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AN EXPLORATORY STUDY OF SCHOOL SUSPENSION, SOCIAL BONDING AND JUVENILE DELINQUENCY

By

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ABSTRACT

AN EXPLORATORY STUDY OF SCHOOL SUSPENSION, SOCIAL BONDING AND JUVENILE DELINQUENCY

By

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This thesis studies school suspension and the elements of social bonding, as described by Travis Hirschi, and their relationships with Juvenile Delinquency. The elements of focus were: school ATTACHMENT; school COMMITMENT; school INVOLVEMENT; and BELIEF in educational success. Social Bond Theory, along with current research in the area of school suspension are reviewed. The sample was taken from the 1977 National Youth Survey, which is a longitudinal study of delinquency and drug use among American youth. The findings of this research suggest that school suspensions are significantly related to delinquency and that suspensions weaken the bonds, particularly the BELIEF element of the bond and that weakened bonds may contribute to delinquency. Further research in this area is, however, recommended.

ACKNOWLEDGEMENTS

Numerous delinquency theories exist. Some try to explain relationships that exist among delinquents, while most all delinquency theories want to know: why some youth do or some do not commit deviant acts. Rather humorously, Travis Hirschi asks: "What is there about criminologists that leads them to ask, why do they do it?" (Hirschi, 1969, 231). The answer to that question for me is quite simple. I've longed to understand the delinquency that I was involved in during adolescence. I still ask myself the question: "Why did I do it?"

As I later studied the various delinquency theories, I would often search for answers to the question: "Why was I delinquent?" Thus I must thank the entire Michigan State University Criminal Justice Department faculty and staff for their encouraging my quest for answers. I will be forever honored to have been so privileged to be a student of such a renowned program and to have learned from the geniuses of the MSU Criminal Justice Professors. I would like to conclude with special dedication and thanks to committee members: Dr. Merry Morash, Dr. Rosie Epynyoung, and Dr. Vincent Hoffman. Additionally, I must thank the Grand Blanc School System for suspending me so frequently. During

high school, I was suspended repeatedly and am not sure exactly how many times I was suspended. It was the unforgettable suspension experiences and their related effects that were the driving force behind my lifelong quest to study suspension and my campaign to end the frequent and unnecessary use of suspension and expulsion.

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CHAPTER ONE
INTRODUCTION

The Problem

The role of the American family has been changing. The extended family is disintegrating. Nuclear families often live hundreds of miles away from their relatives. It is common to observe families in which both the mother and father work. Infants and children are often left in the care of baby-sitters and older children and frequently left on their own. Due to economic and career priorities, families are spending less time with their children thus making the ROLE OF THE SCHOOL MONUMENTALLY IMPORTANT. Currently, the majority of adolescents in the US are concentrated in public schools and because of its ever-increasing impact on the entire population, the educational system should be of prime concern.

Evidence indicates that delinquency may be a consequence of a multitude of factors, however a number of studies suggest that negative school experiences can lead to youthful misbehavior and delinquency (Stinchcombe, 1964; Polk and Schafer, 1972; Elliott and Voss 1974). There exists an aspect of negative school experiences, namely school suspensions and its relationship to delinquency that this researcher desires to study. Charles B. Vergon (Associate Professor and Attorney) of the University of Michigan School of Education, provides the most current

and complete picture of suspension in a recent study entitled "Disciplinary Actions in Michigan Public Schools: Nature, Prevalence and Impact 1978-1986" (1990). The problem Vergon found was that Michigan ranked 6th in the nation with the highest suspension rates for public school students. Students suspension rates in Michigan are 43% higher than the national average.

Using data collected from school districts across the country by the US Office for Civil Rights, Vergon analyzed the nature, prevalence, and impact of various disciplinary measures for the state and for systematically selected samples of Michigan school districts for various years between 1978 and 1986. Included in the 1986 sample were 115 Michigan districts including urban, suburban and rural school systems. Similar analysis of the nature, prevalence and impact of suspensions and expulsions were carried out for the midwest and the US, allowing comparisons between Michigan's practices and broader regional and national patterns. Nearly 97% of the Michigan districts studied, reported using suspensions.

Suspended students, some of whom were suspended more than once, numbered 102,000 in 1986 or 6.9% of Michigan K-12 population, but suspensions were concentrated in 12 to 13% of the junior and senior high school population. With a Michigan suspension rate of nearly 70 students per thousand, as contrasted to a national rate of 50, Michigan students were 43% more likely to experience suspension than were their

classmates nationwide. Only five states suspended a greater proportion of their school-age population than did Michigan. These states were Maryland, Florida, Louisiana, Delaware, and South Carolina. Furthermore, substantial variations emerged among the districts studied in Michigan. Although the suspension rate for the entire state was 70 students per thousand, it ranged from a low of 0 in four districts to a high of 311 students per thousand in one community. This research also examined the impact of disciplinary actions on various student populations to ascertain if some were at greater risk of suspension than others. In Michigan like the US and the Midwest, males accounted for approximately seven out of every ten suspensions. This means that males were approximately twice as likely to be suspended than their female counterparts. Minority students as a group, and African-American and Hispanic students in particular were suspended at higher rates than whites in Michigan. The suspension rates for minorities was 141 as compared to 56 students per thousand for non-minority students. By far the highest incidence of suspension involved African-Americans who were suspended at a rate of 167 students per thousand, followed by hispanics at a rate of 100 per thousand. African-Americans had the highest suspension rates in the US with Michigan blacks being almost twice as likely to experience suspension as their black counterparts, nationwide.

Over the eight-year period studied, the suspension trend in Michigan climbed steadily. Additionally, Vergon found that the use and

duration of suspensions varies widely from district to district within the state based on local determinations of appropriate minimums and maximums for various types of misconduct. Thus, in some districts suspensions may be limited to three days or less, while in other districts, students may be removed from school or their regular classes for up to the balance of the school year or even longer. In conclusion, Vergon defines the problem as being: the frequent, increasing and unnecessary use of suspension, particularly in Michigan, disproportionate suspension rates for minorities, particularly for blacks, inconsistent use of suspension and expulsion, thus leaving it up to individual school districts, what a student is suspended for and how long.

Admittedly, Vergon did not examine the impact suspension had on delinquency. An extensive body of literature has been developed on the theme of "Negative School Experiences" or "School Failure" as a cause of adolescent misconduct or delinquent behavior (e.g., Hargreaves, 1967; Schafer and Polk, 1967; Toby, 1957; Stinchcombe, 1964; Hirschi, 1969; Polk and Schafer, 1972; Kelley and Balch, 1971; Kelly, 1971, 1974; Rhodes and Reiss, 1969; Elliott, 1966). Yet little study has been done to examine the relationship between SCHOOL SUSPENSION AND DELINQUENCY. Additionally, Vergon's study, which provides the most recent suspension data available, is limited through its use of Office of Civil Rights data. O.C.R. data does not inform what students were suspended for or how long. O.C.R. data is a collection of basic

information. It tells how many students were suspended one or more times but does not disclose the number of students that were suspended repeatedly or more than once.

THE PROBLEM is twofold. Firstly, the use of suspension and expulsion in American public schools is frequent and unnecessary. Secondly, there is little research directly examining whether a relationship exists between school suspensions and delinquency. Thus, there exists a great NEED for this study, particularly since the majority of our public schools still use suspension regularly. The PURPOSE of this study is quite simple—to examine the frequency and necessity of school suspensions in American public schools and to investigate if a relationship exists between school suspensions and delinquency. Furthermore, the purpose of this study is to develop a prediction model on juvenile delinquency based on Travis Hirschi's Social Bond Theory of Juvenile Delinquency. This model will examine the youth's attachment to school as well as their involvement and commitment to school and belief in educational goals.

The Research Hypotheses

The implications expected to be found in this study, are stated in the broad form of hypotheses. These hypotheses are restated in testable form in Chapter 3.

1. A negative relationship exists between a youth's attachment, commitment, involvement and belief in educational goals and school suspension.
2. A negative relationship exists between a youth's attachment, commitment, involvement, and belief in educational goals and delinquency.
3. A positive relationship exists between school suspensions and juvenile delinquency.
4. Suspended students have a higher rate of delinquency, than non-suspended students.
5. An increase in suspension one academic year, results in an increase in delinquency the following year.

Theoretical Framework—Introduction To Theory

Numerous theories of delinquency causation exist, as was pointed out in the fourth edition of "Juvenile Delinquency Concepts and Control," written by Robert Trojanowicz and Merry Morash, published in 1987. In "Juvenile Delinquency Concepts and Control," the popular assumptions of numerous theories were reviewed. Travis Hirschi's Social Bond Theory was found to have the strongest supporting research. Thus, it offers one of the best explanations of the causes of delinquency, at least amongst the contemporary sociological theories of criminality.

Hirschi supports a Social Control Theory which assumes that an individual has the free will to violate the law and that delinquent acts result when an individual's bond to conventional society is weak or broken. Hirschi maintains that youth do not take part in illegal activities, because of strong bonds to conventional society. Elements of the bond consist of ATTACHMENT of the individual to others (i.e., parents, teachers), COMMITMENT to conventional lines of action (i.e., education or other legitimate goals), INVOLVEMENT in conventional activities and BELIEF in legitimate values, that of conventional society. Basically, the more tightly bonded a person is to the conventional social groups, the higher the level a person obtains of each element, the less likely they will commit delinquent acts.

Hirschi provides a description of the elements of the bond to the conventional society and attempts to show how each of these elements is related to delinquent behavior and how they are related to each other. Hirschi defines the elements of the bond as follows: ATTACHMENT is defined by a child's sensitivity to the opinions of significant others, such as parents, teachers, and friends. ATTACHMENT to the parent is seen as being the most important. If children do not care or think about reactions of their parents, parental control over the child is seriously reduced. Secondly, COMMITMENT is viewed as a rational component in conformity which is measured by a child's investment in conventional society. Are children dedicating themselves to conventional activities

such as getting an education, building up a business or other legitimate goals. Thirdly, INVOLVEMENT is measured by gauging the amount of time spent in conventional activities, such as homework and athletics. And the final element is BELIEF. To what extent does a child believe in the norms of the conventional society. What attitude of respect does the child maintain toward the rules of society. The more a child believes in the morality of the law, the less likely the child will be delinquent.

A relation among the elements was seen by Hirschi: "In general, the more closely a person is tied to conventional society in any of these ways, the more closely he is likely to be tied in other ways. The person who is attached to conventional people is for example, more likely to be involved in conventional activities and to accept conventional notions of desirable conduct" (Hirschi, 1969, 27).

Although attachment and commitment to parents was seen as most significant, attachment and commitment to the school was also found to be significant. Hirschi studied the elements of the social bond in relation to education. A child's ATTACHMENT to the school was measured by the child's sensitivity to the opinions of the teachers. COMMITMENT was measured by the child's educational aspirations and expectations. INVOLVEMENT was measured by the amount of time spent doing homework and BELIEF was measured by the child's acceptance of the school's authority. Hirschi presented a simple causal chain and examined data relevant to it. The causal chain runs from academic incompetence,

to poor school performance, to disliking of school, to rejection of the school's authority, to the commission of delinquent acts.

Criticism of the Social Control Theory

Social Control Theory has some weaknesses and can explain only some of the differences between youths in levels of delinquency. It does not predict serious delinquency over minor delinquency. And it does not explain why bonds are developed in some but not all youth. Social Control Theory does not explain the more serious criminal behavior done by adolescents or their subsequent adult criminality. Admittedly, it is not this researcher's interest to predict early adult criminality, rather it is to investigate delinquency which occurs during adolescence and of particular concern during ages when school suspensions are applied.

Social Control Theory is also criticized for overestimating the significance of involvement in conventional activities and underestimating the role played by ones peers. "Several studies have revealed that peer group, and in some cases a delinquent peer group to which a youth is strongly committed, plays an important part in the development of delinquent behavior" (Trojanowicz and Morash, 1985, 59). Some of these voids have been filled by revised and refined theories. One particularly successful effort was made when Social Control Theory was integrated with Strain and Learning theories, producing a new integrated theory which was well supported by research (Elliott, Huizinga and Ageton,

1985). Hirschi's theory is also criticized for the use of English and Math grades as a measure of grade point average. Furthermore, the use of grade point averages as an indication of intelligence is highly debated amongst researchers, as is whether intelligence levels are predictive of delinquency. In spite of the previously described weaknesses, Hirschi developed and empirically tested an explanation of delinquency. His findings provided considerable evidence to support the Social Control explanation of delinquency.

Overview

In Chapter 2, the Pertinent Literature is reviewed. In Chapter 3, the Design of the Study is detailed. In Chapter 4, the Analysis of the Results is provided and in Chapter 5, Summary and Conclusions are drawn. The data identifying the most recent suspension trends (Frequency) was already discussed in the problem section of this first chapter. Beginning in Chapter 2, (The Literature Review), two studies are reviewed for the purpose of characterizing the suspended student and identifying the necessity of suspension. Additionally, Hirschi's Social Bonding Theory is reviewed in detail.

CHAPTER 2

REVIEW OF THE LITERATURE

Numerous studies have evaluated the various programs that have developed as alternatives to school suspensions. These studies however, only look at the successfulness of the alternative programs and do not specifically look at suspensions or their effects. For example, the Portland Oregon Public Schools Research and Evaluation Department instituted and studied a four-year pilot program—P.A.S.S. (Positive Alternatives to School Suspension). Reports were issued in 1984 and 1986. These reports systematically analyzed whether the alternative suspension programs were successful. As stated in the report, the main goal of the P.A.S.S. program was to reduce out-of-school suspensions in order to "obviate the negative consequences of school suspensions." The name of the program—Positive Alternatives to School Suspensions and the study itself, implies that school suspensions are negative. Yet the implication that school suspensions are negative is not supported by research.

Most alternative suspension programs (like delinquency programs) are based on some assumption or theory. In the case of alternative suspension programs, it is assumed that school suspensions are negative. In fact, some studies go so far as to say that school suspensions are

contributing to or furthering delinquency. Of the many alternative suspension programs this researcher reviewed, the researchers neglected to analyze the relationship between suspension and delinquency. Reason being, they were already acting on the belief that school suspensions are negative or cause delinquency. They therefore focused their attention on evaluating the successes of the alternative program.

As previously stated, most of the existing research is on alternative programs to school suspension. However, two studies were found that looked specifically at suspension. One large national study on school suspension was conducted by the Children' Defense Fund in 1975 and a study on suspensions in the Philadelphia Public School was done in 1982.

School Suspensions: Are They Helping Children?

This report was published in 1975 by the Children's Defense Fund (C.D.F.) of the Washington Research Project. The study relies on two primary sources of data: (1) the results of an extensive household survey of children out of school which was published earlier by the C.D.F. in "Children out of School in America" (1974), and (2) C.D.F. analysis of information submitted by school districts to the Federal Office for Civil Rights (O.C.R.). In the 1974 report, nearly two million children, according to 1970 U.S. Census data, missed all or substantial portions of their school year. C.D.F. concluded that they were out of school for the most part, not by choice but because they had been excluded. One of the

most common mechanisms for putting children out of school is exclusionary discipline in one form or another—whether it is called suspension, expulsion, voluntary withdrawal, blocking, barring, temporary dismissal or a cooling-off period. C.D.F. found that most of those disciplinary exclusions were discretionary acts, hidden from public view and that many suspensions were unnecessary, made no educational sense and deserted the interests of the children involved. In many cases, short term disciplinary exclusions added up to a significant loss in schooling and caused youngsters to drop out of school permanently.

Methodology

The 1970 U.S. census indicated where most serious problems of non-enrollment were and what impact of location, income, parental education and minority status was on the likelihood of children being out of school. However, census data does not tell who these children are, why they are out of school, and what it means to them. The C.D.F. decided to do a door-to-door survey in various parts of the country in order to answer those questions. The report includes the results of the C.D.F. survey of 8,500 households in nine states. Out of these nine states, 30 areas were surveyed. Areas to monitor were selected by a balance of factors, such as: regional variation, racial and ethnic mix, urban and rural populations and different income levels. The nine states selected were: (1) Alabama, (2) Colorado, (3) Georgia, (4) Iowa, (5)

Kentucky, (6) Maine, (7) Massachusetts, (8) Mississippi, and (9) S. Carolina.

Monitors visited at least every fourth household. When there were no answers or refusals, the monitor then visited the preceding household. All household interviews were conducted in confidence and non information on individuals visited was released to anyone outside of the Children's Defense Fund. C.D.F. calculated children out of school by two different measures: (1) children who missed 3 or more consecutive months of school, and (2) children who missed 45 days of school whether or not it was consecutive. All monitors used an identical household questionnaire prepared by C.D.F.

Suspension data submitted to the Office of Civil Rights (O.C.R.) was also analyzed. Detailed analysis of O.C.R. suspension data covered more than 2,800 school districts and 24,188,681 students. The districts reporting to the O.C.R. are not a random sample of all districts in the nation. Rather they are a census of all school districts containing substantial minority enrollments. Furthermore, the set of districts represents more than 50% of the total school enrollment in the nation and almost 90% of the total minority school enrollment.

Findings

At the time of the study, C.D.F. found that public school suspensions are rampant all over America and deprive hundreds of

thousands of school children annually of needed education. Use, grounds, procedures and the lengths of suspensions vary widely between schools, even in schools within the same district. The vast majority of school suspensions in C.D.F. survey were for non-dangerous, nonviolent offenses which did not have a seriously disruptive effect on the educational process. Sixty-three point four percent of the suspensions were for non-dangerous reasons, such as truancy and tardiness (24.5%), behavior problems (13.6%), arguments (8.5%), and other; smoking, drugs, alcohol, dress code, misc. punishment related offenses, i.e., failed to write 1,000 word essay or stay after school (16.8%). Approximately 1/3 of the suspensions did involve fighting, however, all but a minuscule proportion were fights between students and did not involve violence against school faculty or staff. Less than 3% of the suspensions were for destruction of property, use of alcohol or drugs or other criminal activity. In some surveyed areas, the percentage of students suspended for truancy and tardiness ranged from 30 to 50%. In short, according to C.D.F. survey, most students were suspended for non-dangerous offenses. Sixty-three point four percent of the suspensions were for infractions of school rules, with almost 25% of which was for truancy and tardiness.

C.D.F. Survey - Reasons for Suspensions:

Fighting (physical conrtact)	36.6%	
Truancy and tardiness	24.5%	
Other: smoking, drugs, alcohol, Misc. punishment related	16.8%	63.4% Non-dangerous Offenses
Behavior problems	13.6%	
Arguments	8.5%	

The largest number of suspended students were to be white, however, proportionately more black children were suspended. At the secondary level and overall, black students were suspended almost twice as much as white students. The C.D.F.'s survey corroborates O.C.R.'s data regarding the disproportionate suspension of minority students. Blacks in the C.D.F. survey were suspended more than three times as often as white students and black students more frequently received multiple suspensions. Additionally, the O.C.R. data indicated that black students were suspended longer than whites, however, the C.D.F. survey did not find a racial pattern in the duration of suspensions.

C.D.F. found suspensions to be common in all types of school districts, large city districts, large suburban districts and small urban and suburban districts. Approximately 1 in every 13 secondary students were suspended at least once during the 1972-73 school year. Suspension figures under-state the problem of children out of school in America

because it does not include: (1) voluntary withdrawal or push outs, (2) children put in to special education classes, (3) transfers, (4) drop outs and (5) those in jail. C.D.F. found that suspended student is likely to be: poor, from families receiving AFDC or other public assistance, black, male, in secondary school and a child from single-parent (female-headed) family.

As previously mentioned, the vast majority of suspensions in C.D.F.'s survey were for non-dangerous, nonviolent offenses which did not have a seriously disruptive effect on the educational process. Thus, the C.D.F. feels that suspensions are not necessary except in a small minority of cases to maintain order. "The great majority of suspensions do not serve any demonstrated valid interest of children or schools. Instead they harm the child and jeopardize their education. Suspension pushes children and their problems into the streets, thereby causing more problems for them and the rest of us," (C.D.F. school suspension interview).

C.D.F. further maintains that suspensions take away educational time that may cause marginal, weak or poorly motivated students to drop out permanently. Suspensions contribute to juvenile delinquency by putting unsupervised children and those with problems into the streets to do things they might not have done if they'd been in school. Suspensions by themselves, do not solve behavior problems, they do not help children. Suspension simply returns a child to class again with the

same problem. Not a single school official interviewed by C.D.F. contended that suspensions help children.

