouston (1984) studied youth in a disadvantaged area of London who were born between September 1959 and August 1960 in an effort to examine the relationship between educational attainment, intelligence, family background and delinquency. As noted by Ouston, scores on the National Foundation for Educational Research reading test and a non-verbal IQ test indicated that for both males and females, delinquents had lower scores than non-delinquents and delinquency was related to teacher's reports of behavior at school.

Simmons (1978), however, raised a number of issues regarding the relationship between IQ and delinquency proposed by Hirschi and Hindelang (1977). While Hirschi and Hindelang (1977) saw IQ as an indicator of stable innate ability which effects delinquency through its impact on school performance, Simmons (1978) suggested that a view of IQ as unstable and influenced by various social factors leads to a different causal order. If IQ is unstable and influenced by social factors then it is reasonable to propose that IQ results from

delinquency rather than IQ causing delinquency. Indeed, there is considerable evidence suggesting that IQ scores are influenced by social factors. Bronfenbrenner (1975) has reported that studies of identical twins raised apart have indicated that the less similar the differences in their environments, the greater the differences in their IQ scores. Also, Simmons (1978) noted that there is, also, research which indicates that substantial increases in the IQ scores of low socioeconomic status and minority group members are obtained when exposed to various remedial programs. According to Simmons (1978, p. 269), Hirschi and Hindelang (1977) presented an outdated view of IQ, and indicated that IQ is more correctly seen as "a broad set of problem-solving skills which are better labeled academic aptitude or scholastic readiness." For instance, Jones (1965) studied middle-class and lower class black schools and found that in the second, third and fourth grades there were no significant differences in reading comprehension scores between the children in these schools. However, by the eighth grade, large differences between these groups were evident. Moreover, in replicating this study, Ryan (1965) suggested that such differences are not because lower class youth come to school with lower IQ's, but results from these students' interaction with the schooling environment. Finally, according to Simmons (1978, p. 269), the problem of "the respondents motivations while taking the test" must be given close attention. Because delinquents are typically viewed as unmotivated, and because IQ tests are frequently administered in group settings, delinquents may do poorly

on such tests because of other school related factors and the testing situation.

In another study which examined the IQ and delinquency relationship, Menard and Morse (1984) also questioned the conclusions of Hirschi and Hindelang (1977). While Menard and Morse (1984) do not deny the existence of a zero order correlation between IQ and delinquency, they do suggest that "both IQ and academic performance are linked to delinquency only as an outcome of various institutional responses to differential levels of each" (p. 1348). In order to examine this relationship, Menard and Morse analyzed data from a longitudinal, random subsample of San Diego high school youth (Elliott and Voss, 1974). A path model based on the research of Hirschi and Hindelang (1977) testing the relationship between IQ and delinquency with academic aptitude, GPA and school alienation (attitudes) as intervening variables was tested. The results of this analysis indicated that the influence of IQ on delinquency was indirect with IQ explaining less than two percent of the variance in delinquency. On the other hand, an alternative model examining various institutional practices such as negative labeling, alienation, perception of low access to desirable goals and delinquent peer group associations explained 28.6 percent of the variance in non-serious delinquent behavior and 20.4 percent of the variance in serious delinquent behavior. Moreover, when IQ, academic aptitude and academic performance were added to this model, little improvement in this model was noted. As a result, Menard and Morse (1984) concluded that

"Theoretically, IQ is not causally related to delinquent behavior. . .[and] empirically, the association between IQ and delinquent behavior is so weak as to be negligible, given a properly specified causal model of delinquency" (p. 1374).

Some Evidence on the Relationship Between Learning Disabilities and Delinquency

Another body of research which focuses on the individual characteristics of youth is concerned with the relationship between learning disabilities and delinquency. According to Federal funding criteria, learning disabilities are defined as disorders of listening, thinking, talking, reading, writing, spelling or arithmetic, and include perceptual handicaps, dyslexia, developmental aphasia, and minimal brain dysfunction. However, learning disabilities do not include learning difficulties that result from visual, hearing, or motor handicaps, mental retardation, emotional disturbance, or environmental disadvantage (Murray, 1976). As Lane (1980) suggests, the emergence of the learning disability (LD)-delinquency link was the result of several factors: (1) the development of delinquency research indicating a relationship between school failure and delinquency, (2) the simultaneous development of research linking learning disabilities and school failures, and (3) the informal observations of juvenile justice practitioners and educators who noted close similarities between learning disabled and delinquent youth.

According to Johnson et al., (1979), by 1975 arguments indicating

a link between learning disabilities and school failure as well as delinquency had appeared. Basically these arguments championed two models of the learning disability and delinquency relationship. The first, referred as the susceptibility model, suggests that certain learning abilities are associated with difficulty in learning from experience, difficulty in recognizing social cues, and impulsiveness. According to this model, these difficulties inhibit the effectiveness of typical social sanctions and rewards and, as a result, increase the probability of delinquent behavior (Murray, 1976).

The second model of the relationship between learning disabilities and delinquency could be referred to as the school failure model. According to this model, learning disabilities frequently lead to negative labeling of youth and placement with others who are less capable and are failing academically. According to this model, negative labeling and poor academic achievement frequently lead to negative self-images and association with peers who are hostile to school and prone to delinquency. Such negative self-images and associations with delinquency prone peers can lead to delinquency in two ways. First, negative self-images may lead to an increased need for compensating successes which can lead to psychological incentives to commit delinquent acts. Secondly, associating with delinquency prone peers can lead to psychological incentives to commit delinquent acts or it can lead to school drop-out, suspensions and absenteeism which, in turn, may lead to opportunities to commit delinquent acts or to economic incentives to engage in delinquent behaviors (Murray,

1976).

A number of studies have indicated a high incidence of learning disabilities among delinquent youth. In an early study concerning the LD-delinquency link, Poremba (1967) indicated that among a population of delinquent youth, 50 percent had a specific learning disability. Also, Sawicki and Schaeffer (1979) examined a randomly selected sample of 125 delinquents and reported that 7 percent did not have learning disabilities, 16 percent were mentally retarded and 77 percent were learning disabled. Among those classified as learning disabled, 46 percent were found to have mild disabilities and 31 percent were found to have severe learning disabilities. Further, an examination of the relationship between the number of offenses, offense severity and severity of learning disabilities indicated a positive relationship between the severity of learning disabilities, the number of offenses and the severity of offenses. Moreover, variables such as age, race and intelligence level were not found to be predictors of the number or severity of offenses.

In a journal volume devoted to the link between learning disabilities and delinquency, Sikorski and McGee (1986) noted that studies focusing on adjudicated youth who were subsequently placed in residential treatment programs or juvenile detention facilities indicated that from 40 percent to 70 percent of such youth displayed "significant neurodevelopmental abnormalities, including language, cognitive, perceptual and motor abnormalities" (p. 11). In addition, there was evidence that most of these youth were academic underachievers and

showed significant learning problems. On the average, the youth were three years below grade and age expectations in math and over four years below expectations in reading.

Studies employing nondelinquent control groups have, also, reported a relationship between learning disabilities and delinquency. Berman (1975) analyzed data obtained from a random sample of males admitted to Rhode Island training schools and a nondelinquent sample matched on age and intelligence from schools which accounted for 82 percent of training school admissions. The results of this study indicated that the delinquents performed more poorly as a group on measures of Weschler's Psychometric Intelligence and on a number of measures of sensory perception. Also, a study conducted by Berman and Siegal (1976), found adaptive abilities and learning skills among a group of 45 male delinquents to be significantly lower than among a nondelinquent control group matched on age, sex, race and social status.

Murray (1976) reported the results of a study conducted by the American Institute of Research (AIR) for the National Institute of Juvenile Justice and Delinquency Prevention which served as the impetus for two subsequent large scale studies on the relationship between learning disabilities and delinquency. The AIR study consisted of an extensive literature review, interviews with 46 consultants to glean information on unpublished theory and examined a number of demonstration projects. The results of this study indicated that the presumed relationship between learning disabilities and

delinquency was based primarily on the observations practitioners made of their clients. In contrast, academicians were often skeptical of a strong relationship between learning disabilities and delinquency. Although research indicated that 22 percent to 90 percent of delinquents had learning disabilities, the research team concluded that the 'disparity of estimates fairly reflects the disparity of definitions, procedures, and analyses in the studies' (Murray, 1976, p. 61). In addition, the research team reported that based on existing research no estimate of the incidence of learning disabilities was possible nor had any study to that time been able to demonstrate that youth with learning disabilities are more likely to be delinquent than other youth and recommended that further research and evaluation be conducted (Murray, 1976).

Subsequent to the AIR study, the General Accounting Office (GAO) of the Federal Government conducted a study which explored the extent of learning problems among youth in juvenile institutions in Connecticut and Virginia (Comptroller General of the U.S., 1977). Learning problems in this report consisted of three classifications: (1) satisfactory slow learners, (2) youth with limited academic potential, and (3) underachievers. In addition, the underachievers category was further divided into youth having primary learning problems (learning disabilities) and youth with secondary learning problems--those who were unsuccessful in school due to exogenous factors such as poor attendance, exposure to serious familial or social problems, and emotional or behavior problems. The results of this study

indicated that 26 percent had primary learning problems, 51 percent had secondary learning problems, 19 percent had limited academic potential, and 3 percent were classified as satisfactory learners. Only one subject was found to be functioning at grade level.

In addition to the GAO study, the office of Juvenile Justice and Delinquency Prevention (OJJDP) commissioned a two year research and demonstration project through the National Center for State Courts to examine the relationship between learning disabilities and delinquency (Johnson et al., 1979; Crawford, 1982) as well as a remediation program targeted at learning disabled juvenile offenders which was operated by the Association for Children with Learning Disabilities (ACLD) (Crawford, 1982). In order to compare the prevalence of learning disabilities among adjudicated and non-adjudicated males, data were collected from a large sample of youth in Baltimore, Indianapolis and Phoenix and a subsample of youth of which one-third were adjudicated delinquents. When the adjudicated youth were compared with the non-adjudicated youth, it was discovered that twice as many (32 percent) of the adjudicated youth had learning disabilities as non-adjudicated youth (16 percent) (Johnson et al., 1979). In addition all subjects were administered questionnaires containing police contact and self-report delinquency in order to determine the prevalence of delinquency and police contacts among learning disabled youth and non-learning-disabled youth. Although this study suffered from some methodological problems (e.g., a 65 percent attrition rate among respondents), the results indicated no significant differences between

learning disabled and non-learning-disabled youth in either police contacts or self-reported delinquency. As a result, the researchers suggested that the higher percentage of learning disabilities among adjudicated youth may result from their inability to communicate with authorities and that poor school performance may be a factor in authorities deciding to process these youth in the juvenile justice system (Zimmerman, Rich, Keilitz, & Broder, 1978).

Another study which was undertaken at approximately the same time as the GAO study and the National Center for the State Courts study was conducted by Swanstrom, Randle, and Offord, (1981) in southern Minnesota. These researchers reported the results of a three year study funded by the Law Enforcement Assistance Administration which was intended to determine the prevalence of learning disabilities within the general population and among juvenile offenders. In this study, samples of 317 seventh grade students and 128 adjudicated delinquents aged 12 to 17 were compared. The results of this study indicated that the percentage of delinquents with a learning disability was three and one-half times greater than the percentage of learning disabled youth in the general seventh grade population. Roughly one out of two delinquents tested were found to have a learning disability compared to approximately one in six in the general seventh grade population.

More recent studies have continued to produce somewhat conflicting results. In a New Mexico study, Pasternack and Lyon, (1982) compared the proportion of juvenile delinquents with learning disabilities

with the proportion of youth with learning disabilities in the general school population. The results of this study failed to support the belief that delinquents are more likely to have learning disabilities than non-delinquents. Also, Meltzer, Roditi, and Fenton, (1986) compared groups of 53 delinquents, 26 learning disabled youth and 50 average achievers in order to examine differences in their cognitive profiles. Results of this study indicated a number of differences between these three groups in regards to their cognitive and educational profiles as well as a number of similarities. The delinquents displayed the weakest educational skills of all three groups in work recognition, reading comprehension, spelling and math, although delinquents and learning disabled youth had very similar scores in mathematics. Overall, 14 percent of the delinquent group was found to have a learning profile similar to those of learning disabled youth.

Aside from research projects which have attempted to examine the relationship between learning disabilities and delinquency, there are, also, reports of projects which have attempted to provide educational remediation for learning disabled delinquents. As noted earlier in this section, part of the Office of Juvenile Justice and Delinquency Prevention (OJJDP) effort to explore the link between learning disabilities and delinquency during the mid-1970s, involved the development of a remediation program targeted at learning disabled juvenile offenders. This remediation project was operated by the Association for Children with Learning Disabilities (ACLD) and carried out remediation programs in Baltimore, Indianapolis, and Phoenix. The major

program objectives of each of these remediation efforts was to improve youths' scholastic achievement, improve school attitudes and reduce delinquent behavior. Further, these programs employed an academic treatment model, as opposed to a behavioral or medical model, which focused on the following strategies: "(1) work on a level that increases proficiency in the functional areas, (2) use each juvenile's preferred modality, and (3) employ techniques for learning how to learn" (Crawford, 1982, p. 8). The results of these projects indicated that the remediation program improved reading and arithmetic test performance among subjects and dramatic gains were seen at the point where subjects had received at least 55 to 65 hours of remediation. Overall, the remediation program was found to be more effective with learning disabled delinquents as opposed to non-learning disabled delinquents and while the remediation program failed to substantially improve student's attitudes towards school, delinquent program participants indicated a significant decline in delinquent activity (Crawford, 1982).

In addition to the above project, Bachara and Zaba (1978), also, examined a remediation program for learning disabled delinquents. Their subjects were 79 juvenile delinquents who were referred to a juvenile court for various status offenses, including incorrigibility, truancy and school disruption. Subjects were determined to have a learning disability through testing, which included intelligence testing, educational evaluation, visual perceptual, audiological, and psychological examinations. Of these 79 subjects, 48 were given

no remediation due to various circumstances exogenous to the study, and 31 were exposed to some type of remediation which included placement in a special education or private school, placement in a special education class, given visual-perceptual-motor training, or tutored. In addition 84 percent of those youth exposed to some type of educational remediation also received supported counseling. The results of this study indicated that 41.6 percent of the group who received no remediation recidivated, compared to 6.5 percent of those youth who received some type of remedial service.

School-Based Delinquency Prevention Programs

Early School-Based and Individually Focused Prevention Efforts

Despite the fact that the relationship between various aspects of schooling has received considerable attention within the criminological and educational literature, there is a dearth of sound evaluation of school-based delinquency prevention projects. As noted earlier in this chapter, early writers such as Burt (1925), Healy (1933), and Hill (1935-36) had indicated that the school was a logical place for delinquency prevention efforts while Lane and Witty (1934) reported that educational programs for delinquents could improve delinquents' educational functioning and could be operated in public schools to prevent delinquency.

In a study intended to improve the educational functioning of a group of delinquents, Roman (1957) studied 21 males aged thirteen to

sixteen who were on active status with the Treatment Clinic of the Manhattan Children's Court in an attempt to develop an effective reading program for delinquents. Roman reported that these subjects had a reading retardation of at least two years and had IQ scores ranging from 65 to 95. These subjects were divided into three treatment groups: (1) group remedial reading which focused on group reading, (2) tutorial group reading which combined group reading and a therapeutic group process, and (3) interview group therapy which focused on group therapy. In analyzing the outcomes of these groups, Roman indicated that the tutorial group therapy intervention was significantly more effective in improving the reading ability of these delinquents and felt it could be used to assist other delinquents. Unfortunately, no information of this program's effects on delinquency were provided.

Although many early programs were not carefully evaluated, early delinquency prevention programs which employed an individual or casework approach, although not school-based, have not received favorable reviews. For instance, Toby (1968), in examining the Cambridge-Somerville study which employed casework and attempted to develop strong one-on-one bonds between youth and counselors, indicated that 41 percent of the youth exposed to the intervention became delinquent as opposed to only 37 percent of a control group who did not receive the intervention. Further, a 30-year follow-up of these youth indicated that when they reached their late 40's, those who had received the intervention were more likely than controls to be

experiencing a number of problems such as hypertension and alcoholism (McCord, 1978). Also, a study which examined the effects of counseling for potentially deviant high school females in New York failed to produce positive results. Those subjects who received the intervention were not significantly different from controls on various outcome measures such as attendance, truancy, school retention, suspensions and discharges, conduct marks, teacher and counselor ratings, or court involvement (Meyer, Borgatta, & Jones, 1965). Similarly, an experimental work-study and employment program for inner-city high school males with poor achievement histories produced no significant outcomes with respect to police contact after six years when compared with a randomly assigned group of controls (Ahlstrom & Havinghurst, 1971).

Reckless and Dinitz (1972) provided an assessment of an experimental school-based delinquency prevention program involving potentially delinquent youth and youth who were felt to be potential dropouts. Youth identified as potential delinquents or dropouts by their sixth grade teachers were randomly assigned to either a self-contained class especially designed for such youth (the experimental condition) or a regular self-contained class (the control condition). Youth not identified as potential delinquents or dropouts were assigned to regular self-contained classes and served as a comparison group, and these youth, along with control youth, were exposed to the regular curriculum. Youth who were in the experimental group, however, were exposed to a modified curriculum that included the attempted

development of close teacher-student relations, a special classroom discipline system that avoided sending youth to the office as well as special curriculum materials. These curriculum materials covered five main topics: "(1) The World of Work; (2) The School and You, (3) The House We Live In, (a presentation of government services), (4) Getting Along With Others, and (5) The Family (Reckless & Dinitz, 1972, p. 62). However, analysis of their outcome data indicated no significant differences between experimentals and controls on either school performance or police contact, although whites in both groups fared better than blacks. Also, while the good-boy comparison group tended toward greater delinquency involvement and poorer school performance, they continued to display much better outcomes than either experimentals or controls. In terms of attitudinal changes similar results were noted. Experimentals and controls displayed no significant differences on measures of self-concept, socialization, perceptions of law, police and various school focused measures, although experimental subjects indicated favorable views of the program.

Rose and Marshall (1974) evaluated the effects of a school social worker program on delinquency. In this program students were seen for an average of four hours by a social worker due to referrals for truancy, delinquency or other behavioral problems. The analysis in this study focused on 156 males and 92 females who were seen most frequently, and a comparison with similar students at two schools without social workers was undertaken. Results revealed that

delinquency rates were slightly higher during a two year period for the comparison students, although these differences were not statistically significant.

Murray, Bourgue, Hannar, Hersey, Murray, Overbey, and Stotsky (1980) reported results of the Cities in Schools Program, a program targeted at providing a variety of services to inner-city students who traditionally experience school failure. Services provided included academic support, counseling, education and cultural enrichment activities as well as other human services when needed. In addition, each student had a caseworker who monitored the student's progress and positive support networks called school "families" were established and consisted of one staff and forty students. Also, for purposes of evaluation students were randomly assigned to either an experimental or control group at three demonstration sites. Results of the evaluation were mixed. Experimental students at one site showed improvements in understanding of options and requirements, feelings of control over their future, stricter standards of personal control, improved effort and attention in class, interpersonal relations, success in learning situations, attendance, and acquisition of basic reading skills. However, these outcomes were not replicated at the other two sites. Also, numbers of arrests varied at the three sites. Official delinquency increased at two sites and declined at one site. Unfortunately, methodological problems such as control group attrition and lack of police information for the control groups make careful comparisons of the experimental and control groups

difficult (Hawkins and Lishner, 1987). The results of these earlier individually or casework focused interventions have not been encouraging. Indeed, Romig (1978), after reviewing a number of prevention projects employing a casework approach indicated that such projects produced unfavorable results.

Contemporary School-Based Programs and Remediations

Preschool Programs

Evaluations of preschool intervention programs have indicated positive effects on a number of risk factors related to delinquency (Hawkins & Lishner, 1987; Gottfredson, 1988). For example, Lazar, Darlington, Murray, Royce, and Snipper (1982), in a meta-analysis of the long term effects of eleven preschool programs for minority youth, reported that such programs significantly reduce placements of children in special education classes, and lessen grade retention. Also, graduates of these programs were more likely to perform adequately in school and show improved performance on IQ and Math Achievement tests, although these effects diminished over time, and showed some improvement in attitudes toward school.

In addition, McKay, Sinisterra, McKay, Gomez, and Lloreda (1978) reported the results of a preschool program which provided nutritional assistance, health care, and educational intervention for groups of low socioeconomic status, chronically undernourished children from Columbian families. This program provided a high intensity

intervention over different periods of time and for different lengths of time for different groups of children between 42 and 87 months of age. The results of this program indicated that the earlier the treatment began and the longer it lasted, the greater the improvement in academic ability scores. As Gottfredson (1988) notes in a review of this program, "although the children studied were more disadvantaged than most children involved in U.S. compensatory education studies, the results suggest that the longer the duration of a well-planned and multimodal intervention, the greater the beneficial effect of the intervention" (p. 37).

A study designed to examine the effects of interpersonal cognitive problem-solving skills on the behavioral adjustment of minority preschool and kindergarten children has been reported by Shure and Spivack (1979). This study involved 219 black children in daycare and kindergarten who were assigned to two experimental and control groups. The intervention involved daily twenty minute lessons over three months consisting of games and dialogues intended to teach children specific problem-solving skills. Results indicated that both experimental groups improved in consequential thinking and their ability to determine alternative solutions to interpersonal problems.

A long-term study of a preschool project targeted at black, low socioeconomic status youth conducted by Berrueta-Clement, Schweinhart, Barnett, Epstein, and Weikart (1984), has reported some positive results. This project, the Perry Preschool Project, examined a group of 121 youth who were matched on background variables and randomly

assigned to experimental and control conditions. Experimental students attended small classes with a student to teacher ratio of six to one for two and a half hours each morning for five days a week for a period which lasted from one to two years. In addition, project teachers made weekly home visits. Underlying this project was the idea that the preschool intervention could improve students' chances of success in elementary school which, in turn, would facilitate adjustment in later grades. In a follow-up of these youth to age nineteen, the investigators reported long-term benefits of the program on cognitive performance, scholastic achievement, decreased use of welfare assistance, reductions in teenage pregnancies, increased high school graduation rates, enrollment in postsecondary schools and reductions in official delinquency rates. However, in a review of this project, Gottfredson (1988) raised serious questions about the methodological rigor of the Perry Preschool Project which included difficulty in interpreting the data and the use of scaling techniques which may not have taken differences between the groups into account.

Elementary School Programs

Kellam and Brown, 1982, (cited in Gottfredson, 1988; Hawkins & Lishner, 1987) have reported evaluation results of an elementary school program intended to reduce various delinquency risk factors. Called the Woodlawn project, this program targeted 1,242 disadvantaged minority children over a four year period beginning in the first grade. Students in randomly assigned experimental and control

schools were compared on a number of measures such as teacher ratings of social adaptational status, scores from IQ and achievement tests, and grades. Program interventions consisted of weekly group process meetings and meetings between program personnel and parents to elicit parental support for the program and to review student progress. Results of the first year evaluation indicated a worsening of social adaptations among experimental students. Also, a long term follow-up of half the experimentals to the third grade indicated no differences in ratings of experimentals and controls. However, when program effects were examined from the middle to the end of the year--the time during which the intervention occurred--experimental students displayed significant gains in social adaptation when compared to controls, indicating the program may have produced some positive short-term effects. Moreover, short-term benefits in math were noted for two of the three experimental groups as well as long-term benefits in oral language and reading scores. However, effects on achievement test scores were minimal. Overall, the evaluators of this project concluded that it provided no increased immunity against later problems of maladjustment and that it did not benefit seriously maladjusted children.

Gottfredson (1988) has, also, provided a review of a number of additional elementary instructional practices that have targeted various risk factors associated with delinquency. For instance, direct instructional methods which utilize a fast instructional pace, hierarchical sequencing of steps, frequent questioning and praise

for correct answers and drills, have provided promising results. Also, the Mastery Learning Model (Bloom, 1974, cited in Gottfredson, 1988) is another instructional method which has produced positive results. The mastery learning model is intended to give slower-learning students the amount of instruction needed to master classroom materials. Basically the mastery learning model is predicated on clear instructional objectives, reducing instruction to discrete units, assessing mastery prior to beginning another unit, practice, and corrective instruction. Importantly, it can help slower students master instructional materials. On the other hand, it does have some drawbacks such as requiring longer periods of instructional time and may help slower students at the expense of those who learn more quickly (Gottfredson, 1988).

A third instructional strategy which has shown considerable promise is cooperative learning (Slavin, 1983). Cooperative learning strategies attack the problem of differential learning "by creating classroom arrangements that provide incentives for progress or performance for all students. They do this by making use of improvement points, success in competitions between students of approximately equal ability, or similar methods. The essence of successful cooperative learning programs is cooperative incentives for learning" (Gottfredson, 1988, p. 40). Evaluations of cooperative learning methods indicate that they are effective in increasing students' academic achievement, improving race relations, liking for school and self-esteem (Slavin, 1983). As Gottfredson (1988) notes, "these

noncognitive effects of cooperative learning methods are especially important because they suggest that the methods have potential for rearranging friendship patterns--a potentially valuable tool in serving delinquent peer associations" (p. 41). However, these results have not been empirically verified.

As Gottfredson (1988) notes, while direct instruction, mastery learning and cooperative learning methods have shown positive results, one type of program, special education, has not demonstrated success. An evaluation of a study which randomly assigned students classified as educationally mentally retarded or emotionally disturbed to a regular or high quality special education class, did not reveal beneficial outcomes for youth placed in the special education classes. In fact, regular class placement was found to be more beneficial to both groups (Calhoun and Elliott, 1977). Moreover, a review of educational programs for students with mild educational problems conducted by Madden and Slavin (1983) revealed few benefits of placement in special education classes, while rather consistent benefits of placement in regular classes was noted (cited in Gottfredson, 1988).

Middle and High School Programs

According to Hawkins and Lishner (1987) school-based programs which have employed a behavioral approach have frequently demonstrated positive effects on educational attainment and school behavior while demonstrating limited effects on delinquency. In one such project, the PREP project, students identified as having academic or behavioral

problems were assigned to either an experimental condition or a control condition at two of three project sites. Program interventions consisted of individualized academic instruction, interpersonal skills training, teacher training, teacher reinforcement of appropriate behaviors, clear classroom rules, family liaison and family management skill training. At two experimental schools, experimental students showed early achievement gains, although these gains faded over time. In addition, favorable outcomes were observed for experimental students in a number of areas: school attendance, suspensions, citizenship ratings and teacher ratings of outstanding school behavior. Unfortunately, no delinquency measures were reported (Filipczak and Wodarski, 1979).

Another program using a personalized education approach was evaluated by Gottfredson (1986, cited in Gottfredson, 1988). This project, the Compton Action Alternative School (CAAS), involved intensive personal interaction between students, many of whom had gang associations, and teachers. In addition to intensive personal contacts between students and teachers, the program employed a basic instructional program, an expanded range of rewards for students, paid students for school maintenance, and organized parent activities. The evaluation employed a quasi-experimental design which compared non-equivalent groups and caution was recommended in interpreting the results. However, after involvement in the program, CAAS students saw themselves as more able, felt their parents emphasized education more, reported higher educational expectations, attachment to school,

belief in conventional rules, more positive self-concepts, less rebellious attitudes, increased effort on school work, worked more, and reported less drug usage when compared to controls. However, no statistically significant difference between the groups was noted for self-report delinquency.

D. C. Gottfredson (1986), however, reported less promising results from part of another school-based program (the PATHE program) which employed individually focused interventions in four middle and three high schools in Charleston, South Carolina. Although this program also employed school-wide interventions, one component of this program was intended to provide both affective and academic services to students whose histories indicated academic or behavioral difficulties. Once identified students' problems were diagnosed based on students' standardized achievement test performance, prior grades and disciplinary records. Also, behavioral treatment objectives for students were established and progress toward these objectives were frequently assessed.

A comparison of program students with a randomly selected equivalent control group indicated that reductions in delinquent behavior were not observed among program participants. Moreover, findings regarding other risk factors associated with delinquency were mixed. Program students were more likely to graduate from school than controls, but this, to a large extent, was due to project effects at two of the middle-schools who lost no target students. However, at one of the high schools program students were more likely to drop

out than others. Overall program students scored higher than controls on standardized tests and promotion rates were better for target students than controls, although these differences were not always statistically significant. Also, program students grades were significantly higher one year but significant differences were only found in one school the following year. Improvements in attendance were noted in two of the project schools--one which closely monitored attendance and another which exceeded project objectives regarding student contacts. Lastly, target students reported more positive self-concepts but slightly less attachment to school, although these differences did not reach statistical significance.

