

OVERDUE FINES: 25¢ per day per item RETURNING LIBRARY MATERIALS: Place in book return to remove charge from circulation records ATAL May 10, 2000

SELF-REPORT DELINQUENCY AND OFFICIAL ARCHIVAL RECORDS: A COMPARISON

:

By

Maria Isabel Fernandez

A THESIS

Submitted to Michigan State University in partial fulfillments of the requirements for the degree of

MASTER OF ARTS

Department of Psychology

.

ABSTRACT

SELF-REPORT DELINQUENCY AND OFFICIAL ARCHIVAL RECORDS: A COMPARISON

By

Maria Isabel Fernandez

Juvenile delinquency remains a serious domestic problem despite strong efforts to control its occurrence. Initially, researchers acknowledged a relationship between delinquency and demographic variables. Recently, linkages between delinquency and frustration producing environments such as school were demostrated.

The study of delinquency is contingent upon the adequacy of the measurement methods. Yet the field is plagued by conceptual and empirical disputes concerning the most commonly utilized measurement methodologies, self-reports and official records.

The present study, designed to examine the relationship among self-reported delinquency, legal involvement as measured through official records and school performance, occurred within the context of a larger five year delinquency prevention project. Self-report data were obtained via process and follow-up interviews. Court, police and school data were gathered from the participants' official records. The data sets were standardized into three

Maria Isabel Fernandez

corresponding time periods and monthly rates were computed for each variable. Correlational techniques were utilized to determine relationships among the variables.

The results demonstrated that official record data were related within time, but were not related to self-reported delinquency. A strong predictive relationship between self-report delinquency and school performance was found. No consistent relationship between legal involvement and school performance was detected. To my parents, Oscar and Isabel Fernandez, who taught me the true meaning of Love, and to Ramon Luis Sandin who helps me live it.

J.

ACKNOWLEDGEMENTS

Research efforts are seldom individual endeavors, but depend upon numerous persons and groups whose contributions are essential to the completion of the work. Foremost among these are the members of the Thesis Committee. I extend my deepest gratitude to Bill Davidson, my chairperson, advisor and friend. His high standards and personal values encouraged my desire to achieve and excel. His leadership skills and democratic orientation makes one feel as a valued and respected peer. The net result of working with him has been tremendous intellectual, as well as, personal growth. Likewise, I thank Esther Fergus. Throughout the course of these last two years, she has been more than wonderful. I first thought of her as a role model, one of the few women who successfully completed the Ecological Program. Her enthusiasm, approachability and willingness to listen and help, facilitated the formation of a wonderful relationship. She is much more than a friend, she is my pseudo sister in Michigan. I am also greatful to Charlie Johnson who was instrumental during my first and most trying year at Michigan His worldly experience and practical advice helped State. to set me on the right academic track.

I also wish to thank in a very special way, Dr. Bill Fairwearther. He percieved my need for a father figure and

iii

took me under his protective wings. His wisdom, affection and advice on both academic, as well as, personal levels have been greatly appreciated. Then there is Craig Blakely, who was not a member of my committee, but for all practical purposes should have been. He was always there when I needed him. His instruction, guidance and above all, his patience were instrumental to this work.

A special note of thanks goes to Roger Buldain and Bill Crano for the generous gifts of their time and expertise on the use of cross-lagged panel analysis. Likewise, I thank Neal Schmitt for teaching me to interpret these results.

This section would not be complete without mentioning my dearly beloved cohorts at the Adolescent Diversion Project. Each and every one of them contributed in a special way to the completion of this work. I want to thank the interviewing crew, the system's people and the student data staff for all their help. Then there are Becky and Keitha who put up with all of us. I extend my gratitude especially to Becky for being such a wonderful audience and so masterfully efficient as well.

There are two very special people that, while not dirrectly associated with the academic portion of this work, were, nonetheless, vital to its fructition. They are my parents, Oscar and Isabel. What can one say to persons that have done so much for so little recompense? All that they did, they did out of love, and words can not convey

iv

my love and gratitude. Then there are my eight brothers and sisters: Diana, Ana, Lily, Vivian, Oscar, Myrni, Cristy, and Alex. They are and have always been a big part of my life. I would not be the person that I am today if not for them.