Suspension seldom benefits children. Usually the child cannot make up missed schoolwork or tests, resulting in the child getting further behind. Additionally, C.D.F. maintains a labeling theory perspective, in that suspension often labels a child as a troublemaker. This label causes teachers, school officials and other students to foster expectations that breed misbehavior. The labelling process does sometimes carry over from one teacher to another. The teacher expects a certain kind of behavior, namely rebellious behavior or negative behavior from a youngster, and with that kind of expectation as a preset, the C.D.F. maintains that the youngster naturally is reinforced into producing that kind of behavior.

According to the C.D.F., the use of suspensions in public schools has reached mammoth proportions, thus making the issue of suspension important because the majority of students in America attend public schools. School officials have traditionally argued that the school acts "in loco parentis"—as a parent substitute. Contradiction is shown when school officials act so often to throw a child out of school. Few parents would take such action. Even the courts have recognized the "suspensions of just a few days could work substantial harm to a child," (Shankley v. Northeast Index. School District). As a result of the in-depth survey and the harmful conclusions reached, the C.D.F. concludes

that reassessment of the underlying rationale and effectiveness of suspension as an educational tool must be undertaken.

Strengths and Weaknesses of the C.D.F. Survey

The report provided by the C.D.F. titled "School Suspensions: are they helping children," is a good descriptive study based on a large sample. Recall that the study is based on two sources of data: (1) an extensive household, door-to-door survey (8,500 households), and (2) analysis of information submitted by school districts to the Federal Office of Civil Rights (National Census Data). Thus the study utilizes two primary sources of data from which to draw conclusions about suspension. The study provides a good characterization of the "suspended student." That is, the study characterizes the student who is suspended most often. The O.C.R. data was not a random sample, rather it was a census of all school districts (with substantial minority enrollments). However, due to reporting problems, the census figures are a conservative count of children out of school in America, thus O.C.R. data likely understates the problem.

The C.D.F. survey of course provides the benefits common to self-report studies. The questionnaire was uniform and interviews were conducted in confidence with assured anonymity, hopefully resulting in truthful answers by respondents. The C.D.F. study raises a lot of issues about the effectiveness of school suspensions and brings to the surface

the extent of the problem of children out of school in America, at least as it was in the mid-1970s. The C.D.F. survey illuminated the wide spread use of suspensions and confirmed the patterns of racial discrimination.

The C.D.F. drew a lot of conclusions for which there were no empirical tests. For example, C.D.F. concludes that suspensions contribute to delinquency by allowing unsupervised children into the streets to commit delinquent acts. This seems logical, however, the activities of children during suspension should be investigated not just assumed. Another conclusion made by C.D.F. fell along the lines of the Labelling Perspective wherein it is believed that the suspension/labelling process by school officials, teachers and other students, fosters an expected negative behavior. The student is reinforced into producing negative behavior or delinquency as a result of the labelling process. Again this conclusion is not empirically tested by C.D.F. or at least backed up by some of the existing labelling theories, most of which have since been unsubstantiated by recent theorists. The C.D.F. survey is strictly a descriptive study which provides a good data base for further investigation.

Suspended Students—Suspended Learning

Another report on suspensions was provided in a study by the Philadelphia public schools entitled "Suspended Students—Suspended Learning" (1982). This report was a collective effort by staff and volunteers in a Philadelphia's Parent Union, conducted over a four-year period. The parents union analyzed the suspension data that school districts are required to submit to the U.S. Office of Civil Rights (O.C.R.). Each school in the system must report on a yearly basis the number, race and sex of students who have been suspended at least once. Through this analysis, the parent's union found that: since 1977, Philadelphia's Public Schools have been suspending on the average almost 15% of its students and almost 25% of secondary students at least once. Overall suspension rates have increased for both minority and non-minority students. This report presents data on the scope and nature of the suspension problem in Philadelphia Public Schools.

The report begins by noting two particular court decisions that have determined what is considered to be proper and lawful use of suspensions. In Goss vs. Lopez (95 S.Ct. 729; 1075) the right of students to due process in all suspension cases was established. The Supreme Court ruled that a suspension is, in effect, the denial of access to a public education which is guaranteed by the state. In Jones vs. Gillespie (Philadelphia, Pa. 1970) the process by which a student is suspended is spelled out in greater detail. The critical issue in these

decisions is that although they establish the mechanism by which suspensions may be levied, they do not in fact resolve the problem of what constitutes a fair, reasonable and legitimate suspension, state law is equally vague. Thus the ruling leaves school systems with the discretion to determine: what are suspendable offenses, which students will be suspended and for how long. And for the most part, the decision to suspend a student is left up to individual principals.

Methodology

In examining 72 school handbooks, this study found a wide range of behaviors were considered serous enough to warrant suspension. Some of the so-called "misbehaviors" seem absurd, for example: illegal employment, chewing gum or wearing a hat to class. Also what seems to be common practice is the use of suspension for repeated acts of misconduct as well as for the serious offense. Based on the belief that suspensions were frequently used and abused, the examiner's first intention was to document the extent to which suspensions were used as a disciplinary measure by analyzing both the district-wide and the school-by-school rates of suspension. The second intention was to ascertain if suspension rates vary from school to school and identify those schools that had a very high or very low suspension rates or dramatic changes over the last two years. Thirdly, why were students being suspended

from school? Data were gathered by interviewing school personnel and analyzing suspension data submitted to the Office of Civil Rights.

For the 1979-80 and 1980-81 school years, and for every school for which data were available, the study linked the numbers of students suspended to the appropriate enrollment figures, as well as to other school characteristics such as the proportion of the student enrollment from families on aid to families with dependent children, student and teacher absentee rates, and the California Achievement Test Scores. Overall suspension rates (total suspensions/total enrollment), the suspension rates for white students (number of whites suspended/white enrollment) and the non-white suspension rates were calculated for the entire district and for the individual schools, as well as to compare variations in these rates across schools with similar or dissimilar characteristics. The purpose of this report was to get a perspective on the magnitude of the problem that exists city-wide.

Findings

Fifteen percent of all students, 16.8% of all minority students and 10.08% of all non-minority students were suspended at least once during the school year. And the pattern of increase over a four year period (1977-81) showed that the district's suspension rate increased 3.2% with the increase being greater for minority students than for non-minority, 3.7 compared to 1.5%. In 1980-81 the districts minority suspension rate was

the highest (18%) while the white rate was only 10.8%. Additionally, these rates of suspension, for both minority and non-minority students, appeared high when compared to the national rates. Minority students in Philadelphia were suspended at a rate that is almost three times the national rate for that group. As expected, the rates of suspension differed markedly by school level. Almost 25% of Philadelphia secondary students compared to approximately 6.3% of elementary students were suspended, with suspension rates increasing for both secondary and elementary students. There also was evidence of increasing racial disproportion in the rates of suspension. All suspension rates reached their highest point in the 1980-81 school year.

In some schools, suspensions were virtually non-existent, while in others, suspension appears to be a very common occurrence. Of the 68 secondary schools in this study, 34 or exactly 1/2, suspended 25% or more of their students at least once during the school year. Of these, 13 suspended 40% or more of their students at least once, and 6 schools suspended 50% or more of their student population at least once. The point is, that even within districts, there is wide variation in the use of suspension.

Another concern of this study was to identify and describe school characteristics associated with the different rates of suspension. Schools with low suspension rates were characterized by a high degree of community and parent involvement in the school. They were also

characterized by a strong personal belief of the principal in the importance of instruction rather than control. Suspensions were measures of last resort to be used only when all else had failed. Schools with high suspension rates were characterized by a low level of parental or community involvement. Standards were designed to emphasize control in the school. Suspensions were used as the most common means of implementing discipline. And schools whose suspension rates have changed significantly were primarily associated with changes in personnel.

The report concludes by highlighting some programs that were developed to eliminate suspension. (Programs not emphasizing "control" but emphasizing "positive discipline"). Again reference to suspension is made in negative terms. The trend and belief by many educators is that suspension is counterproductive and is considered "Negative disciplines." One North philadelphia high school principal explained that he began realizing that "Suspensions just don't work because they made everybody feel worse. Students feel angry and rejected. They are rejected by the teacher and principal, they are teased by fellow students and further punished by angry parents. Rapport between student, home and authorities in the school breaks down" (Principal Rogers, interviewed 1980-81 school year). It is believed by these authors that student misconduct and delinquency can and often does reflect a sense of frustration that students experience when their educational needs are not

met. The institution should adjust to meet the needs of the students, rather than adjusting students (by suspending) to meet the needs of the institution. Students must be in school to learn, suspension should be a last resort.

Strengths and Weaknesses of Study

This report, like the one provided by the Children's Defense Fund, is basically a descriptive study. Also its analysis is limited to the Philadelphia School District. However, some of its conclusions were similar. Similarly: there exists a wide variety of offenses which are suspendable, suspension rates vary as do the offenses for which a student can be suspended, even within the same district, also minority students were suspended at a rate higher than non-minority students. This study analyzed O.C.R. data which is limited to the number, race and sex of students suspended at least once during the school year. O.C.R. data does not provide what the student was suspended for and it is unknown how many were suspended more than once. The other main source of data for the Philadelphia study was claimed to be drawn from interviews with "key school personnel." However, these "key personnel" were not identified in the report. Were they teachers? principals? or janitors? If the key personnel interviewed were school administrators, it is likely they would not be too receptive to allowing the parent union's

investigators ("outsiders") to question their use of suspension as disciplinary measure.

Social Bonding and Delinquency

The effects Social Bonding have on juvenile delinquency will now be discussed through in-depth review of Hirschi's Social Bonding Theory. In a large body of data on delinquency collected in California, Travis Hirschi contrasts the assumptions of three major perspectives on delinquency. Namely: (1) strain, (2) control and (3) Cultural deviance theories. In 1969 Hirschi published his major findings in "Causes of Delinquency." Hirschi begins by outlining the assumptions of these theories. Then by drawing from many sources, he criticizes strain and cultural deviance theories and maintains a social control perspective through which he advocates a Social Bonding Theory.

Traditionally, theorists study why some people break the law or why some adolescents participate in delinquency. Hirschi focuses on why some do not take part in illegal activities. Basically, Hirschi feels that adolescents do not take part in illegal activities because of strong bonds to conventional society. The elements of the bond as described by Hirschi consist of ATTACHMENT of the individual to others, COMMITMENT to conventional lines of action, INVOLVEMENT in conventional activities and BELIEF in legitimate or conventional values. Recall that control theory maintains that the higher the level a person

obtains of each of these elements, the less likely they are to commit delinquent acts. The more tightly bonded an adolescent is to conventional social groups, the less likely delinquent.

The Sample and The Data

Hirschi's study sets out to explain why some adolescents do not break the law. The sample was drawn from 17,500 students entering the eleven public junior and senior high schools in Western Contra Coast County, California in the Fall of 1964. The population was stratified by race, sex, school and grade. The subjects were selected randomly for inclusion in the sample. A stratified probability sample of 5,545 students was produced: 1,479 black males, 2,126 non-black males, 1,076 black females and 864 non-black females. Of the 5,545 students in the original sample, complete data were eventually obtained on 4,077, or 73.5%. The data came from 3 sources: (1) school records; (2) the questionnaire (self-report survey) completed by the students; and (3) police records.

Delinquency Defined

"Delinquency is defined by acts, the detection of which is thought to result in punishment of the person committing them by agents of the larger society" (Hirschi, 1969, 47). Delinquency was measured by many items on the questionnaire which dealt with delinquency or deviant behavior. Specifically six items were included in a delinquency scale: (1) petty larceny; (2) grand larceny; (3) auto theft; (4) vandalism

(malicious mischief); (5) assault and battery; and (6) all other offenses that are commonly thought to result in punishment by agents of the larger society if detected.

According to Hirschi, sex, race, social class, neighborhood, mother's employment, the broken home, size of family and so forth, are the things of which most empirical studies, textbooks and theories of delinquency are constructed (traditional variables). A strong relation between race and delinquency can be interpreted by almost any theorist. Hirschi feels that these variables should be treated as intervening variables, rather than as direct causes of delinquency. Thus it is necessary to control these variables in subsequent analysis. Hirschi uses two traditional variables (social class and race) to describe the distribution of delinquency in the population. In sum, there is no important relation between social class as traditionally measured and delinquency. Social class differences with respect to self-reported delinquency were very small. The slight differences in self-reported delinquency among race are not large, and do not make a relation between race and self-reported delinquency logically necessary. Furthermore, Hirschi feels that there is no reason to believe that the causes of crime among blacks are different from those among whites. Hirschi speculates that black-white official differences may be exaggerated by differential police activity.

Hirschi further comments on some other traditional variables and delinquency, namely: age, mother's employment; size of family and ordinal position (birth order) and broken homes. A positive relation between AGE and delinquency exists, with middle adolescence being the time period of maximum delinquent activity. It is also noted that delinquent activity of dropouts declines after they leave school, further supporting a relationship between schools and delinquency. Hirschi found that the mother's employment in relation to delinquency was not very strong. However, there exist much consistent research that as family size increases, the likelihood of delinquency increases. Children from large families are more likely than children from small families to have committed delinquent acts. Overcrowding in Hirschi's sample was found unrelated. However, family size is related to academic achievement which is related to delinquency. Also, the middle child was most likely to commit delinquent acts. Finally self-reports revealed that differences in behavior between children in broken and unbroken homes, is not great. Only a weak relationship favored intact homes. Yet "the broken-home, causes delinquency" concept is firmly ingrained in society, as is the labelling perspective. Both of these ideas are refuted by recent research.

The family and the school are nearly always the conventional socializing agencies. Although attachment and commitment to parents was seen as being the most significant, attachment and commitment to the

schools was also found to be significant. The basic elements of the social bond (attachment, commitment, involvement and belief) will be reviewed here with particular focus on the schools.

School Attachment

Recall that school attachment is measured by a child's sensitivity to the opinions of the school officials. Specifically, does the child like schools? Or care what teachers think about him? According to Hirschi: "the boy who does not like school and who does not care what teachers think of him is to this extent free to commit delinquent acts....if a person feels no emotional attachment to a person or institution, the rules of that person or institution tend to be denied legitimacy....the child who doesn't like school or does not care what teachers think, is likely to believe that the school has no right to control him" (Hirschi, 1969, 127).

Like School. Hirschi found the relation between liking school and delinquency to be very strong, represented by a correlation of .18. Over 79% of the boys committing two or more delinquent acts were found among the 55% who were indifferent to or dislike school. 49% of the boys who dislike school have committed two or more delinquent acts in the previous year, compared to only 9% of those who like school. In 1985 Richard Lawrence found similar results. Tests for significant differences between the means in school performance scores of the delinquent and non-delinquent youths, resulted in statistical significant

differences. All of the items measuring school performance showed significant differences between the two groups. Particularly the mean school performance scores for delinquents liking school was 3.44 compared to 3.90 for nondelinquents, resulting in a t of 2.96 ($P < .01$)(Richard Lawrence, 1985). Hirschi also found that ability and performance (measured by English Average Marks) is related to attitudes toward school, (Liking school), the correlation being .23. Similarly, Polk and Schafer found that failing students are more likely to see the school in negative terms. That is, the failing student is more likely to down-rate the public school system and an increased likelihood of agreeing that school is "dull and boring." Only 33% of D/F students versus 60% of A/B students rated the public school system as "very good." And 46% of D/F students agreed that "school is dull and boring" compared to 23% of A/B students.

Care What Teachers Think. The question "Do you care what teachers think of you?" is a central measure of attachment to school. Hirschi found that "the less a boy cares about what teachers think of him, the more likely he is to have committed delinquent action. This relation too is very strong and is congruent with control theory" (Hirschi, 1969, 123). This was particularly evident with self-reported delinquent acts wherein 36% of those without concern for teacher's opinions had committed two or more delinquent acts, whereas only 12% of those with

a lot of concern for teacher's opinions, committed two or more delinquent acts.

School Commitment (proofs of dedication to school)

School commitment was measured by the child's educational aspirations and expectations. Commitment to education was also measured by several items on Hirschi's questionnaire. These questions formulated an "Achievement Orientation Index," that is questions designed to measure those that are committed to educational success. Additionally, a child's commitment to the school was measured by general school aptitude.

Educational Aspirations and Expectations. Admittedly, it is difficult to measure the intensity of aspirations. Hirschi measured educational ASPIRATIONS by asking: "How much schooling would you like to get eventually?" Hirschi concludes that the higher the student's educational aspirations, whether the student is black or white, the less likely the student is to commit delinquent acts (by both self-report and official measures). Similarly, Polk and Schafer concluded that the educational aspirations of the uncommitted delinquent youth are lower than those of the successful and committed non-delinquent youth (Schools and Delinquency, 1972). Hirschi measured EXPECTATIONS by asking: "How much schooling do you actually expect to get eventually?" Aspiration levels in the sample were high. Unfortunately, educational

expectations in the sample were as high as aspirations. Thus producing only minor discrepancies as the difference between aspiring to graduate from college and the expectation of attaining only some college as insufficient to produce delinquency. In other words, the discrepancies in educational aspirations and expectations are not important antecedents of delinquency in Hirschi's sample.

Index of Achievement Orientation. Those committed to educational success as evidenced by current efforts should be least likely, according to control theory, to commit delinquent acts. Several items in Hirschi's questionnaire tap this kind of commitment. For example: "I try hard in school" and "how important is getting good grades to you personally?" Similar items were combined to produce an Index of Achievement Orientation. Hirschi found a relation between achievement orientation and self-reported delinquency. He concludes that the ambitious (those that try hard in school, those that personally feel it is important to get good grades, etc.) are much less likely than the unambitious to have committed delinquent acts.

General School Aptitude. Hirschi measured General School Aptitude by: the students academic competence; self-rating on school ability and intelligence. The best measure of success in school is undoubtedly grade-point average. However, overall grade-point averages were not available when Hirschi's analysis was conducted. However,

grades in required subjects such as English and Math were available for most students in the sample. Hirschi measured academic competence by analyzing DAT scores and English Average Marks.a The correlation between Differential Aptitude Test Verbal Scores and average marks in English is .39. Also the prediction that average marks are more closely related to delinquency than test scores is confirmed. Hirschi concludes that the better a student does in school, the less likely he is to have committed delinquent acts and the less likely to have been picked up by the police.

Richard Lawrence also found that the delinquent group scored significantly lower on the intelligence scale (GPA). This finding is supported by other research as well (Cattell and Cattell, 1975; Pierson and Kelly, 1963, Polk and Schafer 1972). Lawrence found the mean GPA for non-delinquents to be 3.50 compared to 2.565 for delinquents ($t=6.02$ $p < .001$). In Lawrence, several of the school performance variables were significantly predictive of official delinquency. The discriminent function was statistically significant (Wilk's Lambda = .51; $X2 = 110.8$; $df = 13$; $p = .00$) and it accounted for 49% of the total variance explained. The variable the most predictive of official delinquency status was "lower intelligence" .64 and "lower grades" .37, ranking fourth in order of their contribution.

Hirschi also suggests that the more competent a student thinks he is the less likely the student is to commit delinquent acts. Thirteen

percent of those who consider themselves "among the best" in school ability have committed two or more delinquent acts, while 35% of those who consider themselves "below average" in school ability have committed two or more delinquent acts. Hirschi concludes that the more academically competent a boy is and/or the more competent he sees himself to be, the less likely he is to be delinquent.

School involvement

The school does more than prepare students for the future. It acts also as a holding operation; it attempts to engross and involve students in activities. Historically, "idle hands" have been viewed as the "devil's workshop." In other words, unoccupied youths are likely to get involved in mischief and of course the more time unoccupied, the greater the likelihood of delinquency. Hirschi points out that as defined, delinquency requires very little time, negating the "idle hands are the devil's workshop" theory. Furthermore, Hirschi states that the leisure activities (such as TV, reading, hobbies, sports, etc.) of the boys in the sample are collectively unrelated to the commission of delinquent acts. However, all of the indicators of time spent in a concern for homework, are reasonably strongly related to the commission of delinquent acts. Also, attendance at school activities and participation in interscholastic athletics are reviewed.

Time Spent in and Concern for Homework. School involvement is traditionally measured by time spent in and concern for homework. Hirschi provides several indicators of attention to homework on the questionnaire. A relation between time devoted to homework and delinquency is evident. Of those committing one or more delinquent acts, 64% dedicated less than a half hour per day doing homework. As compared to 34% who spent 1 and 1/2 hours or more per day studying. In other words, the less time studying, the greater the chances for delinquency.