As noted above, however, another aspect of the PATHE program was aimed at school-wide climate improvement. These school-wide interventions were aimed at various aspects of the school social organization and included: (1) developing teams of staff, students, parents and community members to design and implement school improvement interventions, (2) reviewing and revising the school curriculum, improving teaching techniques and improving teacher competencies in classroom management and school-wide discipline, (3) developing academic innovations such as mini-courses designed to teach students academic skills such as studying and test taking, providing free reading periods and using student team learning (Slavin, 1983), (4) implementing a career exploration and job seeking skills program, and (5) other school-wide innovations such as a School Pride Campaign, expanded extracurricular activities and Peer Counseling. Unlike

those interventions which targeted individual students, the more organizationally focused interventions produced more favorable outcomes. In project schools, small but significant improvements in self-reported delinquency and school misbehavior were noted. Specific measures of school climate, also, indicated improvements in program schools. Program schools indicated increases in school safety, staff morale, teacher-administration cooperation and, in middle schools, improvements in students reports of the clarity and fairness of school rules. Other project measures indicated mixed results. Students in the project schools reported receiving lower grades, school attendance increased in the high schools but decreased slightly in the middle schools, and significant differences in students reports of self-concept were found. However, significant decreases in student alienation were reported and in project middle schools student reports of attachment to school increased significantly (D. C. Gottfredson, 1986).

Another study which examined school organizational change through collective problem solving was reported by Grant and Capell (1983). This study examined teams comprised of school administrators, teachers, counselors, parents and youth agency representatives who were trained to develop interventions to address problems in their schools. Interventions varied by site but included time out rooms, student monitors, teacher home visits and rewards for positive behaviors. Unfortunately no control schools were used in the evaluation. However, the results indicated that the length of time these teams were involved in problem-solving was associated with reductions in reports of school

crime. Also, the types of team activities which were associated with crime reduction varied by school level. High school teams which targeted increased communication within the school and between the school and the community, which involved youth and adults in problem-solving, and which taught students knowledge and competencies which could facilitate students success beyond school were associated with reports of reduced school disruption. At the elementary and middle school level, teams which strove to improve discipline and security and improve teacher/parent and teacher/student relations were associated with reductions in disruption.

Gottfredson (1988) also provided some insight on the use of a school-wide improvement program intended to improve discipline in a predominantly black urban middle school. This program used a structural organizational development approach consisting of teams of administrators, teachers and other staff to identify and overcome problems influencing the implementation of interventions designed to improve school discipline and students' chances of academic success. After three years of operation, program teams had implemented improved classroom management and instructional practices, revised school discipline policies and practices and implemented interventions intended to increase parent involvement and reduce student alienation. Evaluation results indicated that, as a whole, the school became safer and the classroom learning environment more orderly over the course of the project. In addition, teacher morale improved dramatically and teacher reports of planning and action and perceptions of

the school administration became more positive. Student attitudes toward school also showed improvement and students' self-reported delinquency was significantly reduced.

Hawkins, Lam, and Lishner (1985a), and Hawkins, Doueck and Lishner (1985b) reported the effects of enhanced classroom instruction in five Seattle middle schools on a number of risk factors associated with delinquency. These studies used both experimental and quasi-experimental designs to test the effects of classroom-based instructional methods which included proactive classroom management, interactive teaching, and cooperative learning. At the end of one year of program operation, Hawkins et al., (1985a) indicated that experimental teachers implemented the project instructional practices significantly more frequently than control teachers and that the use of the enhanced instructional method was associated with student behaviors linked to achievement, increased achievement in math, more positive attitudes toward math class, higher educational aspirations, and reductions in suspension and expulsion rates. However, no effects on self-reported delinquency were reported. Also, in a separate analysis Hawkins et al., (1985b) examined the effects of enhanced classroom instruction on achievement, bonding and behaviors of a subsample of 160 low achievers. These results indicated that students in the experimental classes reported more positive attitudes toward math, more bonding to school, higher educational expectations and fewer suspensions and expulsions. However, among low achievers significant effects were not found with respect to achievement test scores, or

self-reported delinquency at the end of one year of intervention.

In summary, this chapter has attempted to review the literature on the relationship between schooling and delinquency. This review has focused on a range of literature concerned with the effects of individual characteristics on school failure, school problems and delinquency as well as how the school operates to produce both school problems and delinquency. Although much of the early writing on the relationship between schooling and delinquency viewed failure, misbehavior and delinquency as resulting from the individual characteristics of youth such as psychological health or mental ability, there has also been recognition, although frequently implicit, that schooling may have an independent affect on delinquency. By the 1960's a much larger body of more sociologically based research had appeared and focused more on the characteristics of the school which increase the probability of school problems and delinquency.

At present, research on the relationship between individual characteristics such as IQ, learning disabilities and delinquency, as well as those characteristics of schools themselves which produce delinquency, continue to attract considerable attention. However, even within the research focusing on such individual traits as IQ or learning disabilities, there is recognition that school factors may serve as important mediating influences on delinquency (Hirschi & Hindelang, 1977; Wiatrowski et al., 1982; Ryan, 1965; Menard & Morse, 1984). Moreover, research by Rutter et al., (1979) indicate that regardless of students' background characteristics, schools have an

independent affect on delinquency.

As a result of the extensive literature linking various aspects of schooling to school failure, school disruption and delinquency, school-based delinquency prevention programs have been attempted (Reckless & Dinitz, 1972; D. C. Gottfredson, 1986; Hawkins & Lishner, 1987; Gottfredson, 1988) and others proposed as an effective strategy in reducing delinquency (Gold, 1978; Johnson et al., 1979; Hawkins & Wall, 1980; Gold & Mann, 1984; Gottfredson, 1988). After reviewing the previous literature, a number of promising school-based delinquency prevention strategies are suggested. To begin with, early education programs for youth in the preschool years, in elementary school and in secondary schools have produced positive outcomes. Such beneficial outcomes have been noted for programs which have sought to improve schools by implementing better instructional, classroom management, behavior management and overall school climate improvement practices; for approaches which attempt to make the educational experience more rewarding and which increase students academic success; and for programs which are intended to facilitate learning attachment and commitment to schooling, teachers and prosocial behavior (Hawkins & Lishner, 1987; Gottfredson, 1988). However; some common practices in education such as identifying and grouping problem students, pull-out programs and special education assignments, may provide few, if any, beneficial effects for students in these programs (Gottfredson, 1988).

CHAPTER III

THEORETICAL FRAMEWORKS AND PROGRAM DESCRIPTION

As noted in the previous chapter, the relationship between various aspects of schooling and delinquency is well documented. However, knowledge of a relationship between schooling and delinquency is not in itself a sufficient condition for the development of a successful school-based delinquency reduction program. An examination of various delinquency prevention projects found that such projects typically lacked both a well articulated theory of delinquency and a description of how their activities would reduce the problem (Krisberg, McCall, & Munson, 1978; Krisberg & Fong, 1979). Further, Krisberg and Fong (1979) concluded that as a result goals were often ambiguous, not clearly related to the problems to be addressed, and that project planning was incomplete. From a practical standpoint, theory serves as a guide to program activities; what should be done to achieve desired outcomes. In addition, theory helps both researchers and program staff assess the effectiveness of various interventions. As Martin, Sechrest and Redner, (1981) note, "in attempting to solve any problem, a clear idea of the nature of the problem, its causes, and developmental processes is vital" (p. 29). When an adequate theoretical framework is lacking efforts are likely to be directed at

factors unrelated to the causes of crime, those populations who may be the most suitable targets of interventions may be overlooked, and questions regarding the optimal time and strength of interventions may be ignored.

In the development and implementation of the Milwood Project, three theoretical frameworks were employed. First a variant of control theory (Hirschi, 1969) found in previous work by Friday and Hage (1976) and Friday and Halsey (1977) was used to conceptualize a model school organization. In effect, this theoretical framework focused on a hypothetical school organization capable of reducing school disruption and delinquency. Secondly, a critical perspective was used to understand the role of education in postindustrial, capitalist America and how schools are organized to produce school disruption and delinquency (Bowles & Gintis, 1976; Carnoy, 1972; Ryan, 1981; Angus, 1985). Third, a variant of the program development and evaluation model (Gottfredson, 1982a, 1984a) was used to guide the process of program development and was viewed as a practical program management and evaluation strategy. In effect, the program development and evaluation model served as a theoretical framework which guided program staffs' organizational change efforts. Basically, these three theoretical frameworks helped guide staffs' answers to three fundamental questions: (1) how would a model school capable of meeting all student's need be organized and function, (2) how do schools produce disruption and delinquency and what aspects of the school organization and climate need to be changed, and (3) what is a systematic and

effective process for developing, implementing and evaluating change?

The Role Relationships Perspective:
Vision of a Model School Organization

Rather than being concerned with why youth deviate, control theories concern themselves with why people conform (Hirschi, 1969). Unlike control theories which are primarily concerned with the social-psychological development of commitments and attachments to prosocial institutions, involvement in conventional activities and belief in conventional modes of behavior (e.g., Hirschi, 1969), the role relationships perspective attempts to integrate both micro and macro levels of analysis in understanding how various structural, institutional and individual level factors affects youth's integration into conventional patterns of behavior (Friday & Hage, 1976).

Of critical importance within the role relationships perspective is the saliency of the major socializing institutions for the individual. These major socializing institutions are: (1) kin relationships--including the extended family, (2) community, (3) school, (4) work, (5) peers, and (6) other institutions which may be salient for a particular individual. As Friday and Hage (1976) note, however:

The key is not so much whether a youth is unemployed, in school, has divorced parents, or lives in a ghetto--although these can be important causes explaining a lack of work, school, family, or community role relationships--but whether or not he has these relationships at all and how involved he is in them. The more involved one becomes in these relationships, the less likely he is to engage in deviant acts and especially to be involved in major crimes that often lead to detection and prosecution. (p. 351)

In response to the control theory question, "why do people conform," the role relationship perspective posits that conformity is more likely to the extent that youth are involved in these institutions, that youths' roles within these institutions overlap, and that these socializing institutions direct the person toward conformity. In such instances, informal social controls are heightened and the probability of deviation is reduced. There are, however, a number of factors which hinder the social order's ability to integrate youth and others into conventional institutional roles.

Social Structural Effects on the Patterns of Role Relationships

Rather than focusing strictly on the social-psychological affects of youth's integration or lack of integration into conventional roles and the resulting relationship to behavior, the role relationships perspective is also concerned with the structural conditions which shape the basic socializing institutions and the role of youth in society. From a macro-sociological perspective, it is important to understand the historically changing status of youth in industrial and postindustrial capitalist societies (Friday & Hage, 1976; Greenberg, 1977; Friday, 1980). In peasant and tribal societies youth played important production roles and juvenile crime rates were low. Similarly, under feudalism, youth played important roles in farming and handicraft production from a very early age (Greenberg, 1977).

Youth, also, assumed important roles during the early stages of

the industrial revolution (Greenberg, 1977; Friday, 1980). In order for the growing capitalist economy to develop in America, a reserve army of labor was required to lessen worker demands, depress wages and supply sufficient labor (Messerschmidt, 1979). As Greenberg (1977) notes, during this period working class youth worked at an early age and were even given preference in some sectors of the economy. Moreover, while middle and upper-class youth did not need to work, they received much closer supervision than today. As a result, it has been argued that during the early part of the industrial revolution juvenile crime accounted for a much smaller percentage of total crime and was more confined to the lower classes (Greenberg, 1977).

As capitalism and industrialization progressed, however, the roles of youth began to change. The development of the American capitalist economy into a monopoly or core sector comprised of more stable concentrated industries such as steel, copper, aluminum, shipping, and a competitive or peripheral sector comprised of less profitable distributors, repair shops, garages and light manufacturing, had a profound effect on the labor force, of which youth were a part. As O'Connor (1973) indicates, growth of the monopoly or core sector tends to result in both a surplus of capital through the production of a surplus of goods and productive capacity and a surplus population which results from technological unemployment. Unemployment becomes a problem because growth in the monopoly or core sector of the economy is dependent on increases in physical capital per worker and

technological advances, rather than an increase in the employment of workers. Under such circumstances, it becomes increasingly difficult for potential workers such as youth who are attempting to enter the job market for the first time to obtain employment in the monopoly sector (O'Connor, 1973; Messerschmidt, 1979). As Messerschmidt (1979) demonstrates, from the 1880's onward the proportion of child labor involved in manufacturing and mining declined, and the overall "ratio of child labor in all occupations plunged by two-thirds between 1910 and 1930" (p. 47). Consequently, youth as well as other groups of workers such as women, were relegated to the competitive or peripheral sector of the economy forming a marginalized sector of the labor force. Moreover, capitalism's tendency to expand production through technology as opposed to labor, as well as periodic downturns produced by capitalism did not increase youths' prospects for full work participation in the peripheral sector either. As Schwendinger and Schwendinger (1976) note, the prospect of stable employment for these marginalized youth is dependent upon several conditions. To begin with stable employment for youth is dependent on capital's ability to reconvert a portion of its profit into capital; to expand production and the job market. Secondly, it is dependent upon the ability of capitalists to sell a sufficient amount of commodities to make a profit which can be used for the expansion of capital investments. Finally, the overproduction of commodities and capital which results in satiated commodity markets, curtails demand and creates widespread unemployment. As a consequence of these interrelated economic

conditions, job markets fluctuate in accordance with business cycles, resulting in periods of growth and depression; periods in which those marginalized groups of workers such as youth, women and minorities, become the subjects of labor force exclusion.

Aside from the more direct influences of capitalist expansion on the economic participation of youth, other related social changes contributed to the marginalization of youth as well. Economic changes, in both the U.S. and England, have historically led to extensions in the length of education (Greenberg, 1977). As already noted, technological advances were important ingredients in capitalist development in the United States. Growing reliance on technological sophistication led to an increase in the requisite skills necessary for social and economic participation. Mechanization required that workers possess greater physical dexterity and skill and eliminated the need for unskilled labor (Bortner, 1988; Bell, 1973). Consequently, more years of formal schooling were needed to develop such skills, thus, extending the period between childhood and meaningful participation in work (Friday & Hage, 1976).

In addition, fundamental social changes occurring in the U.S. around the turn of the century also helped to marginalize youth. The increasing supply of adult workers due to extensive immigration and the expansion of the average life expectancy due to advances in medical technology and health care made youth less crucial to economic life (Ewen, 1976). Further, labor unions concerned with winning better working conditions and wages for adult workers, along with

reformers who sought to protect children from harsh and dangerous conditions in the work place, supported the enactment of child labor laws which legally restricted youth participation in economic life (Bortner, 1988).

Concomitant with the marginalization of youth, came an ideological shift in the perception of youth. A new social category, youth unemployment, was developed (Friday, 1980), and a separate legal structure, the juvenile court was developed to respond to the problems associated with youth. Not only did this new legal structure deal with criminal offenses but with status offenses which "tended to reify the ideal behaviors of youth," thus, helping perpetuate the belief that delinquency results from individual pathology rather than the "structural conditions surrounding his [her] exclusion from full participation in the society" (Friday, 1980, p. 106).

However, as Friday and Hage (1976) note, employment, especially for young children, is not the primary mechanism of social integration. Nevertheless, the structural forces which have led to youth marginalization and unemployment are important because these structural forces have affected other major socializing institutions such as school, family, community, peers and work in ways which "tend to isolate youth and restrict the development of integrative relationships" (Friday & Hage, 1976, p. 353).

Major Socializing Institutions and Their Effects on Role Relationships

The role relationships perspective emphasizes the interrelationship and interaction across all socializing institutions. In addition

it is interested in the frequency of interaction (behavior) of individuals within and with these socializing institutions and not simply the individual's attachments (attitudes) to these institutions. Of crucial importance is the number of opportunities the individual has to be socialized to the dominant norms of society which is enhanced by the degree to which the major socializing institutions such as family, school, work, community, peers and others overlap and direct the individual toward conformity (Friday & Hage, 1976; Friday, 1980).

Family Role Relationships

Historically, the family has had the responsibility of providing individuals with the goods and services necessary for survival. However, there have been fundamental changes in the social organization of reproduction (i.e., the relationships, activities, institutions and beliefs involved in the maintenance and renewal of human life) as well as in ideologies regarding family life. "Beliefs about the proper composition of the domestic unit, the timing of family formation, sexuality, individual health and happiness, household beauty and comfort have all varied over time" (Laslett, 1981, p. 240).

Although there is some debate regarding the extent to which extended kin families were a predominant form in preindustrial societies (Laslett, 1972), there is less argumentation that more recent domestic forms have increasingly excluded nonkin members such as apprentices, boarders and servants from the domestic unit (Laslett,

1981). However, while the nuclear family seems to have a long history (Laslett, 1972), recent perspectives of the family see it as an evolving and open system which has changed both structurally and functionally as society has changed. While the nuclear family consisting of two parents and several children served the production focused needs of a growing industrial economy, its small size, mobility and labor is no longer crucial in postindustrial monopoly capitalist America. The most common adaptations, other than the nuclear family, are: "1) the single parent family with either only one parent involved or with both biological parents living in separate households but both involved with their offspring, and, 2) the blended family, also known as the 'remarried family' or 'reconstituted' family" (Taylor, 1985, p. 74).

In precapitalist agricultural societies, production was intended for consumption and immediate use. Production took place within a local context and the basic unit of production was primarily self-sufficient (Laslett, 1981). However, under capitalism, independent family producers became divided into two classes, propertied capitalists who owned the means of production and propertyless wage laborers (Edwards, Reich, & Weisskopf, 1978). "Labor had been transformed into labor power and the means of production had been transformed into capital; they had both become commodities whose value could only be realized through exchange" (Laslett, 1981). As Laslett (1981) notes:

On the one hand, the separation of producers from direct access to tools, land, and raw materials meant that an exchange of labor power for wages became part of the production process, and the reproduction of labor power was dependent on the same exchange system. On the other hand, the production of material goods increasingly became more highly differentiated and specialized, the division of labor became societal rather than local or familial, labor productivity increased, and exchange within an impersonal, competitive market became the mechanism for coordinating productive activities. (p. 248)

In addition, the ability of capitalists to reproduce their own class position was dependent upon the accumulation of surplus value which could be reinvested in the means of production. However, the family also requires a surplus (i.e., material resources which are above the immediate needs of producers) because families frequently support nonproducers or dependents such as young children. These dependents--persons who need the support of others for their survival--exist in all societies, but the types of persons who are dependents have varied historically. As a result a basic tension exists between capitalists who need accumulation to ensure their class position and families who need surplus to maintain dependents (Laslett, 1981).

Importantly, as capitalism developed, fundamental changes in the relations of family members to one another and with those outside the family occurred. As Zaretsky (1978) notes, "once families were brought together in a common workshop, they were no longer supervised by the father but by the master" (p. 72). Moreover, family members were no longer able to work at their own rhythm, but were required to work at a pace determined by the workplace and the coordinated

division of labor.

Concomitant with the changes in family life that occurred with the development of capitalism, came an ideological shift regarding the family and family roles. The family which had once been seen as the basic unit of production and the center of progressive individualism, was relegated to a less exalted position as the division of labor became more societal as opposed to local and familial (Zaretsky, 1978; Laslett, 1981). In addition the role of women, which had been on a more equal footing with men during the middle ages, changed. The belief in separate 'spheres' for men and women came to dominate family ideology with the rise of capitalism. Women came to be excluded more from economic opportunities outside the home but were given a much higher status in the family (Zaretsky, 1978).

Fundamental changes in the role and status of youth also occurred. In early American families, children were economic assets. Children made an economic contribution to their families early in life by working with and for their families. When parents became elderly, children were frequently relied on to care for their parents in a time when government programs for the maintenance and support for the elderly did not exist. But today, rather than being economic assets, children have become long term dependents whose average dependency is twenty years (Keniston, 1977).

Aside from the direct economic contributions of children, the structural changes affecting the role and status of youth, also, affected other family functions. One of these was the removal of

education from the family. Although there were schools in colonial America, they were primarily for boys. Children spent less time in school than today and left school at a fairly early age. Most of a child's education occurred at home and revolved around reading the scriptures or learning a trade (Keniston, 1977). Also, as youth became economically redundant, compulsory mass education was developed to meet the needs of the developing capitalist state (Bowles & Gintis, 1976).

As a result of the development of the public school in the middle of the nineteenth century and the rise of compulsory education, formal education began to replace family education. While there were a number of justifications for this shift a common argument was that families--particularly immigrant families--could not adequately educate youth for participation in the growing and increasingly complicated workplace. Schools were viewed as being able to do what families were unable to do: impart good work habits and essential skills, develop good character and, in short, Americanize (Keniston, 1977).

Accompanying these and other changes in families was a change in the ideological conception of childhood. As Empey (1982) notes, the modern American conception of childhood and adolescence is an historically recent phenomenon. Childhood came to be treated as a special phase in the life cycle which required special nurturing, direction, protection and training which could be best accomplished at home or school. However, as Keniston (1977) suggests, the family was not always seen as the most reliable institution for providing

youth with the necessary skills for later economic and social participation.

While the broad social changes reflected in capitalist development have resulted in numerous changes in family functioning, capitalist development has also differentially affected families. Within the capitalist economy, the resources which families have to support both their productive and nonproductive members are determined by the wages individuals earn. However, because of the unequal distribution of income under capitalism, some families become concerned with subsistence at a very basic level while others are more concerned with acquiring additional comforts. Under such circumstances, more secure families are likely to be concerned with securing their socioeconomic positions while families in a less secure position attempt to improve their position (Laslett, 1981).

While the preceding only touches on some of the ways in which families have changed due to the development of the postindustrial monopoly capitalist state, the key issue from the role relationships perspective is that such changes have altered the structure of families. Also broad social structural forces have led to changes within families and between families and those individuals and institutions outside families.

As Currie (1985) notes, concern with the relationship between family life and crime has an extensive history. Moreover, an extensive body of research exists regarding the relationship between various aspects of family life and delinquency. Primarily this research is

concerned with: (1) social structural and cultural conditions which affect family life, (2) the background characteristics of parents and their effects on delinquency, (3) the effects of family structure on delinquency, and (4) the effects of family process on delinquency.

A number of studies have suggested that social structural and cultural forces have an affect on delinquency. Research by Vaz and Casparis (1971) suggested that differences in Canadian and Swiss society may account for relatively lower levels of delinquency among Swiss youth. Their findings indicated that the Canadian youth they studied tended to be more peer oriented and deviant, while Swiss youth were more parent oriented and engaged in fewer criminal acts. Similarly, Kobal (1965) found that youth in Slovenia tended to be more open toward adults and less delinquent than youth in London, and Clifford (1976) has indicated that while juvenile delinquency has increased in Japan, strong cultural traditions and the nature of social organization help account for Japan's relatively low crime rate among industrial nations. In another comparative study, Clinard and Abbott (1973) reported that social structural changes in Africa which disrupted more traditional living patterns led to unstable family relationships and increased crime rates. Moreover, West (1969) indicated that "social handicaps" such as low income, poor housing and welfare support were related to delinquency while a more recent study by Laub and Sampson (1988) found residential mobility to have a direct effect on delinquency.

Studies which have examined the background characteristics of

parents have noted a relationship between various parental characteristics and delinquency. Research by Wilson (1975) found that in England youth whose parents were serious offenders offended at approximately twice the rate as youth whose parents had no or only a minor criminal record. Likewise, Farrington, Gundry and West, (1975) found that criminal fathers were far more likely to have delinquent sons compared to noncriminal fathers and the Gluecks (1950) reported that 70 percent of the delinquents they studied had at least one parent with a criminal record. However, in a recent reanalysis of a subsample of the Gluecks (1950) data, Laub and Sampson (1988) reported that although parental deviance was not directly related to delinquency, it was related to family dysfunction.

Of course larger structural forces may in some way influence parental characteristics as parents adopt various mechanisms to cope with their environment and may affect family structure and family process as well. Another focus of delinquency research has examined the relationship between family structure and delinquency. Research by Glueck and Glueck (1950), Chilton and Markle (1972), Smith and Walters (1978), have reported a relationship between broken homes and delinquency. More recent research conducted by Johnson (1986) examined various types of family structures and their relationship to delinquency. Although no overall relationship between family structure (i.e., real father/real mother, real father/stepmother, real father only, real mother/stepfather, real mother only) and self-reported delinquency was found, males in mother/stepfather homes reported

significantly more criminal acts than youth in other types of homes. Also, family structure showed an overall relationship to self-reported trouble with police, school, and juvenile court officials. Similarly, VanVoorhis, Cullen, Mathers, and Garner, (1988) found no relationship between family structure and delinquency except for status offenses.

In explaining possible reasons for the relationship between mother/stepfather families and delinquency both VanVoorhis et al., (1988) and Johnson (1986) indicated that the quality of the parent-child relationship may be an important intervening factor. Indeed, research which examines family process (e.g., quality of family life) comprises the most extensive body of research on the relationship between family life and delinquency. Research has indicated that families help generate delinquent behavior by their failure to generate parent-child attachments and bonds (Bowlby, 1969; Hirschi, 1969; Rutter, 1972), through the improper socialization of children (Glueck & Glueck, 1950; McCord & McCord, 1959; Hirschi, 1969; West & Farrington, 1973; Wilson, 1983; Wilson & Herrnstein, 1985), by their dysfunctional styles of interaction (Alexander, 1973; Patterson & Fleishman, 1979) or some combination of genetic traits combined with inadequate parenting practices (Wilson & Herrnstein, 1985).

More recent research on family process has shed additional light on the relationship between various family characteristics and delinquency. Cernkovich and Giordano (1987) analyzed data collected from 824 youth in a large North Central Standard Metropolitan Statistical

Area in order to examine the relationship between multidimensional measures of family interaction and delinquency. Measures of family interaction in this study included: control and supervision, identity support, caring and trust, intimate communication, instrumental communication, parental disapproval of peers, and conflict. Their findings indicated that control and supervision, identity support, conflict and instrumental communication were significantly related to delinquency across all family contexts. Moreover, when analyses by race, sex, as well as race and sex combined were performed, with few exceptions, control and supervision, identity support, parental disapproval of peers and instrumental communication were significantly related to delinquency across all of these subgroups.

VanVoorhis et al., (1988), also, examined various measures of family quality including supervision, affection, conflict, child maltreatment and overall home quality on various types of delinquency. Their results indicated that overall home quality was related to delinquency and concluded that "bad homes" not "broken homes" may be the more salient factor in the family delinquency relationship. Also, two studies of familial controls have demonstrated a relationship between such controls and delinquency. Hill and Atkinson (1988) indicated that paternal support is more important than maternal support in deterring delinquency among males while maternal support is more important than paternal support in deterring delinquency among females. Further, for males and females, paternal and maternal support have statistically significant negative effects on delinquency. In

addition, males and females were found to be subjected to different types of controls. Males indicated more paternal support and rules concerning their appearance while females reported more maternal support and curfew rules.

In another recent study of parental control, Wells and Rankin (1988) explored the effects of direct controls such as regulation/restriction, strictness, punishment/contingency and punitiveness on delinquency. Their results indicated that direct parental controls appear to be as effective in reducing delinquency as measures of indirect controls or attachment. Also, the relationship between at least some direct parental controls may not be linear. For instance, perceived moderate strictness of parents was related to reduced levels of delinquency while low and high strictness resulted in higher delinquency. Also, more frequent and severe punishment was found to be associated with higher levels of delinquency.

Taken as a whole the research concerned with the relationship between family life and delinquency provides some support for the role relationships perspective. In general the role relationships perspective posits that social structural factors influences the structural make-up of families which in turn affects family process and the quality of family life which is related to delinquency. In fact, a recent study by Laub and Sampson (1988) provides some empirical support for at least part of this model. A subset of the original data on 500 delinquents and 500 nondelinquent males matched on age, race/ethnicity, neighborhood SES, and IQ collected by Glueck and

Glueck (1950) were analyzed to examine the effects of various structural background variables (household crowding, family disruption, economic dependence, foreign-born, residential mobility, mother's irregular employment, father's criminality/drunkenness, mother's criminality/drunkenness), family process variables (father's erratic/threatening discipline, mother's erratic/threatening discipline, mother's lack of supervision, parental rejection/hostility, youth's emotional rejection of parents), and serious delinquency. Further, their model suggested that structural background factors primarily influence delinquency through their effects on family process. Results of the research indicated that, with the exception of residential mobility, the structural background factors had no significant direct effect on delinquency. Rather, family process variables mediated 79 percent of the effect of the structural background variables on delinquency. Results also indicated that criminality and drunkenness of both mothers and fathers were the most salient predictors of poor discipline and supervision and parental discipline. Further, family disruption, residential mobility and mother's and father's criminality/drunkenness had significant negative effects on parental rejection of the child. Structural background variables were also associated with youth's attachments to parents. The strongest predictors of weak attachments to parents were father's deviant conduct and family disruption, although residential mobility and foreign-born status, also, had significant effects. Further, all of the family process variables had significant effects on delinquency in the predicted

direction and this was particularly true of mother's supervision.