Aside from my immediate family, numerous other persons deserve acknowledgements. First there is my Tia Lola, whose wit, enthusiasm and regular telephone calls made my life in Michigan much more pleasant. I want to thank Sally, Mari, Jose Ramon, Fernando, and Cecilia for their unending friendship, encouragement and support. A special note of appreciation goes to Don Juan, Dona Viye and Peter whose genuine love and concern transcended the barriers of space, distance and time. Above all, there is Ramon Luis, whose love supported me and companionship inspired me. By his very beingness he challenges me to actualize more and more of my potential. In trying moments he upheld me, and in times of triumph he shared my joy. Words cannot express all I feel.

Last of all, I wish to thank the students, youths and their families who participated in the Adolescent Diversion Project.

ν

TABLE OF CONTENTS

	Page
LIST OF TABLES	. viii
LIST OF FIGURES	. ix
INTRODUCTION	. 1
Statement of Problem	$ \begin{array}{c} 1 \\ 1 \end{array} $
Archival Records as Primary Outcome Data Self-Report Delinguency Measures	. 2 . 4
Self-Report Delinquency Techniques Controversy Between Self-Report Delinquency	. 7
Data and Archival Record Data	. 10 . 15
METHOD	. 19
Subjects	. 19
Reliability	. 20 . 21
Administration Procedures for SRD	· 22 · 23
The Interviewing Process	. 24
Delinquency Instrument	. 25 . 26
Official Police Data	. 27 . 27
School Data	. 29 . 30
RESULTS	. 37
Relationship Between Court and Police Records. Relationship Between Solf-Pepert Delinguency	. 41
and Archival Records	. 44
Scores and School Performance	. 50
Data and School Performance	. 52 . 57
DISCUSSION	. 58

Page

Questions Posed by This Study	•	58
Records and Self-Report Delinquency Relationship Among School Performance, Self-	•	58
Report Delinquency Scores and Court and Police Involvement	• •	62 69 70
APPENDIX	•	74
REFERENCES		77

LIST OF TABLES

Tabl	le Pa	ıge
1	Intercorrelation of Court Variables 3	8
2	Intercorrelation of Police Variables 3	19
3	Intercorrelation of School Variables 4	۰O
4	Intercorrelation of Court and Police Records 4	+2
5	Cross-Lagged Panel Correlations of Court Petitions and Police Contacts 4	+3
6	Intercorrelation of SRD Scores and Archival Records	•6
7	Across Time Correlations of SRD Scores and Archival Records 4	¥7
8	Cross-Lagged Panel Correlations of SRD Scores and Court Petitions 4	+8
9	Cross-Lagged Panel Correlations of SRD Scores and Police Contacts 4	+9
10	Across Time Correlations of SRD Scores and School Status	51
11	Cross-Lagged Panel Correlations of SRD Scores and School Status	53
12	Across Time Correlations of School Status and Archival Records	54
13	Cross-Lagged Panel Correlations of Court Petitions and School Status 5	5
14	Cross-Lagged Panel Correlations of Police Contacts and School Status	6
15	School Status at Time 2 and SRD Scores Across Times 2 and 3 6	5

LIST OF FIGURES

Figu	re	Page
1	Cross-Lag Analysis of Self-Report Delinquency Scores (SRD) and School Status	35
2	School Status at Time 2 and SRD Scores Across Times 2 and 3	66

INTRODUCTION

CHAPTER I

INTRODUCTION

Statement of Problem

Despite more than thirty years of attempting to find ways in which to understand, predict and gain control over the occurrence of juvenile delinquency, "it remains one of the more serious domestic problems in the United States" (Peterson, Urban, & Vondracek, 1975, p. 383).

Students of juvenile delinquency and practitioners who explore the literature discover that almost all of the research on delinquency begins in the official records of police, court and institutions (Gold, 1970). This implies that those who have devoted their energies to delinquency research have usually been dependent upon official, archival records of police or court contacts as primary outcome data (Blakely, Kushler, Parisian, & Davidson, 1979).