In a study by Polk and Schafer, the question was asked "In the average week, how many hours do you spend at schoolwork at home?" (homework). Polk and Schafer concluded that the "uncommitted youth, it would appear, is characterized by behavioral withdrawal from school. He does not study, he receives poor grades, and does not participate in activities" (Polk and Schafer, 1972, 85). Thus, delinquency may be a function of the lack of commitment to school at least for some of the uncommitted youths.

Attendance at School Activities. All of the items measuring school performance in Lawrence's study, showed significant differences between delinquents and non-delinquents. Non-delinquents showed more attendance at school activities than did delinquents. The mean score of non-delinquent's attendance at school activities was 1.56 compared to .91

for delinquents ($t = 3.51$ and $p < .001$). The zero order correlations between school performance and self-reported delinquent behavior provide support for a relation between two variables. Lack of participation in school activities is associated with greater likelihood of involvement in delinquent behavior. Also, several of the school performance variables were significantly predictive of official delinquency adjudication. The variables most predictive of official delinquency status were (in the order of their contribution): lower intelligence, more school rule violations, and less attendance at school activities. Discriminant function coefficient for participation in school activities being .32 $p < .001$. These findings provide support for Hirschi's (1969) claim that attachment to school and involvement in school activities provide a containment against involvement in delinquent behavior.

In the study by Polk and Schafer (1972), the question was asked "In the average week, how many evenings do you spend at school-related activities?" Recall that Polk and Schafer conclude that the uncommitted delinquent youth is characterized by behavioral withdrawal from school, he does not study, he receives poor grades, and he does not participate in school activities. And that delinquency among at least some youth may be a function of the lack of commitment to school. Also, Polk and Schafer's interpretations lean toward the view that commitment is temporally prior to delinquency, but admit that the data of this study do not support this sequence over any alternative sequence.

Participation in Interscholastic Athletics. Interscholastic athletics are supported by community members and school administrators partly out of the belief that participation in sports is an effective deterrent to delinquency. Polk and Schafer draw from numerous theories to predict that participation in interscholastic athletics will have a deterring influence on delinquency. For example, athletes should be delinquent less often than non-athletes on the basis of the theoretical reasoning of Differential Association. Wherein delinquency is contingent upon the amount of exposure to deviant subgroups and inversely with exposure to conforming influences. Coaches usually set strict standards of behavior for on and off the field. Most athletes internalize these standards and exert pressure on other athletes to conform as well. The athlete is more likely to be exposed to strong conforming influences than the non-athlete. Albert Cohen, Arthur Stinchcombe, Kenneth Polk and Walter Schafer contend that delinquency is often the result of rebellion against the school. For Polk and Schafer, rebellion sometimes rises out of failure. For some youths, school is frustrating, an outcome of which is overt rebellion in the form of illegal behavior. For successful athletes, school is less likely to be a source of frustration than for the comparable non-athlete. In short, participation in interscholastic athletics can be expected to exert a deterring or negative influence on delinquent behavior. In testable terms, athletes should be delinquent less often than comparable non-athletes. In Schafer's sample, as predicted, athletes are less often

delinquent than non-athletes. Ninety-three percent of the athletes were considered nondelinquent with the remaining 7% of athletes delinquent. Comparatively, 83% of the non-athletes were considered non-delinquent with the remaining 17% of non-athletes as being delinquent.

Belief

The final element of the social bond is belief. Beliefs are the major variables in most sociological explanations of delinquent behavior. To some, beliefs appear to be the key independent variable; delinquency results when the norms have not been internalized. Within control theory tradition, the relevant beliefs are more or less universally held within the society, but are variably "neutralized" or explained other ways. For control theorists; delinquency is not caused by beliefs that require delinquency but is rather made possible by the absence of (effective) beliefs that forbid delinquency. Since this study is concerned with delinquency and the schools, belief and respect for the law will be reviewed in addition to a child's acceptance of school authority.

Respect for Police. We have seen the effects of attachment to parents and teachers. Hirschi found an equivalent relation between "respect for the police" and delinquent behavior. Hirschi concludes that lack of respect precedes delinquent acts and does not simply follow from contact with the police. The relation between self-reported delinquency and respect for police was evident in Hirschi's sample. The question was

asked "I have a lot of respect for the Richmond Police?" Responses ranged from strongly agree to strongly disagree. Forty-five percent of those that did not respect the Richmond Police, reported having committed two or more delinquent acts. Comparatively, 12% of those having a lot of respect for the police, reported having committed two or more delinquent acts, and 71% of those with a lot of respect for the police reported no delinquency involvement.

Lack of Respect for the Law. Lack of respect for the police presumably leads to lack of respect for the law. Hirschi found "attitude toward the law" to be strongly related to self-reported delinquency. There is variation in the extent to which boys believe they should obey the law, and the less they believe they should obey it, the less likely they are to do so. In Hirschi's sample, the question was asked "It's alright to get around the law if you can get away with it?". Forty one percent of those that "strongly agreed" and 45% of those that "agreed", reported committing two or more delinquent acts. Comparatively, 15% of those that "disagreed" and 9% of those that "strongly disagreed" reported committing two or more delinquent acts.

Acceptance of School Authority. In regard to the school, beliefs are measured by a child's acceptance of school authority. Hirschi measured feelings about the scope of the school's legitimate authority by asking the question "It is none of the school's business if a student wants

to smoke outside of the classroom?". Hirschi also measured self-reported delinquency by age at which cigarette smoking began. Hirschi suggests although smoking is a better predictor of delinquent activity than the attitudinal measure, the attitudinal measure is independently related to delinquency.

Acceptance of school authority was measured by "school rule violations" and "truancy" in Richard Lawrence's study (1985). The mean score for school rule violations for non-delinquents was .73 as compared to 1.67 for delinquents ($t = 5.40$ and $p < .001$). Additionally, the mean score for truancy for non-delinquents was .97 as compared to delinquents 1.44 ($t = 2.39$ and $p < .05$). School rule violations and truancy seem to be predictive of involvement in self-reported delinquent behavior. To determine the relative amount of delinquent behavior explained by school performance and personality factors together, multiple regression analysis was performed using the predictors having significant zero-order regression coefficients. Number of school rule violations, attachment to school and truancy were found to be the most important school performance variables. The variables most predictive of official delinquency status were (in the order of contribution): lower intelligence, more school rule violations (-.436 $P < .001$), less attendance at school activities...more truancy (.27 $p < .01$). Again, these findings provide support for Hirschi's (1969) claim that attachment to school and

involvement in school activities provide a containment against involvement in delinquent behavior.

The Causal Chain

Hirschi concludes with a discussion of the effects of school experience on delinquency. Hirschi presented a simple causal chain and examined data relevant to it. The causal chain runs from: ACADEMIC INCOMPETENCE, TO POOR SCHOOL PERFORMANCE, TO DISLIKING OF SCHOOL, TO REJECTION OF SCHOOL'S AUTHORITY, TO THE COMMISSION OF DELINQUENT ACTS. All statistical relations relevant to this chain have been presented, and all are in fact consistent with it. It was shown that the higher a boy's score (the better a student does in school), the less likely to have committed delinquent acts and the less likely to have been picked up by police. Furthermore, the more academically competent a boy is and/or the more competent he sees himself to be, the less likely he is to be delinquent, regardless of his position in the opportunity.

If the link between ability and performance and delinquency is the bond to the school, then ability and performance must be related to attitudes toward school. The correlation between Differential Aptitude Test Verbal Scores and Liking School is .11. The correlation between English Average Marks and Liking School is .23. The statistical data to this point are consistent with the causal chain. Recall that 49% of the

boys who dislike school have reported committing two or more delinquents acts in the previous year, compared to only 9% of those who like school. In control theory, delinquency is not seen as compensation for previous frustration and failure; it is not seen as an alternative route to some remote goal. Boys who do badly in school reduce their interest in school (they may of course actually come to hate it) and are thus free to this extent to commit delinquent acts.

The boy who does not like school and who does not care what teachers think of him is to this extent free to commit delinquent acts. The less a boy cares what teachers think of him, the more likely he is to have committed delinquent acts. Thirty six percent of those that didn't care very much what teachers thought, reported having committed two or more delinquent acts compared to only 12% of those who care a lot about what teachers thought. The items used to measure attachment to the school, "Do you like school?" and "Do you care what teachers think of you?" are, as would be expected, substantially related to an item designed to tap feelings about the scope of the school's legitimate authority; "it's none of the school's business if a student wants to smoke outside of the classroom". This item, in turn, is very strongly related to delinquency. Thirty eight percent of those that "strongly agreed" as well as those that "agreed," reported two or more delinquent acts compared to only 12% of those that "disagreed" and 11% of those that "strongly disagreed."

Beginning, then, with variation in academic competence, we have traced a path through attachment to the school and support of the school's authority to delinquency. Let us now look at the simultaneous effects of the variables. First, the set of school items, accounts for more of the variance in delinquency than the father-mother items combined. (The coefficient of multiple correlation is .41, whereas for the father-mother items it is .36.) Second, as was expected, academic competence has little direct effect on the commission of delinquent acts when the effects of school performance and attitudes toward the school are removed. Third, the effects of academic performance are not eliminated when attachment to the school is taken into account. Fourth, when the effects of academic competence, grades, and attitudes toward the school are taken into account, the relation between self-perceived school ability and self-reported delinquency disappears. Fifth and finally, the three attitudinal measures, retain an effect on delinquency when the effects of the competence and performance variables are removed. See Table 1 in the Appendix for self-reported delinquent acts and selected school items (Hirschi, 1969, 130).

Summary

This literature review was designed to inform the reader of the nature and use of suspensions as they are used in American public schools. It was discovered in three major studies of school suspension,

that suspensions are rampant all over America, and found to be common in all types of school districts. Use, grounds, procedures, and lengths of suspensions vary widely between schools, even in schools within the same district. The vast majority of school suspensions were non-dangerous, non-violent offenses; 63.4% of the reasons for suspension in one study were for truancy and tardiness, behavior problems, arguments, smoking, drugs, alcohol, dress code and miscellaneous punishment-related offenses (non-dangerous reasons). In all the studies, minority students were suspended at a higher rate than non-minority students. In addition to the frequent use of suspensions, the problem with suspension is, they serve no demonstrative valid interest of children or school and may in fact harm the child by getting further behind. Suspensions may cause marginal, weak or poorly motivated students to dropout permanently. Additionally, it is believed that suspensions may contribute to juvenile delinquency by putting unsupervised children into the streets.

Additionally, this literature review was designed to incorporate theory. Thus an overall look at the elements of the social bond and their relationship to juvenile delinquency was reviewed. Travis Hirschi found the elements of the social bond in relation to education as being: measured by the child's sensitivity to the opinion of the teachers (ATTACHMENT to the school); measured by the child's educational aspirations and expectations (COMMITMENT to the school); measured by the amount of time spent in school activities, especially doing homework

(INVOLVEMENT in school); and measured by the child's acceptance of the school's authority (BELIEF in educational goals). In short, it was found that the higher the level a student obtains of each element, the less likely they will commit delinquent acts. These concepts will be incorporated into the "Design of study," to be described next, in Chapter 3.

CHAPTER 3

DESIGN OF THE STUDY

Introduction

This chapter will present the methodology used in the study to test whether a relationship exists between school suspension and delinquency. And to test the relationship between juvenile delinquency and the social bonding model. In this chapter, the sample population and data collection procedures, the variables, the testable hypotheses, and the subsequent data analysis techniques will be described.

Sample Population and Data Collection Procedures

The data for this study were made available (in part) by the Inter-University Consortium for Political and Social Research, Ann Arbor, Michigan. The data for the National Youth Survey (N.Y.S.) was originally collected by Delbert Elliott beginning in 1976. The National Youth Survey is a longitudinal study of delinquency and drug use among American youth. The study design called for an initial survey in 1977 with a national probability sample of youths aged 11 to 17. The total youth sample was initially interviewed between January and March of 1977 concerning their involvement in delinquent behavior and drug use

during the calendar year, 1976. Second, third, fourth and fifth surveys were conducted during this same time period in successive years. By the third survey (1979), the panel was 15 through 21 years of age; the National Youth Survey employed a probability sample of households in the continental United States in 1976 based upon multistage, cluster sampling design. Seventy-six primary sampling units were selected, with probability of selection being proportional to size. This sampling procedure resulted in the listing of 67,166 household of which approximately 8,000 were selected for inclusion in the sample. All youths living in the selected households who were 11 through 17 years on December 31, 1976 and were physically a mentally capable of being interviewed were eligible respondents for the study. The selected households generated an estimated 2,360 eligible youths. Of these, 635 (27%) did not participate in the study due to (1) parental refusal, (2) youth refusal, or (3) an inability to make contact with the respondent. The remaining 1,725 (73%) agreed to participate in the study, signed informed consents, and completed interviewed in the initial (1977) survey. The loss rate from any particular age, sex or racial group appears to be proportional to that group's representation in the population. Further with respect to these characteristics, participating youth appear to be representative of the total 11 through 17 year-old youth population in the US as established by the US Census Bureau. Finally, the respondent loss over the first three surveys was relatively

small. The loss rate for the 1978 survey was 4% (N = 70), and for the 1979 survey, the cumulative loss increased to 6% (N = 99). The representiveness of the sample has not been affected in any serious way by the loss over the first three surveys.

The Variables

The Dependent Variable. Juvenile Delinquency is measured through self-reports of the number of times the student committed certain acts within the last twelve months (Christmas a year ago to the Christmas just past). Eighteen specific delinquent acts make up seven categories of offenses: (1) drug offenses; (2) weapon offenses; (3) Breaking and Entering a building or car; (4) vandalism; (5) theft, major and minor; (6) assault, excluding sexual; and (7) robbery. The eighteen acts that make up these categories are listed on the next page. Delinquency is further subdivided into non-delinquent, occasional delinquent and serious delinquent.

Non-Delinquent. A non-delinquent is defined as a surveyed youth, between the ages of 11 and 19 , claiming to have not participated in any of the seven categories of delinquency during the calendar year prior to the survey. That is, Christmas a year ago to the Christmas just past.

Occasional Delinquent. An occasional delinquent is defined as a surveyed youth, between the ages of 11 and 19, claiming to have

participated in one or two acts of delinquency during the calendar year.

Serious Delinquent. A serious delinquent is defined as surveyed youth, between the ages of 11 and 19, claiming to have participated in three or more acts of delinquency during the calendar year prior to the survey.

Categories of Delinquency

I. Drug offenses

1.Marijuana sales

II. Weapon offenses

2.carrying hidden weapons

III. Breaking and entering

3.building or car

IV. Vandalism

4.school property

5.family property

6.other property

V. Theft

7.stole motor vehicle

8.stole more than $50

9.stole $5 to $50

10.Stole less than $5

VI. Assault and battery

11.hit teacher

12.hit parent

13.hit students

14.gang fights

15.aggravated assault

VII. Robbery

16.strong-arm student

17.strong-arm teacher

18.strong-arm others

The Independent Variables. The independent variables are school suspension, and the elements of the social bond: school attachment, school commitment, school involvement, and belief in school authority. These variables will be discussed in further detail.

School Suspensions. Are measured through self-reports of the number of times suspended within the past twelve months (Christmas a year ago to the Christmas just past). Suspension is divided into non-suspended and suspended students with the total number of suspensions calendar year, per student (frequency) is accounted for. School suspension is hypothesized to be positively related to delinquency.

Non-Suspended Student

A non-suspended student is defined as a junior or high school student, ranging from 6th to 12th grade, between the ages of 11 and 18 years of age, claiming never to have been suspended from school during the past twelve months prior to survey. The category response for "never" been suspended last year is (0).

Suspended Student

A suspended student is defined as a junior or high school student, ranging from 6th to 12th grade, between 11 and 18 years of age, claiming to have been suspended from school at least once in the past twelve months prior to survey. The category responses: (1), (2), (3), (4), (5)...corresponds to the number of times suspended in the past twelve months.

School Attachment. Is measured by five categories which depict whether a child is sensitive to teacher's opinions and whether a child likes school. Specifically, how important is it to the child to have teachers think of them as a "good student" and how important is it to make a "good impression," rather than tell the truth to teachers. Additionally, whether or not a child likes school is measured by certain feelings the child has about school, such as: feeling like NOBODY AT SCHOOL CARES about me or feeling like I DON'T BELONG AT SCHOOL, or feeling LONELY AT SCHOOL. Unfortunately, the direct

question "Do you like school?" was not asked in the National Youth Survey. Sensitivity to teacher's opinions and liking school are hypothesized to be negatively related to delinquency.

Good Student. Sensitivity to teacher's opinion is measured by asking the student: "How important is it to you, to have teachers think of you as a good student?" The category scales are: very important (5); somewhat important (3); and not important at all (1).

Good Impression. Sensitivity to teacher's opinion is further measured by asking the student: "Making a good impression is more important than telling the truth to teachers?". The category scales are: strongly agree (1); agree (2); neither agree or disagree (3); disagree (4); and strongly disagree (5).

Nobody at School Cares. Whether a child likes school was measured by certain feelings a child has about school. The question was asked "I often feel like nobody at school cares about me?". The response scales are: strongly agree (1); agree (2); neither agree or disagree (3); disagree (4); and strongly disagree (5).

Belong at School. Whether a child likes school was also measured by a feeling of not belonging at school. The question was asked: "I don't' feel as if I belong at school?". The response scales are: strongly

agree (1); agree (2); neither agree or disagree (3); disagree (4); and strongly disagree (5).

Lonely at School. Whether a child likes school is further measured by a child's feeling of loneliness at school. The question was asked: "Even though there are lots of kids around, I often feel lonely at school?". The response scales are strongly agree (1); agree (2); neither agree or disagree (3); disagree (4); and strongly disagree (5). A combined "agreement" to two or more of the child's feelings about school (measures c, d, or e) will be construed to qualify as not liking school.

School Commitment. Is first measured by the child's educational ASPIRATIONS and EXPECTATIONS, which is measured by the importance placed on going to college (aspirations) and the belief in chances for finishing college (expectations). Secondly, GENERAL SCHOOL APTITUDE is used to measure school commitment. General School Aptitude is defined by the student's academic competence, that is; self-rating on school ability and intelligence. Intelligence is measured by a student's grade point average. Thirdly, school commitment, those committed to educational success is further measured by ACHIEVEMENT ORIENTATION. Several items from the questionnaire are used to tap commitment, these items will be explained in the Index of Achievement Orientation. It is hypothesized that school commitment is negatively related to delinquency.

Educational Aspirations and expectations. Aspirations are measured by asking: "How important is it to you to go to college?". The response scales are: very important (5); somewhat important (3); and not important at all (1). Expectations were measured by asking: "What do you think your chances are of completing a college degree?". The response scales are: good (3); fair (2); and poor (1).

General School Aptitude. Academic competence is first measured by the student's self-rating on school ability and intelligence. Three measures of self-rating on school ability are found by asking the student: first, how well they think they are doing or whether they think they are a good student. Secondly, how well they think they are at having a high GPA and thirdly, how well they think they are doing in hard subjects. The response scales are: very well (5); ok (3); and not well at all (1). Intelligence is measured by asking the question: "What is your grade point average?". The response scales are: mostly A's (5); mostly B's (4); mostly C's (3); mostly D's (2); and mostly F's (1).

Index of Achievement Orientation. Several items are used to tap commitment to educational success. "How important has you school work been to you?". "How important is it to you to do well even in hard subjects?". "How important is it to you to have a high grade point average?". And "how important is it to you to do your own school work without help from anyone?" The response scales are: very important (5);

somewhat important (3); and not important at all (1). The previously listed four items combine to produce an Index of Achievement Orientation. The higher the student scores on the achievement index; the more committed they are to educational success and theoretically, the more committed a child is to school, the less likely the child is to be delinquent.

School Involvement. Since Hirschi found that "leisure activities" were collectively unrelated to delinquency, the focus here will be on time spent in SCHOOL ACTIVITIES, particularly time spent in doing SCHOOL WORK. Additionally, interest and participation in ATHLETICS or other school activities, is also used to measure a students involvement in school.