As Friday (1980) notes, "the family is thus seen as important as an immediate origin of crime; not because it causes crime per se [although this may be true in some situations], but because relations within the family effectively influence the exposure and importance of other norm-defining reference groups" (p. 116). What is critical from the role relationships perspective is that those factors which negatively influence family structures and family process increase the probability that youth will be isolated from the family which will "increase the child's association with peers and/or deviant associations" (p. 116).

School Relationships

As Friday (1980) notes, "In our highly technical, industrial society, education and schools play a key role in determining the eventual placement of the individual in society. In terms of length and intensity of exposure, education is considered, next to the family, the major force shaping youths' lives" (p. 116). The importance of formal schooling in the lives of youth, however, is an historically recent phenomenon. As noted in the previous section, free public schooling was not available to most youth in Colonial America. Although there were schools--including free public schools--these schools were primarily for the education of boys (Keniston, 1977). Moreover, education in general was the responsibility of the family and the clergy which focused on teaching the values and skills

necessary for a trade and religious piety. However, by 1850 public primary schools had become commonplace in the United States (Katznelson & Weir, 1985).

Unlike Europe, however, where the development of public schooling met considerable resistance, the development of mass public education in the United States grew rapidly and encountered considerably less opposition. This rapid growth and relative lack of opposition has been attributed to a number of factors. Among those factors which facilitated the growth of mass public education in the U.S. was the existence of a more democratic tradition in a "federal state where a language of republicanism was shared by the citizenry at a distinctive moment of capitalist development" (Katznelson & Weir, 1985, p. 45).

According to Katznelson (1981), (cited in Katznelson & Weir, 1985), in the West the state responded to the problem of social order in various ways and included:

The attempt to regulate, and often proscribe, combinations of workers at the point of production; the use of the franchise to incorporate workers and their leaders into the polity in ways that least threatened social cohesion; and the development of a new nexus of political relationships linking residence communities to government. Collectively, these responses by the state replaced traditional 'private' forms of social control with public authoritative activity. One consequence was the displacement of conflict between capital and labor into relations between the state and citizen. (p. 49)

Further, in the United States, local elites attempts to resolve problems of order were assisted by the fact that workers were citizens whose voting behaviors and bases of solidarity were unpredictable and by a federal system which was unable to concern itself with local

problems due to its concern with securing its own domestic and international existence. It was amid these conditions that local governments developed public schools as a key mechanism intended to incorporate citizens into the social order and to secure property and authority (Katznelson & Weir, 1985).

In fact, connections between education, republicanism and stability were frequently found in the proclamations of school officials and political leaders. For instance, according to Katznelson and Weir (1985), the first superintendent of Chicago's schools indicated the following in his inaugural report:

Republican institutions are founded upon the virtue and intelligence of the people where they exist, they can be founded upon nothing else. . . . It is in the province of the Public Schools to educate each rising generation that it may be able to transmit our institutions, unimpaired, to each successive generation in turn. Tear down our School Houses and turn our children into the streets, and our political institutions would be involved in the ruin. . . . Education is necessary not only for the public safety but for the happiness of the individual.
(p. 50)

Although there is some evidence which indicates that the development of public education was imposed on the working class, at least in some areas (e.g., Bowles & Gintis, 1976), in many other cases the establishment of public schools was supported by working-class individuals and groups (Carlton, 1911, 1965, cited in Katznelson & Weir, 1985; also see Bortner, 1988). Further, schools were initially community-based and served people from relatively homogenous class and ethnic backgrounds. Thus, for many working class individuals schools were genuinely local institutions despite the fact that at

the city level they were dominated by and served the needs of the dominant classes (Katznelson & Weir, 1985).

Despite this early and general support for education, however, conflicts soon developed in education. According to Katznelson and Weir (1985), these conflicts were of two types. The first concerned ties between the schools and the increasingly differentiated residential communities. As new groups entered the cities, schools had to resolve disputes over language instruction and bilingualism. The second conflict in education concerned the changing character of work around the turn of the century and the growth of "semiskilled" workers. In response schools began adding new courses in manual training. The result was the depreciation of common schooling, a change in the relationship between schools and the community and the development of a more stratified system of schooling (Katznelson & Weir, 1985).

Additional reforms of American education were evident during the first three decades of the twentieth century. These reforms were accomplished through a coalition of professional educators, business people and politicians and led to the development of professionalism, in addition to merit and efficiency, which became the guiding principals of American educational organization (Katznelson & Weir, 1985).

According to Katznelson and Weir (1985) the changes wrought by the development of capitalism produced more than changes in the nature of work; changes in culture and spatial arrangements also occurred.

Industrialization moved the locus of work from the family workshop and created new divisions in city space which required new mechanisms of social control. Importantly, it was in response to the problems created by capitalist development and the need for social control that fostered the growth of mass public education (Katznelson & Weir, 1985). As Spring (1973) notes, the development of compulsory mass education served a number of needs. It served as a holding tank and inexpensive form of police for marginalized youth. It, also, served to train, test, sort and prepare youth for roles as future wage-laborers, and it served to perpetuate the values of bourgeois society.

Aside from the intended functions of schooling, though, the internal contradictions of schooling can have unintended effects. During their early schooling experiences, students, especially those from the lower class, can directly experience the oppressive and alienating nature of capitalist institutions. In addition, higher education can instill and promote critical faculties and question the legitimacy of capitalist institutions. Thus, "educational institutions create troublesome populations (i.e., drop outs and student radicals) and contribute to the very problems they were designed to solve" (Spitzer, 1975, p. 644).

From a role relationships perspective changes produced by the developing capitalist economy were significant. First, changes which moved the locus of work from the family to the factory, also, removed education from the home. Secondly, the changes in spatial arrangements which initially led to the development of community-based schools,

later acted to sever the ties between the school and the community and placed schooling in the hands of professional educators. Thirdly, the development of the internal stratification of schools led to the development of internal conflicts as students were required to attend school but were frequently excluded from the rewards which schools offered.

As noted earlier, the relationship between schooling, school disruption and delinquency has been copiously documented. Research has indicated a relationship between social class and delinquency (Cohen, 1955; Toby, 1957; Gold, 1963; Short, 1964; Stinchcombe, 1964; Palmore & Hammond, 1964; Elliott, 1966; Bachman et al., 1971; Wolfgang et al., 1972), the organizational characteristics of schools, school learning and delinquency (Bachman et al., 1971; Mukherjee, 1971; McKissack, 1973; Elliott & Voss, 1974), school status or academic performance and delinquency (Gold, 1963, 1970; Palmore & Hammond, 1964; Hirschi, 1969; Rhodes & Reiss, 1969; Kelly, 1971; Empey et al., 1971; Kelly & Balch, 1971; Polk & Richmond, 1972; Feldhusen et al., 1973; Elliott & Voss, 1974; McPartland & McDill, 1977; Phillips & Kelly, 1979; Rankin, 1980), tracking and delinquency (Hargreaves, 1967; Schafer et al., 1970; Schafer & Olexa, 1971; Kelly, 1974, 1975; Wiatrowski et al., 1982), school involvement, commitment, attachment and delinquency (Polk & Halferty, 1966; Hirschi, 1969; Kelly & Balch, 1971; Kelly & Pink, 1973; Hindelang, 1973; Hartnagel & Tanner, 1982), and the organizational characteristics of schools on school disruption and delinquency (Schafer & Polk, 1967; Polk & Schafer, 1972; Boesel

et al., 1978; Gottfredson & Daiger, 1979; Rutter et al., 1979). To the extent, then, that youth and their parents are cut off from schooling and to the extent that schools, as organizations, create failure, or inhibit integration into the school, both youth and their parents become less committed to schooling. For parents, the school may become an alien institution; for youth, rewards and success may be sought in other areas, some of which are likely to result in contact with agencies of social control.

Community Relationships

As previously indicated, the changes wrought by the development of capitalism in the United States produced more than changes in the relations of work; it resulted in cultural and spatial changes as well. As industrialization and urbanization progressed, there appeared an increasing separation between the place of residence and the workplace as well as a separation of the residences of the various social classes. Importantly, from the role relationships perspective such broader structural changes are critical because such changes resulted in a change in the relations between people, and their bonds to various social institutions.

As Wilson and Herrnstein (1985) note, since the early part of the nineteenth century, social scientists have been aware that some places consistently have more crime than others. Moreover, it was this concern with how various community or neighborhood factors influenced crime that gave impetus to the rise of the "Chicago School"

and efforts to examine the differences in delinquency rates between various Chicago neighborhoods. This research indicated that despite the change in a community in its ethnic or social make-up, after a period of instability, the community tended to retain its delinquency rate. Thus, it was suggested that there was something about the neighborhood itself that might account for delinquency (Shaw, 1929; Shaw & McKay, 1931, 1942).

The relationship between community and crime has been noted in a number of comparative studies. Wolfgang and Ferracuti (1982) in exploring the "subculture of violence" reported that persons raised in certain areas of Sardinia and Columbia were more likely to engage in assault and murder than persons in other places of similar economic development. In Uganda, Clinard and Abbott (1973) reported that slum areas displaying a higher level of community integration and less tribal diversity, have lower crime rates than other slum areas matched on physical and economic conditions. Also, in Guyana, crime rates were found to differ between urban and rural areas, between low-income and high income areas and between areas populated by different racial groups (Clinard & Abbott, 1973). Moreover, in a series of studies in England which compared working-class families living on the Isle of Wight with comparable families residing in an inner-city section of London, researchers concluded that higher levels of deviance and mental illness among the London youth were the result of the stresses of inner city life, particularly as they affected working-class women, which were seen in higher levels of stress,

marital discord and broken homes (Rutter, 1972, 1978).

Research on the contextual affects of community has been driven by three theoretical perspectives: social disorganization, subcultural or cultural deviance, and labeling or societal reaction (Simcha-Fagan & Schwartz, 1986). The social disorganization approach is found in the work of Shaw (1929), Shaw and McKay (1931, 1942) and has been further described in research by Kornhauser (1978). Generally, the social disorganization perspective posits a two-stage model where community structural characteristics result in a weak community organizational network which in turn may weaken the individual's social bonds. According to the social disorganization perspective, various community structural characteristics may influence delinquency directly through attenuation of the individual's bonds to the primary socializing institutions (Simcha-Fagan & Schwartz, 1986).

The subcultural or culture deviance approach is found in the work of Sellin (1938), Sutherland and Cressey (1955), Miller (1958) and Cloward and Ohlin (1960), and is based on the view that modern complex societies are comprised of groups with, to some extent, differing normative values. Consequently, communities may vary in the extent to which they tolerate or sustain deviant subcultures. Also, the existence of an adult deviant subculture(s) is seen as affecting youth's normative values and increases the probability of youth associating with deviant peers which leads to delinquency. Thus, the existence of deviant community subcultures can affect delinquency by: its direct affect on youth's normative values, through

differential association with delinquent peers, or by providing deviant opportunities (Simcha-Fagan & Schwartz, 1986).

The labeling or societal reaction perspective is primarily explicated in the work of Kitsuse (1962), Becker (1963), Schur (1971), and Lemert (1972), and examines deviance as a status, as opposed to a behavior, which is a consequence of social control. In addition, other writers have indicated that lower class persons are more likely to be officially labeled as criminal (Hackler, 1970; Schur, 1969; Wilkins, 1971), and that police are more likely to concentrate their efforts in lower-class areas (Cicourel, 1968; Chambliss & Seidman, 1971). According to this perspective, family and community are associated with delinquency in a way which is very different than the other two perspectives and is the result more of the actions of social control agents than the behaviors of youth (Simcha-Fagan & Schwartz, 1986).

From the role relationships perspective the community or neighborhood is important for a number of reasons. Aside from being a place where individuals and families reside, the community is the context within which peer associations are likely to be developed and nurtured. Moreover, as Wilson and Herrnstein (1985) note, "they [communities/neighborhoods] are also complex societies in which interactions shape attitudes, boundaries set limits to what is seen or imagined, and physical circumstances supply opportunities and constraints" (p. 299). As the role relationships perspective suggests, wider structural changes which affect the structural characteristics of American

communities may produce conditions which increase the probability of delinquency. In speculating about how these structural changes may have affected lower-class American communities, Wilson and Herrnstein (1985) make a number of observations. To begin with they note that these communities appear to have become more fluid and less stable. They suggest that the social structure of inner-city neighborhoods has been altered by the movement of more stable families out of the inner-city, which has reduced neighborhood social controls, the relocation of businesses and employment opportunities to the periphery of cities and the breakdown of organized neighborhood political organizations (also see Katznelson and Weir, 1985) which has weakened attachments to these communities. Moreover, Wilson and Herrnstein (1985) suggest that:

Urban life changes the scale of human interaction by reducing the distances that separate. . . people, increases the number of criminal opportunities in a given area. . . and shapes the interactions of persons by the physical arrangement of streets, buildings, and windows. (p. 306)

As Friday and Hage (1976) indicate, industrialization and urbanization have affected the development of community relationships by increasing family mobility which, in turn, has reduced community attachments. This has occurred because increased mobility reduces the opportunity for individuals to develop role relationships based on roots in a neighborhood. Moreover, as youth's mobility increases, they are more likely to meet friends away from the neighborhood where informal social controls may be strongest. Further, youth's mobility, along with the development of a youth subculture, reduces their

interactions across age groups which, in turn, strengthens the importance of peers. The result is the breakdown in the sense of community and the isolation of both adults and youth.

How various community contextual, subcultural and labeling effects might be related to both self-reported and official delinquency has been explored in a study by Simcha-Fagan and Schwartz (1986). Importantly, this research begins to provide some empirical support for how the various characteristics of communities affect interactions between individuals and between individuals and community institutions, as well as delinquency. As their research indicates, community level organizational participation had a significant positive affect on school attachment and a moderate but significant effect on self-reported delinquency. Moreover, an indirect association, mediated by weak attachment to school, was found between community characteristics and delinquent peers. Also, a strong direct relationship between the existence of a criminal subculture and official delinquency and a lesser, but significant effect on self-report delinquency was noted. When official delinquency was examined, community characteristics were, also, found to be important. For instance, area economic level was found to be associated with the existence of a disorder-criminal subculture which, in turn, was related to delinquency, and family economic level was found to have a negative direct effect on delinquency. Also, association with delinquent peers was found to have a strong positive effect on official delinquency.

Peer Relationships

According to the role relationships perspective youth's peers become important to the extent that those peers lack integration into and across role sets, are oriented toward deviant behavior and to the extent that youth are not integrated into other conforming roles which increases the importance of peer relations. As noted earlier in this chapter, changes in the roles of youth which resulted from the development of postindustrial monopoly capitalism have operated to exclude youth from broad social and economic participation; they have been excluded from integration into adult society by virtue of age, talents, and skills (Glaser, 1972, p. 9). As a result youth "are cut off from the rest of the society, forced inward toward their own age group, and made to carry out their whole social life with others their own age" (Coleman, 1961, p. 3).

As Friday and Hage (1976) note:

Adolescents create their own culture--not a counter-culture, but a youth subculture with its own fashion, speech, musical taste and the like. In part this culture is necessary, given the structural constraints against work integration in postindustrial society and the increased alienation at home and school. Postindustrial society has tended to make fewer and fewer demands on youth, creating perhaps the world's largest leisure class without the wherewithal to utilize it. (p. 353)

Further, Sanders (1976) has suggested a mechanism by which youth can back up identity claims to peers. While adults can turn to hazardous occupations to demonstrate their courage, "coolness," or "smartness," youth have comparatively few legitimate ways to establish

the genuineness of their verbal performances. Opportunities to take risks with the law or to engage in acts of civil disobedience come and go. However, theft, joy-riding, and violence present timeless ways for youth with little status at home or school to demonstrate to others that they possess valued character traits.

Rosenberg and Rosenberg (1978), in a study which examined the relationship between self-esteem and delinquency, provided empirical support for a similar hypothesis to the one proposed by Sanders (1976). As Rosenberg and Rosenberg (1978) note, the labeling perspective (Schur, 1971) in combination with Mead's (1934) concept of reflective appraisals posits that social reactions (i.e., labeling and stigmatization) may lead one to see themselves through the eyes of particular or generalized others and if these appraisals are negative they may lead one to negative evaluations of self. In contrast, Kaplan (1975) has hypothesized that youth adopt deviant reference groups for the purpose of enhancing self-esteem. As a result there are theoretical bases for suggesting that delinquency affects self-esteem and self-esteem affects delinquency. In their analysis of data from the Youth in Transition Study (Bachman, Kahn, Mednick, Davidson, & Johnson, 1972), Rosenberg and Rosenberg (1978) indicated that low self-esteem was likely to result in higher levels of delinquency and this was particularly true for lower-class youth. Conversely, while delinquency was found to have a generally weak effect on self-esteem, its effect was stronger among higher-class than lower-class youth. As a result Rosenberg and Rosenberg (1978) turned to Kaplan's (1975) hypotheses regarding reference group

identification and noted:

In a lower class environment in which delinquency is more common [see Elliott & Huizinga, 1983], the low self-esteem youth is more likely to find companions who will respect and admire delinquent behavior. . . . Furthermore, the severity of condemnation may be weaker and the general level of acceptance of delinquent behavior stronger in environments in which such behavior is more widespread. Finally, there are probably fewer alternative ways for the lower class youngster to command social respect, e.g., acquiring a car, stereo, clothes. The reverse applies to the higher class youngsters with low self-esteem. The higher socioeconomic class contains fewer delinquent groups which can serve as sources of status; general social condemnation of delinquency in this environment may be more intense. . . and the youth may have other ways of gaining self-esteem. (p. 288)

The importance of youth status has been noted by Friday and Hage (1976) who have suggested that as youth become excluded from participating in broader social roles and as the importance of peers increases, youth concerns with power and status increase. Research on Chicago gangs has indicated that many acts of gang deviance were the result of threats to gang members power and status (Short & Strodtbeck, 1965) and nonutilitarian thefts of such items as gasoline, cigarettes, condoms and sharp clothes in Sweden were seen as directly related to youth's concerns with status, wealth and prestige (Friday, 1974).

Research suggesting the importance of delinquent peers in the etiology of delinquency is extensive. Research conducted by Shaw and McKay (1931) and the Vera Institute of Justice (1980, cited in Wilson & Herrnstein, 1985) indicated that among arrested juveniles no fewer than 50 percent of those arrested committed their offenses

in groups and for most property offenses, this figure was over 70 percent. Also, Erickson and Jensen (1977) and Hindelang (1976), using self-reported delinquency measures, reported that most youth admitting delinquent behavior indicated that such behaviors were usually committed in groups.

Although Hirschi (1969), Cartwright, Howard, and Reuterman, (1970) and Verlade (1978) have reported weak associations between attachments to peers and delinquency, other researchers have found stronger associations. For example, Johnson (1979, cited in Wilson & Herrnstein, 1985) in a study of 734 Seattle high school students, reported that having delinquent friends made a greater difference in the amount of self-report delinquency than did parental behavior or family socioeconomic status. Further, two more recent studies, Matsueda (1982) and Simcha-Fagan and Schwartz (1986), have indicated links between community characteristics, family structure, school, peers and delinquency.

In a re-analysis of the data used by Hirschi (1969), Matsueda (1982) reported findings which provide some empirical support for a relationship between community characteristics, family structure, negative peers, exposure to definitions favorable to law violation and delinquency. Results of this study indicated that being older, residing in a neighborhood perceived to have more trouble, and receiving less parental supervision, increases the chances that youth will develop slightly more delinquent friends which, in turn, increases their exposure to delinquent definitions. In contrast, as a result

of being more attached to their friends, youth who were from less trouble oriented neighborhoods, who received closer parental supervision and who had fewer delinquent friends tended to have fewer definitions favorable to the violation of law. Moreover, increases in the number of definitions favorable to the violation of law relative to unfavorable definitions was associated with increases in delinquent behavior.

Research cited earlier by Simcha-Fagan and Schwartz (1986) also, points to the importance of peers in the generation of delinquency. Their findings indicate that association with delinquent peers, along with weak school attachment, produced the strongest effects on self-report delinquency. They also reported that the presence of a criminal subculture affects both the probability of having an officially recognized criminal status and increases deviant behavior. Further, association with delinquent peers was found to have a strong positive effect on official delinquency.

Recapitulation and Program Description

In suggesting an approach to delinquency prevention, Friday (1983) indicates that a holistic approach is necessary given the multitude of factors which are associated with delinquent behavior.

In addition, Friday (1983) states:

Prevention requires conditions that tend to foster a positive self-concept, a sense of self-worth and feelings of meaningful and responsible participation. If a high crime prone pattern is associated with family alienation, school alienation, and the lack of work or community relationships,

efforts should be directed towards all of these areas.
(p. 44)

As Friday (1983) goes on to note, this holistic orientation should focus on the ways in which the isolation and segregation of youth could be decreased. Consequently, efforts should be directed toward "providing greater opportunities for interaction across role sets and decreasing the inherent alienation within each set. Efforts directed toward these two goals will tend to reduce the saliency of peer influence" (p. 44).

Krohn, Massey, and Zielinski, (1988) has provided empirical support for the importance of role overlap in a study of adolescent deviant behavior. Relying on previous work by Friday (1980), Friday and Hage (1976) and Krohn (1986), Krohn et al., (1988) examined the relationship between network multiplexity (i.e., the degree to which individuals who interact in one focused context also interact in another) and adolescent cigarette smoking. Their results indicate that it is not simply involvement in formal activities which constrained youth's cigarette smoking but the inclusion of significant others, particularly parents, in various formal activities that produces a constraining effect. Moreover, when adolescents participate jointly in formal activities with friends and parents, they were less likely to smoke.

The role relationships perspective provides an organizing framework for understanding how broad social structural changes are translated into broad categories of individual behavior. While it does

not deny that structural factors (i.e., social class) may directly affect individual behaviors such as delinquency (Elliott & Huizinga, 1983), it is particularly concerned with the indirect effects of structural factors, mediated by changes in primary socializing institutions, on delinquency. Consequently, the preceding has been an attempt to sketch at least some of the ways in which broader structural forces, through the development and operation of capitalism, have fundamentally changed the primary socializing institutions of work (production), family (reproduction and nurturing), school, community and peers.

Importantly, the role relationships perspective posits that social structural changes have resulted in a condition where each of the primary socializing institutions has become more isolated from the others. Moreover, these structural changes and the resulting changes in the character of the primary socializing institutions, have resulted in fundamental changes in the role and status of youth in postindustrial monopoly capitalist America, as well as in the relationships between youth and these primary socializing institutions. Not only is there little overlap among the primary socializing institutions, but many youth are neither integrated into these socializing institutions (although the peer group is frequently an exception) individually or into combinations of these institutions and other formal contexts simultaneously and jointly with significant others. As a result, social integration is lessened to the extent that the individual lacks meaningful participation within these socializing

institutions and various formal contexts and to the extent that these socializing institutions and contexts do not overlap and direct the person toward conformity. Under such circumstances, the individual's bonds to prosocial behavior are likely to be weakened. Also, under such circumstances, the peer group may become the focal point for self-evaluation and status. Yet, because of the frequent isolation of the peer group, such groups are likely to be the least integrative, thus, increasing the probability of delinquent behavior.

While the role relationships perspective provided an overall organizing framework regarding how an hypothetical model school might be organized, an effective school organizational change strategy requires a more specific understanding of why schools are organized to produce social and academic failure. In attempting to answer this question a critical examination of the structure and organization of schools proved useful.

The Critical Perspective: The Structure and Organization of Failure

The Structure of Education in Capitalist America

The traditional view of education sees schooling as a consensual undertaking capable of altering individual capacities--presumably in ways beneficial to the individual--and therefore, positions within the social structure (Angus, 1985). Formal schooling is viewed as the correct path to upward social mobility and the American dream. The outcomes of formal schooling are, also, seen as a "socially

powerful, politically feasible means of attacking a broad range of remarkably diverse social and economic problems" (Papagiannis, Klees, & Bicket, 1982, p. 246).

There is, however, a darker side to the schooling equation. There is the possibility that "rather than holding out equal opportunities for individual mobility. . .schools are thought to maintain and reproduce a system of structural inequality over time." From this perspective schools are not regarded as "neutral arenas in which all children start out with equal choices in the competition for the technical knowledge and credentials that may lead to future income" (Angus, 1985, p. 4). Rather, the social relationships found in schooling operate to reproduce and legitimate the class structure of society by replicating a hierarchical division of labor within the school (Bowles, 1971; Bowles & Gintis, 1976), and by reinforcing through schools the predominant ideology that legitimates this hierarchical structure (Bourdieu & Passeron, 1977; Giroux, 1981). As Bowles (1971) notes, differentiation in financing, rules, expectations, curriculum and opportunities for choice are apparent between levels of schools, between schools and within schools. While the more structural characteristics of schooling are important to an understanding of the function of schooling in society, a more organizationally based critical perspective is necessary in order to understand how this structure is translated into practice. It also serves as a guide to developing action strategies to alter school organization.

**A Critical Perspective of School Organization:
Developing Strategies for Change**

As already noted, traditional views of schools see them as primarily designed to pass along a set of consensual values and views schools as mechanisms designed to assure upward social mobility and prosperity. Such a static conception of the school as an organization seems entirely too simplistic and masks the considerable conflict that occurs within schools, school systems and between schools, school systems and their immediate environment.

Several writers have provided accounts of the various conflicts inherent in the development of the American educational system (Carnoy, 1972; Bowles & Gintis, 1976; Katznelson & Weir, 1985). The "four walls" conception of the school as an isolated social institution--if, indeed, it ever was--has been replaced with an "open system" perspective (Lawrence & Lorsch, 1961) of an organization subject to considerable internal and external pressure (Chubb & Moe, 1985). However, system openness does not imply democratization. As Katznelson and Weir (1985) point out, the historical development of American education has been characterized, at least in urban areas, by a shift from a more locally democratized system to one which is dominated by professional educators, allied with business people and politicians tied to larger economic markets. Earlier, fundamental changes in the spatial, socio-political and economic organization of urban areas were mitigated by the fact that there existed a local politics of education which was reflected in the fact that children attending

various schools were part of a single school district. However, with growing diversification, suburbanization, and the development of numerous political entities (i.e., townships, municipalities, villages, towns, etc.), including schools, with varying fiscal needs, a more complex social order has developed (Katznelson & Weir, 1985).

This growing social, political and economic diversification effects schools in various ways. To begin with, public schools are subject to a powerful public-legal mandate to educate everyone within their attendance boundaries until age sixteen. As a result, the public school is obligated to accommodate a disparate population which has a range of needs and interests. Schools, which may not be community based, have become highly political organizations, and are required to respond to the varied "demands of several levels of government, each of which is providing resources, imposing regulations, and trying to realize various objectives" (Chubb & Moe, 1985, p. 9). School systems employ attorneys to advise them on a host of legal issues, they negotiate with collective bargaining units, they are concerned with rules regarding tenure, hiring and firing and other personnel issues, they are concerned with finances, curriculum development, transportation, millage campaigns, public relations and a host of other issues (Elrod & Friday, 1986).

At the community level there are various groups and individuals which vie for influence in school operation. Relations between these groups, the school system and individual schools may be either supportive or openly conflictual. Within the school system one finds various

levels of conflict or cooperation between school board members and superintendents, between central office personnel and building personnel, between building principals and teachers, between teachers, between teachers and students, between students, and any combination of these (Elrod & Friday, 1986).