Time Spent Doing School Work. Time spent on school work was measured by the amount of time spent studying during the weekday afternoons and evenings and during the weekends. "On the average, how many afternoons during the school week, from the end of school to dinner, have you spent studying?". And "on the average, how many evenings during the school week, from dinner to bedtime, have you spent studying?". For both questions, responses range from 0 to 5. Additionally, the question was asked: "On the weekends, how much time have you generally spent studying?". The response scales are: a great deal (5); quite a bit (4); some (3); not to much (2); and very little (1).

Time Spent on School Athletics. First it is ascertained whether a student is a member of any athletic teams at school. Available responses are: yes (2) or no (1). Then involvement in athletics was measured by the amount of time spent on athletics during the weekday afternoons and evenings and on weekends. "On the average, how many afternoons during the school week, from the end of school to dinner, have you spent on team activities?". And "on the average, how many evenings during the school week, from dinner time to bed time, have you spent on team activities?". For both questions, responses range from 0 to 5. Additionally, the question is asked: "On the weekends, how much time have you generally spent on team activities?". The response scales are: a great deal (5); quite a bit (4); some (3); not too much (2); and very little (1).

Time Spent on Other School Activities. It is first ascertained if the student has taken part in any activities at school, other than athletics, such as; service clubs, recreational or hobby clubs, student government, newspaper and or yearbook. The responses are: Yes (2) or No (1). Then involvement in this activities is measured by the amount spent on these activities during the weekday afternoons, evenings and on weekends. "On the average, how many afternoons during the school week, from end of school to dinner, have you spent on these activities?". And "On the average, how many evenings during the school week, from dinner time to

bed time, have you spent on these school activities?". For both questions, responses range from 0 to 5. Additionally, the question is asked: "On weekends, how much time have you generally spent on these school activities?". The response scales are: a great deal (5); quite a bit (4); some (3); not too much (2); and very little (1).

Belief. Belief is the final element of the social bond. Recall that Hirschi maintains that conventional beliefs are more or less universally held within the society. Through the use of the National Youth Survey data, this belief is measured by asking the respondent their feelings about cheating on school tests, drug use and delinquency (CONVENTIONAL NORMS AND ATTITUDES). Additionally, conventionally beliefs are measured by BELIEF AND RESPECT FOR THE LAW and ACCEPTANCE OF SCHOOL AUTHORITY. It is hypothesized that absence of such beliefs leaves the individual free to commit delinquent acts. Conventional beliefs, particularly belief in educational goals, is negatively related to delinquency.

Conventional Norms and Attitudes. To ascertain whether conventional beliefs are universally held within the society as postulated by Hirschi, data from the National Youth Survey was used to measure attitudes toward deviance. Specifically eight questions are asked: "How wrong is it for someone your age to cheat on school tests?" "Purposely damage other people's property?" "Use marijuana or hash?" "Steal

something worth less than $5?" "Hit or threaten to hit someone?" "Break into a vehicle or building to steal something?" "Sell hard drugs such as heroin, cocaine or LSD?" Or "Steal something worth more than $50?". The response scales are: very wrong (4); wrong (3); a little bit wrong (2); and not wrong at all (1). The higher a student's cumulative score for the eight items, the higher or stronger a student's conventional beliefs.

Acceptance of School Authority. Determination of acceptance of school authority is measured by school rule violations and truancy. From the National Youth Survey Data, school rule violations are measured by asking: "How many times in the last year have you: 'cheated on school tests?' 'Hit or threatened to hit a teacher or other adult at school?' 'Hit or threatened to hit other students?' or 'purposely damaged or destroyed property belonging to a school?". Truancy is measured by asking: "How many times in the last year have you skipped classes without an excuse?". Frequencies are calculated for each question.

Testable Hypotheses

Introduction. The research hypothesis is divided into five elements. School suspension and the elements of the social bond: school attachment, school commitment, school involvement and belief in educational success. Each element has several predictors.

School Suspension. School Suspensions are indicated by the number of times suspended in one year.

Null Hypothesis - There is no relationship between school suspension and the elements of the bond.

Directional Hypothesis - School suspensions are negatively related to a youth's attachment, commitment, involvement and belief in school.

Null Hypothesis - There is no relationship between school suspensions and delinquency.

Directional Hypothesis - School suspensions are positively related to delinquency.

School Attachment. Five indicators make up the school attachment predictor of juvenile delinquency. The first two are: (1) concern that teacher's think respondent is a good student and (2) making a good impression. Additionally, "Not liking school" is also an indicator of school attachment. Not liking school is comprised of three predictors: (3) feeling nobody at school cares, (4) feelings of not belonging at school and (5) feeling lonely at school.

Null Hypothesis - There is no relationship between the first two attachment predictors, "concern for teacher's opinions" and "making a good impression" and delinquency.

Directional Hypothesis - Concern for teacher's opinions and making a good impression are negatively related to delinquency.

Null Hypothesis - There is no relationship between liking school and delinquency.

Directional Hypothesis - Liking school is negatively related to delinquency.

School Commitment. School commitment is comprised of three commitment predictors: (1) educational aspirations and expectations, (2) general school aptitude and (3) achievement orientation.

Null Hypothesis - There is no relationship between school commitment and delinquency.

Directional Hypothesis - School commitment is negatively related to delinquency.

School Involvement. Three indicators make up the school involvement predictor of juvenile delinquency. (1) Time spent in and concern for homework, (2) athletics, and (3) other school activities.

Null Hypothesis - There is no relationship between school involvement and delinquency.

Directional Hypothesis - School involvement is negatively related to delinquency.

Belief in Educational Success. Belief is comprised of two predictors: (1) belief in conventional norms and attitudes and (2) acceptance of school authority.

Null Hypothesis - There is no relationship between conventional beliefs and delinquency.

Directional Hypothesis - Conventional beliefs are negatively related to delinquency.

Null Hypothesis - There is no relationship between acceptance of school authority and delinquency.

Directional Hypothesis - Acceptance of school authority, which is measured by the number of school rule violations, is positively related to delinquency.

Conclusion. Each of these elements and predictors will be independently tested and analyzed. The results of this testing will be reported in Chapter 4.

Data Collection Analysis

The original collection of data on which this thesis is based is the result of the National Youth Survey. "Survey research is probably the best method available to the social scientist interested in collecting original data for describing a population too large to observe directly" (Earl Babbie, 1983, 209). The analysis of this data will be secondary analysis. The main advantage of secondary analysis is of course, its

avoidance of the enormous expenditure of time and money which a survey entails. The analysis will be accomplished through univariate, bivariate and multivariate analysis.

Univariate Analysis will be used to examine only one variable at a time. Univariate analysis gives summary statistics on the distribution of the values of both the dependent and independent variables. Univariate analysis describes the units of analysis of a study and, in this case are a sample drawn from a larger population, thus allowing one to make descriptive inferences about the larger population. These summary statistics are accomplished by using the FREQUENCIES command on discrete variables (nominal and ordinal levels of data measurement) and the DESCRIPTIVE command on continuous variables (interval and ratio levels of data measurement).

In contrast to univariate analysis, subgroup comparisons constitute a kind of BIVARIATE ANALYSIS, in that two variables are involved. While univariate analysis and subgroup comparisons focus on describing the people (or other units of analysis) under study, bivariate analysis focuses on the variables. Bivariate analysis will be used to analyze the relationship between two variables, giving tests of significance and measuring the association between delinquency and the independent variables. The options to be used for measuring the association between two variables are: Lambda, Gamma and Pearson's Product-moment Correlation. LAMBDA is an appropriate measure of association to be

used in the analysis of two NOMINAL variables. GAMMA is an appropriate measure of association to be used in the analysis of two ORDINAL variables and PEARSON'S r is an appropriate measure of association to be used in the analysis of two INTERVAL or RATIO variables.

MULTIVARIATE ANALYSIS is the third analysis technique to be used. Instead of one independent variable, like in bivariate analysis, this technique introduces more than one independent variable. Instead of explaining the dependent variable on the basis of a single independent variable, an explanation is sought through the use of more than one independent variable, thus allowing the researcher to check for the spuriousness of the relationship. That is, are the dependent and independent variables causally related? Or is this relationship the result of the effects of some third variable.

One method of analysis to be used is MULTIPLE REGRESSION ANALYSIS, where the dependent variable is affected simultaneously by several independent variables. Multiple regression analysis provides a means of analyzing such situations. A second method of analysis is provided by FACTOR ANALYSIS, which is a different approach to multivariate analysis than regression analysis. Factor analysis is an efficient method of discovering predominant patterns among a large number of variables. Factor analysis will be used to create a typology of delinquency. The data file contains several indicators of delinquency.

Each item should provide some indication of delinquency but none of them alone will give a perfect indication. All of these items, moreover, should be highly correlated empirically.

The STATISTICAL SIGNIFICANCE of a relationship that is observed in a set of sample data is expressed in terms of probabilities. The level of significance of this study is set at a .05 level. Which means the probability of a relationship as strong as the observed one being attributable to sampling error alone is no more than 5 in 100. In other words, the probability of sampling error is discounted when the stated level of significance is less than five chances in a hundred.

CHAPTER 4

THE FINDINGS

Introduction

The findings presented in this chapter are an accumulation of univariate, bivariate, and multivariate analysis. Beginning with a GENERAL DESCRIPTION of: the sample population; the suspended student; the delinquent youth; and a delinquency typology. Furthermore, school suspension and the elements of the social bond and their relationships with delinquency are reviewed. Recall that for this study, the elements of the social bond are focused on the bonding process in the educational atmosphere. Thus, school ATTACHMENT, school COMMITMENT, school INVOLVEMENT, and BELIEF in educational success are evaluated.

After the general descriptions, the effects of the school suspension on the social bonds are examined in bivariate analyses. Then the elements of the bond are tested for relationships with delinquency. Together, school suspension and select bond elements are combined as predictor variables and are regressed with delinquency. Regression analysis is used to assess the relative importance of the various predictor

variables in their contribution to variation in the criterion variable. Specifically to determine if the core variables have an effect on total delinquency, Tables 2 through 10 in the appendix present the results of these analyses within each questionnaire. The findings for each questionnaire will be separated and presented in separate sections. Also the results of hypotheses testing will be disclosed.

General Descriptions of Sample Population

Through the use of UNIVARIATE ANALYSIS, summary statistics described the sample population by running frequencies. The sample in this study initially consisted of 1725 junior high and high school aged youth selected from across the United States. Their age at the first interview (1977) ranged from 11 to 17. The ages of the sample are basically evenly distributed, with each age group containing between 13 and 15% of the total sample population. The sample consisted of 53.2% males (n = 918) and 46.8% females (n = 807). Seventy-eight point nine percent (n = 1361) of the sample population was white; 15.1% (n = 260) black; 4.4% (n = 76) hispanic; and 1.6% (n = 28) other. The "parent or guardian interview" information was not available for all waves, however, certain family characteristics were described in the first wave. The principal wage earner in the family (at Wave I) was the father 70.4%, with 40.7% of the family incomes being $14,000 per year or less. In the first wave, 82.1% reported living in single family homes, 7.3% in

apartments, 4.5% in multi-family homes, and 3.3% in mobile homes. Finally, 18% of the sample population reported being on some kind of public assistance.

General Description of the Suspended Student

Each year, an average of 13% of the sampled students were suspended at least once. Male students were consistently suspended twice as often as female students (suspended once) and three times more often than females who were suspended two or more times. Recall that the majority of the students were white (78.9%), the remaining 21.1% were minorities, 15.1% of which were black. Although the minority students were only 1/5th of the sample population, minorities were suspended at a rate twice that of white students, and three or four times the rate of white students who were suspended two or more times. For the first two waves, it was discovered that the older the student, the larger the percentage of students suspended, as was evident for students suspended two or more times in Wave I: (age 11 = .4% suspended), (age 12 = 1.6%), (age 13 = 5.2%), (age 14 = 5.8%), (age 15 = 6.8%), (age 16 = 9.3%), (age 17 = 8.2%). However, by the third wave, (ages 13-19), the suspension rates did not consistently increase with age and showed no significant relationship.

As might be expected, high school students were more likely to be suspended than junior high students; twice as often. Additionally, as

student grade point averages went down, the percentage of students suspended went up. For example, of the students that got mostly A's in Wave I, 3% were suspended two or more times; (mostly B's = 2.7% suspended), (mostly C's = 9.4%), (mostly D's = 12%), and (mostly F's = 14%). This pattern held constant for all waves and for both categories of suspension; (suspended once or two or more times). Also, suspended students on Public Assistance were suspended at a rate twice that of students not on Public Assistance. Finally, suspended students were more likely from homes with an annual income $14,000 per year or less. Of the students that were suspended two or more times, almost 68% came from homes with an annual income of $14,000 or less. Twenty-eight point four percent came from middle income families ($14,000-$26,000), and only 3.7% of the suspended students came from upper income families ($26,000 or more). In short, the suspended student is likely to be: male, minority, high school students from homes with incomes of $14,000 or less, on Public Assistance, and likely to be suffering failing grades.

General Description of the Delinquent Youth

The original eighteen specific acts of delinquency as detailed on page 51 were further categorized into seven major forms of delinquency: 1. drug sales; 2. carrying hidden weapons; 3. breaking and entering into building or car; 4. theft: major and minor; 5. vandalism; 6. assault

excluding sexual; and 7. robbery. On the average for all waves, approximately 50% of all of the youth reported at least one act of delinquency. Twice as many of those involved reported three or more acts of delinquency. Males reported delinquency involvement twice that of females for occasional and repeated offenses. In addition to males being at least twice as likely to be involved in every category of delinquency, males were five times more often than females to be involved in weapons, breaking and entering, and robberies.

With regard to race, there were no significant differences in the percentages of delinquency involvement as reported by the different races. According to the self-reports; blacks, whites, and hispanics are basically equally involved in delinquency. It is this issue that civil liberty unions and various minority advocates scream about when prisons, jails, and juvenile courts are disproportionately represented by minorities. Recall that initially, the ages ranged from 11 to 17 with similar percentages of each age category (13 to 15%). It would appear in looking at the rate of serious delinquency (three or more acts), the percentage of self-reported delinquency increases with age up to 16; then continues to decrease with age. Although the significance level indicates a relationship ($P = .011$). The significance and weak relationships were constant throughout the waves.

There were no significant differences in the percentages of junior high and high school students that reported delinquency involvement.

Almost equal percentage of either school level reported delinquency. For example, in Wave I, 64.7% of junior high students, and 61.9% of high school students reported delinquency involvement. Of course, by the fourth and fifth wave, most of the youth were high school aged. Furthermore, as student grade point averages decreased, the percentage of students reporting delinquency involvement increased. For example, in Wave I (mostly A's 48.1% delinquent), (mostly B's 62.1%), (mostly C's 70.4%), (mostly D's 74.4%), and (mostly F's 78.6%). This pattern held constant for all waves.

Finally, students reportedly involved in one or more acts of delinquency were rather evenly distributed amongst the family income levels which were divided into three categories: 1. $14,000 or less, 2. $14,001 to 26,000, and 3. $26,001 or more. Similar percentages of each income level reported delinquency involvement. In short, there were no significant differences in delinquency rates amongst the social class and races. Additionally, there was no difference in the rates of delinquency reported by junior high and high school students. However, a weak relationship between age and delinquency was shown. Also, the delinquent youth was likely to be male with failing grades.

General Description—Delinquency Typology

Recall that eighteen specific acts make up the seven categories of delinquency: 1. drug sales; 2. weapons; 3. breaking and entering; 4.

vandalism; 5. theft; 6. assault; and 7. robbery. Frequency distributions showed that assaultive behavior, particularly fight among students was the number one form of delinquency; followed by vandalism, then theft. This pattern held constant for all waves.

The Dependent Variables

For the first part of the analysis, the elements of the social bond are viewed as dependent variables for the purpose of examining the effects of school suspension. Thereafter, the dependent variable is delinquency wherein the effects of the bond elements on delinquency are examined. A factor analysis was done on all the different types of delinquency for each weave. Factor analyses revealed no significant differences between the types of delinquency involvement by the subjects in this study. This finding allowed the researcher to COMPUTE all these delinquency types together to create the category "DELINQ." DELINQ measures the total amount of delinquency involvement reported by each subject in the survey. The reported delinquency was further RECODED into three different categories: "occas delinq" - one or two acts of delinquency in the last twelve months; "serious delinq" - three or more acts of delinquency in the last twelve months.

Core Variables

The variables that were common to all the questionnaires are school suspension and the elements of the social bond: attachment, commitment,

involvement, and belief. Under school ATTACHMENT, the core variables are concern for teachers' opinion and liking school. "likesch" is a variable obtained by computing the questions measuring students' attitude about school: feels lonely at school; no one at school cares; and don't belong at school. LIKSCH was recoded into: HATESCH, NEITHER, AND LIKESCH.

Under school COMMITMENT, the core variables are educational aspirations and expectations. Specifically, importance of going to college and chances for completing college. Also, general school aptitude or self-rating on ability resulted in the variable "selfrate" which was developed by computing how well a student thought he or she was doing; at being a good student; at having a high GPA; and how well are doing in hard subjects. Furthermore, commitment was measured by an achievement index, developed by computing the importance of: schoolwork; GPA; and doing own school work without help.

Under school INVOLVEMENT, time spent in, and concern for: homework, school athletics, and involvement in other school activities are the core variables. Finally, under BELIEF in educational success, the core variables are: conventional norms and attitudes; and acceptance of school authority. Acceptance of school authority was measured by the number of school rule violations, specifically: cheating on tests; skipping class; damaging school property; striking a teacher; and fighting with other students.

Questionnaire I: Analysis of Suspension and Social Bonds

The first element to be examined is school ATTACHMENT. This category is made up of five variables. The first two measure a youth's sensitivity to teachers' opinions. A relationship was found between suspension and a youth's concern that the teacher thinks the youth is a good student and making a good impression with teachers. The next three variables measure a youth's attitude about school: 1. no one at school cares; 2. feel don't belong at school; and 3. feel lonely at school. Since the original survey didn't ask, these variables were used to measure whether a student like school. A negative relationship between suspension and the first two variables was found. However, the third variable, "feel lonely at school," was not significantly related.

The next element to be examined is school COMMITMENT. The first two variables of commitment measure youths' educational aspirations and expectations. Negative relationships were found between suspension and the importance of going to college and the chances for completing college. This was particularly evident with suspended students wherein 25.7% of suspended students felt it was not important to go to college, wherein 12.7% of non-suspended students reported it was not important to go to college. Next, general school aptitude is made up of variables measuring self-rating on ability and GPA. "SELFRATE" is a variable created by factor analysis after three variables were found to measure basically the same thing. The questions were asked: 1. How are you

doing at being a good student?; 2. How are you doing at having a high GPA?; and 3. How are you doing in hard subjects? A negative relationship was found between suspension and self-ratings on ability (P = .00, X2 = 85.4, Gamma = -.56). The youth's level of commitment to school was also measured by asking: 1. How important is school work?; 2. How important is it to do well in hard subjects? Suspension was found to be negatively related to both measures: (P = .00, X2 = 34.0, Gamma = -.40), (P =00, X2 = 20.8, Gamma = -.30). The suspended student is likely to be less committed to school than the non-suspended student.

School INVOLVEMENT was also looked at. This category was made up of variables measuring time spent studying, time spent on school athletics, and time spent on other school activities. The amount of time spent on 1. Weekday afternoons; 2. Weekday evenings; and 3. Weekends for each activity was accounted for. Time spent on athletics and other school activities were not significant. However, time spent studying during weekday evenings and on weekends were significant. A negative relationship was found between suspension and involvement in studying. That is, suspended students are likely to study less than non-suspended students. This was apparent where 70% of suspended students studied very little during weekday evenings compared to 50% of non-suspended students.

The last element in the questionnaire to be looked at is BELIEF. This category is made up of thirteen variables, eight of which measure conventional norms and attitudes. Youth were asked whether they thought eight specific acts were or were not wrong. Negative relationships were found between suspension and all the measures of conventional norms and attitudes (see BELIEFS, Table 1 in the Appendix). The next variable to be looked at is Acceptance of school authority, measured by the number of school rule violations. Suspension was positively related to the number of times cheated on school tests, hit a teacher or other students, damaged school property, and skipped class. Suspended students reported more school rule violations than non-suspended students. It would appear that the null hypothesis of no relationship between suspension and the elements of the social bond is rejected. Suspensions are negatively related to a youth's attachment, commitment, involvement, and belief in school. That is, the more suspended, the weaker the bonds to school.