Rather than seeing the school as a static entity characterized by consensus, the school is more correctly seen as a dynamic entity characterized by considerable tension among individuals, groups, goals and objectives. In response to these tensions, the school as an organization tends to develop various forms and mechanisms for responding to this highly complex political environment. As Chubb and Moe (1985) note:

The organization and its environment together constitute a system of behavior in which. . .everything is related to everything else: the environment shapes the internal organization, the organization generates outputs, and outputs in turn have a variety of reciprocal effects on both the organization and its environment. The result over time is an iterative process of impact and adaptation. (p. 6)

As an adaptive mechanism many schools develop rather formalized and rigid hierarchical structures which characterize their operation. This in turn becomes a limiting factor in the school's ability to creatively respond to its particular environment, as school personnel are required to adhere to a rather centralized set of rules including legal requirements, and standard operating procedures. Faced with considerable external and internal pressure, and cognizant of the demands of the hierarchical structure of the system, school personnel often find themselves devoting considerable energy to tasks not

directly related to effective education (Elrod & Friday, 1986). As Morris, Crowson, Porter-Gehrie, and Hurwitz (1984) found in an ethnographic study of sixteen public schools, school principals were often forced to divide their attention among hundreds of brief interactions each week and to develop skills more generally found among politicians which took time from important leadership functions related to effective schools such as guiding curriculum and instruction.

School organizations have been described as loosely coupled systems which require ad hoc management methods (Weick, 1982). Faced with numerous demands on their time, public school administrators are often forced to focus on immediate organizational needs, eschewing more long-term primary goals related to effective educational practice. Despite such loose management styles in many schools, however, there is nevertheless a hierarchical division of labor between building administrators, teachers, counselors and other support staff. This hierarchical and rigid system imposes many restraints on teachers. Faced not only with the necessity to maintain order in the classroom, provide instruction, grade papers and act as mini-parent, teachers may have little input into school management and may not be supported in their efforts to develop more creative educational strategies. As school system management becomes more bureaucratized, politicalized and rigid, teachers may feel powerless to make positive changes and are frequently met with both building and central administration resistance to innovation.

This hierarchical structuring is also, seen in the presumed

need to categorize and sort students leads to the stratification of students as well. The stratification of students is achieved through tracking, differential participation in extracurricular activities, in the attitudes of school staff who have lower expectations for lower class youth (Bowles, 1971), and in the many ways school personnel communicate their evaluations of students through honor rolls, track positions, privileges and praise for academic achievement and appropriate demeanor (Greenberg, 1977). Research by Rist (1970), indicates that teachers' estimation of a child's academic ability is based on whether or not the child is neat, clean, verbal, and from a middle-class family. Also, Ryan (1981) suggests a number of additional mechanisms which tend to hierarchically sort students. These are:

1. Teachers belief that educational ability is normally distributed much as shoe size or height.
2. Teacher training that directs teaching at individuals, emphasizing differences among individuals and internal events.
3. The continual grading and labeling of students.
4. Teaching students to accept such labels.

Based upon the preceding theoretical framework it is clear that the problems faced by both students and school personnel within the school environment are not pathologically based. Indeed, they are constrained by the functions of schooling in postindustrial monopoly capitalist America, by the socio-political-economic environments within which schools operate and by the administrative and pedagogical practices taught to and learned by school personnel. However, people

are not completely constrained by their environment. They are also to some extent autonomous. As Angus (1985) notes, ". . .human beings must be seen in a dialectical relationship with social structures. And in this interaction between agents and structures people have, at each and every moment, both a relative autonomy from and a relative dependence upon, social structures" (p. 9).

While a reasonably clear theoretical orientation to the relationship between schools and delinquency and a theoretical perspective which supports the notion of human agency are necessary conditions for the development of a successful social action project, they are not sufficient conditions. An additional condition is a clearly defined process by which change would take place. Here, a modified form of the Program Development and Evaluation (PDE) Model described by Gottfredson (1984a) was employed as an intervention to assist in the development, management and evaluation of the change process as well as intervention outcomes.

The PDE Model: A Practical Guide To Program Development

The Program Development and Evaluation (PDE) Model is a process by which researchers and practitioners work cooperatively to identify problems, elaborate theories about why these problems exist, specify measurable goals and objectives, develop theory-ridden interventions to overcome problems, identify obstacles to intervention implementation and resources to aid implementation, and evaluate program process and outcomes. Underlying this model are two general assumptions:

(1) that any social action endeavor is more likely to be implemented with integrity if those entrusted with implementation have a sense of ownership and commitment to program philosophy, goals and interventions, and (2) that the probability of success of any social action endeavor is enhanced by engaging in a systematic process of program development and evaluation. PDE is a process based on sound management principles and addresses many of the obstacles to successful delinquency prevention efforts identified in the literature.

According to Gottfredson (1982a), the antecedent of the PDE model are found in the works of a number of writers interested in action research and organizational development. For example, both Collier (1945) and Lewin (1946), published articles regarding the use of social science in practical problem solving. Of particular note was the work of Lewin (1946, 1947) who proposed that rational social management develops in a spiral of steps composed of planning, action and fact-finding (evaluation) of the result of the action (Lewin, 1947). Further, this sequential and spiraling model of planning, action and evaluation is the basis of many present organizational development efforts in a variety of industrial, human service and educational settings (Gottfredson, 1982a).

In describing Organizational Development (OD), French and Bell (1978) indicate that OD is a series of intervention activities over a period of time which involves a number of steps including: emphasizing normative change, engaging in collaborative problem solving, using social science, using the experience bases of intact work teams

and emphasizing goals and objectives. A form of organizational development, the Program Development model, was developed by the Social Action Research Center in an attempt to study social change. In practice the Program Development model stresses collaboration between the program developer and program implementors to assist in needs assessment, in clarifying program goals and objectives, in analyzing a program's forcefield (environmental constraints and resources), and in developing strategies for change or implementation (Blanton & Alley, 1975, cited in Gottfredson, 1982a).

Subsequently, Gottfredson (1982a, 1984a) expanded and built upon the Program Development model in an effort to make it better suited to serve as an evaluation tool. The result was the Program Development Evaluation (PDE) model which placed greater emphasis on theory, measurement and experimental or quasi-experimental design while maintaining the original program development emphasis (Gottfredson, 1982a). A slightly modified version of the PDE model was implemented during the first year of the project and became the guiding perspective behind the process of organizational change.

The version of the Program Development Evaluation model adopted by the program included seven steps:

1. Problem identification. This step involves the identification of key problems which require alleviation. This step was viewed as crucial because a failure to identify the appropriate problems would result in the expenditure of resources in areas which

are not likely to produce the desired outcomes.

2. Theory Development. In this step theory refers to the development of systematic ideas about why particular problems exist and provides some specific direction for program activities.

3. Development of Measurable Goals and Objectives. This step calls for the development of measurable intermediate outcomes (objectives) which if achieved should assist in the achievement of measurable ultimate outcomes.

4. Program or Intervention Design. This step refers to the development of specific programs or interventions (activities) that should overcome stated problems and achieve stated objectives and goals.

5. Forcefield Analysis. This step involves the examination of resources which can be used to facilitate intervention design and implementation as well as obstacles to intervention design and implementation.

6. Program or Intervention Implementation. This step requires an assessment to determine if the program or intervention is actually being implemented in the manner intended (i.e., with integrity).

7. Evaluation and Feedback. This is the last step in the cycle of the PDE process and is concerned with measuring program goals and objectives and providing results of the evaluation to program designers and implementors. If outcomes are not what are expected or hoped for and if further improvements are needed, then each step

of the process is repeated.

Importantly, the involvement of program implementors, in this case school and program staff, in each step of the PDE cycle was viewed as critical. This was intended to democratize the program development process and to develop staff commitment to the program. Further, the PDE process was not intended to be a one time event, but rather a spiraling sequence of steps which took place on a regular basis. The PDE model employed in the Milwood Project can be seen in Figure 1.

Having developed a general theoretical framework of a hypothetical model school based on role relationships theory; having developed a conception of why schools are organized to produce failure and the possibility of human agency based on a critical perspective; and having adopted a particular process for program development; interventions could be designed which would, hopefully, produce predicted outcomes.

Program and Intervention Description

As Friday and Halsey (1977) note:

If integration into society and commitment to conformity is to be maximized, it is necessary that schools redefine their goals and enlarge the scope of their education. As a primary socializing agent, school can have a positive or negative impact on the lives of youth. At its best, it can work to counteract a harmful family situation. At its worst, it can act as a stumbling block for those who have had a positive upbringing. (p. 144)

As a critical primary socializing institution, the school plays a key role within the role relationships perspective. However, the

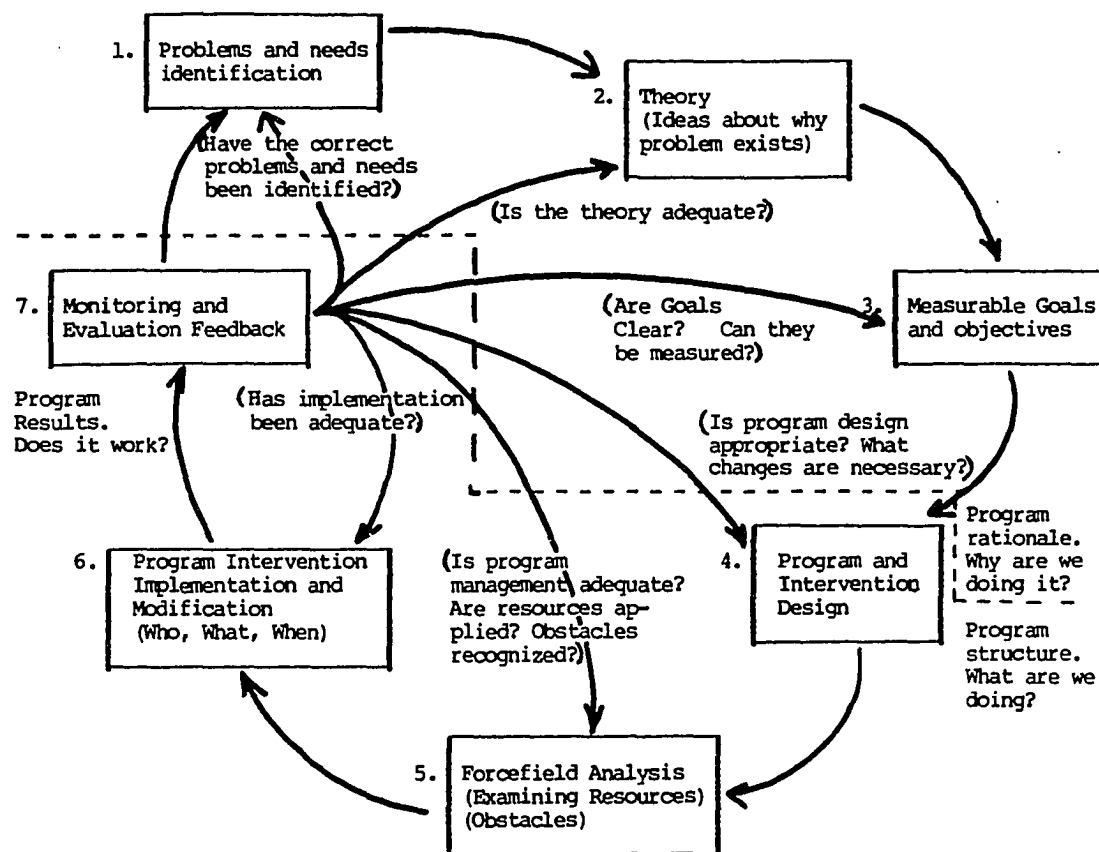


Figure 1. The Program Development Process.

translation of the role relationships perspective into a specific plan for school change required four additional steps: (1) the development of a more specific school focused version of the role relationships perspective which could serve as an organizing framework for program development activities, (2) a consideration of the critical perspective of schooling and why schools are organized to produce failure, (3) a consideration of the literature linking school failure and delinquency, and (4) the involvement of key building staff in program development.

In developing the program proposal, Friday and Elrod (1980) noted:

The problem with previous efforts [at school-based delinquency prevention] has been the emphasis on the individual and on the identified 'pre-delinquent'. Consequently, the . . . [Milwood] project is designed to examine the wider social conditions that contribute to delinquent involvement by applying strategies and concepts which have shown more theoretical promise--particularly approaches which attempt to integrate youth through the development of overlapping role relationships which may inhibit delinquent involvement. (p. 17)

Consequently, the program design was directed toward improving the school's ability to increase youth integration by providing more opportunities for interaction across role sets and decreasing the inherent alienation within each set. Hence, program efforts would be designed to enhance the relationships between the school, families and the community (Friday & Elrod, 1980). Moreover, changes in the organizational characteristics of the school were viewed as necessary if the school was to expand its interaction with families and the

community, and to create an organizational climate conducive to school improvement. In effect, such changes required a fundamental shift in the school's operational ideology from a relatively undemocratic system to one which saw its mission as meeting the needs of all students and staff and expanding its role beyond the narrow confines of the school and classroom instruction.

Within this general organizing framework, program and school staff identified five areas of school organization where project activities should be directed. These were: (1) student involvement, (2) parent and community involvement, (3) use of community resources and staff support, (4) school discipline and creation of an orderly climate for learning, and (5) achievement. Also, during the second year of program funding, a school within a school program for sixty students, the Milwood Alternative Program (M.A.P.), was implemented and was intended to serve as a micro integration of the above areas. Further, within each of the targeted areas, specific interventions were developed which constituted the more specific components which it was hoped, would lead to school improvement. The specific interventions within each organizational area included:

1. Student Involvement: Student involvement interventions were intended to develop student involvement in and attachment to school. Primary interventions in this area were: (1) A Student Council consisting of two students randomly selected from each home-room. Student Council members participated in some basic exercises in leadership training, planned and operated school dances--including

publicity, ticket sales and operating concessions---engaged in school beautification projects, took field trips, selected a liaison to the School Advisory Committee and reviewed school rules and made recommendations for changes. (2) A Student Project Advisory consisting of approximately ten students was chosen by teaching staff for their positive leadership abilities. This group met regularly with the program Site Director. Activities in which this group engaged included: discussing and making recommendations concerning school improvement, conducting school beautification projects, taking field trips, and election of a student liaison to the School Advisory Committee. (3) A Pep Club was formed. This group was made up of approximately forty students who engaged in various efforts to support school athletic teams and boost school spirit. This group met regularly, worked on cheers, sold school buttons, made signs for sporting events and organized pep rallies. (4) An Intramural and After School Basketball Program was initiated. A Saturday morning basketball program was operated at an elementary school within a predominantly minority neighborhood within the schools attendance area. Also, an intramural basketball program was run after school during the winter. (5) Other Involvement Activities. A number of other involvement activities were developed and included: a Reading Club which emphasized reading for fun and attendance at cultural events and two yearly all night "lock ins" at the YMCA---one for males and one for females, involving approximately two hundred total students as well as a number of staff and parents.

2. Parent and Community Involvement: Interventions in this area were designed to increase overlap between the school, its attendance community and the larger community. Specific interventions included: (1) A School Advisory Committee was established and met monthly to discuss school operations and to receive a report on program activities. This group consisted of a diverse group of parents, the building principal, teacher representatives, the Assistant Superintendent of Schools, the Director of the Criminal Justice Commission and, at times, student representatives. This group also took on various projects such as purchasing two personal computers for classroom use. (2) A Home-School liaison was hired and was responsible for maintaining linkages between the school and the community, organizing school open houses and working with youngsters who were having attendance problems and their families. (3) A Community Outreach Program was developed. This involved "taking the school to the community" by conducting a number of meetings and coffees in parents homes and in elementary schools throughout the school's attendance area. Also, project generated literature such as a project brochure which was widely distributed, a school-parent newsletter; and television, radio and newspaper reports were important parts of the project's outreach efforts. Another community outreach intervention consisted of encouraging parents to attend open houses, parent-teacher conferences, athletic events, other activities, and to act as volunteers in the school.

3. Use of Community Resources and Staff Support: This area

of school organization was, also, an extension of school community overlap and was specifically directed toward the identification and use of community resources. Interventions in this area consisted of:

- (1) Use of University resources. As a major state institution of higher learning, Western Michigan University possessed a number of valuable resources which could be used and included: University media services to help facilitate public relations, fiscal oversight, expert consultation, political support, and transportation resources.
- (2) Development of a Tutoring Corps. A tutoring corps of University students was recruited which provided individual tutoring to school youth.
- (3) Development of a parent and volunteer support group. A core group of parent and concerned volunteers was established which provided tutoring and secretarial help within the school.
- (4) Provision of In-Service training assistance. This included workshops in cooperative learning and sending a number of teachers to specialized in-service workshops.
- (5) Project program development, implementation and evaluation activities. This intervention actually consisted of a range of interventions carried out by project research staff including internal research staff from Western Michigan University and external research staff from the Johns Hopkins University.

External research activities included the development and analysis of student and teacher surveys, consultation on the implementation of the Program Development and Evaluation Model, feedback of project results to the internal research staff and periodic project site visits. Internal research activities included working directly with

school staff in the development and implementation of project activities providing individual assistance to and consultation with school staff, working with the building administration to organize school improvement task forces; providing feedback to school staff, the school advisory, to central school administration, and the community regarding project efforts, including results from yearly student and teacher surveys.

4. School Discipline: A primary concern among staff at the school during the development of the project and during the first year of project operation was reducing school disruption. Also, it was felt that the school's reliance on out-of-school suspension was counterproductive; that it exacerbated problems. Interventions in this area consisted of: (1) Modifying and clarifying the existing discipline code, making students and parents aware of this code, and continually working on developing a consistent approach to discipline among staff. (2) Use of informal problem solving where possible. The objective here was to involve the counseling staff more in the resolution of conflict between students and between students and teachers as opposed to simply relying on punishment. (3) An In-House Suspension Center (ISSC) was developed. This center was staffed by a certified teacher, who also happened to be the president of the local teachers union, and an aide. Both these staff had outstanding classroom management skills. The center was a highly structured environment where students worked on classroom assignments.

5. Achievement/Curriculum: The original proposal called for the implementation of a school wide diagnostic and prescriptive

program, the infusion of career oriented materials in the curriculum, and restructuring the day to provide more opportunities for team teaching and career oriented activities. Unfortunately, a millage failure and school reorganization resulted in the loss of staff who were responsible for implementing these components. During the first year of the project, a proposal was submitted to the State Department of Education to adopt a State validated school within a school alternative program. This intervention, the Milwood Alternative Program (MAP), began during the second year of project operation and was intended to be an experiment in the Achievement/Curriculum area and served as a micro program of the larger school organizational change effort.

Interventions in the achievement/curriculum area included: (1) A skills lab was developed during the second year of the project and provided remedial education services to approximately 25 students. This program operated during the second semester of the second year of project operation but was discontinued after the end of the second year due to budget reductions and because evaluation results suggested it was not effective. (2) A Basic Skills Program was developed by the Program Reading Specialist who was hired during the third and final project year. This program provided diagnostic testing and remediation for students who scored low on standardized reading tests but who were receiving no other remedial services. (3) An Intensive Study Program was designed and implemented by the Program Graduate Assistant during the third year of the program. This program provided

individual and group tutoring to a group of approximately ten youth who were experiencing academic and behavioral problems in class.

(4) The Milwood Alternative Program (MAP) was a school within a school program for 60 students which operated during the final two program years. Students who had experienced considerable academic, attendance and behavioral problems were encouraged to apply for admission and students were selected based on perceived need. This program was intended to contain all of the overall components of the larger school organizational change program but on a smaller scale. The MAP had four general goals. They were to: (a) personalize education through small class size and improved teacher-student interaction, (b) provide an environment where individual and group performance was rewarded, (c) explore ways of dealing with individual and group problems, and (d) teach students basic academic skills.

Structurally the program was staffed by three teachers who taught classes of 20 students in Social Studies, Science and English. These teachers were assisted by a counselor who ran a group session at the beginning of each day intended to develop close student-teacher relations and to resolve individual and group problems. These students were on a different morning class schedule than other students which allowed flexibility for participants to collectively plan activities.

Project staff who were hired by the project who had direct responsibility for project operation or who devoted a substantial portion of their time to project operation included:

1. The Project Director who served as the principal investigator and who had ultimate responsibility for project operation.
2. The Superintendent of Schools who had responsibility for school operation.
3. The Assistant Superintendent of Schools who was responsible for the school system portion of the project and who served on the school advisory committee.
4. The Project Site Director who was responsible for daily project operation.
5. The Building Principal who was responsible for daily school operation.
6. The Building Assistant Principal who assisted the Principal with daily building operations.
7. A Project Secretary to assist the Project Site Director.
8. The Project Graduate Assistant who acted as an assistant to the Project Site Director.
9. The Home-School liaison who was responsible for developing linkages between the school and the community and improving student attendance.
10. An Attendance Clerk who assisted the Home-School liaison and documented school attendance.
11. An In-School Suspension Center Teacher to teach in the ISSC.
12. An In-School Suspension Center Aide to assist the ISSC teacher.

13. A Counseling Center Secretary to free-up and assist the school Counseling Center staff.
14. Three teachers to teach the Milwood Alternative Program (MAP) classes.
15. Three Counselors to assist with the MAP and to provide counseling to students and staff.
16. The Skills Lab teacher who was responsible for providing remedial education to academically deficient students.
17. The Project Reading Specialist who was responsible for providing remedial reading instruction to students needing but not otherwise receiving remedial reading instruction.
18. The remaining building staff who were responsible for carrying out effective classroom practices.

Project staffing over the three project years can be seen in Figure 2.

The Milwood Project was designed as a theory-based action project which was intended to change the social organization of the school in ways which more effectively met the needs of students and staff. Moreover, if implemented, it was felt that these changes in the school social organization would result in lower levels of delinquency among the school population. The overall school change process is schematically represented in Figure 3.

Importantly, the original project proposal was not intended to focus on either delinquent or predelinquent youth. Rather than focusing primarily on student's behaviors its intended focus was

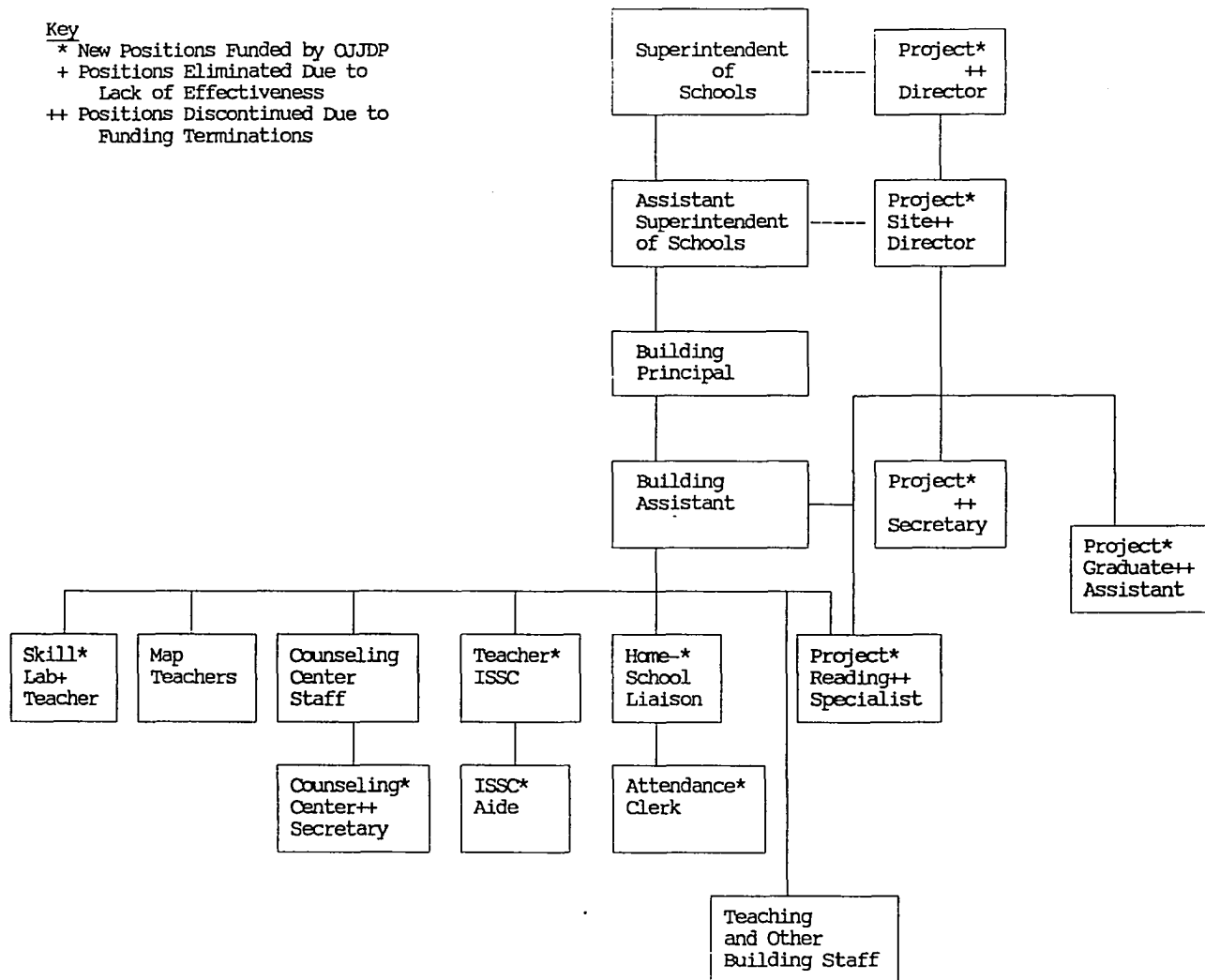


Figure 1. Organization and Staffing of the Milwood Project.

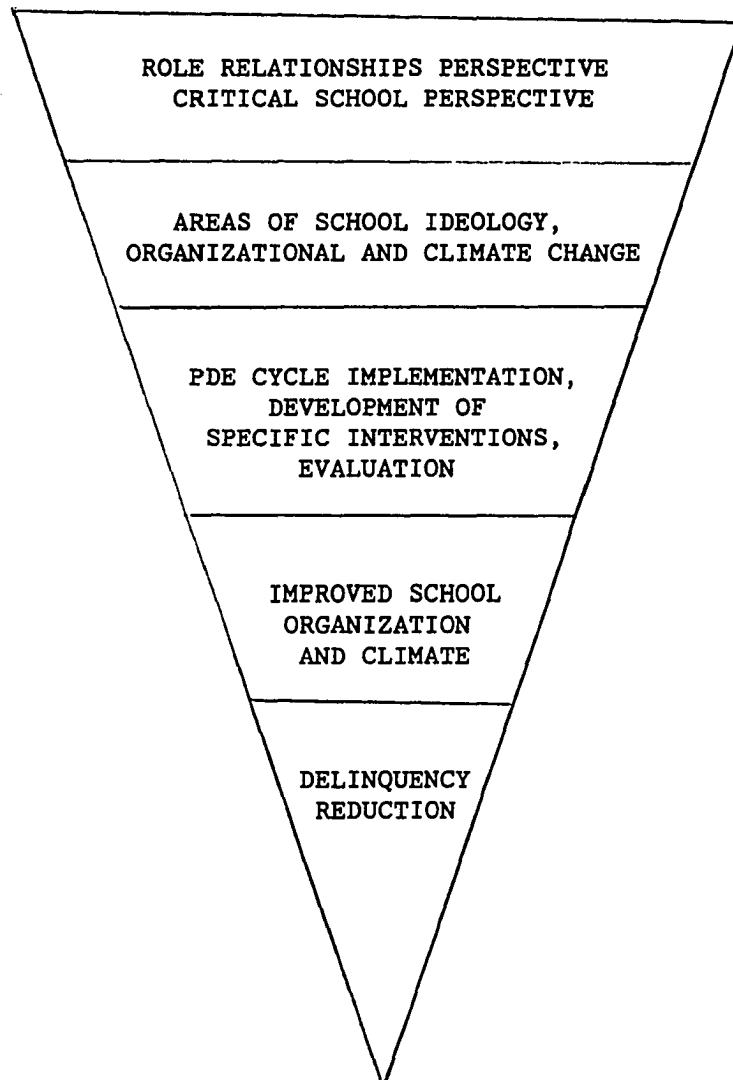


Figure 3. Schematic Diagram of the School Change Process.

directed toward all students and staff through changes in the organizational characteristics of the school. There were exceptions, however. Although they required organizational changes to implement, the development of the In-School Suspension Center, the activities of the Home School liaison, as well as encouraging teachers to use informal problem solving mechanisms such as counselors, did focus on individual student behaviors. In addition, all of the interventions which provided academic assistance to students such as the Milwood alternative Program (MAP), the tutoring program, the intensive study program and the diagnostic/prescriptive reading program did target individual students, although the M.A.P. tutoring and intensive study programs were voluntary programs in which students were encouraged to participate. The result was a project consisting of a range of interventions some of which focused on the overlap between the school and the community, some on the organizational climate of the school and some, either directly or indirectly, on individual students. To a large extent this range of interventions resulted from a number of external factors which regularly resulted in project adaptation as well as the democratic nature of the Program Development Evaluation Model which allowed for staff involvement and flexibility in project development and modification. Nevertheless, the totality of these interventions--it was felt--should result in a school organization which was better able to meet student and staff needs.

CHAPTER IV

EVALUATION METHODOLOGY

Evaluation Hypotheses

As already noted, the Program Development and Evaluation (PDE) model served as a guide to the development of program interventions and the evaluation of the effectiveness of these interventions. From a practical standpoint, the PDE model called for regular feedback of project outcomes to project managers and staff. This was seen as necessary in order to provide project personnel with information which could assist with decisions to discontinue, modify, continue or develop additional interventions which were felt to be related to desired project outcomes. Ultimately it was also desirable to be able to make reasonable statements regarding how well the project achieved its stated goals.

In many respects the evaluation of the Milwood Project was similar to what Schein (1987) refers to as the "Clinical Perspective." According to Schein (1987, p. 40), the clinical perspective is normative in its orientation and uses underlying theories of or models of "system health" to resolve problems requiring remedial action. In the case of the Milwood Project, these underlying theories of "system health" were made more explicit in the theoretical orientation employed by the project which was intended to resolve a number of problems

related to the ability of the school to meet the cognitive and affective needs of a range of students, as well as teachers, building administrators and parents and, hence, reduce delinquency.

Moreover, according to Schein (1987) the ultimate validation test employed by the clinical perspective is whether or not the clinician/researcher "can predict the results of a given intervention" (p. 52). If the clinician/researcher is able to predict intervention results then these successful predictions tend to validate their theory or model of what is happening. "If improvement does not occur as predicted, the clinician clearly has disconfirmed his or her hypothesis, but if improvement does take place it does not necessarily support those hypotheses" (Schein, 1987, p. 53). Unpredicted or chance improvements are possible. Nevertheless, the ability to predict the outcomes of interventions is the best way to validate the type of social action research employed in the Milwood Project (Schein, 1987).

Stated in more traditional terms the general hypothesis of the Milwood Project was that school social organization is related to delinquency. Further, the theoretical perspectives which directed project development suggested that changes in specific social organizational characteristics of the school would lead to reductions in delinquent behavior among the school population. Central to both the role relationship's perspective, control perspectives in general, as well as the critical prospective, is that students who are attached to and involved in schooling and who have strong bonds to schooling

are less likely to engage in delinquent behavior. Therefore, the following evaluation hypotheses can be developed:

Hypothesis 1. Students' perceptions of Attachment to School are inversely related to delinquency.

Hypothesis 1A. Students' perceptions of Attachment to School will significantly increase over the course of the project.

Hypothesis 2. Students' perceptions of Involvement in School are inversely related to delinquency.

Hypothesis 2A. Students' perceptions of Involvement in School will significantly increase over the course of the project.

Hypothesis 3. Students' perceptions of Alienation from School are directly related to delinquency.

Hypothesis 3A. Students' perceptions of Alienation from School will significantly decrease over the course of the project.

Hypothesis 4. Students' perceptions of Rebellious Autonomy are directly related to delinquency.

Hypothesis 4A. Students' perceptions of Rebellious Autonomy will significantly decrease over the course of the project.

Hypothesis 5. Students' perceptions of Positive Self-Concept are inversely related to delinquency.

Hypothesis 5A. Students' perceptions of Positive Self-Concept will significantly increase over the course of the project.

Also important to the role relationships perspective and to most control perspectives, is that as youths' bonds to conventional institutions increase, bonds to less conventional groups such as

negative peers become attenuated. Therefore, the following evaluation hypothesis can be developed:

Hypothesis 6. Students' perceptions of Negative Peer Influence are directly related to delinquency.

Hypothesis 6A. Students' perceptions of Negative Peer Influence will significantly decrease over the course of the project.

In a school organizational environment where students are attached to and involved in schooling, it is reasonable to expect that students would, also, feel that school is a rewarding place. Overall, the project sought to increase positive student-teacher interactions. Therefore, the following evaluation hypotheses are proposed:

Hypothesis 7. Students' perceptions of School Rewards are inversely related to delinquency.

Hypothesis 7A. Students' perceptions of School Rewards will significantly increase over the course of the project.

While the preceding hypothesized attitudinal changes are felt to reflect key changes in the social organizational characteristics of the school, the ultimate test of project effectiveness must be measured in terms of behavioral change. The ultimate aim of this project was, of course, to increase students' academic success, to reduce problematic school behaviors, and to reduce delinquency among the project school population. Therefore, the following additional hypotheses are proposed:

Hypothesis 8. Students' perceptions of School Effort are inversely related to delinquency.

Hypothesis 8A. Students' reports of School Effort will significantly increase over the course of the project.

Hypothesis 9. Students' academic success is inversely related to delinquency.

Hypothesis 9A. Students' academic success will significantly increase over the course of the project.

Hypothesis 10. Students' school misbehavior is directly related to delinquency.

Hypothesis 10A. Students' school misbehavior will significantly decrease over the course of the project.

Hypothesis 11. Students' Self-Reported Delinquency will significantly decrease over the course of the project (Loether & McTavish, 1974 for a discussion of general and statistical hypotheses).

Research Design

Since the research reported here is similar to the clinical perspective described by Schein (1987), the ultimate aim is to be able to predict improvements in specific areas of school social organization and reductions in delinquency among the project school population. In order to determine the extent to which these predictions are supported, three research designs were employed. These designs could be referred to as a case study design, a repeated one-group pretest-posttest design and a nonequivalent control group design (Campbell & Stanley, 1963). Ideally, an experimental design

would have been preferred and would have allowed much stronger statements about project effects. However, the use of an experimental design in this instance was not possible. The ability to carry out the project was contingent on two factors which precluded random assignment to experimental and control conditions. First, initiation of the project was possible because of the desire of central school system administrators, as well as building administration and staff at the eventual project school, to remediate problems at the eventual project school. This interest in problem remediation, rather than providing a forum for research, coupled with political pressure and potential funding, provided an entree for project development and determined the project site. Secondly, within the project school there was considerable resistance to the random assignment of students to experimental and control conditions, although in one instance random assignment was used. As a result, the designs employed to evaluate project affects were either pre-experimental or quasi-experimental designs (Campbell & Stanley, 1963).

One of the designs used in this research was a case study. Participant observational data were collected over the three years of the project by this author who served as the Project Site Director. The purpose of the case study design was to develop a detailed and more in-depth understanding of the daily operation of the school than would be possible through more quantitative types of analysis of less frequently collected data. Also, it was felt that the collection of observational data would assist with the refinement

of project theory and the generation of additional research questions (Hagan, 1989). The deficiencies of such a design are that it does not control for various threats to internal validity (e.g., history, maturation, selection, mortality) and external validity (e.g., interaction of selection and experimental variables) (Campbell & Stanley, 1963). The use of the case study design, however, was intended to supplement data collected and analyzed via the two additional designs employed. Thus, these threats to internal and external validity are felt to be somewhat minimized.

The second design employed by the Milwood Project could be referred to as a one-group pretest posttest design. In this instance, the one group was the project school organization. Various measures of school organizational life were taken each spring during the three years of the project with data collected during year one being considered the pretest data and data collected during year three being considered posttest data. However, as Campbell and Stanley (1963) note, there are a number of variables which can compromise internal validity in such a design--notably history (this is particularly true in this instance given the lengthy time period between the pretests and posttests), maturation, testing, instrumentation, statistical regression, and interaction of selection and maturation (Campbell & Stanley, 1963). In addition, two threats to external validity are inherent in such a design. These are the interaction of testing and experimental variables and the interaction of selection and experimental variables (Campbell & Stanley, 1963). Despite such problems

this design is mentioned here because it is important to be able to describe changes in the project school over time in order to gain insight about the possible correctness of project predictions.

The use of the preceding two designs would have produced considerable caution in the interpretation of project outcomes if used by themselves. However, as Campbell and Stanley (1963, p. 47) note, the addition of a "nonequivalent control group reduces greatly the equivocality of interpretation over what is obtained" in using a one-group pretest-posttest design. Consequently, a control school was selected which was felt to be similar to the experimental school in school problems and student characteristics. The resulting design was a nonequivalent control group design. This design differs slightly from the usual nonequivalent control group design discussed by Campbell and Stanley (1963) in that the assignment to the experimental condition (project) was neither random nor under the project staff's control. As already noted, the decision to choose Milwood as the project site was due to central administration's desire to remediate problems in the school experiencing the most problems as well as the willingness of some building staff to work on the development of the project. Consequently, the resulting design was what Campbell and Stanley (1963, p. 50) refer to as a "self-selected" nonequivalent control group design. Possible shortcomings of this design which may threaten internal validity include statistical regression and the interaction of selection and maturation while threats to external validity include the interaction of testing and experimental variables, the interaction

of selection and experimental variables and reactive arrangements. Nevertheless, the use of a control group, even if widely divergent from the experimental group, assists in the interpretation of project effects (Campbell & Stanley, 1963).

Although there are some problems regarding the evaluation design which may lead to caution in the interpretation of project effects, the design employed was the most rigorous available given the social action environment in which the project was developed and operated. Further, considerable attention will be devoted to a discussion of how problems of internal and external validity may have affected results in the following chapter.

Subjects

Subjects included students at the project school (Milwood Junior High School) and at a control school (South Junior High School) during the 1980-81, 1981-82, and 1982-83 school years. Although the absolute size of the student populations at both schools varied over the course of each year due to student withdrawals and new enrollments, the approximate size of the student population at the experimental school varied from 671 students in 1980-81 to 680 students in 1982-83. At the control school the student population ranged from approximately 652 students in 1980-81 to approximately 691 in 1982-83.

The racial composition of the two schools was very stable over the three years of the project. Both the project school and the control school were predominantly white in racial composition, although

the control school had a substantially larger black population than the project school while the project school had a slightly larger hispanic population. In 1982, for instance, the project school student population was 71.4 percent white, 23.5 percent black, 3.5 percent hispanic and 1.6 percent of the population was comprised of other racial groups. At the control school 60.0 percent of the student population was white, 37.0 percent was black, 1.2 percent was hispanic and 1.8 percent was made up of other racial groups.

Since the junior high population is comprised of seventh and eighth graders, the mean ages of students at the two schools were very similar over the course of the project. The mean age of project school students was 13.0 years and the mean age for control students was 13.2 years. In terms of gender, females accounted for a slight majority of the students at the project school, making up 52.9 percent of the student population in the first project year and 53.2 during the third project year. Males comprised 47.1 percent of the project school population during the first year and 46.8 during the third year. At the control school, however, males comprised a majority of the student population over the course of the project. During the first project year, males comprised 50.9 percent of the control school student population with females accounting for the remaining 49.1 percent. During the third project year, males accounted for 54.7 percent of the control school population with females accounting for the remaining 45.3 percent.

Data and Measures

A range of data and measures are available which can be used to evaluate project outcomes. These data include qualitative data consisting of daily observations of project school life and project operations, written reports of project activities prepared by project staff for building and school system personnel, national evaluators and funding agency monitors, and press reports covering the project. In addition, a range of quantitative data were collected and include:

1. Behavioral data which are available in school records but which may not be compiled such as the numbers of absences, suspensions and discipline referrals.

2. School achievement data which are collected each year by the schools through the administration of the Metropolitan Achievement Test, a standardized test of student performance, as well as student grades at the project school.

3. Attitudinal data on both students and school staff which were collected as part of the national evaluation conducted for the funding agency by researchers from the Center for Social Organization of Schools at the Johns Hopkins University.

Behavioral data were collected at the project school by the project staff and were placed on computer file for analysis. In addition, behavioral data on total suspensions and attendance was collected for the project school and the control school for each of the three project years. Also, achievement test data for students

in both the project and control schools were obtained from the school system's data management department for each project year. Behavioral and achievement test data collected for project school and control school students can be seen in Table 1.

Table 1

Behavioral and School Achievement Data Collected for Project School (Milwood) Students and Control Students in 1980-81 through 1982-83

School/Years	Data Collected
Milwood	Behavioral Data
1981	Referrals, Suspensions, Attendance
1982	Referrals, Suspensions, Attendance
1983	Referrals, Suspensions, Attendance
Control	
1981	Total Suspensions, Total Attendance
1982	Total Suspensions, Total Attendance
1983	Total Suspensions, Total Attendance
Milwood	Achievement Test Data
1981	MAT Test Scores, Student GPA
1982	MAT Test Scores, Student GPA
1983	MAT Test Scores, Student GPA
Control	
1981	MAT Test Scores
1982	MAT Test Scores
1983	MAT Test Scores

In addition to behavioral and school achievement data, attitudinal data were collected from students and teachers each spring during the project and from students in a follow-up survey in the spring of 1987. These data were collected by the project staff through the administration of the School Action Effectiveness Study (SAES). The

SAES was part of the national evaluation conducted for the funding agency (OJJDP) by evaluation staff from the Johns Hopkins University. Surveys were administered to a random sample of approximately 300 students in both the project and control schools during the first year, to all project school students and a random sample of approximately 300 control school students during the second year, to all project and control school students the third year, and to all project and control school students in 1987.

During the first year surveys were administered to all seventh and eighth graders selected for the sample in two waves in the school's cafeteria during mid-week in the Spring of 1981. Students were provided a survey booklet, the reason for the survey was explained, and students were given careful instructions on completing the survey. In addition, project staff and trained university students monitored survey administration. Students who were absent on the day of the survey administration were given follow-up surveys in small groups by project staff. During the third year students at both the project school and control school were again surveyed during mid-week in the Spring of 1983 in social studies class--a required class for all students. Social Studies teachers were trained by project staff on survey administration and were advised on how to handle any common problems which might occur. Again, follow-up surveys of absent students were conducted by project staff. No problems were encountered in the administration of the student surveys. Response rates and the quality of survey responses can be seen in Table 2.

Table 2*
Quality of SAES Survey Responses, 1981-1983

School	Student Survey		Teacher Survey
	Response Rates	Invalidity Index	Response Rate
Milwood			
1981	.76	13	.81
1983	.85	9	.80
South			
1981	.80	17	.39
1983	.75	22	.58

Note: Invalidity scores greater than 90 suggest carelessness or unusual responses to student survey questions.

*Table adopted from Gottfredson and Cook (1985).

The SAES employs two kinds of survey measures--individual level and school level measures. Individual level measures are computed by averaging individual's responses to the items in the scale and then averaging the scale scores for all individuals in the school. These measures average students' and teachers' reports of their own characteristics, behaviors, and attitudes. The second type of measures employed in the SAES are school level measures which are computed by averaging the school average for each item in the scale. These scales measure characteristics of the school as reported by students and teachers (Gottfredson & Cook, 1985).

The survey measures employed in this evaluation were developed

by Gary Gottfredson and his colleagues at the Johns Hopkins University especially for the School Action Effectiveness Study (SAES) of which the Milwood Project was a part. These measures consist of both previously developed scales which have well known psychometric properties and a number of original scales developed specifically for the national evaluation. Because the scales have been employed in surveys of thousands of youth in the United States and United States territories, and due to extensive research on these scales, the psychometric properties of the SAES scales are well established and have been published, with the exception of the Self-Report Delinquency Scale, by Gottfredson as part of the Effective School Battery--a tool intended to help schools assess their organizational climates (Gottfredson, 1984b).

In describing the criteria used to select items for inclusion on the SAES survey, Gottfredson (1984) indicated:

(a) Items were chosen to cover the dimensions school climate research has shown are important or what practitioners are concerned about; (b) items had to work; that is, every item had to contribute to the reliable and valid measurement of the dimensions of climate covered; and (c) items were chosen that seemed in good taste, did not offend most people, and were easy to answer. (p. 12)

A readability analysis using the Flesch (1951) method of determining readability, revealed that the reading level of the SAES survey is in the upper part of the grade five range. In other words, about 50 percent of all fifth graders should have little difficulty reading the survey in the Spring of their fifth school year.

The SAES scales are unidimensional summative scales employing

a "likert-type" or dichotomous response formats. Additional research on the scales conducted by Gottfredson, Ogawa, Rickert, and Gottfredson, (1982a) resulted in the purification of these scales and the combining of response categories. The result was the development of scales which are scored "0" or "1" and which distinguish between respondents having the least pro or least anti sentiments on a particular item. With the exception of the negative peer influence scale, each of the scales employed in this evaluation was taken from the SAES battery and uses the same items. The negative peer influence scale used here has one less item than the scale developed by Gottfredson, et al., (1982a). The deletion of one item was done because an item analysis of the negative peer influence scale indicated that a substantial improvement in the scale's reliability (alpha) could be achieved through the deletion of this item. A description of the SAES scales used in this evaluation can be found in Table 3. Also, item wording and item scoring for each of these scales can be seen in Appendix A.

Table 3

Brief Description of Selected SAES Student Scales

Scale	Description
Attachment to School	Ten items concerning the importance of teachers' perceptions of students, grades, and students' feelings about classes, school, and school staff.

Table 3--Continued

Scale	Description
School Effort	Five items concerning how hard students work on schoolwork compared to other students, and how diligent they are in the quality and attention given to homework.
Involvement	Twelve items concerning students' participation in a wide variety of in-school and out-of-school activities including school sponsored activities and work.
Alienation	Four items concerning perceptions that teachers and others care about students and students' sense of belonging in school. Expanded to six items in the third year.
Rebellious Autonomy	Three items concerning students' not having to explain how they spend money or what they do, including homework.
Positive Self-Concept	Twelve items concerning perceptions of self as a good student, doing well in school, as well as general perceptions of self and abilities.
Negative Peer Influence	Eight items concerning friends' support of schooling, school misbehavior, and involvement in trouble.
School Rewards	Four items concerning teachers or the school rewarding students for their work or behavior.
Total Self-Report Delinquency	Nineteen items covering a range of behaviors from personal to property offenses, drug and substance use including cigarette smoking.
Self-Report Serious Delinquency	Eleven items comprising a subscale of the Total SRD scale and covering a range of criminal behaviors from personal to property offenses.
Self-Report Drug Use	Five items comprising a subscale of the Total SRD scale including student's use of cigarettes, liquor, marijuana and other drugs and going to school "high."

Because of its centrality to the present research, the fact that it has not been previously published as part of the Effective School Battery, and because there has been some debate in the criminological literature regarding the efficacy of self-report delinquency (SRD) measures, some additional discussion of the SRD scale used in this evaluation is warranted. As Elliott and Ageton (1980) note, much of the criticism of SRD measures concerns: (1) the extent to which items employed in SRD measures are representative of the domain of delinquent offenses, (2) the fact that SRD items frequently contain some overlap, thus resulting in the over-representation of some offenses, and (3) limited or ambiguous response sets which are often open-ended, thus increasing the potential for forward and backward telescoping or recall problems. However, SRD measures which overcome these problems have been shown to be capable of "capturing a broader range of persons and levels of involvement in delinquent behaviors than are official arrest statistics," thus suggesting some superiority to official statistics in determining truer levels of delinquent involvement (Elliott & Ageton, 1980, p. 107).

The SRD scale developed by Gottfredson et al., (1982a) and used in this evaluation consists of a range of offenses from serious to non-serious offenses and cigarette smoking, contains minimal overlap of items, and employs a dichotomous "last year variety" scale which provides respondents with a specific reference period. Thus, Gottfredson et al., (1982) have attempted to resolve problems with scales developed prior to the SAES study.

Moreover, research by Hindelang, Hirschi, and Weis, (1981) suggest the utility of the response format used in the SRD measures employed in this evaluation.

Two concepts, reliability and validity, also deserve some attention in the consideration of the scales employed in this evaluation. Technically, reliability describes the "relative contributions of measurement error and 'true' score variability to a scale or other measure. It is the proportion of variance in a score that is not error to the total variance in the score" (Gottfredson et al., 1982a, p. 80). Further, there are two types of reliabilities which should be considered before some degree of confidence in these scales is achieved. First, Cronbach's Alpha serves as a "homogeneity coefficient which indicates the extent to which a scale measures whatever it is purported to measure at a given point in time" (McIver & Carmines, 1981). Second, test-retest reliability is a measure of a score's stability over time. High test-retest reliability implies that a stable characteristic of people or an organization is being measured.

Typically, practitioners have developed rules of thumb for acceptable levels of reliability and, as Gottfredson et al., (1982a) note, "reliabilities much below .7 or .8 for individual diagnosis, personnel decisions, and so forth [create problems] because one would want to be reasonably certain that a score is reasonably error-free when making important decisions about individuals" (p. 19). For purposes of evaluation, however, lower reliabilities are acceptable, for three reasons. First, since the scores of many individuals are

frequently averaged in an evaluation, reasonably dependable estimates of true-score means can be obtained even when individual measures have low reliabilities. Second, longer scales are generally more reliable but it is often impossible to administer batteries of long scales. Consequently, employing short scales with many persons results in good estimates of group means. Third, in an evaluation it is important to examine a variety of outcomes, which, again, is problematic if long reliable scales are used. Using shorter, less reliable scales with many people, however, solves such a problem and provides satisfactory estimates of true-score means. For evaluation purposes scales with reliabilities as low as .5 or lower have been said to be adequate, provided that the project being evaluated uses randomization, or that any selection is independent of program goals or objectives (Gottfredson et al., 1982a).

As noted earlier in this chapter, the project school was not chosen randomly nor was randomization used within the project school since the entire student population constituted the subjects of this study. However, the choice of the project school, at least as far as is known, had no effect on the control school, hence, its choice appears to be independent of project goals or objectives. Consequently, the Alienation and Rebellious Autonomy scales which have reliabilities of .45 and .41 respectively, are adequate, although their reliabilities are not as high as one might desire. The remaining scales employed in this evaluation all have acceptably high reliabilities (α) for evaluation purposes as indicated in Table 4. Further,

test-retest reliabilities are somewhat lower indicating some change along these dimensions over time (see Table 4).

Table 4
Reliabilities (Alpha) and One Year Test-Retest Reliabilities
for SAES Scales

Scale	Alpha	One Year Test-Retest Reliabilities*	Number of Scale Items
Attachment to School	.79	.50	10
Involvement	.57	.44	12
Alienation	.45	.36	4
Rebellious Autonomy	.41	.39	3
Positive Self-Concept	.56	.48	12
Negative Peer Influence	.73	.42	8
School Rewards	.54	.33	4
School Effort	.61	.43	5
Total Self-Report Delinquency	.86	.59	19
Self-Report Serious Delinquency	.83	.38	11
Self-Report Drug Use	.75	.63	5

*Note: One year test-retest reliabilities are correlations between scales in the 1981 and 1982 SAES surveys computed on a sample of SAES survey respondents and adapted from Gottfredson et al., (1983).

Aside from questions regarding reliability, some consideration should be given to the validity of the SAES scales employed in this

evaluation. Validity concerns the extent to which these scales measure what they are intended to measure and is closely linked to theory. Since theory involves ideas about the relationship between phenomena, the ability to predict relationships between the measures used in this evaluation provides some support for the validity of these measures. In effect, if the hypothesized relationships between the SAES measures and self-report delinquency are supported, then some confidence in the validity of these measures is possible. For instance, if Attachment to School and School Effort are positively related to one another and if they are both negatively related to Self-Report Delinquency, then there is some basis for concluding that these three scales are reasonable measures of the constructs which they represent. Importantly, extensive research on the relationships between the scales employed in the SAES as well as the relationships between the scales used here and other measures provides some support of their construct validity (Gottfredson, 1984b). More evidence of the construct validity of the scales employed in this research can be found in the discussion of project outcomes found in the following chapter.

CHAPTER V

EVALUATION OUTCOMES

Project Implementation

Prior to discussing the outcomes of the project, a brief discussion of project implementation is warranted. Project implementation refers to the extent to which project staff and others were engaged in activities which were intended to change the social organizational climate of the school in predictable ways. Some discussion of the extent to which project and school staff were engaged in school improvement efforts is critical because too frequently program designs are not carried out in practice. The mere development of a social action program, no matter how well articulated, does not necessarily mean that those entrusted with carrying out the program will do so.

In writing about human service program implementation, Williams and Elmore (1976) note:

The fundamental implementation question remains whether or not what has been decided actually can be carried out in a manner consonant with that underlying decision. More and more, we are finding the answer is no. So it is crucial that we attend to implementation. (p. xi)

In order to address the issue of implementation of the Milwood Project three related issues should be addressed: (1) what strategies did project developers employ to increase the likelihood that project theories and ideas were put into practice, (2) what did project

staff do to carry out these theories and ideas, and (3) what were the indirect or spill-over effects which were initiated by the project and carried out by others.

As noted in Chapter III, from the beginning the Milwood Project was a cooperative undertaking between university staff (this author and the principal investigator) and school building staff. Also, a key ingredient of the Program Development and Evaluation (PDE) Model employed by the project was democratic program development involving line staff. The participation of line staff--those entrusted with intervention implementation--was intended to both develop a sense of staff ownership of the project and to utilize staff expertise in intervention design. The result was a project which was collectively developed rather than being imposed from the outside. Consequently, the democratic program development process initiated by the principal investigator and this author was a regular project activity and served as the initial strategy intended to ensure that the project was implemented with integrity.

The result of the project's ongoing program development efforts were the various interventions described in Chapter III. However, once these various interventions were designed people had to engage in activities intended in the design of the interventions if they were to be implemented with integrity. Moreover, some oversight or monitoring of these activities was necessary in order to determine the extent to which interventions were implemented, the quality of the interventions, and the results of the interventions.

Daily observations and monitoring of project activities by the Project Site Director (this author) suggest that overall the project was implemented with a high degree of integrity. Project staff entrusted with crucial programmatic responsibilities such as the operation of the Attendance Office (Home-School Liaison and Attendance Clerk), the In-House Suspension Center, the Milwood Alternative Program, the Tutoring Corps, the Diagnostic/Prescriptive Reading Program, as well as the provision of secretarial assistance to the Counseling Center, the Counseling Program, the Intensive Study Program, the School Advisory Committee, and the development of community relations, the Program Development and Evaluation process and overall school improvement activities were implemented with a moderate to high degree of integrity. Staff and others were able to devote considerable energy and time to these activities on an ongoing basis and relatively few obstacles were encountered in the implementation of these interventions.

Other interventions, however, encountered various obstacles and were implemented with less integrity than desired. Both the student council and the skills lab were implemented with a moderate to poor degree of integrity. Some teaching staff did not support a Student Council which was chosen randomly and resisted allowing students to attend some meetings. In addition, it is not clear whether the Student Council met frequently enough (approximately once per month) to serve as a strong intervention, although meetings were generally well organized and students did become involved in projects such as spon-

soring school dances and school clean-ups.

The Skills Lab was the most poorly implemented intervention of the primary project interventions. When the Skills Lab was initiated, a permanent teacher for the lab with the necessary skills could not be hired because of a recall list made up of recently laid off teachers. As a result, the lab was originally staffed by substitutes and when a full-time teacher was assigned, he lacked the enthusiasm needed for an admittedly difficult assignment. Observations of the lab revealed a reasonably orderly environment, but one in which students seemed to lack motivation.

Also, it should be recalled that the school system had undergone a major reorganization due to financial problems just prior to the implementation of the project in the fall of 1980. The result was that numerous staff positions were eliminated, staff were laid off, buildings were closed, and staff were reassigned. This meant that many interventions scheduled to be implemented were never implemented because of a lack of staff. In addition, key staff who had played critical roles in the development of interventions which were to begin in 1980-1981 were no longer at the school. This meant that new relations between project staff and new building staff had to be developed and additional program development meetings held in order to develop the new staff's ownership and commitment to the project. Despite these difficulties, however, project staff worked tirelessly to implement the project given the remaining resources.

Project implementation did not rest solely on the efforts of

the project's managers and the activities of project staff. Frequently, the activities of project staff had an indirect or spill-over effect within the school. Although somewhat more difficult to evaluate, these indirect effects constitute the ways in which project activities produced change in others or influenced others in ways which in turn resulted in the improvement of the school's social organizational climate, even when these others were not the targets of a more direct intervention. Such indirect or spill-over interventions constitute an important part in the school change effort, particularly in a project which attempted to focus as much on the organization of the school as directly on the individuals within the school. Ultimately, however, the most potent indicator of the integrity of project interventions is found in project outcomes and it is this issue which comprises the remaining part of this chapter.