Questionnaire III: Analysis of Suspension and Social Bonds

The first two variables of the ATTACHMENT element measure the youth's concern for their teachers' opinions. A relationship was found between suspension and a youth's concern that the teacher thinks the youth is a good student, and making a good impression with teachers. Next, certain attitudes about school were used to measure whether a child

liked school. Only one of the three variables was significant. A negative relationship between suspension and belonging at school was found (P = .00, X2 = 10.9, Gamma = -.29).

The next element to be examined is school COMMITMENT. The first two variables measure a youth's educational aspirations and expectations. Negative relationships were found between suspension and the importance of going to college and chances for completing college. Also, suspensions were found to be negatively related to a youth's self-rating on ability. Suspended students were more likely to rate themselves as not being a good student and not doing well on GPA than non-suspended students. Additionally, suspensions were found to be negatively related to Grade Point Average (P = .00, X2 = 63.5, Gamma = -.48).

The next variable under commitment was created by factor analysis - "ACHIVINDX." This variable measures a youth's level of commitment by asking: 1. How important is school work?; 2. How important is it to do well in hard subjects?; 3. How important is a high GPA? A negative relationship was found between suspension and ACHVINDX. The suspended student was more likely to find school work unimportant and was found to be less committed to school than the non-suspended student.

Next, only the variables measuring time spent studying were found to be significant INVOLVEMENT variables. Again, school athletics and other school activities were insignificant. Time spent studying during

weekday afternoons and evenings were significant. A negative relationship between suspension and studying was found. That is, the suspended youth was likely to study less than non-suspended students.

The last element in the questionnaire to be looked at is BELIEF. Conventional norms and attitudes and acceptance of school authority make up the Belief element. Once again, negative relationships were found between suspension and all the measures of conventional norms and attitudes. Secondly, a relationship was found between suspension and acceptance of school authority which was measured by the number of certain school rule violations. Suspension was positively related to school rule violations. This was particularly evident wherein 63.7% of suspended students were involved infighting; whereas only 29% of non-suspended students reported involvement in fighting. Also, 71.5% of suspended students reported skipping classes compared to 38% of non-suspended students.

Again, it would appear the school suspensions are negatively related to a youth's attachment, commitment, involvement, and belief in school. That is, suspended students are less attached, less committed, less involved in school, and maintain less conventional norms and attitudes, and acceptance of school authority than non-suspended students. These patterns held constant for all waves. These similar findings in Waves IV and V will not be reviewed here, but are presented in the

Appendix. In the next part of the analysis, the relationship of the bond elements and delinquency will be disclosed.

Analysis of Social Bonds and Delinquency

Questionnaire I Analysis

The first element to be examined under delinquency is school ATTACHMENT. This category is made up of five variables. The first two measure a youth's sensitivity to their teachers' opinions. A relationship was found between delinquency and a youth's concern that the teacher thinks the youth is a good student and making a good impression with teachers. This was particularly evident with self-reported delinquent acts wherein 69.0% of those without concern for teachers' opinions had committed three or more delinquent acts, wherein only 36% of those with a lot of concern for teachers' opinions committed three or more delinquent acts. The null hypothesis that there is no relationship between the first two attachment predictors is rejected. The next variables to be looked at are: 1. No on at school cares; 2. Feel don't belong at school; 3. Feel lonely at school. These variables were used to measure whether a student liked school. A negative relationship between delinquency and the first two variables was found. However, the third variable, "Feeling lonely at school" was not significantly related (P = .44, X2 = 11.9, Gamma = -.10).

The next element to be examined under delinquency is school COMMITMENT. This category is made up of nine variables. The first two variables to be looked at measure the youth's educational aspirations and expectations. Negative relationships were found between delinquency and the importance of going to college and the chances for completing college. Next to be looked at is general school aptitude which is made up of variables measuring self-rating on ability and GPA. "SELFRATE" is a variable created by factor analysis after three variables were found to measure a youth's self-rating on ability. Three questions were asked: 1. How are you at being a good student?; 2. How are you doing at maintaining a high GPA?; and 3. How are you doing in hard subjects? A negative relationship was found between delinquency and self-ratings on ability (P = .00, X2 = 54.7, Gamma = -.23). This was particularly evident with self-reported delinquent acts wherein 70% of those rating themselves as not doing well committed three or more delinquent acts, whereas only 31% of those that rated themselves as doing very well committed three or more delinquent acts. Furthermore, Grade Point Averages were found to be negatively related to delinquency (P = .00, X2 = 83.5, Gamma = -.27). That is, the better a student does in school, the less likely the student is to be delinquent.

The next variable to be looked at is "ACHVINDX." This variable was created by factor analysis after four variables were found to measure basically the same thing. The achievement index measured the youth's

level of commitment to school by asking: 1. How important is school work?; 2. How important is it to do well in hard subjects?; 3. How important is it to have a high GPA?; 4. How important is it to do own school work without help? A negative relationship was found between delinquency and achievement index. The importance of school was found to be the most highly correlated of all the school commitment measures (P = .00, X2 = 61.3, Gamma = -.30). The null hypothesis that there is no relationship between school commitment and delinquency is rejected. The subject's commitment to school was found to be negatively related to delinquency. That is, the more committed to school, the less likely to be delinquent.

School INVOLVEMENT was also looked at. This category is made up of nine variables. Time spent studying, time spent on school athletics, and time spent on other school activities each contained three variables. Specifically, each activity was measured by the amount of time spent on the activity during 1. weekday afternoons; 2. weekday evenings; and 3. weekends. None of the variables measuring athletics and other school activities were significant. The null hypothesis that there is no relationship between school activities-school athletics, and delinquency is not rejected. However, a negative relationship was found between delinquency and time spent studying. Thus, the more a student studied, the less likely delinquent.

The last element of the social bond to be looked at in the questionnaire is BELIEF. This category is made up of thirteen variables, eight of which measure conventional norms and attitudes. Youth were asked whether or not they thought eight specific acts were or were not wrong. A negative relationship was found between delinquency and all eight measures of conventional norms and attitudes. The next variable to be looked at is acceptance of school authority, measured by the number of school rule violations. The number of times cheated on school tests, hit teacher or other students, damaged school property, and skipped classes were all positively related to delinquency. That is, the more school rule violations, the more likely delinquency. The null hypothesis that there is no relationship between conventional beliefs and acceptance of school authority and delinquency is rejected.

Questionnaire II Analysis

The first element to be examined under delinquency is school ATTACHMENT. This category is made up of five variables. The first two variables to be looked at measure a youth's sensitivity to their teachers' opinions. A relationship was found between delinquency and a youth's concern that the teacher thinks the youth is a good student and is making a good impression with teachers. This was particularly evident with self-reported delinquent acts wherein 65.9% of those without concern for teachers' opinions had committed three or more delinquent acts,

wherein only 24.4% of those with a lot of concern for teachers' opinions committed three or more delinquent acts. The null hypothesis that there is no relationship between the first two attachment variables and delinquency is rejected. The next variable to be looked at measures whether a youth liked school. "No one at school cares," and "Feeling lonely at school" were not significant. Another question was asked: Does the student agree that he or she doesn't belong at school? An affirmative answer indicated that the student disliked school. A negative relationship was found between delinquency and liking school. The hypothesis that there is no relationship between liking school and delinquency is rejected.

The next element to be examined under delinquency is school COMMITMENT. This category is made up of eight variables. The first two variables to be looked at measure the youth's educational aspirations and expectations. Negative relationships were found between delinquency and the importance of going to college and the chances for completing college. The next variable to be looked at is general school aptitude which is made up of variables measuring self-rating on ability and GPA. "SELFRATE" is a variable created by factor analysis after three variables were found to measure basically the same thing. The questions measured the youth's self-rating on ability. Three questions were asked: 1. How are you doing at being a good student?; 2. How are you doing at having a high GPA?; 3. How are you doing in hard subjects. A negative

relationship was found between delinquency and self-rating on ability (P = .00, X2 = 15.4, Gamma = -.26). Furthermore, Grade Point Averages were found to be negatively related to delinquency. Thus, the better a student rated themselves on ability and the better a student does in school, the less likely delinquent.

The next variable to be looked at is "ACHVINDX." This variable was created by factor analysis after three variables were found to measure basically the same thing. The achievement index measured the youth's level of commitment to school by asking: 1. How important is school work?; 2. How important is it to do well in hard subjects?; 3. How important is it to do own school work without help? A negative relationship was found between delinquency and achievement index. The importance of school was found to be the most highly correlated of all the school commitment measures (P = .00, X2 = 71.4, Gamma = -.38). A negative relationship was found between delinquency and achievement index. That is, the higher the score on the achievement index, the more committed to school. The more committed to school, the less delinquency. The null hypothesis that there is no relationship between school commitment and delinquency is rejected.

School INVOLVEMENT was also looked at. This category is made up of variables measuring time spent studying, time spent on school athletics, and time spent on other school activities. Each activity was measured by the amount of time spent on the activity during the weekday

afternoons, evenings, and on weekends. Again, none of the variables measuring school athletics or other school activities were significant. The null hypothesis that there is no relationship between school athletics and other activities and delinquency is not rejected. However, a negative relationship was found between delinquency and the amount of time spent studying. The more a student studied, the less likely to be delinquent.

The last element of the social bond in the questionnaire is BELIEF. This category is made up of ten variables; eight of which measure conventional norms and attitudes. Youth were asked whether they thought a certain conduct was right or wrong. A negative relationship was found between delinquency and all eight measures of conventional beliefs. The next variable to be looked at is the number of school rule violations which were used to measure acceptance of school authority. This category is made up of five variables. However, too much data was missing for the frequencies: cheated on school tests; damage to school property; and truancy. The two remaining school rule violations: 1. frequency of hitting teacher; and 2. frequency of hitting others were both positively relation to delinquency. The more school rule violations, the more likely delinquent.

Questionnaire III Analysis

The first element to be examined under delinquency is school ATTACHMENT. This category is made up of five variables. The first

two measure a youth's sensitivity to their teachers' opinions. A relationship was found between delinquency and a youth's concern that the teacher thinks that the youth is a good student and is making a good impression with teachers. This was particularly evident with self-reported delinquent acts wherein 60.8% of those without concern for teachers' opinions had committed three or more delinquent acts, whereas only 25.1% of those with a lot of concern for teachers opinions committed three or more delinquent acts. The null hypothesis that there is no relationship between concern for teachers opinions and delinquency is rejected. The next variable to be looked at is LIKESCH: 1. No one at school cares; 2. Feel don't belong at school; 3. Feel lonely at school were used to measure whether a student liked school. A negative relationship between delinquency and the variables was found. The more a youth liked school, the more attached to school, the less likely delinquent. The null hypothesis that there is no relationship between liking school and delinquency is rejected.

School COMMITMENT is the next element to be examined. This category is made up of seven variables. The first two measure a youth's educational aspirations and expectations. Negative relationships were found between delinquency and the importance of going to college, and the chances for completing college. Next to be looked at is general school aptitude which is made up of variables measuring self-rating on ability and GPA. Self-rating was measured by asking: 1. How are you

doing at being a good student; and 2. How are you doing at having a high GPA. Negative relationships were found between delinquency and the self-rating measures (P = .00, X2 = 56.5, Gamma = -.30) and (P = .00, X2 = 74.4, Gamma = -.32), respectively. Furthermore, Grade Point Averages were found to be negatively related to delinquency (P = .00, X2 = 103.1, Gamma = -.33). The better a student does in school, the less likely delinquent.

The next variable to be looked at is "ACHVINDX." This variable was created by factor analysis after four variables were found to measure basically the same thing. The achievement index measured a youth's level of commitment to school by asking: 1. How important is school work?; 2. How important is it to you to do well in hard subjects?; 3. How important is it to have a high GPA?; and 4. How important is it to do own school work without help? Again, the importance of school was found to be the most highly correlated of all the school commitment measures (P = .00, X2 = 102.8, Gamma = -.44). A negative relationship was found between delinquency and achievement index. The better a student rated themselves, the better the GPA, the higher the score on the achievement index, the more committed to school, the less likely delinquent. The null hypothesis that there is no relationship between commitment and delinquency is rejected.

School INVOLVEMENT was also looked at. Time spent studying, time spent on school athletics, and time spent on other school activities

were measured by the amount of time spent on each activity during 1. weekday afternoons; 2. weekday evenings; and 3. weekends. Again, neither school athletics nor other school activities were significant. A negative relationship was found between delinquency and the amount of time spent studying, the less likely the youth is to be delinquent. The null hypothesis that there is no relationship between school athletics or other school activities and delinquency is not rejected.

The last element of the social bond to be looked at in the questionnaire is BELIEF. This category is made up of thirteen variables, eight of which measure conventional norms and attitudes. Youth were asked whether they thought eight specific acts were right or wrong. A negative relationship was found between delinquency and all eight measures of conventional norms and attitudes. The next variable is acceptance of school authority measured by the number of school rule violations. School rule violations such as: cheating, truancy, fighting, damaging school property, and hitting a teacher were found to be positively related to delinquency. That is, the more school rule violations, the more likely the youth is to be delinquent. The null hypothesis that there is no relationship between conventional beliefs and acceptance of school authority and delinquency is rejected.

For the first three waves, a youth's attachment, commitment, involvement, and belief in school are negatively related to delinquency. That is, the stronger each of the elements of the bond, the less likely the

youth is to be delinquent. With some slight variations and, of course, different significant levels, these findings were consistent with all the questionnaires. In avoidance of being redundant, and perhaps even boring, these similar findings in questionnaires IV and V will not be reviewed here, but are presented in the Tables in the Appendix for the reader's review.

Analysis of Suspension and Delinquency By Waves

Wave I. Since the probability is small (P = .00), the hypothesis of no relationship between school suspension and delinquency is rejected. School suspensions are positively related to delinquency. A chi square of 95.0 shows the variables are adequately related with the strength of the relationship indicated by the Gamma statistic of .59. School suspensions were found to be positively related to delinquency. That is, the suspended student is more likely to be delinquent than the non-suspended student. This was particularly evident with self-reported delinquent acts wherein 75% of the students suspended three or more times and 70.3% of students suspended once or twice had committed three or more acts of delinquency, wherein only 37.9% of the non-suspended students reported committing three or more acts of delinquency. Furthermore, suspensions in Wave I were found to be significantly related to delinquency in Wave II (P = .00, X2 = 45.1, Gamma = .57). However, the amount of delinquency by youth suspended in Wave I did

not significantly increase in Wave II. Also, the more often suspended, the greater the percentage of delinquency involvement.

Wave II. Recall that an average of 13% of all students were suspended any given year. In Wave II, more than half of the suspension data was missing; therefore, with the sample being too small, analysis of suspension and delinquency in Wave II was not done.

Wave III. Since the probability is small (P = .00), the hypothesis of no relationship between suspension and delinquency is rejected. School suspensions were found to be positively related to delinquency. A chi square of 126.3 shows that the variables are adequately related with the strength of the relationship indicated by the Gamma statistic of .62. School suspensions are positively related to delinquency. Suspended students are more likely to be delinquent than non-suspended students. This was particularly evident with self-reported delinquent acts wherein 89.5% of the students suspended three or more times and 59.1% of students who were suspended once or twice, had committed three or more delinquent acts, whereas only 28.7% of non-suspended students committed three of more delinquencies. Furthermore, suspensions in Wave III were found to be significantly related to delinquency in Wave IV (P = .00, X2 = 97.0, Gamma = .54). However, the amount of delinquency by youth suspended in Wave III did not significantly increase in Wave IV. Also, the more often a student is suspended, the greater the percentage of

delinquency involvement. For example, 28.7% of non-suspended students, 59.1% of students suspended once or twice, and 89.5% of students suspended three or more times reported three or more acts of delinquency.

Wave IV. Again, the probability is small (P = .00). The hypotheses of no relationship between suspension and delinquency is rejected. School suspensions were found to be positively related to delinquency (P = .00, X2 = 87.0, Gamma = .60). However, the amount of delinquency in Wave IV did not significantly increase in Wave V.

Wave V. Again, the probability is small (P = .00). The hypothesis of no relationship between suspension and delinquency is rejected. School suspensions were found to be positively related to delinquency (P = .00, X2 = 141.2, Gamma = .70). More suspended students were found to be involved in delinquency than non-suspended students. Also, the more often students were suspended, the greater the percentage of students involved in delinquency. This was particularly evident wherein 21.1% of non-suspended students, 58.5% of those suspended once or twice, and 81.3% of students suspended three or more times reported serious delinquency involvement.

So far, the relationships of school suspension and the elements of the bond, the bond elements and delinquency, and school suspension and delinquency, have been reviewed. As a result of suspension and the bond

elements being significantly related to delinquency, they were combined as predictor variables and regressed with delinquency. The next section is the result of the regression analysis.

Regression Analysis Findings

A two-step regression analysis was conducted, see Table 10 in the Appendix. After controls, the major predictor variables of the composite measure of delinquency (Wave IV Delinquency) in the first step are: school suspension and truancy. The major predictor variable being suspensions. Prior delinquency (Wave I Delinquency) was not found to be a significant predictor variable. The total amount of delinquency in Wave IV was found to have an F of 5.1 ($p \leq .01$) and an R-Square of .05.

At the second step of the regression analysis, a significantly greater amount of variance in the composite measure of delinquency is explained. After the interaction terms were introduced in step two, the total amount of delinquency in Wave IV was found to have an F of 18.0 ($p \leq .01$) and an R-Square of .29. At step two, the major predictor variables of the composite measure of delinquency are: from the BELIEF element of the bond, specifically school rule violations and conventional norms and attitudes. Weak predictors include the COMMITMENT variables of self rating on ability and importance of school work. School suspensions were no longer a significant predictor of delinquency.

Review of the Findings

Through the use of bivariate analysis, negative relationships were found between school suspension and the elements of the social bond. Consistently in all waves, it was found that suspended students were less attached, less committed and less involved in school and maintained less conventional norms and attitudes than non-suspended students. Also, suspended students maintained less acceptance of school authority indicative by the number of school rule violations.

Secondly, through the use of bivariate analysis, relationships were found between the elements of the social bond and delinquency. Consistently in all waves, a negative relationship was found between a youth's attachment, commitment, involvement and belief in educational success and delinquency. The higher the level a youth obtained of each element, the less likely they were to commit delinquent acts. In reference to the involvement element, only time spent studying was found to be significant. School athletics and other school activities were not significant in any waves. Thirdly, for Waves I, III, IV and V, school suspension was individually tested for relationships with delinquency through bivariate analysis. School suspensions were found to be positively related to delinquency in each wave and for delinquency in the following wave. However, the amount of delinquency by suspended youth in one year did not significantly increase the next year. Suspended

students were more likely to be involved in delinquency than non-suspended youth and the more suspended, the more the delinquency involvement.

Finally, as a result of the bond elements and suspension being significantly related to delinquency, they were selected as predictor variables along with prior delinquency and were combined for regression analysis with delinquency. In Wave IV, 5% of the variance in the composite measure of delinquency was explained by the selected predictor variables in the first step of the regression. In the second step, 29% of the variance in delinquency is explained. In the second step, the belief and commitment elements of the bond explained away the affects of suspension on delinquency.

CHAPTER 5

This chapter will summarize the thesis and will discuss the implications of this study on the Social Bonding Theory, the implications for policy and the implications for future research.

Summary and Discussion

School suspensions are still widely used in the United States, particularly in public schools. University of Michigan Professor Charles B. Vergon recently discovered that Michigan ranked sixth in the nation for the highest suspension rates for public school students. Nearly 97% of the Michigan districts studied, reported using suspension. Most of any existing suspension data is collected by the U.S. Office of Civil Rights (O.C.R.) and is limited to disclosing the number of student suspended. The O.C.R. data does not indicate: the offense students were suspended for and how long or how many students were suspended more than once. Vergon also discovered that the suspension trend in Michigan has been climbing steadily. In addition to the increasing trend in the use of suspension, use and duration of suspension was found to vary widely from district to district.

Vergon and other researchers such as the Children's Defense Fund, define the problem as being: the frequent, increasing and unnecessary use of suspension, disproportionate suspension rates for minorities, particularly for blacks and inconsistent use of suspension and expulsion. Furthermore, the problem is complicated by the lack of empirical research in examining the impact of suspension. This study is an attempt to examine the effects of suspension on youth and particularly to look at the relationships between suspension and juvenile delinquency.