Data Analysis Strategy

As noted earlier, the ultimate aim of this type of evaluation is to be able to predict the results of program interventions (Schein, 1987). Following this, a series of predictions were made in the form of hypotheses. These hypotheses predicted that the measures used in this evaluation would be correlated with Self-Report Delinquency in theoretically predictable ways. If these theoretically hypothesized (predicted) relationships are borne out by the data, then there is some reason to believe that the theoretical underpinnings of our measures are reasonable; at least they are not disproved by

our results. In addition, if these hypothesized relationships are reflected in the analysis, then there is some basis for having confidence in the construct validity of our measures. That is, there is clear support for the argument that the measures employed in this evaluation are appropriate indicators of the social phenomena they were constructed to represent (Gottfredson, 1984b).

Correlation analysis employing the calculation of Pearson product-moment correlations for pairs of evaluation measures---in this case the various scales employed in this evaluation with the self-report delinquency scales--will be used. The Pearson product moment correlation coefficient " r " is used to calculate the strength of the relationship between pairs of interval level variables (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975). In addition, tests of significance were computed to determine if the hypothesized relationships are likely to have occurred by chance. Since the hypotheses stated in Chapter IV specify a particular direction of the relationship, a one-tailed test of significance is appropriate (Henkel, 1976; Nie, et al., 1975).

Also, to check for any anomalies in the results due to the possible violations of the assumptions underlying the Pearson coefficient using data derived from scales, Kendall's tau correlations were computed. Kendall's tau is a measure of association for ordinal level variables and was computed as a check on the Pearson " r " coefficients, and can be found in Appendix B (Loether and McTavish, 1974, for a discussion of Kendall's tau).

Once confidence in the measures employed in this evaluation and the underlying project theory are gained, then the critical task is to be able to make statements about changes in the project school over time and relative to the control school. In order to accomplish this, the data analysis strategy will parallel a strategy employed by D. C. Gottfredson (1986) in a published evaluation of a similar school change project. This strategy calls for a test to determine if any difference in means between the project school and control school at time one (the beginning of the project, 1980-81 or baseline) and at time two (the end of the project, 1982-83) are likely to have occurred by chance.

Since the samples in this evaluation are independent samples (from the project and control schools and comparing samples of students at the project school between the baseline year and the end of the project when the student populations were different), and because the sample size is large ($N > 100$), an appropriate statistic for this test is the t-statistic. The t-statistic is a significance test which can be used to determine if two samples have been taken from populations with different means. Again, a one-tailed test of significance is appropriate since the direction of the hypothesized differences have been predicted in advance (Henkel, 1976; Nie, et al., 1975). If there are no differences found within the .05 level of significance then no differences between the project school and the control school can be said to exist. On the other hand, if statistically significant differences within the .05 level of

significance are found then there is support for the conclusion that the project has produced some effect.

Also, effect sizes as suggested by Glass (1976) will be calculated. As D. C. Gottfredson (1986, p. 718) notes, "The effect size is the ratio of the pre-post change on a given measure to the standard deviation for the measure." For measures of student behaviors and attitudes, the effect size is calculated as follows:

$$\Delta = \frac{(\bar{X}_{\text{post}} - \bar{X}_{\text{pre}})}{SD_{\text{pre}}}$$

"It uses each school's baseline (1981) score as a control, and it can be interpreted as a percentage of the baseline standard deviation" (Gottfredson, 1986, p. 718). For example, an effect size of ".30" for a particular measure indicates that the school means on that measure increased from the baseline year to the post-test year by 30% of one standard deviation. "As a rule of thumb, effect sizes of .1 or greater are large enough to be of interest" (D. C. Gottfredson, 1986, p. 718).

Outcomes

First it should be noted that a comparison of the Pearson product-moment coefficients found in Table 5 below and the Kendall tau coefficients found in Appendix B indicate very little difference in the direction or strength of the relationships among the variables. Further, there are only slight differences in whether or not the

observed relationships among the measures are statistically significant. In only five pairs of relationships were differences found and in each instance the Pearson r gave a somewhat more conservative estimate of the relationship. In four instances the Pearson r failed to reach significance while reaching significance in the Kendall tau matrix. These relationships were between Involvement in School and Rebellious Autonomy, Alienation from School and GPA, Rebellious Autonomy and Total Self-Report Delinquency, and School Rewards and GPA. However, in one relationship between Rebellious Autonomy and GPA, a small (.02) direct relationship was found, although this relationship was not statistically significant ($p = .41$). Consequently, one can have reasonable confidence that the relationships between the measures represented in the Pearson correlation matrix in Table 5 accurately reflect the data.

Of even more importance is to determine if the relationships between the evaluation measures including Self-Report Delinquency are in the hypothesized (predicted) direction. Further examination of the correlation matrix in Table 5 indicates that, with one exception, nine of the ten hypothesized relationships between Attachment to School, Involvement in School, Alienation from School, Rebellious Autonomy, Positive Self-Concept, Negative Peer Influence, School Rewards, School Effort, GPA and Self-Report Delinquency are in the predicted direction. Moreover, of those relationships which are found to be in the predicted direction, only three, Involvement in School, Rebellious Autonomy, and School Rewards fail to reach

Table 5
Pearson Product-Moment Correlation Matrix of Evaluation Measures*

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Attachment to School	1.00	.29*	-.52*	-.21+	.44*	-.44*	.27*	.44*	.25+	.15*	-.44*	-.41*	-.32
2. Involvement in School		1.00	-.17+	-.10	.35*	-.16+	.30*	.18*	.12+	.05	-.09	-.09	-.09
3. Alienation from School			1.00	.23*	-.54*	.30*	-.16+	-.27*	-.11	-.23*	.28*	.23*	.24*
4. Rebellious Autonomy				1.00	-.13	.15+	-.19+	-.05	.02	-.16+	.12	.02	.22*
5. Positive Self-Concept					1.00	-.38+	.40*	.45*	.30*	.23+	-.28*	-.19+	-.26+
6. Negative Peer Influence						1.00	-.14+	-.40*	-.20+	-.20+	.58*	.55*	.38*
7. School Rewards							1.00	.15+	.10	-.09	-.06	-.02	-.09
8. School Effort								1.00	.38*	.26*	-.44*	-.38*	-.31*
9. GPA									1.00	.23*	-.22*	-.23*	-.15+
10. Suspensions										1.00	-.29*	-.26*	-.23*
11. Total SRD											1.00	.91*	.84*
12. SR Serious Delinquency												1.00	.57*
13. SE Drug Use													1.00

*Significance level equal to or less than .001

+Significance level equal to or less than .05

statistical significance of at least the .05 level.

The one anomaly in the correlation results is the relationship between school suspensions (an indicator of school misbehavior) and the other measures. Except for the negative relationship between suspensions and school rewards, being suspended is associated with each of the other measures in the opposite direction than was predicted. This finding raises some suspicions regarding this measure, although correlations between suspensions and other project collected measures such as discipline referrals ($r = .74$, $p < .001$) and being absent from school ($r = .13$, $p < .001$) appear logical. The result is an anomaly that is not easily explained. It is known that the project school experienced a very high number of out-of-school suspensions (513) during the baseline year. Consequently, it would be desirable to compute correlations between suspensions and the other measures for the second and third years. Unfortunately, data are not presently available to make these computations possible. Possibly, the high number of suspensions at the project school during the first year (the year for which these correlations are computed) made being suspended from school a normative behavior resulting in few negative perceptions of school. Also, it could be that being removed from an uncongenial school environment may act to enhance perceptions toward school, thus, accounting for these unexpected results. Unfortunately, these additional hypotheses cannot be tested at present. As a result, data supplied to the national evaluation staff by the school system will be substituted in subsequent analyses concerning suspensions

from school.

With one exception, the preceding correlation analysis suggests that the measures employed in this evaluation are sound measures of their underlying theoretical constructs, and simultaneously are related to delinquency in the predicted direction, thus confirming nine of the ten original hypothesis. Next, attention is turned to the remaining hypotheses concerning the likelihood that changes in the project school over time, and changes between the project school and control school occurred, and if so, if they were likely to have occurred by chance, or were due to project interventions.

Table 6 provides convincing evidence that the project produced positive effects on all but one of the attitudinal outcome measures which are related to delinquency. With the exception of school rewards which showed a slight decrease, students at the project school reported statistically significant improvements in Attachment to School, Alienation from School, Rebellious Autonomy, and Positive Self-Concept from the baseline year (1981) until the end of the project (1983). Moreover, the effect sizes, representing the proportion of change over time, are substantial for each of these measures. The remaining measures--Involvement in School, Negative Peer Influence, and School Effort--while not evidencing statistically significant improvements, nevertheless, showed positive nontrivial effect sizes in the predicted direction.

Also, Table 6 indicates that in 1981 the project school displayed somewhat lower mean scores than the control school on each of the

evaluation measures. However, by 1983, project school students reported higher mean scores than control school students on all but one measure--School Rewards. The control school, in contrast, displayed only one statistically significant outcome between the baseline year and the end of the project, and this result indicates that Rebellious Autonomy significantly increased at the control school. Further, an examination of the effect sizes for the control school reveals that nontrivial changes in the control school are all in a direction indicating a worsening of climate in that school.

Aside from changes in students' attitudes regarding important aspects of the schooling environment over the course of the project, it is also important to examine students changes in behavior. As noted earlier, there is some concern regarding the measure of school suspensions employed in the earlier correlation analysis. Therefore, computations of means and standard deviations for out-of-school suspensions and in-school suspensions by Gottfredson and Cook (1985) as part of the SAES research will be substituted.

As Table 7 indicates, students at the project school displayed significant ($p < .01$) improvements on five of the seven behavioral measures employed over the course of the project. Significant improvements are found in students Metropolitan Achievement Test scores, Out-of-School Suspensions, Total Self-Report Delinquency, Self-Report Serious Delinquency, and Self-Report Drug Use. Moreover, the effect sizes for each of these measures is substantial. In addition, one other measure, In-School Suspensions, improved, although

Table 6

Means, Standard Deviations, and Effect Sizes for Pretest to Posttest
Changes in Attitudinal Evaluation Measures for Milwood and the Control School

Outcome Measure	Milwood (Project School)						Control School					
	1981			1983			1981			1983		
	M	SD	N	M	N	Δ	M	SD	N	M	N	Δ
1. Attachment to School	.64	.27	178	.72	561	.30*	.65	.26	165	.63	488	-.08
2. Involvement in School	.19	.17	209	.21	550	.12	.22	.16	195	.20	448	-.13
3. Alienation from School	.36	.30	185	.30	533	-.20*	.35	.28	168	.37	429	.07
4. Rebellious Autonomy	.72	.33	193	.60	539	-.36**	.63	.30	173	.68	430	.17*
5. Positive Self-Concept	.69	.17	150	.75	520	.35**	.73	.16	141	.74	414	.06
6. Negative Peer Influence	.22	.21	190	.18	543	-.19	.21	.24	188	.24	433	.13
7. School Rewards	.21	.26	209	.19	545	-.08	.22	.27	192	.20	441	-.07
8. School Effort	.59	.31	209	.62	550	.10	.62	.29	214	.58	462	-.14
Percent Measures Improved						88.0						13.0

Effect sizes (Δ) indicate the ratio of the pre-post mean difference to the baseline standard deviation. See text for Explanation.

*T-statistic for pre-posttest change in school mean is significant at the $p < .05$ level.

**T-statistic for pre-posttest changes in school mean is significant at the $p < .01$ level.

this improvement was not statistically significant and the effect size was trivial.

On one measure, GPA (Grade Point Average), a statistically significant finding in a direction opposite than predicted was found, although the effect size was not large. This is somewhat surprising given the improvement in Metropolitan Achievement Test scores noted above. Possibly, GPA (class performance) and achievement test scores are not highly related. Unfortunately the data are not presently available to examine this relationship.

As was true for the attitudinal measures, Table 7 indicates that project school students displayed consistently less favorable mean scores on each of the behavioral measures in the baseline year (1981). However, by the end of the project these mean scores had reversed and favored the project school. Moreover, changes in these behavioral measures at the control school were again in a direction indicating an intensification of problems at that school. This is particularly true regarding control students' reports of Self-Report Drug Use ($p < .01$) and to some extent Total Self-Report Delinquency (N.S., $r = .25$).

Consequently, the preceding analysis presents clear evidence which supports the following hypotheses:

1. Students' perceptions of Attachment to School are inversely related to delinquency ($r = -.44$, $p < .001$).
2. Students' perceptions of Involvement in School are inversely

Table 7

Means, Standard Deviations, and Effect Sizes for Pretest to Posttest
Changes in Behavioral Evaluation Measures for Milwood and the Control School

Outcome Measure	Milwood (Project School)						Control School					
	1981			1983			1981			1983		
	M	SD	N	M	N	Δ	M	SD	N	M	N	Δ
9. GPA	3.29	2.83	710	3.05	666	-.08*	NA	-----	---	-----	---	---
10. MAT Test Scores (Total)+	97.65	35.69	243	105.92	600	.23**	105.28	30.06	247	102.50	571	-.09
11. Suspensions Out of School+	2.04	5.06	295	.38	660	-.33**	.70	2.70	275	.74	651	.01
12. Suspensions In School+	.71	1.59	295	.65	660	-.04	NA	-----	---	-----	---	---
13. Self-Report Delinquency (Total)	.19	.20	198	.13	561	-.30**	.13	.16	186	.17	488	.25
14. Self-Report Serious Delinquency	.12	.19	207	.07	545	-.26**	.10	.19	196	.11	453	.05
15. Self-Report Drug Use	.30	.32	212	.20	545	-.31**	.17	.23	204	.25	458	.35**
Percent Measures Improved						86.0						20.0

Note: Data on GPA and In-School Suspensions not available for the control school. Control school did not have in-school suspension center. Effect sizes (Δ) indicate the ratio of the pre-post mean difference to the baseline standard deviation. See text for explanation.

+Means and standard deviations for these measures adapted from Gottfredson and Cook (1985).

**T-statistic for pre-posttest changes in school mean is significant at the $p < .01$ level.

related to delinquency although this relationship is weak ($r = -.09$, n.s.).

3. Students' perceptions of Alienation from School are directly related to delinquency ($r = .28$, $p < .001$).

4. Students' perceptions of Rebellious Autonomy are directly related to delinquency, although the relationship is weak ($r = .12$, n.s.). However, the relationship with Drug Use is stronger ($r = .22$, $p < .001$).

5. Students' perceptions of Positive Self-Concept are inversely related to delinquency ($r = -.28$, $p < .001$).

6. Students' perceptions of Negative Peer Influence are directly related to delinquency ($r = .58$, $p < .001$).

7. Students' perceptions of School Rewards are inversely related to delinquency, although the relationship is weak ($r = .06$, n.s.).

8. Students' perceptions of School Effort are inversely related to delinquency ($r = -.44$, $p < .001$).

9. Students' academic success as measured by GPA is inversely related to delinquency ($r = -.22$, $p < .001$).

Only one hypothesis concerning a relationship between one behavioral measure and delinquency could not be confirmed. This hypothesis stated:

10. Students' school misbehavior as measured by the number of suspensions is directly related to delinquency ($r = -.29$, $p < .001$).

Moreover, all but two (another produced mixed results) of the hypotheses predicting positive changes in various aspects of the

project school's social organizational climate received some support. Although statistically significant improvements were not found in each instance, the above analyses indicated that:

1A. Students' perceptions of Attachment to School significantly increased over the course of the project ($p < .05$, $\Delta = .30$).

2A. Students' perceptions of Involvement in School showed nontrivial improvement, although this change was not statistically significant ($\Delta = .12$).

3A. Students' perceptions of Alienation from School significantly decreased over the course of the project ($p < .05$, $\Delta = -.20$).

4A. Students' perceptions of Rebellious Autonomy significantly decreased over the course of the project ($p < .01$, $\Delta = -.36$).

5A. Students' perceptions of Positive Self-Concept significantly increased over the course of the project ($p < .01$, $\Delta = .35$).

6A. Students' perceptions of Negative Peer Influence showed a nontrivial decrease over the course of the project, although this improvement was not statistically significant ($\Delta = -.19$).

7A. Students' perceptions of School Rewards decreased slightly over the course of the project, although this change was trivial and was not statistically significant ($\Delta = .08$). This was the one measure which showed a change in the opposite direction than predicted.

8A. Students' perceptions of School Effort increased over the project, although this improvement was not statistically significant ($\Delta = .10$).

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9A. Students' academic success, as measured by GPA showed a small but significant decrease over the course of the project ($p < .05$, $\Delta = -.08$). However, students' standardized test scores (Metropolitan Achievement Test) improved significantly over the course of the project ($p < .01$, $\Delta = .23$).

10A. Students' school misbehavior, as measured by Out of School Suspensions decreased significantly over the project ($p < .01$, $\Delta = -.33$), and In-School Suspensions showed a small decrease, although not significant ($\Delta = .04$).

11. Students' reports of Total Self-Report Delinquency ($p < .01$, $\Delta = -.30$), Self-Report Serious Delinquency ($p < .01$, $\Delta = .26$), and Self-Report Drug Use ($p < .01$, $\Delta = .31$), also, showed substantial and statistically significant reductions.

Overall, the data presented in the preceding analyses indicates that substantial improvements in the project school occurred over the course of the project on six of the eight attitudinal measures used and on five of the seven behavioral measures used.. Further, when project school changes are compared with control school changes, it is readily apparent that substantial deterioration of the school social organizational climate at the control school occurred during the project, while consistent improvements in the social organizational climate of the project school were observed. Thus, there is strong evidence to suggest that the Milwood Project affected the social organizational climate of the project school in positive ways.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Project Summary

Public and media concern with the problems being experienced in the public schools, as well as research on the relationship between various aspects of schooling and delinquency has a considerable history. Since the 1960s, public opinion polls, governmental bodies, as well as the popular press have expressed concerns regarding school problems such as poor discipline, vandalism, low achievement, and delinquency. Further, an extensive body of research appearing in a range of scientific journals has documented relationships between various aspects of schooling and delinquency. Factors such as socioeconomic status (Cohen, 1955; Toby, 1957; Gold, 1963; Short, 1964; Gold, 1970; Elliott, 1966), race (Palmore & Hammond, 1964; Wolfgang et al., 1972), academic achievement (Gold, 1963; Palmore & Hammond, 1964; Hirschi, 1969; Rhodes & Reiss, 1969; Gold, 1970; Kelly 1971; Kelly & Balch, 1971; Empey & Lubeck, 1971; Empey, et al., 1971; Polk & Richmond, 1972; Feldhusen, et al., 1973; Elliott & Voss, 1974; McPartland & McDill, 1977; Phillips & Kelly, 1979; Rankin, 1980; Wiatrowski et al., 1982), school tracking (Hargreaves, 1967; Schafer et al., 1970; Schafer & Olexa, 1971; Kelly, 1974; Kelly, 1975; Hartnagel & Tanner, 1982), school involvement, commitment and attachment

(Polk & Halferty, 1966; Hirschi, 1969; Kelly & Balch, 1971; Kelly & Pink, 1973; Hindelang, 1973; Hartnagel & Tanner, 1982), social organizational characteristics of schools (Schafer & Polk, 1967; Polk & Schafer, 1972; Boesel et al., 1978; Gottfredson & Daiger, 1979; Rutter et al., 1979), IQ (Hirschi & Hindelang, 1977; Wiatrowski et al., 1982; Ouston, 1984) and learning disabilities (Poremba, 1967; Sawicki & Schaeffer, 1979; Sikorski & McGee, 1986; Berman, 1975; Berman & Siegal, 1976; Comptroller General of the U.S., 1977; Swanstrom et al., 1981) have all been linked to various school problems and delinquent behavior.

As might be expected, however, there is not unanimity within the scientific literature concerning the relationship between some of the above school related factors and delinquency. For instance, a number of studies (Hirschi, 1969; Kelly & Balch, 1971; Rhodes & Reiss, 1969; Empey et al., 1971; Empey & Lubeck, 1971; Polk & Richmond, 1972; Kelly & Pink, 1973; McPartland & McDill, 1977; Hartnagel & Tanner, 1982) have indicated that there is no relationship or only a weak relationship between social class, schooling and delinquency. Also, a number of studies which have to some extent examined the relationship between race, other school related variables and delinquency have found that race is not as strongly related to delinquency as school factors (Hirschi, 1969; Jensen, 1976). Further, some researchers have found little relationship between IQ and delinquency or have seriously questioned the validity of IQ measures (Simons, 1978; Menard & Morse, 1984), and others have reported only a weak

relationship between learning disabilities and delinquency (Murray, 1976; Pasternack & Lyon, 1982). Importantly, however, this research has discounted the importance of social class, race, IQ and to some extent learning disabilities, while stressing the importance of school factors in the generation of delinquency. In total, the result is an extensive body of research documenting a relationship between various aspects of schooling and delinquency.

Compared with the wealth of research linking various aspects of schooling and delinquency, relatively little documentation of school-based delinquency prevention/reduction efforts exist. Further, of the existing evaluations of school-based delinquency prevention/reduction programs which do exist, many of these efforts focus on individual students as opposed to changing the ways the school social organization affects students. For example, research on school-based delinquency projects reported by Reckless and Dinitz (1972), Rose and Marshall (1974), Murray et al., (1980) and Gottfredson (1986) which subjected targeted students to individually focused interventions, or provided an alternative educational environment, did little to reduce delinquency. However, a study conducted by Berrueta-Clement et al., (1984) which examined an experimental program for preschool students involving small teacher-student ratios, weekly home visits and lasting from one to two years, indicated lower delinquency rates as these children got older, although this research has been criticized on methodological grounds (Gottfredson, 1988).

In contrast to the overall poor performance of school-based

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delinquency prevention programs which have targeted groups of individual students or operated alternative school programs, Grant and Capell (1983) and D. C. Gottfredson (1986) have reported positive evaluation results for programs which, in part, focused on the social organizational characteristics of schools. In each case, these programs used teams of school staff, students and teachers to develop various school improvement interventions including improving the curriculum, increasing teacher skills in classroom management, focusing on school discipline concerns, implementing peer tutoring and teacher home visits, and providing rewards for positive behaviors. In results reported by both Grant and Capell (1983) and D. C. Gottfredson (1986) significant decreases in school misbehavior and delinquency were noted. As Grant and Capell (1983) indicate, high school teams which target increased communication within the school, and between the school and the community, which involve youth and adults in problem solving, and which teach students knowledge and competencies which could facilitate students' success beyond school are associated with reports of reduced school disruption.

While the research reported by Grant and Capell (1983) and D. C. Gottfredson (1986) suggest the potential of school-based delinquency prevention/reduction programs which employ a social organizational focus, there is scant evaluation evidence regarding such programs. Consequently, there is a dire need for evaluation studies documenting the potential effectiveness of school-based programs which attempt to employ a social organization focus. It is to this

end that the preceding research has been directed; the evaluation of a social organization focused school-based delinquency reduction program which operated in a public junior high school from 1980 to 1983.

The Milwood Project, as this program was called, was a joint venture between university social scientists and school staff, and was intended to develop and implement a range of theoretically grounded and cooperatively developed interventions capable of solving the immediate problems of little attachment and commitment to school, a lack of student involvement in school, school misbehavior, low academic achievement and delinquency. Three theoretical frameworks served as guides to program (project) development, implementation and evaluation. The first of these theoretical frameworks, the role relationships perspective found in the work of Friday and Hage (1976), and Friday and Halsey (1977), was used to conceptualize a model school organization capable of meeting the needs of all students, staff and parents. According to the role relationships perspective, historical-structural changes within society have affected the primary socializing institutions of family, community, school, work, peers, and other salient institutions for the individual in ways which increase the isolation of each of these socializing institutions from the other, thus decreasing the social orders ability to integrate youth into positive roles.

Second, a critical perspective was employed to gain a clearer understanding of how schools might be organized and operate to produce school problems and delinquency. Based on this perspective, schools

were viewed as frequently being designed to meet the needs of some students, staff and parents while systematically excluding others from full participation in the potential rewards of schooling. At the school system level the system was viewed as experiencing considerable internal conflict as well as conflict with the community it relied on for financial support. At the school level, there was also internal conflict as well as conflict with the school system's central administration and the community. The result was a cycle of retrenchment which, in turn, led to further problems at the school system and building level. Further, staff morale was low, many students lacked attachment, commitment and involvement in schooling; school misbehavior and academic failure were serious problems, and the school lacked the organization and direction to attack these problems.

Third, a modified version for the Program Development and Evaluation (PDE) model served as a guide to the continued development, implementation and evaluation of the school change process. As used, the PDE model was a process by which researchers and school staff worked cooperatively to identify problems, elaborated theories regarding why those problems existed, specified measurable goals and objectives, developed theory-ridden interventions to overcome problems; identified obstacles to intervention implementation and resources to aid implementation, and evaluated program process and outcomes.

While the original program proposal contained no interventions which targeted groups of students or individuals for interventions, a financial crisis in the school system just prior to project implementation resulted in the closing of some schools, a reorganization of

junior high and high schools, the lay-off of staff and the elimination of positions and programs. These changes within the schools resulted in the loss of key staff who were intended to perform critical project functions--including the building principal who had worked on program development--as well as key programs such as the community schools program which was intended to provide after school recreational and educational programs for youth and adults. Consequently, a considerable amount of additional program development was necessary during the first year to involve new staff in the PDE process and to develop new interventions to replace those which were lost. As a result of these changes within the schools, as well as the democratic process employed in the PDE model, a range of interventions were developed which included both individual and social organization focused interventions.

Interventions were designed to improve five areas of school social organization. These were: (1) student involvement, (2) parent and community involvement, (3) use of community resources and staff support, (4) school discipline and the creation of an orderly climate for learning, and (5) achievement. Within each of these areas a range of interventions were developed which were intended to carry out the project's theoretical mission of changing the school's social organizational climate in ways which improved students' bonds to school, reduced the salience of negative peers, created an orderly environment for learning, developed community support for the school, increased academic achievement, and reduced delinquency.

Conclusions

As Schien (1987) notes, the ultimate test of this type of evaluation, what Schien calls the "clinical perspective," is the ability to predict the results of a given intervention. Consequently a number of hypotheses were developed which predicted, based on the project's underlying theoretical perspectives, how various social organizational characteristics of the school were related to delinquency, and how these characteristics of the school would improve over the course of the project. Importantly, the majority of these predictions were confirmed.

The data analysis presented in Chapter V revealed that nine of the ten hypotheses (predictions) regarding theoretically derived social organizational characteristics of the school and their relationship to self-report delinquency were confirmed, although two of these relationships were weak and one was weakly related to Total Self-Report Delinquency, but more strongly related to Self-Report Drug Use. More specifically, students' perceptions of School Attachment, Involvement, Positive Self-Concept, School Rewards, School Effort, and Academic Success as measured by GPA were inversely related to Total Self-Report Delinquency. Also, as hypothesized, students' perceptions of Alienation from School, Rebellious Autonomy, and Negative Peer Influence were directly related to delinquency. The only relationship which was not confirmed predicted that School Misbehavior as measured by the number of suspensions is directly

related to Self-Report Delinquency. The analysis indicated a moderate and inverse relationship between this measure (not an SAES measure) and Total Self-Report Delinquency which is not easily explained and raised some questions regarding the validity of this measure. Further, these relationships, as well as the extensive research done on the validity of the SAES measures (Gottfredson, 1984b) used in this research, provide support for the construct validity of these measures.

As previously indicated, the ultimate aim of this type of social action project is to be able to predict improvements in specific areas of school social organization. Again, a number of hypotheses were developed predicting specific changes, and again, with one exception these predictions were supported. Students' reports of Attachment to School, Positive Self-Concept and Standardized Achievement Test scores significantly improved while students' reports of Involvement in School and School Effort showed nontrivial but not statistically significant improvements. Further, students' reports of Alienation from School, Rebellious Autonomy, Out-of-School Suspensions, Total Self-Report Delinquency, Self-Report Serious Delinquency and Self-Report Drug Use decreased significantly, while Negative Peer Influence showed a nontrivial, but not a statistically significant decrease and In-School Suspensions showed a very slight decrease. Only two measures, students' perceptions of School Rewards and GPA, showed declines. Students' perceptions of School Rewards showed a trivial and nonsignificant decrease, while students' GPAs showed a statistically significant but slight decline.

These positive improvements are particularly evident when a comparison with the control is made. During the baseline (first) year of the project, the project school displayed a less healthy social organizational climate, as indicated by the evaluation measures, than the control school and this was true for each of the evaluation measures. However, by the end of the project two years later, the project school displayed a healthier social organizational climate than the control school as indicated by all but one of the evaluation measures--School Rewards. These results present rather clear evidence that both over time and relative to the control school, the Milwood Project produced strikingly consistent and positive results.