Travis Hirschi's Social Bond Theory was found to be one of the best explanations of the causes of delinquency, at least amongst contemporary sociological theories. Since Hirschi's theory was found to have such strong supporting research, Social Bond Theory was incorporated into this study for the purpose of examining suspension and juvenile delinquency. Hirschi studied the elements of the bond in relation to education: ATTACHMENT, COMMITMENT, INVOLVEMENT AND BELIEF. A child's ATTACHMENT to school was measured by the child's sensitivity to teacher's opinions and liking school. COMMITMENT was measured by the youth's educational aspirations and expectations. Also General School Aptitude measured the student's academic competence, self rating on school ability and intelligence. INVOLVEMENT in school was measured by the amount of time spent on school related activities and BELIEF in educational success was measured first by conventional norms and attitudes, and acceptance of school

authority which is measured by the number of school rule violations. According to Hirschi, the higher the level a youth obtains of each element, the less likely they are to commit delinquent acts.

The concepts as provided by Travis Hirschi and the Social Bond Theory were incorporated into the design of this study. The National Youth Survey, a longitudinal study of delinquency in America was originally collected by Delbert Elliott in 1977. The National Youth Survey provided the data for this study. Following the concepts as described by Hirschi, variables measuring the bond elements of ATTACHMENT, COMMITMENT, INVOLVEMENT AND BELIEF, were extracted from the National Youth Survey for further analysis. Through the use of simple bivariate analysis, it appeared that school suspensions weaken the social bonds, particularly the bonds to the school. The level of attachment to these elements is lower with suspended students. However, did suspensions weaken the bonds or did already weakened bonds result in misbehavior which resulted in suspension? This issue of time-order is problematic for many researchers and is not necessarily resolved in this study. What can be said for certainty is that significant relationships exists between suspension and the bond elements.

The elements of the bond were then individually examined as to their relationship with delinquency. Through the use of simple bivariate analysis, it appeared that a youth's weak attachments, commitments and involvement and beliefs resulted in delinquency. The level of attachment

to these elements is lower in delinquent youth than non-delinquent youth. Again the issue of time order is problematic. Did weak attachments result in delinquency? Or did delinquency result in weak attachments? What can be said is that significant relationships exist between the bond elements and delinquency. Furthermore, it is acknowledged that the effects of poverty, unemployment, association with delinquent peers and the like, are not evaluated. They are beyond the scope of this study and are for future research endeavors.

School suspension was found to be positively related to delinquency in each wave and to delinquency in the following wave. Suspension was evaluated with delinquency in the following year in attempt to address the time-order problem. Also, it is possible, although likely infrequent, that a delinquent act could result in suspension. However, according to research, the majority of suspensions were for non-dangerous reasons, such as: truancy, tardiness, behavior problems, arguments, smoking and other nondelinquent offenses, (Children's Defense Fund Survey). Again it is recognized that the relationships between suspension and delinquency may be spurious. An attempt to deal with causality is dealt with in the regression analysis.

It is suggested by the simple correlations that school suspensions and the elements of the bond are strongly related to delinquency. However, regression analysis revealed that school suspensions are only related to delinquency through their effects on the bonds to the school.

A two-step regression analysis was conducted to determine whether the correlations between suspension and delinquency could be attributed to other variables, such as the control variables of prior delinquency (Wave 1) or to elements of the bond. In the first step of the regression analysis, when prior delinquency and bond elements were controlled, school suspensions from Wave III were found to be associated with delinquency in Wave IV ($R2 = .05$; $F = 5.1$; $p \leq .01$; Table 10). Also, there was a low but significant Beta weight for truancy, indicating that truancy explained a very small amount of the variance in the composite measure of delinquency. Before the interaction terms were considered, school suspension (Wave III) had the highest Beta weight, indicating that it explained the greatest proportion of variance in the composite measure of delinquency in Wave IV.

At the second step of the analysis, a significantly greater amount of variance in the composite measure of delinquency is explained ($R2 = .29$; $F = 18.0$; $p \leq .01$). The most highly predictive of delinquency was no longer school suspensions, but from the COMMITMENT and particularly the BELIEF elements of the bond. Under the Belief element, acceptance of school authority, measured by the number of school rule violations and conventional norms and attitudes had the highest Beta weights, indicating that the Belief element of the bond was the most highly predictive of the composite measure of delinquency. At the second step it was discovered that school suspensions were not even

significant. While controlling for prior delinquency, the bond elements explained away the affects of suspension on delinquency. Thus it is possible that school suspensions weaken the attachments to the bonds, and that weaken bonds, particularly Commitment and Belief, predict delinquency.

The discovery of causal relationships in scientific research is always a difficult one. The first requirement in a causal relationship between two variables is that the cause precede the effect in time. With longitudinal data, this is easily accomplished. The second requirement is that the two variables be empirically correlated with one another. In this study, numerous correlations were shown. The third requirement for a causal relationship is that the observed empirical correlation between two variables, not be explained away as being due to the influence of some third variable. As was evident in the regression analysis. The first two requirements of causality are repeatedly conducted throughout this study in bivariate analysis of suspension and the bond elements, the bond elements and delinquency and suspension and delinquency. This provides a good foundation for further research in that it is acknowledged that various other predictor variables need to be considered.

Conclusion

First of all, this research is Secondary Analysis of Survey Data. The major benefit of secondary analysis is of course the avoidance of

enormous expenditure of time and money. The key disadvantage involves the recurrent question of validity. Do the questions originally asked provide a valid measure of the variables this researcher wants to analyze. This was particularly evident with one of the Attachment measures. Hirschi found the relation between "liking school" and delinquency to be very strong. This question of whether a youth liked school was not specifically asked in the National Youth Survey. This researcher computed a variable to measure whether a youth liked school. Three questions were asked: (1) Feel lonely at school? (2) No one at school cares? and (3) Don't belong at school? It is recognized that these variables may not actually measure whether a youth likes school. However, the three questions are still a good measure of ATTACHMENT to the school.

Another variable in question is with Hirschi's measure of General School Aptitude. Hirschi acknowledges that overall grade point averages were not available when his analysis was conducted. Thus he used DAT scores and English Average Marks. Hirschi's use of english and math grade as a measure of intelligence raises the issue of validity. Actual grade point averages were available from the National Youth Survey, however, the use of grade point averages as a measure of intelligence is highly debated by researchers. Furthermore, consistent with criticisms of the social bond theory, further analysis showed GPA as a measure of intelligence was not a predictor of delinquency. All other measures

drawn from the National Youth Survey parallel Hirschi's questionnaire and theory.

Survey research is probably the most frequently used and is probably the best method available to researchers interested in collecting original data for describing a population too large to observe directly. Recall that the National Youth Survey employed a probability sample of households in the United States based upon Multistage Cluster Sampling Design. Sampling error was reduced by the inclusion of a large sample, initially 67,266 households of which 8,000 were selected for inclusion of the sample. Furthermore, representativeness was obtained through the use of probability selection, in that all members of the population had an equal chance of being selected in the sample. Additionally, according to Delbert Elliott, the sample of the National Youth Survey was representative of the population from which it was selected as the aggregate characteristics of the sample, closely approximated the aggregate characteristics of the population.

The use of staff administered interviews in the survey provided for a good return rate and ensured that the questionnaires were completed. Of course, the respondents might be reluctant to report controversial or deviant attitudes or behavior in a face to face interview, however confidentiality was assured. Finally the question of reliability is strengthened by the use of the social bond model, in that Hirschi's measures have proven their reliability in previous research. Additionally,

the National Youth Survey is a longitudinal study which provided a consistent questionnaire for five consecutive years.

This research has examined the links between school suspension, the social bond elements and delinquency. Initially there are significant relationships between suspension and delinquency and the elements of the bond and delinquency. However, when regressed with delinquency, school suspension and many of the social bond elements lose their significance. This was particularly true for the ATTACHMENT and INVOLVEMENT elements of the bond. This study provides exploratory evidence that suspension is related to delinquency by way of weakening bonds which then may result in delinquency. However, Hirschi's bond theory as a prediction model is somewhat weak in that two of the four main elements were not significant. Further research is recommended.

Implications for Future Research

This awareness of a statistical association between suspension and delinquency has the potential to result in various policies and law. Representative H. Lynn Jondahl is proposing legislation today to require local districts that suspend or expel students, to provide alternative instruction, ranging from makeup exams to special classes. This slow trend of providing suspension alternatives is perhaps the result of the recognition or suspicion that school suspension is related to delinquency.

The causes of delinquency are various and interrelated, as are the delinquency theories. As a result of this study, it is recommended that since conventional norms and attitudes were strong predictors of delinquency, that theories with that emphasis, be used to further explore the relationship of suspension and delinquency. Yet schools continue to use suspension regularly. Its kind of like using an experimental drug without knowing the possible side affects. Additionally, it is recommended that other predictors of delinquency, such as delinquent peer association, be evaluated. Also, it would be ideal, time and money permitting, if new data could be collected. As it is always questionable whether results from studies done in the past can be applied to the present. In conclusion, this researcher's concern is with the frequent and unnecessary use of suspension which is used in the majority of cases. It is recognized that suspension is sometimes necessary in extreme cases of violence, repeated disruption and with incorrigible youth. This researcher is sympathetic to schools wherein they have no alternative for such cases, however, these situations according to research are few.

APPENDIX

APPENDIX

TABLES 2-10

(pages following)

TABLE 2. Significant Relationships of Variables to Delinquency Wave I

WAVE I	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL ATTACHMENT									
Tchr think good stu	(Sensitivity to tchr's opinion)								
Not Imprt.	18.4	16	10.3	9	69.0	60			
Somewhat	34.9	203	20.0	116	44.9	261			
Very Imprt.	39.1	401	24.1	247	36.7	376	12	81.4*	-.19
Impress tchr foremost									
Disagree	40.2	517	23.8	306	35.9	462			
Neither	23.5	44	16.6	31	59.9	112			
Agree	26.0	54	15.4	32	57.7	120	12	81.2*	.34
None at sch care	(Like school)								
Agree/hatesch	28.1	39	21.6	30	46.9	69			
Neither	23.9	33	20.3	28	55.8	77			
Disagree/likesch	38.7	548	22.2	314	39.0	552	12	33.7*	-.23
Don't belong at sch									
Agree/hatesch	27.3	39	23.1	33	49.0	70			
Neither	22.8	26	13.2	15	64.0	73			
Disagree/likesch	38.6	555	22.5	324	38.6	555	12	45.7*	-.27
SCHOOL COMMITMENT									
Imprt go to college									
Not imprt.	28.9	66	20.2	46	50.4	115			
Somewhat	36.6	166	17.9	81	45.5	206			
Very Imprt.	38.3	391	24.2	247	37.3	381	12	29.4*	-.13
Chances complete									
Poor	25.2	61	17.4	42	57.0	138			
Fair	35.7	228	21.8	139	42.6	272			
Good	40.3	326	23.5	190	35.8	290	12	44.7*	-.18
Self rate as student	(Gen. Sch. Apt./self rating on ability)								
Not well	16.7	11	16.7	11	63.6	42			
Ok	34.9	328	22.0	208	42.9	403			
Very well	44.0	264	24.0	144	32.0	192	8	85.2*	-.23
Self rate GPA									
Not well	18.0	37	15.1	31	65.9	135			
Ok	37.3	350	21.8	205	40.8	383			
Very well	43.1	207	26.3	126	30.4	146	12	94.2*	-.27

TABLE 2 (cont'd). WAVE I	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED									
Self rate hard subjs									
Not well	24.9	42	14.8	25	59.8	101			
Ok	37.2	428	22.3	257	40.3	463			
Very well	41.3	136	25.2	83	33.4	110	10	42.9*	-.19
Grade Point Average									
Mostly F's	21.4	3	28.6	5	50.0	7			
Mostly D's	25.7	19	14.9	11	59.5	44			
Mostly C's	29.2	163	19.1	107	51.3	289			
Mostly B's	37.5	288	24.2	185	37.9	292			
Mostly A's	51.9	151	23.0	67	25.1	73	24	83.5*	-.27
How imprt. sch. work	(Achievement index)								
Not Imprt.	21.6	24	13.5	15	64.9	72			
Somewhat	27.9	87	20.2	63	51.3	160			
Very Imprt.	40.1	509	23.2	294	36.6	464	12	61.3*	-.30
Do well in hard subjs									
Not Imprt.	31.8	14	13.6	6	52.3	23			
Somewhat	28.9	179	21.0	130	49.8	309			
Very Imprt.	41.5	427	22.9	236	35.5	365	12	81.5*	-.24
How imprt high GPA									
Not Imprt.	36.2	25	14.5	10	49.3	34			
Somewhat	33.8	148	19.9	87	46.1	202			
Very Imprt.	37.7	447	23.2	275	38.9	462	12	14.0*	-.04
Do sch work w/o help									
Not Imprt.	26.3	35	10.5	14	61.7	82			
Somewhat	37.0	271	20.7	152	42.2	309			
Very Imprt.	38.0	314	24.9	206	37.0	306	12	59.0*	-.13
SCHOOL INVOLVEMENT									
Wkday Afternoon study									
Very Little	30.7	187	22.1	135	47.2	188			
Some	34.6	234	21.2	143	44.2	299			
Alot	48.8	198	23.2	94	28.1	114	4	47.1*	-.20
Wkday Evenings study									
Very Little	31.9	176	19.4	107	48.7	269			
Some	37.0	263	22.5	160	40.5	288			
Alot	42.1	181	24.4	105	33.5	144	4	23.6*	-.15
Weekends study									
Very little	32.1	336	21.5	225	46.1	482			
Some	43.5	213	23.5	115	32.9	161			
Alot	45.4	71	20.5	32	34.0	53	12	36.7*	-.21

TABLE 2 (cont'd). WAVE I	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
BELIEFS									
Cheat on tests	(Conventional norms & attitudes)								
Not Wrong	23.7	86	13.8	50	62.0	225			
Wrong	40.1	539	24.1	324	35.6	479	6	90.9*	-.40
Damage others prop									
Not Wrong	2.2	1	17.8	8	77.8	35			
Wrong	37.6	624	22.0	366	40.2	668	6	67.2*	-.72
Use Marijuana									
Not Wrong	20.5	59	14.9	43	64.2	185			
Wrong	39.9	565	23.4	331	36.6	518	6	82.3*	-.44
Steal < $5.00									
Not Wrong	14.5	25	16.2	28	68.2	118			
Wrong	39.2	600	22.6	346	38.1	584	6	80.9*	-.53
Assault									
Not Wrong	12.1	28	21.6	50	65.5	152			
Wrong	40.5	497	22.0	324	37.4	552	6	95.5*	-.53
Breaking & Entering									
Not Wrong	7.4	2	18.5	5	74.1	20			
Wrong	37.1	623	22.0	369	40.7	684	6	13.7*	-.60
Sell Hard Drugs									
Not Wrong	9.4	3	12.5	4	78.1	25			
Wrong	37.1	622	22.1	370	40.5	676	6	18.7*	-.63
Steal > $50.00									
Not Wrong	6.5	2	16.1	5	77.4	24			
Wrong	37.2	623	22.0	369	40.6	680	6	18.4*	-.65
Lie to cops 4 frnds									
Yes	20.9	45	11.2	24	67.0	144			
Don't know	29.9	112	21.1	79	48.9	183			
No	41.5	371	23.9	214	34.3	307	12	99.0*	-.33
Stop frnds go astray									
No	16.9	12	14.1	10	66.2	47			
Don't know	28.7	49	17.5	30	53.2	91			
Yes	37.6	467	22.3	277	40.0	496	12	77.5*	-.30
Ok to break rules									
Agree	14.9	40	19.4	52	65.7	176			
Neither	23.1	46	22.1	44	54.8	109			
Disagree	43.4	537	22.4	277	34.2	423	4	122.9*	-.45

TABLE 2 (cont'd). WAVE I	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
BELIEFS CONTINUED	(Acceptance of sch. authority)								
Freq tests cheat	(# school rule violations)								
None	48.4	423	24.7	216	26.8	234			
Once or twice	25.6	124	25.6	124	48.8	236			
3 or more	22.2	77	9.8	34	67.1	233	12	218.4*	.45
Freq hit teachers									
None	39.6	625	23.1	365	37.3	589			
Once	4.5	3	9.1	6	86.4	57			
2 or more	1.6	1	1.6	1	96.8	60	4	145.1*	.87
Freq hit students									
None	70.2	625	17.4	155	12.4	110			
once or twice	39.3	175	27.2	121	33.5	149			
3 or more	16.9	63	18.0	67	65.1	242	4	429.2*	.64
Freq damage sch prop									
None	43.5	625	24.5	353	32.0	460			
Once or twice	6.0	12	15.1	30	78.9	157			
3 or more	2.9	2	0	0	97.1	68	4	267.0*	.80
Freq skipped classes									
None	43.4	508	24.3	285	32.3	378			
Once or twice	29.5	75	21.7	55	48.4	123			
3 or more	14.9	42	11.7	33	72.2	203	12	182.9*	.46
Suspension									
None	39.7	609	22.2	341	37.9	582			
once or twice	9.4	12	19.5	25	70.3	90			
3 or more	9.1	4	15.9	7	75.0	33	10	95.0*	.59

*$p \leq .01$.

TABLE 3. Significant Relationships of Variables to Delinquency Wave II

WAVE II	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL ATTACHMENT									
Tchr think good stu	(Sensitivity to teacher's opinion)								
Not imprt.	14.6	6	19.5	8	65.9	27			
Somewhat	43.3	117	19.3	52	37.4	101			
Very Imprt.	52.5	200	21.8	83	24.4	93	14	41.0*	-.27
Impress tchr foremost									
Disagree	52.2	285	19.8	108	27.8	152			
Neither	20.5	15	27.4	20	47.9	35			
Agree	30.6	22	20.8	15	47.2	34	14	68.3*	.41
Don't belong at sch	(Like school)								
Agree/hatesch	32.6	13	15.2	10	55.8	29			
Neither	25.0	13	19.2	10	55.8	29			
Disagree/likesch	49.7	295	21.2	126	28.5	169	14	40.0*	-.39
SCHOOL COMMITMENT									
Imprt go to college									
Not Imprt.	40.4	44	15.6	17	42.2	46			
Somewhat	42.3	88	20.2	42	37.0	77			
Very imprt.	50.3	194	22.8	88	26.4	102	14	28.8*	-.17
Chances complete									
Poor	41.0	48	14.5	17	42.7	50			
Fair	38.0	95	21.2	53	40.0	100			
Good	54.5	182	22.8	76	22.5	75	14	45.4*	-.26
Self rate as student	(Gen. Sch. Apt./Self rating on ability)								
Not well	40.0	8	20.0	4	35.0	7			
Ok	44.7	185	21.7	90	32.6	135			
Very Well	57.1	124	18.9	41	24.0	52	14	43.0*	-.21
Self rate GPA									
Not well	33.3	23	18.8	13	46.4	32			
Ok	45.8	191	20.9	87	32.4	135			
Very well	57.8	104	21.1	38	21.1	38	14	29.5*	-.26
Self rate hard subjs									
Not well	20.0	13	26.2	17	52.3	34			
Ok	49.4	240	20.0	97	30.0	146			
Very well	52.3	67	22.7	29	25.0	32	12	34.3*	-.24
Grade Point Average									
Mostly F's	40.0	2	20.0	1	40.0	2			
Mostly D's	42.4	14	15.2	5	42.4	14			
Mostly C's	50.9	118	21.1	49	28.0	65			
Mostly B's	64.4	203	16.2	51	19.4	61			
Mostly A's	76.3	87	12.3	14	11.4	13	8	32.6*	.30