An important question and one which must always be asked in evaluation research is could these improvements have occurred by chance, rather than as a result of project activities? The answer to this question is always yes, regardless of the research design. A stronger research design, had it been feasible could have provided some additional assurances that the results reported here were the outcomes of project interventions. Under the circumstances which led to the project, and under which the project operated, the strongest feasible design, although not ideal, was implemented. Despite these shortcomings, however, the consistent findings produced at the project school relative to those at the control school present a logical case for concluding that the project, rather than chance, produced the above positive results.

Another issue which deserves some attention is to describe those aspects of the program which most likely accounted for the positive results being attributed to the program. In Chapter III, a description of the various project interventions was presented and in Chapter V a description of project implementation was provided. However, additional discussion of project interventions are warranted if a more detailed understanding of project operations and a clearer picture of those project activities which are likely to have produced these outcomes is to be gained.

In Chapter V it was indicated that the interventions described in Chapter III were, for the most part, implemented with a high degree of integrity. In other words, those responsible for carrying out activities within the areas of student involvement, parent and community involvement, use of community resources and staff support, school discipline, and the creation of an orderly climate for learning and achievement, engaged in regular quality activities in each of these areas from the time of their implementation until the end of the project (some of these interventions are still continuing). Although independent evaluations have indicated that selected interventions which targeted specific groups of students such as the Skills Lab (Cook, 1983), Student Council (Cook, 1983), and the Milwood Alternative Program (Cook, 1983; Gottfredson & Cook, 1985) failed to produce positive outcomes, it appears as though these interventions may have helped produce a positive climate within the school even though these interventions did not help targeted students (Gottfredson & Cook,

1985). Moreover, evaluations of other program interventions such as the Home-School Liaison (Cook, 1983), and the In-School Suspension Center (Gottfredson & Cook, 1985) produced positive results.

Overall, it appears as if the cumulative affect of the range of interventions which were implemented changed the social organizational climate of the school in positive ways. Unfortunately, however, evaluation of project interventions by the national evaluation staff have focused more on individually targeted interventions with less attention given to those interventions targeted at the school social organizational level which require the analysis of more qualitative data--data which are not easily gathered by external evaluators.

In providing a more qualitative analysis of those interventions directed at the social organizational level of the school, Elrod and Friday (1986) and Friday and Elrod (1987) have indicated that the key to understanding project effects is in the examination of the process of program development, implementation and evaluation. Consequently, it is this process which should be seen as a critical project intervention. Within the school, the use of a democratic program development process required the participation of teachers, administrators, parents and students, and resulted in a sense of ownership in the school improvement process. As a result, the project became a collective expression of those whom ultimately the project would affect and was tailored to the specific problems being experienced by the project school.

Another critical feature of the program development process employed by the project managers was the feedback of evaluation results. This feedback of evaluation results consisted of both information provided by the national evaluation staff as well as the project's management staff. This feedback of information on a regular basis to school staff and involved parents allowed school staff to develop a more objective view of the school as an organization. School and project staff could see how students viewed various aspects of the school's social organization and, based upon such observations, could develop both collective and individual efforts to improve those areas which staff felt needed improvement. By being involved in the development of the project, by receiving feedback regarding the results of their efforts, school and project staff were empowered to respond to their environment in ways not previously envisioned (Elrod & Friday, 1986).

The ability to regularly develop responses to the project school's problems was, itself, the result of other critical interventions. These interventions consisted of the support of a politically powerful coalition of sponsors consisting of Western Michigan University and the Kalamazoo Criminal Justice Commission and which served as an important support when the project encountered school system opposition to project plans. Also, project staff worked diligently to develop a political constituency within the community which supported the project school's improvement efforts. This constituency was comprised of educators, School Board members, parents of project school students,

juvenile justice professionals, and other concerned and supportive citizens and was aided by the production of a considerable amount of positive media coverage of the project (Friday & Elrod, 1987).

Without the support of the Criminal Justice Commission and an outside supportive constituency, it is doubtful that the project school could have developed the autonomy necessary to creatively respond to its problems. Through the application of external pressure on the school system and the school, coupled with internal pressures to respond creatively to the school's problems, the project school developed a degree of autonomy which allowed for a more flexible response to school problems and to some degree made it possible for the school to overcome an organizational environment characterized by bureaucratic rigidity (Elrod & Friday, 1986).

The preceding has been an attempt to describe the evaluation results of a social organization focused school-based delinquency reduction project and to describe those interventions which were most likely to have accounted for project outcomes. The quantitative data analysis presented in this research presents clear evidence that the project produced consistent positive improvements in the school's social organizational climate and reduced delinquency among the school's population. In addition, the qualitative data analysis provided in this chapter, as well as additional research reported by Grant and Capell (1983) and D. C. Gottfredson (1986), suggest the potential of collectively oriented school change projects in improving the social organizational climate of schools and reducing delinquency.

Therefore, it appears that the process of school change is a critical intervention which may be as important as the programmatic interventions which are the typical focus of program evaluation. Consequently, it is suggested that future research of this type employ a strong process and ethnographic oriented evaluation model in addition to a strong quantitative evaluation approach.

There is a developing body of research supporting the efficacy of social organizational focused school improvement programs (Grant & Capell, 1983; D. C. Gottfredson, 1986; Gottfredson, 1988) and that school improvement is feasible regardless of the background characteristics of students (Rutter et al., 1979). The preceding provides additional support for such efforts and suggests some additional factors to be considered in successfully evaluating future school-based programs. A commitment to a sound process of program development and evaluation can go a long way in attacking fundamental problems confronting school staff, youth and parents. However, the ability to carry out such efforts depends on the willingness of funding sources and school systems to support change--a process which, unfortunately, receives more lip service than material support, but promises many rewards.

APPENDICES

Appendix A

Item Content and Scoring of the Milwood Project Evaluation Measures

Note: Item Content and Scoring Adopted from Gottfredson (1984).

ATTACHMENT TO SCHOOL

1. How important is each of the following to you?

	<u>Very Important</u>	<u>Fairly Important</u>	<u>Not Important</u>
(1) What teachers think about you.	1	0	0
(2) The grade you get in school.	1	0	0

2. How do you feel about the following?

	<u>Don't Like</u>	<u>Like</u>
(1) This school.	0	1
(2) The principal.	0	1
(3) The classes you are taking.	0	1
(4) The teachers.	0	1
(5) The counselors.	0	1
(6) I have lots of respect for my teachers. Agree = 1 Disagree = 0		
(7) This school makes me like to learn. Agree = 1 Disagree = 0		
(8) In classes I am learning the things I need to know. True = 1 False = 0		

INVOLVEMENT

3. Which of the following things have you spent time on this school term?

	<u>Yes</u>	<u>No</u>
(1) Varsity or junior varsity athletic teams.	1	0
(2) Other athletic teams - in or out of school.	1	0
(3) Cheerleaders, pep club, majorettes.	1	0
(4) Debating or drama.	1	0

3. Which of the following things have you spent time on this school term? (Continued)

	<u>Yes</u>	<u>No</u>
(5) Band or orchestra.	1	0
(6) Chorus or dance.	1	0
(7) School clubs.	1	0
(8) School newspaper, magazine, yearbook, annual.	1	0
(9) Student council, student government, political club.	1	0
(10) Youth organizations in the community, such as Scouts, Y, etc.	1	0
(11) Church activities, including youth groups.	1	0
(12) Helping out at school as a library assistant, office helper, etc.	1	0

ALIENATION

4. Teachers here care about the students.
Agree = 0 Disagree = 1
5. I feel like I belong in this school.
Agree = 0 Disagree = 1
6. Life in this town is pretty confusing.
True = 1 False = 0
7. I feel no one really cares much about what happens to me.
True = 1 False = 0
8. I often feel awkward and out of place.
True = 1 False = 0
9. These days I get the feeling that I'm just not part of things.
True = 1 False = 0

REBELLIOUS AUTONOMY

	<u>True</u>	<u>False</u>
10. I don't like anybody telling me what to do.	1	0
11. Whether or not I spend time on homework is my own business.	1	0
12. I should not have to explain to anyone how I spend my money.	1	0

POSITIVE SELF CONCEPT

13. How satisfied are you with the way you are doing in school?

- 1 = Very satisfied
 1 = Somewhat satisfied
 0 = Somewhat dissatisfied
 0 = Very dissatisfied

14. How do most other students in your school see you?

	<u>Very</u>	<u>Somewhat</u>	<u>Not at All</u>
(1) A good student?	1	0	0
(2) A trouble maker?	0	0	1
(3) Successful?	1	0	0
(4) A loser?	0	0	1

15. I am the kind of person who will always be able to make it if I try.

True = 1 False = 0

16. My teachers think that I am a slow learner

True = 0 False = 1

17. I do not mind stealing from someone--that is just the kind of person I am.

True = 0 False = 1

18. I am not the kind of person you would expect to get in trouble with the law.

True = 1 False = 0

19. Sometimes I think I am no good at all.

True = 0 False = 1

20. I feel I do not have much to be proud of.

True = 0 False = 1

21. I like myself.

True = 1 False = 0

NEGATIVE PEER INFLUENCE

22. Most of my friends think getting good grades is important.

True = 0 False = 1

23. Most of my friends think school is a pain.

True = 1 False = 0

NEGATIVE PEER INFLUENCE (Continued)

24. My friends often try to get me to do things the teacher doesn't like.

True = 1 False = 0

25. Please think of your best friend in this school. As far as you know, are the following statements true or false about him or her?

	<u>True</u>	<u>False</u>
(1) Is interested in school.	0	1
(2) Attends classes regularly.	0	1
(3) Plans to go to college.	0	1
(4) Belongs to a gang.	1	0
(5) Gets in trouble with the police.	1	0

SCHOOL REWARDS

26. Teachers say nice things about my classwork.

1 = Often

0 = Sometimes

0 = Hardly ever

27. Did you ever get to do something special as a reward?

Yes = 1

No = 0

28. Did you win an award or a prize because of your work in school?

Yes = 1

No = 0

29. Did you help with an award or a prize for your group of class because of your work in school?

Yes = 1

No = 0

SCHOOL EFFORT

30. Compared to other students, how hard do you work in school?

1 = Much harder

1 = Harder

0 = Less hard

0 = Much less hard

31. How true about you are the following statements?

	<u>Nearly Always True</u>	<u>Sometimes</u>	<u>Nearly Always False</u>
(1) I turn in my homework on time.	1	0	0
(2) My schoolwork is messy.	0	0	1
(3) I don't bother with homework or class assignments.	0	0	1
(4) If a teacher gives a lot of homework, I try to finish all of it.	1	0	0

SELF REPORT DELINQUENCY (TOTAL)

32. In the <u>last year</u> have you. . .	<u>No</u>	<u>Yes</u>
(1) purposely damaged or destroyed property belonging to a school?	0	1
(2) purposely damaged or destroyed <u>other property</u> that did not belong to you, not counting family or school property?	0	1
(3) stolen or tried to steal something worth more than \$50?	0	1
(4) carried a hidden weapon other than a plain pocket knife?	0	1
(5) been involved in gang fights?	0	1
(6) sold marijuana or other drugs?	0	1
(7) hit or threatened to hit a <u>teacher</u> or other adult at school?	0	1
(8) hit or threatened to hit other <u>students</u> ?	0	1
(9) taken a car for a ride (or drive) without the owner's permission?	0	1

SELF REPORT DELINQUENCY (TOTAL)--Continued

32. In the <u>last year</u> have you. . .	<u>No</u>	<u>Yes</u>
(10) used force or strong-arm methods to get money or things from a person?	0	1
(11) stolen or tried to steal things worth less than \$50?	0	1
(12) stolen or tried to steal something at school, such as someone's coat from a locker, classroom, or cafeteria, or a book from the library?	0	1
(13) broken or tried to break into a building or car to steal something or just to look around?	0	1
(14) smoked cigarettes?	0	1
(15) drank beer, wine or hard liquor?	0	1
(16) smoked marijuana (grass, pot, ganja)?	0	1
(17) taken some other drugs?	0	1
(18) gone to school when you were drunk or high on some drugs?	0	1
(19) sniffed glue, paint, or other spray?	0	1

SELF REPORT SERIOUS DELINQUENCY (SUBSCALE)

32. In the <u>last year</u> have you. . .	<u>No</u>	<u>Yes</u>
(1) purposely damaged or destroyed property belonging to a school?	0	1
(2) purposely damaged or destroyed <u>other property</u> that did not belong to you, not counting family or school property?	0	1
(3) stolen or tried to steal something worth more than \$50?	0	1
(4) carried a hidden weapon other than a plain pocket knife?	0	1

SELF REPORT SERIOUS DELINQUENCY (SUBSCALE)--Continued

32. In the <u>last year</u> have you. . .	<u>No</u>	<u>Yes</u>
(5) been involved in gang fights?	0	1
(7) hit or threatened to hit a <u>teacher</u> or other adult at school?	0	1
(9) taken a car for a ride (or drive) without the owner's permission?	0	1
(10) used force or strong-arm methods to get money or things from a person?	0	1
(11) stolen or tried to steal things worth less than \$50?	0	1
(12) stolen or tried to steal something at school, such as someone's coat from a locker, classroom, or cafeteria, or a book from the library?	0	1
(13) broken or tried to break into a building or car to steal something or just to look around?	0	1

SELF-REPORT DRUG USE (SUBSCALE)

32. In the <u>last year</u> have you. . .	<u>No</u>	<u>Yes</u>
(14) smoked cigarettes?	0	1
(15) drank beer, wine or hard liquor?	0	1
(16) smoked marijuana (grass, pot, ganja)?	0	1
(17) taken some other drugs?	0	1
(18) gone to school when you were drunk or high on some drugs?	0	1

Appendix B

Kendal Tau Correlation Matrix of Evaluation Measures

Appendix B
Kendal Tau Correlation Matrix of Evaluation Measures

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Attachment to School	1.00	.33*	-.51*	-.23*	.46*	-.44*	.32*	.44*	.29*	.14+	-.41*	-.40*	-.29*
2. Involvement in School		1.00	-.20+	-.14+	.40*	-.25*	.36*	.17+	.20+	.06	-.06	-.09	-.06
3. Alienation from School			1.00	.23*	-.53*	.33*	-.17+	-.33*	-.19+	-.23*	.31*	.28*	.24*
4. Rebellious Autonomy				1.00	-.09	.22+	-.15+	-.05	.05	-.14+	.20+	.10	.24*
5. Positive Self-Concept					1.00	-.41*	.43*	.48*	.40*	.22+	-.33*	-.27*	-.27*
6. Negative Peer Influence						1.00	-.17+	-.41*	-.32*	-.23*	.53*	.50*	.37*
7. School Rewards							1.00	.21+	.17+	-.08	-.09	-.09	-.10
8. School Effort								1.00	.50*	.24*	-.42*	-.40*	-.28*
9. GPA									1.00	.37*	-.22*	-.21*	-.17+
10. Suspensions										1.00	-.27*	-.27*	-.18+
11. Total SRD											1.00	.84*	.87*
12. SR Serious Delinquency												1.00	.60*
13. SE Drug Use													1.00

*Significance level equal to or less than .001

+Significance level equal to or less than .05

Appendix C

The Human Subjects Institutional Board Request Letter and Approval Letter

(81-05-12, 80-06 05)



Western Michigan University
Kalamazoo, Michigan 49008

Department of Sociology

March 14, 1983

Dr. Shirlev Bach
Human Subjects Review Board
Western Michigan University

Dear Dr. Bach:

As per our phone conversation this morning, enclosed is a copy of the transfer of data agreement prepared by Johns Hopkins University. The agreement specifically outlines the data protection procedures we are to follow, including the added protection of changing all I.D. numbers once the files are merged.

The data we expect to get include attitudinal and behavioral scores generated by Johns Hopkins for each student and teacher on school climate. These include measures of self-concept, alienation, involvement in school activities, MAT scores, attachment to school, self-reported delinquency and drug experimentation, rebelliousness, sense of safety, victimization, belief in school rules, rewards in school, grades and educational goals.

We plan to use these data to supplement our current records on attendance, suspension, disciplinary referrals, etc.

I should like to emphasize that our ultimate goal is to generate indices of school climate change and not make any individual comparisons.

I hope that the HSRB can agree to this transfer agreement.

Thank you for your willingness to give this a speedy review.

Sincerely,

Paul C. Friday,
Professor of Sociology
Director of Criminal Justice

PCF:er
enclosure

*Approved at IRB meeting 4/13/83
with prior approval given
verbally on 3/31/83*



Western Michigan University
Kalamazoo, Michigan 49008

June 3, 1981

*Human Subjects
Institutional Review Board*

Mr. Preston Elrod
Milwood Alternative Education Project
Department of Sociology
Western Michigan University

Re: Delinquency Prevention Through Alternative Education 81-05-12 R

Dear Mr. Elrod:

At the meeting of the Human Subjects Institutional Review Board on May 13, 1981, the above proposal was approved, subject to your obtaining permission from Judge Casey and the respective police chiefs for the release of identifiable arrest and court records for the students in your study, and with the understanding that data will be collected and stored in the manner we agreed upon at that meeting. I am asking Usha Helweg to send you a copy of those minutes.

Please inform the Board of any significant changes in your protocol and please send me a copy of the permission letters from the Judge and police chiefs.

I hope that your study goes well.

Sincerely,

A handwritten signature in cursive script that reads "Shirley Bach".

Shirley Bach
Chair, Human Subjects Institutional Review Board

cc: Dr. Paul Friday
Dr. Stanley Robin
Ms. Usha Helweg

BIBLIOGRAPHY

- Ahlstrom, W., & Havinghurst, R. (1971). Four hundred losers: Delinquent boys in high school. San Francisco, CA: Jossey-Bass, Incorporated.
- Alexander, J. F. (1973). Defensive and supportive communications in normal and deviant families. Journal of Consulting and Clinical Psychology, 40, 223-231.
- Angus, L. B. (1985). Human action and social structure in the study of schools as organizations. Paper presented at the Annual Meeting of the American Research Association, Chicago.
- Bachara, G. H., & Zaba, J. N. (1978). Learning disabilities and juvenile delinquency. Journal of Learning Disabilities, 11, (4), 58-62.
- Bachman, J. G., Green, S., & Wirtaner, I. D. (1971). Youth in transition (Vol. 3): Dropping out-problem or symptom. Ann Arbor, MI: Institute of Social Research.
- Bachman, J. G., Kahn, R. L., Mednick, M. T., Davidson, T. N., & Johnson L. D. (1972). Youth in transition, Volume 1: Blueprint for a longitudinal study of adolescent boys. Ann Arbor: Institute for Social Research.
- Bayh, B. (1977). Challenge for the third century: Education in a safe environment - Final report on the nature and prevention of school violence and vandalism. Washington, D.C.: U. S. Government Printing Office.
- Becker, H. (1963). Outsiders. New York: Free Press.
- Bell, D. (1973). The coming of post-industrial society: A venture in social forecasting. New York: Basic Books.
- Berman, A. (1975, January). Incidence of learning disabilities in juvenile delinquents and nondelinquents: Implications or etiology and treatment. Paper presented at the International Education of Learning Disabilities, Brussels, Belgium.
- Berman, A., & Siegal, A. W. (1976). Adaptive and learning skills in juvenile delinquents: A neuropsychosocial analysis. Journal of Learning Disabilities, 9(9), 583-90.

- Berrueta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein, A. S., & Weikart, D. P. (1984). Changed lives: The effects of the Perry Preschool Program on youths through age 19. Ypsilanti, MI: High/Scope Press.
- Berry, J., & Polk, K. (1971). Control theory and youth deviance--a longitudinal analysis change in behavior. Presented at the Annual Meetings of the Pacific Sociological Association, Honolulu.
- Blanton, J., & Alley, S. (1975). Program development: A manual for organizational self-study. Nicasio, CA: Social Action Research Center.
- Bloom, B. (1974). An introduction to mastery learning. In J. H. Block (Ed.), Schools, society, and mastery learning. New York: Holt.
- Boesel, D., Crain, R., Dunteman, G., Ianni, F., Martinolich, M., Moles, O., Spivak, H., Stalford, C. & Wayne, E. (1978). Violent schools - safe schools: The safe schools study report to the Congress, Vol. 1., Washington, D.C.: U. S. Department of Health, Education and Welfare.
- Bordieu, P., & Passeron, J. (1977). Reproduction in education, society, and culture. London: Sage.
- Bortner, M. A. (1988). Delinquency and justice: An age of crisis. New York: McGraw-Hill
- Bowlby, J. H. (1969). Attachment and loss. Vol. 1. New York: Basic Books.
- Bowles, S. (1971). Unequal education and the reproduction of the social division of labor. In M. Carnoy (Ed.), Schooling in a corporate society: The political economy of education in America (pp. 36-64). New York: David McKay Company, Incorporated.
- Bowles, S., & Gintis, H. (1976). Schooling in capitalist America. New York: Basic Books, Incorporated.
- Bronfenbrenner, U. (1975). Nature with nurture: A reinterpretation of the evidence. In A. Montague (Ed.), Race and IQ. New York: Oxford University Press.
- Burt, C. L. (1925). The young delinquent. New York: Appleton Co.

- Calhoun, G., & Elliott, R. (1977). Self-concept and academic achievement of educable retarded and emotionally disturbed pupils. Exceptional Children, 44, 379-380.
- Campbell, D. T. & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Chicago, Ill: Rand McNally. L
- Carlton, F. T. (1911). History and problems of organized labor. Boston: D. C. Heath.
- Carlton, F. T. (1965). Economic influences upon educational progress in the United States, 1820-1850. New York: Teachers College Press.
- Carnoy, M. (1972). Schooling in corporate society: The political economy of education in America. New York: David McKay Co., Incorporated.
- Cartwright, D. C., Howard, K. I., & Reuterman, N. A. (1970). Multivariate analysis of gang delinquency. Multivariate Behavioral Research, 5, 303-323.
- Cernkovich, S. A., & Giordono, P. C. (1987). Family relationships and delinquency. Criminology, 25(2), 295-321.
- Chambliss, W. J., & Seidman, R. (1971). Law, order and power. Reading, MA: Addison-Wesley.
- Chilton, R. J., & Markle, G. E. (1972). Family disruption and delinquent conduct: Multiple measures and effect of sub-classification. American Sociological Review, 37, 93-99.
- Chubb, J. E. and Moe, T. M. (1985). Politics, markets and the organization of schools. Paper presented at the American Political Science Association. New Orleans, LA.
- Cicourel, A. V. (1968). The social organization of juvenile justice. New York: Wiley.
- Clifford, W. (1976). Crime control in Japan. Lexington, Mass: Lexington Books. NA
- Clinard, M. B., & Abbott, D. J. (1973). Crime in developing countries. New York: John Wiley.
- Cloward, R. A., & Ohlin, L. E. (1960). Delinquency and opportunity: A theory of delinquent gangs. New York: Macmillan.

- Cohen, A. K. (1955). Delinquent boys: The culture of the gang. New York: Macmillan.
- Coleman, J. (1961). Adolescent Society. New York: Free Press.
- Coleman, J. S., Campbell, E. Q., Hobson, C. J., McPartland, J., Wood, A. M., Weinfield, F. D., & York, R. L. (1966). Equality of educational opportunity. Washington, D.C.: U. S. Government Printing Office.
- Collier, J. (1945) United States Indians Administration as a laboratory of ethnic relations. Social Research, 12, 275-276.
- Comptroller General of the U. S. (1977). Learning disabilities: The link to delinquency should be determined, but schools should do more now. Washington, D.C.: General Accounting Office.
- Cook, M.S. (1983). The Milwood alternative project: Second interim report. In G. D. Gottfredson and M. S. Cook (Eds.), The School Action Effectiveness Study: Second Interim Report, Report No. 342 (pp. 227-265). Baltimore, MD: The Johns Hopkins University, The Center for Social Organization of Schools.
- Crawford, D. (1982). The ACLD - R & D Project: A study investigating the link between learning disabilities and juvenile delinquency: Executive summary. The Educational Resources Information Center, ED256144.
- Currie, E. (1985). Confronting crime. New York: Pantheon Books.
- Doll, E. A. (1921). Education of juvenile delinquents. Journal of Juvenile Research, 6, 331-346.
- Edwards, R. C., Reich, M., & Weisskopf, T. (1978). The capitalist system. Englewood Cliffs, N.J.: Prentice-Hall.
- Elliott, D. S. (1966). Delinquency, school attendance and dropouts. Social Problems, 13, (Winter), 307-314.
- Elliott, D. S., & Ageton, S. S. (1980). Reconciling race and class differences in self-reported and official estimates of delinquency. American Sociological Review, 45, 95-110.
- Elliott, D. S., & Huizinga, D. (1983). Social class and delinquency behaviors in a national youth panel. Criminology, 21(2), 149-177.

- Elliott, D. S., & Voss, H. L. (1974). Delinquency and dropout. Lexington, MA: Lexington Books, Heath and Company.
- Elrod, H. P., & Friday, P. C. (1986). Delinquency reduction through school organizational change: Some thoughts on the relationship between theory, process and outcomes. Paper presented at the American Society of Criminology Annual Meetings. Atlanta, GA, October.
- Empey, L. T. (1982). American delinquency: Its meaning and construction. Homewood, Ill: The Dorsey Press.
IL
- Empey, L. T., & Lubeck, S. G. (1971). The Silverlake Experiment: Testing delinquency theory and community intervention. Chicago: Aldine Publishing Company.
- Empey, L. T., Lubeck, S. G., & LaPorte, R. L. (1971). Explaining delinquency: Construction, test and reformulation of a sociological theory. Lexington, Mass: Heath Lexington Books.
MA
- Emrich, R. L. (1978). The safe school study report to the Congress: Evaluation and recommendations: A summary of testimony to the House Education and Labor Subcommittee on economic opportunity. Crime and Delinquency, July.
- Erickson, M., & Jensen, G. F. (1977). Delinquency is still a group behavior: Toward revitalizing the group premise in the sociology of deviance. Journal of Criminal Law and Criminology, 68, 262-273.
- Ewen, S. (1976). Captains of consciousness: Advertising and the social roots of consumer culture. New York: McGraw-Hill.
- Farrington, D. P., Gundry, G., & West, D. J. (1975). The familial transmission of criminality. Medicine, Science and The Law, 15, 117-186.
- Feldhusen, J. F., Thurston, J. R., & Benning, J. J. (1973). A longitudinal study of delinquency and other aspects of children's behaviour. International Journal of Criminology and Penology, 1, 341-351.
- Fendrick, P., & Bond, G. (1936). Delinquency and reading. The Pedagogical Seminary and Journal of Genetic Psychology, 48, 236-243.
- Filipczak, J., & Wodarski, J. S. (1979). Behavioral intervention in public schools: Implementing and evaluating a model. Corrective and Social Psychiatry, 25(2), 104-113.

- Flesch, R. (1951). How to test readability. New York: Harper.
- Frease, D. E. (1973). Schools and delinquency: Some intervening processes. Pacific Sociological Review, 16, 426-448.
- French, W. L., & Bell, C. H. (1978). Organizational development: Behavioral science interventions for organization improvement, (2nd Edition). Englewood Cliffs, N.J.: Prentice-Hall.
- Friday, P. C. (1974). Research on youth crime in Sweden: Some problems in methodology. Scandinavian Studies, 46, 20-30.
- Friday, P. C. (1980). International review of youth, crime and delinquency. In G. Newman (Ed.), Deviance and crime: A comparative perspective (pp. 100-129). Beverly Hills, CA: Sage.
- Friday, P. C. (1983). Delinquency prevention and social policy. In A. Morris and H. Giller (Eds.), Providing criminal justice for children (pp. 36-51). London: Edward Arnold.
- Friday, P. C., & Elrod, H. P. (1980). Delinquency prevention through alternative education: The Milwood Project. Kalamazoo, Michigan: Western Michigan University.
- Friday, P. C., & Elrod, H. P. (1983). Delinquency prevention through alternative education, The Milwood Project: Presentation to the Kalamazoo Board of Education. Kalamazoo, MI: Center for Social Research, Western Michigan University.
- Friday, P. C., & Elrod, H. P. (1987). Schools and delinquency: Strategies and conflicts in implementing delinquency prevention through organizational restructuring. Paper presented at the Annual Meetings of the American Society of Criminology, Montreal, Canada.
- Friday, P. C., & Hage, J. (1976). Youth crime in postindustrial societies: An integrated perspective. Criminology, 14(3), 347-368.
- Friday, P. C., & Halsey, J. (1977). Patterns of social relationships and youth crime: Social integration and prevention. In P. C. Friday and V. L. Stewart (Eds.), Youth crime and juvenile justice (pp. 142-151). New York: Praeger.
- Gallup, A. M. (1986). The 18th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools. Pi Delta Kappan, 68, (pp. 43-59).

- Gallup, A. M. & Clark, D. L. (1987). The 19th Annual Gallup Poll of the Public's Attitudes Toward the Public Schools. Pi Delta Kappan, 69, (pp. 17-30).
- Giroux, H. (1981). Ideology, culture and the process of schooling. London: Falmer Press.
- Glaser, D. (1972). Adult crime and social policy. Englewood Cliffs, N.J.: Prentice Hall.
- Glass, G. J. (1976). Primary, secondary and meta-analysis of research. Educational Researcher, 5, 3-8.
- Glueck, S., & Glueck, E. (1940). Juvenile delinquents grown up. New York: Kraus.
- Glueck, S., & Glueck, E. (1950). Unraveling juvenile delinquency. New York: Commonwealth Fund.
- Gold, M. (1963). Status forces in delinquency boys. Ann Arbor: University of Michigan.
- Gold, M. (1970). Delinquent behavior in an American city. Belmont, CA: Brooks/Cole.
- Gold, M. (1978). Scholastic experiences, self-esteem, and delinquent behavior: A theory for alternative schools. Crime and Delinquency, 24, 3, 290-308.
- Gold, M., & Mann, D. W. (1984). Expelled to a friendlier place: A study of effective alternative schools. Ann Arbor: University of Michigan Press.
- Goodenough, F. (1954). The measurement of mental growth in childhood. In L. Carmichael (Ed.), Manual of child psychology (pp. 459-481). New York: John Wiley.
- Gorden, R. (1977). Unidimensional scaling of social variables: Concepts and procedures. New York, NY: The Free Press.
- Gottfredson, D. C. (1986). An empirical test of school-based environmental and individual interventions to reduce the risk of delinquent behaviors. Criminology, 24(4), 705-731.
- Gottfredson, D. C. & Cook, M. S. (1985). A test of a school-based program to reduce delinquency by increasing social integration: The Milwood alternative education project, Evaluation Report. Baltimore, MD: The Johns Hopkins University, The Center for Social Organization of Schools.

- Gottfredson, G. D. (1982a). Program development evaluation. In G. D. Gottfredson, Gottfredson, D.C., Cook, M.S., Ogawa, D. K., Rickert, D. E., School action effectiveness study: First interim report (pp. 48-70). Baltimore, MD. The Johns Hopkins University, The Center for Social Organization of Schools.
- Gottfredson, G. D. (1984a). A theory ridden approach to program evaluation. American Psychologist, 39, 1101-1112.
- Gottfredson, G. D. (1984b). The effective school battery: Users manual. Odessa, FL: Psychological Assessment Resources, Incorporated.
- Gottfredson, G. D. (1986). Compton action alternative school: Final report. Unpublished Manuscript, The Johns Hopkins University, The Center for Social Organization of Schools.
- Gottfredson, G. D. (1988). American education - American delinquency (Report No. 23). Baltimore, MD: The Johns Hopkins University, The Center for Research on Elementary and Middle Schools.
- Gottfredson, G. D., & Daiger, D. (1979). Disruption in six hundred schools (Report No. 289). Baltimore, MD: The Johns Hopkins University, The Center for Social Organization of Schools.
- Gottfredson, G. D., Gottfredson, D.C., Cook, M.S., Ogawa, D. K., & Rickert, D. E. (1982b). School action effectiveness study. Baltimore, MD: The Johns Hopkins University, Center for the Social Organization of Schools.
- Gottfredson, G. D., Ogawa, D. K., Rickert, Jr. D. E., & Gottfredson, D. C. (1982a). Teachers and students in context: The measures used in the School Action Effectiveness Study. In G. D. Gottfredson (Ed.) The school action effectiveness study: First interim report (Report No. 325) (pp. 75-123). Baltimore, MD: The Johns Hopkins University, The Center for Social Organization of Schools.
- Gottfredson, G. D., Gottfredson, D. C., & Cook, M. S. (1983). The School action effectiveness study: Second interim report. The Johns Hopkins University, Center for Social Organization of Schools.
- Governors Crime Prevention Coalition (1979). Public Meeting, Loy Norrix High School, Kalamazoo, Michigan.
- Grant, J., & Capell, F. J. (1983). Reducing school crime: A report on the school team approach. Social Action Research Center: 1-12.

- Greenberg, D. F. (1977). Delinquency and the age structure of society. Contemporary Crisis: Crime, Law and Social Policy, 1, 189-223.
- Hackler, J. C. (1970). Testing a causal model of delinquency. Sociological Quarterly, 11, 511-522.
- Hagan, F. E. (1989). Research methods in criminal justice and criminology, 2nd Edition. New York, N.Y.: MacMillan.
- Hargreaves, D. H. (1967). Social relations in a secondary school. London: Rutledge, Kegan Paul.
- Hartnagel, T. F., & Tanner, J. (1982). Class, schooling and delinquency: A further examination. Canadian Journal of Criminology, 24(2), 155-172.
- Hawkins, J. D., Doueck, H., & Lishner, D. M. (1985b). Changing teaching practices in mainstream classes to reduce discipline problems among low achievers. Seattle: Center for Social Welfare Research.
- Hawkins, J. D., Lam, T. C. M., & Lishner, D. M. (1985a). Instructional practices and school misbehavior. Seattle: Center for Social Welfare Research.
- Hawkins, J. D., & Lishner, D. M. (1987). Schooling and delinquency. In Elmer H. Johnson, (Ed.), Handbook on Crime and Delinquency Prevention (pp. 179-221). Westport, CT: Greenwood Press.
- Hawkins, J. D., & Wall, J. S. (1980). Alternative education: Exploring the delinquency prevention potential. Washington, D.C.: U. S. Government Printing Office.
- Healy, W. (1915). The individual delinquent. Boston: Little, Brown.
- Healy, W. (1933). The prevention of delinquency and criminality. Journal of Criminal Law and Criminology, 24, 78-88.
- Healy, W. and Bronner, A. (1936). New light on delinquency and its treatment. New Haven: Yale University Press.
- Henkel, R. E. (1976). Tests of significance. Sage University Paper Series on Quantitative Applications in the Social Sciences, Series No. 07-004. Beverly Hills and London: Sage Publications.

- Hill, G. D., & Atkinson, M. (1988). Gender, familial control and delinquency. Criminology, 26(1), 127-149.
- Hill, G. E. (1935-36). Educational attainments of young male offenders. The Elementary School Journal, 36, 53-58.
- Hindelang, M. J. (1976). With a little help from their friends: Group participation in reported delinquent behaviour. British Journal of Criminology, 16, 109-125.
- Hindelang, M. J. (1973). Causes of delinquency: A partial replication and extension. Social Problems, 20, 471-487.
- Hindelang, M. J., Hirschi, T., & Weis, J. G. (1981). Measuring delinquency. Beverly Hills, CA: Sage.
- Hirschi, T. (1969). Causes of delinquency. Berkeley: University of California.
- Hirschi, T., & Hindelang, M. J. (1977). Intelligence and delinquency: A revisionist review. American Sociological Review, 42, 571-586.
- Jensen, G. F. (1976). Race, achievement and delinquency: A further look at delinquency in a birth cohort. American Journal of Sociology, 82, 2, 379-387.
- Johnson, G., Bird, T., & Little, J. W. (1979). Delinquency prevention: Theories and strategies. Washington, D.C.: The Office of Juvenile Justice and Delinquency Prevention, Law Enforcement Assistance Administration, U. S. Department of Justice.
- Johnson, R. E. (1979). Juvenile delinquency and its origins. Cambridge, England: Cambridge University Press.
- Johnson, R. E. (1986). Family structure and delinquency: General patterns and gender differences. Criminology, 24(1), 65-80.
- Jones, J. A. (1965). Education in depressed areas: A research sociologist's views. Paper presented at the Fourth Work Conference on Curriculum and Teaching in Depressed Areas. Teachers College, Columbia University, New York.
- Kalamazoo City Police (1976-1978). Annual Report of the Kalamazoo City Police Department, Kalamazoo, MI: City of Kalamazoo.
- Kaplan, H. B. (1975). Self-attitudes and deviant behavior. Pacific Palisades, CA: Goodyear Publishing.

- Katznelson, I. (1981). City trenches: Urban politics and the patterning of class in the United States. New York: Pantheon.
- Katznelson, I., & Weir, M. (1985). Schooling for all. New York: Basic Books.
- Kellam, S. G., & Brown, C. H. (1982). Social adaptation and psychological antecedents in first grade of adolescent psychopathology ten years later. Paper presented at the Research Workshop on Preventive Aspects of Suicide and Affective Disorders Among Adolescents and Young Adults, Harvard School of Public Health, Boston, MA.
- Kelly, D. H. (1971). School failure, academic self-evaluation and school avoidance and deviant behavior. Youth and Society, 2, 489-503.
- Kelly, D. H. (1974). Track position and delinquent involvement: A preliminary analysis. Sociology and Social Research, 58, 380-386.
- Kelly, D. H. (1975). Status origins, track position and delinquent involvement: A self-report analysis. Sociological Quarterly, 16, 264-271.
- Kelly, D. H. (1976). The role of teacher's nominations in the perpetuation of deviant adolescent careers. Education, 96, 209-217.
- Kelly, D. H. (1977). How the school and teachers create deviants. Contemporary Education, 48, 4, (Summer), 202-205.
- Kelly, D. H., & Balch, R. W. (1971). Social origins and school failure: A reexamination of Cohen's theory of working-class delinquency. Pacific Sociological Review, 14, 413-430.
- Kelly, D. H., & Pink, W. T. (1973). School commitment, youth rebellion and delinquency. Criminology, 10, 473-485.
- Keniston, K. (1977). All our children: The American family under pressure. New York: Harcourt Brace Jovanovich.
- Kitsuse, J. I. (1962). Societal reaction to deviant behavior: Problems of theory and method. Social Problems, 9, 247-256.
- Kobal, M. (1965). Delinquent juveniles from two different cultures. Revija za Kriminalistiko in Kriminologijo Ljubljana 4.

- Kornhauser, R. R. (1978). Social sources of delinquency. Chicago: University of Chicago Press.
- Krisberg, B., & Fong, M. (1979). The National evaluation of prevention: Preliminary report. San Francisco: National Council on Crime and Delinquency.
- Krisberg, B., McCall, C., & Munson, J. (1978). Pioneering in delinquency prevention: The California experience. San Francisco: National Council on Crime and Delinquency.
- Krohn, M. D. (1986). The web of conformity: A network approach to the explanation of delinquent behavior. Social Problems, 33, 601-613.
- Krohn, M. D., Massey, J. L., & Zielinski, M. (1988). Role overlap, network multiplexity, and adolescent behavior. Social Psychology Quarterly, 51(4), 346-356.
- Kvaraceus, W. C. (1945). Juvenile delinquency and the school. Yonkers, N.Y.: World.
- Lane, B. A. (1980). The relationship of learning disabilities to juvenile delinquency: Current status. Journal of Learning Disabilities, 13(8), 20-29.
- Lane, H. A., & Witty, P. A. (1934). The educational attainment of delinquent boys. Journal of Educational Psychology, 25, 695-702.
- Laslett, B. (1981). Production, reproduction and change: The family in historical perspective. In J. F. Short, Jr. (Ed.), The state of sociology: Problems and prospects (pp. 239-258). Beverly Hills, CA: Sage.
- Laslett, P. (1972). Household and family in past times. Cambridge: Cambridge University Press.
- Laub, J. H., & Sampson, R. J. (1988). Unraveling families and delinquency: A reanalysis of the Gluecks' data. Criminology, 26(8), 355-380.
- Lawrence, P. R., & Lorsch, J. W. (1961). Organizational environment. Homewood, Ill: Richard D. Irwin.
- Lazar, I., Darlington, R., Murray, H., Royce, J., & Snipper, A. (1982). Lasting effects of early education: A report from the consortium on longitudinal studies. Monographs of the Society for Research in Child Development, Serial No. 195, Vol. 47, Nos. 2-3.

- Lemert, E. M. (1972). Human deviance, social problems, and social control (2nd ed.). Englewood Cliffs, N.J.: Prentice-Hall.
- Lewin, K. (1946). Action research and minority problems. Journal of Social Issues, 2, 34-46.
- Lewin, K. (1947). Group decision and social change. In T. M. Newcomb & E. L. Hartley (Eds.), Readings in social psychology. New York: Holt.
- Liazos, A. (1978). School alienation and delinquency. Crime and Delinquency, (July), 355-370.
- Loether, H. J., & McTavish, D. G. (1974). Inferential Statistics for Sociologists: An introduction. Boston, MA: Allyn and Bacon.
- Lundmen, R. J., & Scarpitti, F. (1978). Delinquency prevention: Recommendation for future projects. Crime and Delinquency, 4, 207-220.
- Madden, N. A., & Slavin, R. E. (1987). Effective pull-out programs for students at risk, Report No. 20. Baltimore: Johns Hopkins University, Center for Research on Elementary and Middle Schools.
- Martin, S. E., Sechrest, L. B., & Redner, R. (1981). New directions in the rehabilitation of criminal offenders. Washington, D.C.: National Academy Press.
- Matsueda, R. L. (1982). Testing control theory and differential association: A causal modeling approach. American Sociological Review, 47, 489-504.
- Matza, D. (1964). Delinquency and drift. New York: John Wiley.
- Mays, J. B. (1954). Growing up in the city. Liverpool: University Press.
- McCord, J. (1978). Early criminals: Hands-off vs. intervention. Human Behavior, 7(7):40-41.
- McCord, W., & McCord, J. (1959). Origins of crime: An evaluation of the Cambridge-Somerville study. New York: Columbia University Press.
- McIver, J. P., & Carmines, E. G. (1981). Unidimensional scaling. Sage University Paper Series on Quantitative Applications in the Social Sciences, 07-024. Beverly Hills, CA: Sage.

- McKay, H., Sinisterra, L., McKay, A., Gomez, H., & Lloreda, P. (1978). Improving cognitive ability in chronically deprived children. Science, 200, 270-278.
- McKissack, I. J. (1973). Property offending and the school learning age. International Journal of Criminology and Penology, 1, 353-362.
- McPartland, J. W., & McDill, E. L. (1977). Violence in schools: Perspectives, programs, and positions. Lexington: Heath and Co.
- Mead, G. H. (1934). Mind, self and society. Chicago: University of Chicago Press.
- Meltzer, L. J., Roditi, B. N., & Fenton, T. (1986). Cognitive and learning profiles of delinquent and learning disabled adolescents. Adolescence, 21, 581-591.
- Menard, S., & Morse, B. J. (1984). A structural critique of the IQ-delinquency hypothesis: Theory and evidence. American Journal of Sociology, 89(6), 1347-1378.
- Mercer, M. L. (1930). School maladjustment as a factor in juvenile delinquency. Journal of Juvenile Research, 14, 41-43.
- Merton, R. K. (1968). Social theory and social structure. New York: Macmillan.
- Messerschmidt, J. (1979). School stratification and delinquent behaviors: A macrosociological interpretation. Dissertation. Stockholm: University of Stockholm.
- Meyer, H. J., Borgatta, E., & Jones, W. C. (1965). Girls at vocational high: An experiment in social work intervention. New York: Russell Sage Foundation.
- Michigan State Police. (1971-1978). Annual uniform crime reports. Lansing, MI: Michigan State Police.
- Miller, W. B. (1958). Lower-class culture as a generating milieu of gang delinquency. Journal of Social Issues, 14, 5-19.
- Miner, J. F. (1919). Deficiency and delinquency. Baltimore: Warinck and York.
- Morris, V.C., Crowson, R. L., Porter-Gehrie, C., & Hurwitz, E. (1984). Principals in action. Columbus, ~~Ohio~~^{OH}: Charles E. Merrill.

- Mukherjee, S. K. (1971). A typological study of school status and delinquency. Unpublished doctoral dissertation, University of Michigan.
- Murray, C. (1976). The link between learning disabilities and juvenile delinquency: Current theory and knowledge. Executive Summary. Washington, D.C.: U. S. Department of Justice, LEAA, NIJJDP.
- Murray, C. A., Bourgue, B. B., Hannar, R. S., Hersey, J. C., Murray, S. R., Overbey, D. D., & Stotsky, E. S. (1980). The national evaluation of the cities in schools program (Report No. 3). National Institute of Education, U. S. Department of Health, Education and Welfare, Washington, D.C.
- The National Committee on Excellence in Education. (1984). A nation at risk: The full account. Cambridge, MA: USA Research.
- Nie, N. H., Hull, C. H., Jenkins, J. G., Steinbrenner, K., & Bent, D. (1975). SPSS: Statistical Package for the Social Sciences. 2nd Edition. New York, NY: MacGraw Hill.
- O'Connor, J. (1973). The fiscal crisis of the state. New York: St. Martin's Press.
- Office of Juvenile Justice and Delinquency Prevention (1980). Program announcement: Prevention of delinquency through alternative education. Washington, D.C.: U. S. Department of Justice.
- Olofsson, B. (1971). Vad var det vi sa! Stockholm: Utbildningsforlaget.
- Ouston, J. (1984). Delinquency, family background and educational attainment. The British Journal of Criminology, 24(1), 2-26.
- Palmore, E. B., & Hammond, P. E. (1964). Interacting factors in juvenile delinquency. American Sociological Review, 29, 848-854.
- Papagiannis, G., Klees, S., & Bicket, R. (1982). Towards a political economy of educational innovation. Review of Education Research, 52, 245-290.
- Parker, I. (1940). Personality problems and reading disability. The National Elementary Principal, 19, 603-610.

- Pasternack, R., & Lyon, R. (1982). Clinical and empirical identification of learning disabled delinquents. Journal of Correctional Education, 33(2), 7-13.
- Patterson, G. R., & Dishon, T. J. (1985). Contributions of families and peers to delinquency. Criminology, 23(1), 63-79.
- Patterson, G. R., & Fleischman, M. J. (1979). Maintenance of treatment effects: Some considerations concerning family systems and follow-up data. Behavior Therapy, 10, 168-185.
- Phillips, J. C. (1974). The creation of deviant behavior in high schools: An examination of Cohen's general theory of subcultures. Ph.D. Dissertation, University of Oregon.
- Phillips, J. C., & Kelly, D. H. (1979). School failure and delinquency: Which causes which? Criminology, 17, 194-207.
- Polk, K., & Halferty, D. S. (1966). Adolescence commitment and delinquency. Journal of Research in Crime and Delinquency, 7, 82-96.
- Polk, K., & Richmond, F. L. (1972). Those who fail. In Kenneth Polk and W. E. Schafer (Eds.), Schools and Delinquency. Englewood Cliffs, N.J.: Prentice Hall, Incorporated.
- Polk, K., & Schafer, W. E. (1972). Schools and delinquency. Englewood Cliffs, N.J.: Prentice-Hall.
- Poremba, C. (1967). The adolescent and young adult with learning disabilities: What are his needs: What are the needs of those who deal with him. In J. Arena (Ed.), Selected papers on learning disabilities, Third Annual International Conference of ACLD. Academic Therapy Publications, 13-1, 13-8.
- Rankin, J. H. (1980). School factors and delinquency: Interactions by age and sex. Sociology and Social Research, 64(3), 420-434.
- Reckless, W. E., & Dinitz, S. (1972). Prevention of juvenile delinquency: An experiment. Columbus: Ohio State University Press.
- Rhodes, A. L., & Reiss, A. J. Jr. (1969). Apathy, truancy and delinquency as adaptations to school failure. Social Forces, 48, (September), 12-22.
- Rist, R. (1970). Student social class and student expectations: The self-fulfilling prophecy in ghetto education. Harvard Educational Review, 40, 411-450.

- Roman, M. (1957). Reaching delinquents through reading. Springfield, ~~Illinois~~^{IL}: Charles C. Thomas.
- Romig, D. A. (1978). Justice for our children. Lexington: Lexington Books.
- Rose, G., & Marshall, T. F. (1974). Counseling and school social work: An experimental study. London: Wiley.
- Rosenberg, F. R., & Rosenberg, M. (1978). Self-esteem and delinquency. Journal of Youth and Adolescence, 6(3), 279-291.
- Rubel, R. J. (1978). Analysis and critique of HEW's: Safe school study report to the Congress. Crime and Delinquency, (July).
- Rutter, M. (1972). Maternal deprivation reassessed. New York: Penguin Books.
- Rutter, M. (1978). Family, area and school influences in the genesis of conduct disorders. In L. A. Hersov & M. Berger (Eds.), Aggression and antisocial behavior in childhood and adolescence (pp. 95-113). Oxford: Pergamon Press.
- Rutter, M., Maughon, B., Mortimore, P., Ouston, J., & Smith, A. (1979). Fifteen thousand hours: Secondary schools and their effects on children. London: Oper Books.
- Ryan, W. (1965). Racial imbalance, cultural deprivation and reading achievement. Mimeo. Advisory Committee on Racial Imbalance and Education, Background Paper No. 7. Massachusetts State Board of Education.
- Ryan, W. (1981). Equality. New York: Random House.
- Sanders, W. B. (1976). Juvenile delinquency. New York: Praeger.
- Sawicki, D., & Schaeffer, B. (1979). An affirmative approach to the LD/JD link. Juvenile and Family Court Journal, 30(2), 11-16.
- Schafer, W. E., & Olexa, C. (1971). Tracking and opportunity: The locking out process and beyond. Scranton: Chandler.
- Schafer, W. E., & Polk, K. (1967). Delinquency and the schools. Appendix M to Task Force Report: Juvenile Delinquency and Youth Crime. President's Commission on Law Enforcement and Administration of Justice. Washington, D.C.: U. S. Government Printing Office.

- Schafer, W. E., Olexa, C., & Polk, K. (1970). Programmed for social class: Tracking in high school. Trans-Action, 7, 39-46, 63.
- Schein, E. H. (1987). The clinical perspective in fieldwork. Sage University Paper Sciences on Qualitative Applications on the Social Sciences, Volume 5. Beverly Hills: Sage.
- Schur, E. M. (1969). Our criminal society. Englewood Cliffs, N.J.: Prentice Hall.
- Schur, E. M. (1971). Labeling deviant behavior. New York: Harper.
- Schwendinger, H., & Schwendinger, J. R. (1976). Delinquency and the collective varieties of youth. Crime and Social Justice, 5, 7-25.
- Sellin, T. (1938). Culture conflict and crime. New York: Social Science Research Council.
- Shaw, C. R. (1929). Delinquency areas. Chicago: University of Chicago Press.
- Shaw, C. R., & McKay, H. D. (1931). Social factors in juvenile delinquency. Washington, D.C.: U.S. Government Printing Office.
- Shaw, C. R., & McKay, H. D. (1942). Juvenile delinquency and urban areas. Chicago: University of Chicago Press.
- Short, J. F. (1964). Gang delinquency and anomie. In M. B. Clinard (Ed.), Anomie and delinquent behavior. New York: Free Press.
- Short, J. F., & Strodtbeck, F. L. (1965). Group process and gang delinquency. Chicago: University of Chicago.
- Shure, M. B., & Spivack, G. (1979). Interpersonal cognitive problem solving and primary prevention. Journal of Clinical and Child Psychology, 8(2), 89-94.
- Sikorski, J. B., & McGee, T. P. (1986). The early warning: Academic problems. Juvenile and Family Court Journal, 37, 11.
- Silberg, N. E., & Silberg, M. C. (1971). School achievement and delinquency. Review of Educational Research, 41, 1, 17-33.
- Simcha-Fagan, O., & Schwartz, J. E. (1986). Neighborhood and delinquency: An assessment of contextual effects. Criminology, 24(4), 667-703.

- Simons, R. L. (1978). The meaning of the IQ-delinquency relationship. American Sociological Review, 43, 268-270.
- Slavin, R. E. (1983). Cooperative learning. New York: Longman.
- Smith, R. M., & Walters, J. (1978). Delinquent and non-delinquent males' perceptions of their fathers. Adolescence, 13, 21-28.
- Spitzer, S. (1975). Toward a Marxian theory of deviance. Social Problems, 22, 638-651.
- Spring, J. (1973). Education as a form of social control. In C. J. Karier, P. Violas & J. Spring (Eds.), Roots of crisis: American education in the twentieth century (pp. 30-39). Chicago: Rand McNally.
- Stinchcombe, A. L. (1964). Rebellion in a high school. Chicago: Quadrangle Books.
- Sutherland, E. H. (1931). Mental deficiency and crime. In K. Young (Ed.), Social Attitudes, pp. 357-75. New York: Holt, Rinehart and Winston.
- Sutherland, E. H., & Cressey, D. R. (1955). Principles of criminology (5th ed.). Chicago: Lippincott.
- Swanstrom, W. J., Randle, C. W., & Offord, K. (1981). The frequency of learning disability: A comparison between juvenile delinquent and seventh grade populations. Journal of Correctional Education, 32(3), 29-33.
- Swift, M., & Spivak, G. (1973). Academic success and classroom behavior in secondary schools. Exceptional Children, 39, 392-399.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. American Sociological Review, 22, 664-670.
- Taylor, L. S. (1985). The family as an adaptable and enduring social unit: A case for assessing delinquent behavior from a family systems perspective. Today's Delinquent, 4, 69-97.
- Toby, J. (1957). Social disorganization and stake in conformity. Criminology and Police Science, 48, 12-17.
- Toby, J. (1968). An evaluation of early identification and intensive treatment programs for predelinquents. In J. R. Stratton and R. M. Terry (Eds.), Prevention of delinquency: Problems and programs (pp. 99-116). Toronto: McMillan.

- Van Voorhis, P., Cullen, F. T., Mathers, R. A., & Garner, C. (1988). The impact of family structure and quality on delinquency: A comparative assessment of structural and functional factors. Criminology, 26(2), 235-261.
- Vaz, E. W., & Casparis, J. (1971). A comparative study of youth culture and delinquency: Upper class Canadian and Swiss boys. International Journal of Comparative Sociology, 12, 1-23.
- Vera Institute of Justice. (1980). Family court disposition study. Unpublished draft. New York: Vera Institute of Justice.
- Verlade, A. J. (1978). Do delinquents really drift? British Journal of Criminology, 18, 23-39.
- Weick, K. E. (1976). Educational organizations as loosely coupled systems. Administrative Science Quarterly, 21, 1-19.
- Weick, K. E. (1982). Administering education in loosely coupled schools. Phi Delta Kappan, 63, 673-676.
- Wells, L. E., & Rankin, J. H. (1988). Direct parental controls and delinquency. Criminology, 26(2), 263-285.
- West, D. J. (1969). Present conduct and future delinquency. New York: International Universities Press.
- West, D. J., & Farrington, D. P. (1973). Who becomes delinquent? London: Heinemann Educational Books.
- Wiatrowski, M. D., Hansell, S., Massey, C. R., & Wilson, D. L. (1982). Curriculum tracking and delinquency. American Sociological Review, 47(1), 151-160.
- Wilkins, L. T. (1971). The defiance-amplifying system. In W. G. Carson and P. Wiles (Eds.), Crime and Delinquency in Britain. London: Robertson.
- Williams, W., & Elmore, R. F. (1976). Social Program Implementation. New York: Academic Press.
- Wilson, H. (1975). Juvenile delinquency, parental criminality and social handicap. British Journal of Criminology, 15, 241-250.
- Wilson, J. Q. (1983). Thinking about crime. New York: Basic Books.

- Wilson, J. Q., & Herrnstein, R. J. (1985). Crime and human nature. New York: Simon and Schuster.
- Wolfgang, M. E., Figlio, R. M., & Sellin, T. (1972). Delinquency in a birth cohort. Chicago: University of Chicago Press.
- Wolfgang, M. E., & Ferracuti, F. (1982). The subculture of violence. Beverly Hills, CA: Sage.
- Zaratsky, E. (1978). Capitalism, the family and personal life. In R. C. Edwards, Reich, M., Weisskopf, T., (Eds.), The capitalist system (pp. 345-349). Englewood Cliffs, N.J.: Prentice Hall.
- Zimmerman, J., Rich, W. D., Keilitz, I., & Broder, P. K. (1978). Some observations on the link between learning disabilities and juvenile delinquency. National Center for State Courts. (August).