TABLE 3 (cont'd). WAVE II	Not Delinq %	n	Occas Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED									
How imprt. sch. work	(Achievement index)								
Not Imprt.	27.0	10	13.5	5	54.1	20			
Somewhat	32.5	40	19.5	24	47.2	58			
Very Imprt.	51.3	273	21.4	114	26.9	143	14	71.4*	-.38
Do well in hard subjs									
Not imprt.	23.1	3	0	0	69.2	9			
Somewhat	37.9	92	21.4	52	39.9	97			
Very imprt.	52.3	228	20.9	91	26.4	115	14	83.1*	-.29
Do sch work w/o help									
Not imprt.	30.6	11	5.6	2	61.1	22			
Somewhat	42.1	127	20.2	61	37.1	112			
Very imprt.	52.3	185	22.6	80	24.6	87	14	51.2*	-.25
SCHOOL INVOLVEMENT									
Wkday aftrns study									
Very little	57.0	134	14.0	33	28.9	68			
Some	62.2	166	18.4	49	19.5	52			
Alot	64.0	121	17.5	33	18.5	35	4	9.2**	-.11
Wkday eves study									
Very little	54.4	124	15.4	35	30.3	69			
Some	64.5	189	16.4	48	19.1	56			
Alot	63.7	109	18.7	32	17.5	30	4	12.6*	-.14
Weekends study									
Very little	39.4	155	20.9	82	38.4	151			
Some	53.3	121	20.7	47	26.0	59			
Alot	65.3	47	19.4	14	15.3	11	14	29.6*	-.30
BELIEFS									
Cheat on tests	(Conventional norms & attitudes)								
Not wrong	26.3	42	18.8	30	55.0	88			
Wrong	52.4	285	21.5	117	26.1	142	2	50.2*	-.48
Damage others prop									
Not Wrong	12.9	4	19.4	6	67.7	21			
Wrong	48.0	323	21.0	141	31.1	209	2	20.1*	-.62
Use marijuana									
Not wrong	31.9	52	16.6	27	51.5	84			
Wrong	50.8	275	22.2	120	27.0	146	2	34.6*	-.39
Steal < $5.00									
Not wrong	23.8	19	13.8	11	62.5	50			
Wrong	49.4	308	21.8	136	28.8	180	2	36.7*	.52

TABLE 3 (cont'd). WAVE II	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
BELIEFS CONTINUED									
Assault someone									
Not wrong	17.4	12	26.1	18	56.5	39			
wrong	49.6	315	20.3	129	30.1	191	2	28.2*	-.51
B & E Bldg or car									
Not wrong	8.3	2	12.5	3	79.2	19			
Wrong	47.8	325	21.2	144	31.0	211	2	25.0*	-.76
Sell hard drugs									
Not wrong	11.1	2	22.2	4	66.7	12			
Wrong	47.4	325	20.8	143	31.8	218	2	11.5*	-.62
Steal > $50.00									
Not wrong	0	0	18.8	3	81.3	12			
Wrong	47.5	326	21.0	144	31.6	217	2	19.4*	-.83
Lie to cops 4 frnds									
Yes	27.8	35	13.5	17	58,7	74			
Don't know	40.9	56	18.2	25	40.9	56			
No	53.1	198	23.9	89	23.1	86	6	58.4*	-.38
Stop frnds go astray									
No	40.5	17	9.5	4	50.0	21			
Don't know	41.3	31	14.7	11	44.0	33			
yes	46.5	242	22.3	116	31.2	162	4	11.7*	-.18
Ok break rules									
Agree	27.4	26	21.1	20	51.6	49			
Neither	27.2	22	17.3	14	55.6	45			
Disagree	52.9	279	21.3	112	25.8	136	4	50.1*	-.43
	(Acceptance of school authority)								
Freq hit teacher	(# of school rule violations)								
None	49.2	327	21.8	145	28.9	192			
once	4.5	76	13.6	3	81.8	18			
2 or more	0	0	0	0	100	83	4	66.7*	.90
Freq hit students									
None	79.6	327	13.1	54	7.3	30			
once or twice	46.6	76	27.0	44	26.4	43			
3 or more	18.5	24	17.7	23	63.8	83	4	224.9*	.71

*$p \leq .01$.

TABLE 4. Significant Relationships of Variables to Delinquency Wave III

WAVE III	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL ATTACHMENT									
Tchr think good stu	(Sensitivity to teacher's opinion)								
Not imprt.	24.7	24	14.4	14	60.8	59			
Somewhat	44.3	294	17.9	119	37.8	251			
Very imprt	58.6	443	16.3	123	25.1	190	4	70.3*	-.31
Impress tchr foremost									
Disagree	56.2	678	17.0	205	26.8	324			
Neither	24.0	42	22.3	39	53.7	94			
Agree	28.0	38	9.1	12	62.1	82	4	122.9*	.17
None at sch care	(Like school)								
Agree/hatesch	34.8	24	21.7	15	43.5	30			
Neither	40.0	46	20.9	24	39.1	45			
Disagree/likesch	51.9	691	16.3	217	31.8	423	4	12.9*	-.21
Don't belong at sch									
Agree/hatesch	30.3	30	14.1	14	55.6	55			
Neither	34.5	41	16.8	20	48.7	58			
Disagree/likesch	53.3	691	17.0	221	29.7	385	4	45.1*	-.37
Feel lonely at sch									
Agree/hatesch	42.0	126	19.0	57	39.0	117			
Neither	38.7	70	18.2	33	43.1	78			
Disagree/likesch	54.7	566	16.0	166	29.3	303	4	27.6*	-.20
SCHOOL COMMITMENT									
Imprt go to college									
Not imprt.	45.3	129	14.7	42	40.0	114			
Somewhat	44.4	204	18.3	84	37.3	171			
Very imprt.	56.0	486	15.8	137	28.2	245	4	24.4*	-.17
Chances complete									
Poor	40.1	113	15.6	44	44.3	125			
Fair	45.7	244	19.1	102	35.2	188			
Good	58.3	455	14.6	114	27.1	212	4	41.6*	-.22
Self rate as student	(Gen. Sch. Apt./Self rating on ability)								
Not well	28.7	49	17.0	29	54.4	93			
Ok	51.7	538	17.5	182	30.8	321			
Very well	61.6	165	14.9	40	23.5	63	4	56.5*	-.30
Self rate GPA									
Not well	24.3	37	17.8	27	57.9	88			
Ok	51.6	475	16.8	155	31.6	6			
Very Well	61.0	225	17.9	66	21.1	78	4	74.4*	-.32

TABLE 4 (cont'd). WAVE III	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED									
Grade Point Average									
Mostly F's	30.8	4	7.7	1	61.5	8			
Mostly D's	17.5	11	12.7	8	69.8	44			
Mostly C's	41.4	218	18.8	98	39.7	210			
Mostly B's	53.5	350	17.6	114	28.9	190			
Mostly A's	69.0	176	12.2	31	18.8	48	8	103.1*	-.33
How imprt sch work	(Achievement index)								
Not imprt.	27.8	25	8.9	8	63.3	57			
Somewhat	32.8	95	17.9	52	49.3	143			
Very Imprt.	56.4	642	17.2	196	26.4	300	4	102.8*	-.44
How imprt. high GPA									
Not Imprt.	31.4	22	10.0	7	58.6	41			
Somewhat	42.3	232	18.8	103	39.0	214			
Very Imprt.	56.5	447	15.1	115	26.4	202	4	50.8*	-.27
Do sch. work w/o help									
Not Imprt.	34.4	33	14.6	14	51.0	49			
Somewhat	42.9	282	19.3	127	37.8	249			
Very Imprt.	58.5	447	15.1	115	26.4	202	4	50.6*	-.27
Do well in hard subjs									
Not Imprt.	26.3	10	13.2	5	60.5	23			
Somewhat	45.6	274	17.3	104	37.1	223			
Very Imprt.	54.4	478	16.5	145	29.1	256	4	26.1*	-.19
SCHOOL INVOLVEMENT									
Wkday aftrns study									
Very little	39.6	214	17.0	92	43.4	235			
Some	54.1	315	15.6	91	30.2	176			
Alot	59.1	233	18.0	71	22.8	90	4	52.5*	-.25
Wkday eves study									
Very little	39.6	177	19.2	86	41.2	184			
Some	52.1	229	15.4	100	32.6	212			
Alot	58.8	245	16.3	68	24.9	104	4	36.2*	-.21
Weekends study									
Very little	43.9	406	17.1	158	39.0	360			
Some	58.3	250	16.1	69	25.6	110			
Alot	64.2	106	17.6	29	18.2	30	4	47.5*	-.28

TABLE 4 (cont'd).	Not Delinq		Occas. Delinq		Serious Delinq				
WAVE III	%	n	%	n	%	n	df	X2	gamma
BELIEFS									
Cheat on tests	(Conventional norms & attitudes)								
Not wrong	30.3	121	16.5	66	53.1	212			
Wrong	57.5	699	16.2	197	23.6	320	2	109.2*	-.47
Damage others prop									
Not wrong	8.2	4	10.2	5	31.4	492			
Wrong	52.1	817	16.5	258	81.6	40	2	55.6*	-.79
Use marijuana									
Not wrong	35.6	196	15.3	84	49.1	270			
Wrong	58.6	625	16.8	179	24.6	262	2	104.9*	-.42
Steal < $5.00									
Not wrong	25.0	55	8.6	19	66.4	146			
Wrong	54.9	766	17.5	244	27.7	386	2	129.0*	-.58
Assault									
Not wrong	22.5	27	11.7	14	65.8	79			
Wrong	53.1	794	16.6	249	30.3	453	2	64.7*	-.57
Breaking & Entering									
Not wrong	8.0	2	4.0	1	88.0	22			
Wrong	51.5	818	16.5	262	32.0	509	2	34.9*	-.84
Sell hard drugs									
Not wrong	12.9	9	20.0	14	67.1	47			
Wrong	52.5	812	16.1	249	31.4	485	2	47.3*	-.64
Steal > $50.00									
Not wrong	2.9	1	17.1	6	80.0	28			
Wrong	51.9	820	16.3	257	31.9	504	2	40.2*	-.80
Lie to cops 4 frnds									
Yes	22.4	64	12.6	36	65.0	186			
Don't know	46.6	199	17.3	74	36.1	154			
No	61.6	553	17.1	153	21.3	101	4	198.3*	-.46
Stop frnds go astray									
No	34.9	38	9.2	10	56.0	61			
Dont know	45.5	95	15.8	33	38.8	81			
Yes	52.9	683	17.0	220	30.1	389	4	34.3*	-.23
Ok break rules									
Agree	24.6	46	13.9	26	61.5	115			
Neither	37.4	77	18.0	37	44.7	92			
Disagree	57.1	697	16.2	198	26.6	325	4	112.6*	-.44

TABLE 4 (cont'd). WAVE III	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
BELIEFS CONTINUED	(Acceptance of school authority)								
Freq test cheated	(# of school rule violations)								
None	64.5	606	14.0	131	21.5	202			
Once or twice	36.0	127	24.1	85	39.9	141			
3 or more	27.2	88	14.5	47	58.3	189	4	208.7*	.49
Freq hit teacher									
None	54.4	821	16.8	253	28.8	435			
Once	7.9	5	7.9	5	84.1	53			
2 or more	6.8	3	4.5	2	88.6	39	4	149.8*	.84
Freq hit students									
None	76.2	821	12.2	131	11.8	127			
Once or twice	39.4	115	26.4	77	34.2	100			
3 or more	15.9	39	16.7	41	67.5	166	4	447.5*	.70
Freq damage sch prop									
None	57.4	821	17.5	251	25.1	359			
Once or twice	5.2	7	15.6	21	79.3	107			
3 or more	6.0	3	2.0	1	92.0	46	4	265.0*	.85
Freq skipped classes									
None	63.5	596	15.4	144	21.1	198			
Once or twice	39.3	95	19.4	47	41.3	100			
3 or more	29.8	130	16.5	72	53.7	234	4	178.0*	.47
Suspension									
None	55.2	786	16.1	229	28.7	409			
Once or twice	22.1	34	18.8	29	59.1	91			
3 or more	2.6	1	7.9	3	89.5	34	4	126.3*	.62

*$p \leq .01$.

TABLE 5. Significant Relationships of Variables to Delinquency Wave IV

WAVE IV	Not Delinq %	Not Delinq n	Occas. Delinq %	Occas. Delinq n	Serious Delinq %	Serious Delinq n	df	X2	gamma
SCHOOL ATTACHMENT									
Tchr think good stu	(Sensitivity to tchr opinion)								
Not imprt.	43.2	41	11.6	11	44.2	42			
Somewhat	51.8	324	17.1	107	30.9	193			
Very imprt.	61.0	368	19.1	115	19.9	120	8	49.5*	-.22
Impress tchr foremost									
Disagree	59.2	652	17.8	196	22.8	251			
Neither	38.8	54	16.5	23	44.6	62			
Agree	31.3	25	16.3	13	52.5	42	8	61.3*	.41
None at sch care	(Like school)								
Agree/hatesch	56.7	642	17.8	202	25.4	287			
Neither	48.4	62	16.4	21	35.2	45			
Disagree/likesch	46.0	29	15.9	10	36.5	23	8	29.3*	.18
Dont belong at sch									
Agree/hatesch	57.6	672	18.1	211	24.3	283			
Neither	49.4	44	11.2	10	38.2	34			
Disagree/likesch	25.4	17	17.9	12	56.7	38	8	58.1*	.37
SCHOOL COMMITMENT									
Imprt go to college									
Not imprt.	49.7	155	18.6	58	31.4	98			
Somewhat	55.0	246	14.8	66	30.2	135			
Very imprt.	60.6	474	16.6	124	22.6	177	8	21.1*	-.14
Chances complete									
Poor	48.5	157	17.0	55	34.3	111			
Fair	52.6	240	15.8	72	31.6	144			
Good	62.7	469	16.6	124	20.6	154	8	36.3*	-.20
Self rate as student	(Gen. Sch. Apt./self rate ability)								
Not well	15.6	5	15.6	5	68.8	22			
Ok	54.3	430	17.2	136	28.5	226			
Very well	63.5	256	20.1	81	16.1	65	6	57.3*	-.27
Self rate GPA									
Not well	29.2	42	18.8	27	52.1	75			
Ok	56.8	460	18.9	153	24.3	197			
Very well	69.9	216	13.6	42	15.9	49	8	90.3*	-.37
Self rate hard subjs									
Not well	25.0	29	20.7	24	54.3	63			
Ok	57.2	541	18.4	174	24.3	230			
Very well	67.3	152	12.8	29	19.9	45	6	69.0*	-.34

TABLE 5 (cont'd). WAVE IV	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED									
Grade point average									
Mostly F's	18.8	3	12.5	2	68.8	11			
Mostly D's	21.8	12	20.0	11	58.2	32			
Mostly C's	45.4	202	19.6	87	35.1	156			
Mostly B's	62.0	374	17.7	107	20.2	122			
Mostly A's	70.3	142	12.4	25	17.3	35	8	98.6*	-.35
How imprt sch work	(Achievement index)								
Not imprt.	27.1	23	16.5	14	55.3	47			
Somewhat	42.4	106	21.2	53	36.4	91			
Very imprt.	61.1	604	16.8	166	22.0	218	8	85.4*	-.38
Do well in hard subjs									
Not imprt.	28.6	10	17.1	6	51.4	18			
Somewhat	53.0	260	17.5	86	29.5	145			
Very imprt.	58.0	462	17.7	141	24.2	193	8	54.7*	-.14
How imprt high GPA									
Not imprt.	25.4	15	16.9	10	57.6	34			
Somewhat	52.4	268	17.4	89	30.1	154			
Very imprt.	59.8	450	17.8	134	22.2	167	8	43.5*	-.22
Do sch work w/o help									
Not imprt.	47.7	31	13.8	9	36.9	24			
Somewhat	49.1	276	17.3	97	33.5	188			
Very imprt.	61.2	426	18.2	127	20.5	143	8	52.2*	-.23
SCHOOL INVOLVEMENT									
Wkday aftrns study									
Very little	45.0	197	17.8	78	37.2	163			
Some	58.1	310	18.0	96	24.0	128			
Alot	64.2	226	16.8	59	19.0	67	4	41.3*	-.24
Wkday eves study									
Very little	44.0	173	19.6	77	36.4	143			
Some	57.7	319	15.9	88	26.4	146			
Alot	63.7	240	18.0	68	18.3	69	4	39.5*	-.23
Weekends study									
Very little	48.0	366	18.8	143	32.9	251			
Some	64.6	268	14.9	62	20.5	85			
Alot	67.3	99	19.0	28	13.6	20	8	47.8*	-.29

TABLE 5 (cont'd). WAVE IV	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
BELIEFS									
Cheat on tests	(Conventional norms & beliefs)								
Not wrong	37.3	114	18.6	57	44.1	135			
Wrong	61.6	760	16.0	197	22.4	277	2	69.6*	-.42
Damage others prop									
Not wrong	10.5	4	15.8	6	73.7	28			
Wrong	58.0	871	16.5	248	25.5	384	2	46.8*	-.76
Use marijuana									
Not wrong	44.1	240	17.5	95	38.4	209			
Wrong	63.7	634	16.0	159	20.4	203	2	66.9*	-.36
Steal < $5.00									
Not wrong	19.7	34	15.6	27	64.7	112			
Wrong	61.5	841	16.6	227	21.9	300	2	152.6*	-.69
Assault									
Not wrong	25.5	27	12.3	13	62.3	66			
Wrong	59.1	847	16.8	241	24.1	346	2	74.5*	-.60
Breaking & Entering									
Not wrong	8.3	3	13.9	5	77.8	28			
Wrong	58.0	871	16.5	248	25.5	384	2	51.2*	-.80
Sell hard drugs									
Not wrong	16.0	12	9.3	7	74.7	56			
Wrong	58.9	863	16.8	247	24.3	356	2	93.2*	-.75
Steal > $50.00									
Not wrong	13.3	4	13.3	4	73.3	22			
Wrong	57.6	871	16.5	250	25.8	390	2	35.2*	-.74
Lie to cops 4 frnds									
Yes	66.0	593	14.8	133	19.2	172			
Don't know	54.5	193	20.3	72	25.1	89			
No	30.3	87	17.1	49	52.6	151	4	145.5*	-.40
Stop frnds go astray									
Yes	38.1	40	14.3	15	47.6	50			
Don't know	50.8	94	14.6	27	34.6	64			
No	59.2	739	17.0	212	23.9	298	4	35.0*	-.26
Ok to break rules									
Agree	62.5	739	16.3	193	21.2	250			
Neither	45.4	79	15.5	27	39.1	68			
Disagree	30.4	56	18.5	34	51.1	94	4	68.3*	.43

TABLE 5 (cont'd). WAVE IV	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
BELIEF CONTINUED	(Acceptance of sch. authority)								
Freq test cheats	(# of sch. rule violations)								
None	66.0	593	14.6	144	19.4	191			
Once or twice	44.4	138	23.5	73	32.2	100			
3 or more	35.2	86	15.2	37	49.6	121	4	125.8*	.41
Freq hit teacher									
None	60.0	875	16.8	245	23.2	339			
Once	2.3	1	27.3	12	70.5	31			
2 or more	0	0	2.6	1	97.4	37	4	164.9*	.89
Freq hit students									
None	76.3	875	11.0	126	12.7	146			
Once or twice	45.1	102	27.9	63	27.0	61			
3 or more	20.4	34	12.6	21	67.1	113	6	342.2*	.66
Freq damage sch. prop									
None	71.1	1011	13.5	190	14.9	210			
Once or twice	16.7	15	21.1	19	62.2	56			
3 or more	5.0	2	5.0	2	90.0	36	4	268.2*	.84
Freq skipped classes									
None	66.4	594	15.7	140	17.9	160			
Once or twice	45.7	90	20.3	40	34.0	67			
3 or more	42.4	191	16.4	74	41.1	185	4	102.1*	.31
Suspension									
None	61.5	884	16.0	219	22.6	310			
Once or twice	21.7	30	23.9	33	54.3	75			
3 or more	3.3	1	6.7	2	90.0	27	4	150.0*	.67

*$p \leq .01$.

TABLE 6. Significant Relationships of Variables to Delinquency Wave V

WAVE V	Not Delinq %	n	Occas. Delinq %	n	Serious Delinq %	n	df	X2	gamma
SCHOOL ATTACHMENT									
Tchr think good stu	(Sensitivity to tch's opinion)								
Not imprt.	43.3	39	13.3	12	43.3	39			
Somewhat	57.2	316	13.9	77	28.8	159			
Very imprt.	69.0	358	11.6	60	19.5	101	4	33.1*	-.26
Impress tchr foremost									
Disagree	65.6	650	12.4	123	22.0	218			
Neither	36.8	42	17.5	20	45.6	52			
Agree	39.3	22	8.9	5	51.8	29	4	58.8*	.47
Don't belong at sch	(Like school)								
Agree/hatesch	63.8	655	12.8	131	23.4	240			
Neither	44.7	38	15.3	13	40.0	34			
Disagree/likesch	42.6	23	9.3	5	48.1	26	4	28.3*	-.36
SCHOOL COMMITMENT									
Imprt go to college									
Not imprt.	58.3	182	11.9	37	29.8	93			
Somewhat	60.9	274	13.3	60	25.8	116			
Very imprt.	66.4	484	11.4	83	22.2	162	4	8.8**	-.11
Chances complete									
Poor	54.0	167	12.9	40	33.0	102			
Fair	62.4	271	12.4	54	25.1	109			
Good	67.1	499	11.4	85	21.5	160	4	18.0*	-.16
Self rate as student	(Gen. sch. apt./self rating on ability)								
Not well	27.3	6	9.1	2	63.6	14			
Ok	59.2	407	14.2	97	26.7	184			
Very well	72.4	260	10.3	37	17.3	62	4	37.0*	-.30
Self rate GPA									
Not well	36.1	44	15.6	19	48.4	59			
Ok	62.1	440	13.1	93	24.7	175			
Very well	76.7	211	9.1	25	14.2	39	4	66.0*	-.40
Self rate hard subjs									
Not well	41.6	42	15.8	16	42.6	43			
Ok	61.9	520	13.1	110	25.0	210			
Very well	74.9	140	10.7	20	14.4	27	4	34.0*	-.33
Grade Point Average									
Mostly P's	9.1	1	27.3	3	63.6	7			
Mostly D's	32.0	17	18.0	18	50.0	25			
Mostly C's	50.8	188	13.8	51	35.1	131			
Mostly B's	67.0	368	12.6	68	20.4	112			
Mostly A's	76.9	140	8.8	16	14.3	26	8	78.6*	.36

TABLE 6 (cont'd).	Not Delinq		Occas. Delinq		Serious Delinq				
WAVE V	%	n	%	n	%	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED									
How imprt. sch. work	(Achievement index)								
Not imprt.	27.4	17	11.3	7	61.3	38			
Somewhat	49.3	106	17.2	37	33.5	72			
Very imprt.	66.8	592	11.7	104	21.4	190	4	66.8*	-.39
Do well in hard subjs									
Not imprt.	33.3	11	9.1	3	57.6	19			
Somewhat	55.3	244	16.1	71	28.6	126			
Very imprt.	66.7	459	10.9	75	22.4	154	4	33.4*	-.24
How imprt high GPA									
Not imprt.	30.9	17	21.8	12	47.3	26			
Somewhat	58.8	280	12.4	59	28.8	137			
Very imprt.	66.1	418	12.3	78	21.5	136	4	30.8*	-.22
Do sch. work w/o help									
Not imprt.	48.6	34	15.7	11	35.7	25			
Somewhat	54.0	256	15.0	71	31.0	147			
Very imprt.	68.6	424	10.8	67	20.6	127	4	29.6*	-.26
SCHOOL INVOLVEMENT									
Wkday aftrns study									
Very little	49.7	178	13.7	49	36.6	131			
Some	63.8	305	11.3	54	24.9	119			
Alot	70.9	232	13.5	44	15.6	51	4	43.8*	-.27
Wkday eves study									
Very little	48.4	153	13.0	41	38.6	122			
Some	63.5	308	11.8	57	24.7	120			
Alot	70.1	253	13.6	49	16.3	59	4	46.7*	-.27
Weekend study									
Very little	57.2	332	12.7	80	34.6	218			
Some	71.7	279	12.6	49	15.7	61			
Alot	72.2	104	31.2	19	14.6	21	4	58.6*	-.34
BELIEFS									
Cheat on tests	(Conventional norms & attitudes)								
Not wrong	48.1	142	12.9	38	39.0	115			
Wrong	66.7	798	11.9	142	21.4	256	2	42.5*	-.35
Damage others prop									
Not wrong	22.2	6	3.7	1	74.1	20			
Wrong	63.8	934	12.2	179	24.0	351	2	35.6*	-.73

TABLE 6 (cont'd). WAVE V	Not Delinq %	Not Delinq n	Occas. Delinq %	Occas. Delinq n	Serious Delinq %	Serious Delinq n	df	X2	gamma
BELIEFS CONTINUED									
Use Marijuana									
Not wrong	49.3	291	13.7	81	36.9	218			
Wrong	72.0	649	11.0	99	17.0	153	2	88.5*	-.43
Steal < $5.00									
Not wrong	27.9	43	13.6	21	58.4	90			
Wrong	67.1	897	11.9	159	21.0	281	2	111.6*	-.64
Assault									
Not wrong	28.3	28	10.1	10	61.6	61			
Wrong	65.5	912	12.2	170	22.3	310	2	78.1*	-.63
Breaking & entering									
Not wrong	22.6	7	6.5	2	71.0	22			
Wrong	63.9	933	12.2	178	23.9	349	2	36.0*	-.71
Sell hard drugs									
Not wrong	27.8	27	14.4	14	57.7	56			
Wrong	65.5	913	11.9	166	22.6	315	2	65.8*	-.61
Steal > $50.00									
Not wrong	18.2	6	6.1	2	75.8	25			
Wrong	64.1	934	12.2	178	23.7	346	2	46.8*	-.77
	(Acceptance of school authority)								
Freq cheated	(# of school rule violations)								
None	70.7	748	10.3	109	19.0	201			
Once or twice	48.6	120	19.0	47	32.4	80			
3 or more	38.7	72	12.9	24	48.4	90	4	109.8*	.43
Freq hit teacher									
None	65.9	948	12.7	183	21.4	308			
Once	6.7	3	15.6	7	77.8	35			
2 or more	0	0	0	0	100.0	7	4	106.2*	.87
Freq damage sch prop									
None	68.2	948	9.8	137	22.0	306			
Once or twice	13.9	10	6.9	5	79.2	57			
3 or more	7.1	2	10.7	3	78.6	22	6	216.0*	.84
Freq skipped classes									
None	72.4	631	10.3	90	17.2	150			
Once	59.3	112	15.9	30	24.9	47			
3 or more	45.6	196	14.0	60	40.5	174	4	101.6*	.40

TABLE 6 (cont'd). WAVE V	Not Delinq %	Not Delinq n	Occas Delinq %	Occas Delinq n	Serious Delinq %	Serious Delinq n	df	X2	gamma
Freq suspended									
None	67.3	910	11.7	158	21.1	285			
Once or twice	24.5	26	17.0	18	58.5	62			
3 or more	12.5	4	6.3	2	81.3	26	4	141.2*	.70

*$p \leq .01$.

TABLE 7. Significant Relationships of Variables to Suspension Wave I

WAVE I	Not Suspended %	n	1 or more Suspensions %	n	df	X2	gamma
SCHOOL ATTACHMENT							
Tchr think good stu	(Sensitivity to tchr's opinion)						
Not imprt.	4.3	66	12.3	21			
Somewhat	33.7	515	40.4	69			
Very imprt	62.0	949	47.4	81	2	26.5*	-.30
Impress tchr foremost							
Disagree	78.6	1194	57.3	98			
Neither	10.7	163	15.8	27			
Agree	10.7	163	26.9	46	2	45.1*	.44
Nobody at sch cares	(Like school)						
Agree/hatesch	84.1	1287	79.1	136			
Neither	7.7	118	12.8	22			
Disagree/likesch	8.2	126	8.1	14	2	8.3**	-.14
Dont belong at sch							
Agree/hatesch	86.1	115	73.3	30			
Neither	6.4	98	9.3	16			
Disagree/likesch	7.5	1318	17.4	126	2	22.8*	-.37
SCHOOL COMMITMENT							
Imprt go to college							
Not imprt.	12.0	185	25.7	45			
Somewhat	26.8	411	26.3	46			
Very imprt.	61.2	940	48.0	84	2	26.4*	-.27
Chances complete							
Poor	12.4	189	31.0	54			
Fair	38.2	582	35.1	61			
Good	49.4	752	33.9	59	2	46.0*	-.34
Self rate as student	(Gen. sch. apt./self rating on ability)						
Not well	3.8	55	7.3	11			
Ok	57.5	841	69.3	104			
Very well	38.8	567	23.3	35	2	16.1*	-.35
Self rate GPA							
Not well	10.6	156	31.7	51			
Ok	58.4	859	52.2	84			
Very well	31.0	456	16.1	26	2	62.6*	-.45
Self rate hard subjs							
Not well	9.3	139	18.8	30			
Ok	69.7	1043	70.0	112			
Very well	21.0	314	11.3	18	2	19.5*	-.34

TABLE 7 (cont'd). WAVE I	Not Suspended %	n	1 or more Suspensions %	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED							
Grade point average							
Mostly F's	.6	9	2.9	5			
Mostly D's	3.8	59	9.2	16			
Mostly C's	30.3	466	56.1	97			
Mostly B's	46.6	717	28.9	50			
Mostly A's	18.7	287	2.9	5	4	85.4*	-.56
How imprt sch work							
Not imprt.	5.9	90	12.8	22			
Somewhat	17.1	261	30.2	52			
Very imprt.	77.0	1178	57.0	98	2	34.0*	-.40
Do well in hard subjs							
Not imprt.	2.2	34	6.4	11			
Somewhat	35.5	543	46.2	79			
Very imprt.	62.3	054	47.4	81	2	20.8*	-.30
SCHOOL INVOLVEMENT							
Wkday evenings study							
Very little	51.6	790	69.8	120			
Some	21.9	335	14.5	25			
Alot	26.5	405	15.7	27	2	28.0*	-.30
Weekends study							
Very little	60.7	928	72.7	125			
Some	29.9	457	20.3	35			
Alot	9.4	144	7.0	12	2	9.4*	-.24
BELIEFS							
Cheat on tests							
Not wrong	19.4	299	37.1	65			
Wrong	80.6	1241	62.9	110	1	29.5*	-.42
Damage others prop							
Not wrong	2.3	36	5.2	9			
Wrong	97.7	1504	94.8	165	1	4.9**	-.39
Use marijuana							
Not wrong	15.1	232	34.5	60			
Wrong	84.9	1307	65.5	114	1	41.6*	-.49
Steal < $5.00							
Not wrong	9.0	138	20.0	35			
Wrong	91.0	1400	80.0	140	1	21.0*	-.43

TABLE 7 (cont'd). WAVE I	Not Suspended %	n	1 or more Suspensions %	n	df	X2	gamma
BELIEFS CONTINUED							
Assault							
Not wrong	13.1	201	18.3	32			
Wrong	86.9	1339	81.7	143	1	3.6**	-.19
Breaking & Entering							
Not wrong	1.4	21	3.4	6			
Wrong	98.6	1519	96.6	169	1	4.3**	-.43
Sell hard drugs							
Not wrong	1.5	23	5.1	9			
Wrong	98.5	1517	94.9	166	1	11.4*	-.56
Steal > $50.00							
Not wrong	1.4	21	5.7	10			
Wrong	98.6	1519	94.3	165	1	16.7*	-.62
Lie to cops 4 frnds							
Yes	12.5	167	32.7	49			
Don't know	25.2	337	25.3	38			
No	62.4	835	42.0	63	2	47.1*	-.40
Stop frnds go astray							
No	4.3	58	8.7	13			
Don't know	11.1	148	15.3	23			
Yes	84.6	1133	76.0	114	2	8.6**	-.26
Ok to break rules							
Agree	74.4	223	56.6	47			
Neither	11.1	171	16.6	29			
Disagree	14.5	1143	26.9	99	2	26.0*	-.35
	(Acceptance of sch. authority)						
Freq tests cheated	(# of school rule violations)						
None	53.1	817	35.6	62			
1 or more	46.9	721	64.4	112	1	19.1*	.34
Freq hit teacher							
None	94.5	1455	74.3	130			
1 or more	5.5	85	25.7	45	1	91.4*	.71
Freq hit students							
None	55.5	847	26.4	46			
1 or more	45.0	692	73.6	128	1	51.2*	.54

TABLE 7 (cont'd). WAVE I	Not Suspended %	n	1 or more Suspensions %	n	df	X2	gamma
BELIEFS CONTINUED							
Freq damage sch prop							
None	86.1	1326	66.9	117			
1 or more	13.9	214	33.1	58	1	89.7*	.48
Freq skipped classes							
None	72.8	1121	31.4	55			
1 or more	27.2	419	68.6	120	1	124.7*	.70

**p ≤ .05 *p ≤ .01.

TABLE 8. Significant Relationships of Variables to Suspension Wave III

WAVE III	Not Suspended %	n	1 or more Suspensions %	n	df	X2	gamma
SCHOOL ATTACHMENT							
Tchr think good stu							
Not imprt.	4.9	66	17.3	32			
Somewhat	43.4	582	45.9	85			
Very imprt.	51.5	692	36.8	68	2	46.1*	-.33
Impress tchr foremost							
Disagree	80.9	1082	10.8	131			
Neither	11.6	155	12.4	22			
Agree	7.5	100	24.2	32	2	20.1*	.28
Don't belong at sch	(Like school)						
Agree/hatesch	6.8	80	10.4	19			
Neither	7.3	98	12.0	22			
Disagree/likesch	86.7	1162	77.6	142	2	10.9*	-.29
SCHOOL COMMITMENT							
Importance of college							
Not imprt.	16.8	240	24.0	46			
Somewhat	28.4	406	30.7	59			
Very imprt.	54.8	784	45.3	87	2	8.1*	-.17
Chances complete							
Poor	16.3	232	27.7	52			
Fair	32.7	464	39.4	74			
Good	51.0	723	33.0	62	2	25.1*	-.31
Self rate as student	(Gen. Sch. Apt./self rating on ability)						
Not well	10.4	137	20.5	35			
Ok	70.2	925	70.2	120			
Very well	19.4	255	9.4	16	2	21.5*	-.36
Self rate GPA							
Not well	9.6	124	17.8	29			
Ok	63.3	815	67.5	110			
Very well	27.0	348	14.7	24	2	18.0*	-.33
Grade point average							
Mostly F's	.6	8	2.7	5			
Mostly D's	3.4	46	9.2	17			
Mostly C's	32.5	433	51.4	95			
Mostly B's	44.8	598	32.4	60			
Mostly A's	18.7	249	4.3	8	4	63.5*	-.48

TABLE 8 (cont'd). WAVE III	Not Suspended %	n	1 or more Suspensions %	n	df	X2	gamma
SCHOOL COMMITMENT CONTINUED							
How imprt sch. work	(Achievement index)						
Not imprt.	5.0	67	12.4	23			
Somewhat	18.0	241	27.0	50			
Very imprt	77.0	1033	60.5	112	2	28.1*	-.36
Do well in hard subjs							
Not imprt.	1.8	24	7.6	14			
Somewhat	39.1	525	41.6	77			
Very imprt.	59.1	792	50.8	94	2	23.9*	-.19
How imprt high GPA							
Not imprt	3.6	48	11.9	22			
Somewhat	35.3	473	42.7	79			
Veryimprt.	61.1	819	45.4	84	2	33.6*	-.32
SCHOOL INVOLVEMENT							
Wkday aftrns study							
Very little	52.2	700	69.6	128			
Some	20.8	279	12.5	23			
Alot	27.0	362	17.9	33	2	27.4*	-.28
Wkday eves study							
Very little	48.5	649	68.5	126			
Some	22.4	300	16.3	30			
Alot	29.1	390	15.2	28	2	41.9*	-.35
BELIEFS							
Cheating							
Not wrong	23.5	336	34.2	66			
Wrong	76.5	1096	65.8	127	1	10.5*	-.25
Use marijuana							
Not wrong	32.3	463	48.2	93			
Wrong	67.7	970	51.8	100	1	19.0*	-.32
Steal < $5.00							
Not wrong	12.4	177	23.8	46			
Wrong	87.6	1256	76.2	147	1	18.9*	-.37
Assault							
Not wrong	6.7	96	12.4	24			
Wrong	93.3	1337	87.6	169	1	8.1*	-.32

TABLE 8 (cont'd).	Not Suspended		1 or more Suspensions				
WAVE III	%	n	%	n	df	X2	gamma
BELIEFS CONTINUED							
Breaking & Entering							
Not wrong	1.1	16	4.7	9			
Wrong	98.9	1415	95.3	184	1	14.01	-.62
Sell hard drugs							
Not wrong	3.7	53	9.3	18			
Wrong	96.3	1380	90.7	175	1	12.9*	-.45
Steal > $50.00							
Not wrong	1.5	21	7.3	21			
Wrong	98.5	1412	92.7	179	1	27.0*	-.68
Lie to cops 4 frnds							
Yes	15.3	219	36.5	70			
Don't know	27.1	387	22.9	44			
No	57.5	821	40.6	78	2	52.0*	-.35
Stop frnds go astray							
No	6.1	87	12.0	23			
Don't know	13.0	186	13.0	25			
Yes	80.9	1154	75.0	144	2	9.3*	-.17
Ok to break rules							
Agree	10.6	152	18.8	36			
Neither	12.7	182	15.1	29			
Disagree	76.7	1097	66.1	127	2	12.8*	-.24
	(Acceptance of sch. authority)						
Freq tests cheat	(# of school rule violations)						
No cheating	60.2	863	43.5	84			
1 or more	39.8	570	56.5	109	1	19.5*	.32
Freq hit teacher							
None	95.5	1368	77.7	150			
1 or more	4.5	65	22.3	43	1	86.3*	.71
Freq hit students							
None	71.0	1017	36.3	70			
1 or more	29.0	416	63.7	123	1	92.4*	.62
Freq damage sch prop							
None	90.7	1299	73.1	141			
1 or more	9.3	133	26.9	52	1	52.5*	.56
Freq skipped classes							
None	62.0	889	28.5	55			
1 or more	38.0	544	71.5	138	1	78.5*	.60

*$p \leq .01$.

TABLE 9. Relationships of Suspension and Delinquency by Waves

	Not Delinq		Occas. Delinq		Serious Delinq				
	%	n	%	n	%	n	df	X2	gamma
WAVE I									
Suspension									
None	39.7	609	22.2	341	37.9	582			
Once or twice	9.4	12	19.5	25	70.3	90			
3 or more	9.1	4	15.9	7	75.0	33	4	95.0*	.59
WAVE III									
Suspension									
None	55.2	786	16.1	229	28.7	409			
Once or twice	22.1	34	18.8	29	59.1	91			
3 or more	2.6	1	7.9	3	89.5	34	4	126.3*	.62
WAVE IV									
Suspension									
None	61.5	884	16.0	219	22.6	310			
Once or twice	21.7	30	23.9	33	54.3	75			
3 or more	3.3	1	6.7	2	90.0	27	4	150.0*	.67
WAVE V									
Suspension									
None	67.3	910	11.7	158	21.1	285			
Once or twice	24.5	26	17.0	18	58.5	62			
3 or more	12.5	4	6.3	2	81.3	26	4	141.2*	.70

*$p \leq .01$.

TABLE 10. Two Step Regression Analysis

	Self Reported Delinquency Measures				
		STEP 1		STEP 2	
Predictor Variables	r	Beta	T	Beta	T
SUSPENSIONS					
Susp 1	.20*	.01	.47	.01	.46
Susp 3	.14*	.16	5.19*	.02	.81
DELINQUENCY					
Delinq1	.07*	.03	1.22	.01	.42
ATTACHMENT 1					
Tchr opinion imprt	-.04*	.02	.99	.01	.51
Attitude about sch	.07*	-.02	-.97	.02	-.94
COMMITMENT 1					
Imprt of sch work	-.05*	.00	.32	.05	2.13**
Self rate on ability	-.03*	-.00	-.31	.02	1.01
INVOLVEMENT 1					
# Eves studying	-.04**	.01	.38	-.01	-.52
BELIEFS 1					
Attitude assault	-.08*	-.05	-1.74***	-.05	1.83***
Attitude drug sales	-.06*	.01	.38	.02	.81
Attitude damage property	-.11*	.00	.13	.03	1.36
Attitude steal < $5.00	-.07*	-.02	-.86	-.02	-.82
Freq cheated on tests	.05*	.04	1.68***	.01	.69
Freq truant	.08*	.06	1.93**	.02	.92
ATTACHMENTS 4					
Tchr opinion imprt	-.10*			.02	.95
Attitude about sch	.12*			.00	.19
COMMITMENTS 4					
Self rate ability	-.11*			-.07	-2.85**
Imprt of scho work	-.14*			.00	.09
Imprt of college	-.06*			.03	.97
INVOLVEMENT 4					
# Afternoons study	-.12*			-.03	-1.35
BELIEFS 4					
Conv Norms & attitudes	-.22*			-.11	-3.30**
# Sch rule violations	.22**			.29	10.84**
		R-Square=.05		R-Square=.29	
		F=5.1*		F=10.99*	

*p ≤ .01; **p ≤ .05; ***p ≤ .10.

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