Early Theoretical Formulations

As a result of this, many of the encompassing theories of juvenile delinquency which early researchers developed, incorporated official records as the principal dependent measures. These earlier studies tended to define delinquency in terms of sociocultural antecedent conditions (Cloward

& Ohlin, 1960; Cohen, 1955; Glueck & Glueck, 1951). As Martin Gold (1966) stated:

"Many well-known social-psychological theories of delinquency are grounded in data abstracted from official records. These theories are built on the finding that delinquency is related to socio-economic status, although the theoreticians recognize that this relationship may arise from the method by which the data are compiled" (p. 28).

In short, many early studies employed operational definitions of delinquency that were coextensive with the availability of official data for arrests or court appearances among juveniles (Shaw & McKay, 1942; Kvaraceus, 1944). These and other studies frequently suggested a causal relationship between demographic variables (such as sex, race, age and socio-economic status) and official delinquency. A large portion of these studies reported inverse relationships between social class and juvenile delinquency (Cloward & Ohlin, 1960; Cohen, 1955; Miller, 1958).

Archival Records As Primary Outcome Data

Although the logic supporting the use of official records of court contacts and dispositions, as well as, police contacts and referrals as the primary variables in delinquency research is obvious, a review of the current literature demonstrated an almost universal dissatisfaction with the reliability and validity of utilizing official records as the principal dependent measure (Cressey, 1957; Erickson & Empey, 1963; McQueen, 1960). Consequently, many of these early theories on delinquency have been scrutinized, attacked and re-evaluated due to their inherent dependency upon official

measures of delinquency (Krohn, Waldo, & Chiricos, 1975; Williams & Gold, 1972).

Three major drawbacks to the use of official records as primary outcome data recurred in the studies reviewed. The first and most frequently leveled criticism was that official archival data are more a measure of police behavior than they are a measure of deviant behavior (Blakely, et al., 1979; Farrington, 1973; Gold, 1966; Williams & Gold, 1972). In fact, a dominant view was that: "the only utility of such statistics is as a source of information about the activities of criminal justice agency personnel, their political and organizational needs and their theories of crime causation" (Hindelang, Hirschi, & Weiss, 1977, p. 22). This position was further supported by Chapman (1968), Cicourel (1960), Piliavin & Briar (1964), Quinney (1970), and Wheeler (1967).

Another frequent criticism of the use of official archival data to define "delinquency" was that most delinquent behaviors are not officially observed or reported, and would therefore not appear on the official records (Blakely, et al., 1979). In fact, during the last decade, estimates of the proportion of delinquent behaviors which are officially detected have ranged from three to twenty percent (Davidson, 1976; Krohn, et al., 1975; Williams & Gold, 1972).

The third and last major criticism levied against the sole use of official archival data as a dependent measure in delinquency research lies with the tendency for many current researchers to attempt to identify juveniles before they

become a part of the official system. Rappaport (1977) claimed that the evaluation of prevention programs or treatments aimed at pre-delinquents has become a major focus of contemporary research. "The problem becomes the credibility of evaluations of preventative programs using official recidivism as a major outcome variable when the target population has an extremely limited incidence or future probability of official contacts with the juvenile justice system" (Blakely, et al., 1979).

The above-mentioned criticisms, coupled with the realization that "official" rates of delinquency are as informative about the results of frequently arbitrary and inconsistent patterns of law enforcement as they are about delinquent behavior, have led to the development of alternative dependent measures of delinquency (Krohn, et al., 1975; Nye & Short, 1957; Sellin & Wolfgang, 1964). The most popular of the techniques developed has been the method of self-report (Hardt & Peterson-Hardt, 1977; Krohn, et al., 1975; Nye & Short, 1957; Sellin & Wolfgang, 1964).

Self-Report Delinquency Measures

Pioneering work in the development and employment of selfreport measures of delinquency was performed by Nye and Short (1957). By utilizing a self-report delinquency measure, they found, contrary to popular theories, that socio-economic status was virtually unrelated to self-reported delinquency. However, they did find a moderate correlation between socioeconomic status and official delinquency.

In general, most of the early research employing selfreport delinquency measures attempted to establish distinguishing differences between "official delinquents" and nondelinquents (Kulik, Stein, & Sarbin, 1968). The official delinquents were those juveniles who were currently incarcerated in institutional facilities while non-delinquents were those without police records.

Current researchers have seriously questioned the validity of this approach. A major criticism of such a dichotomization stems from the very definition utilized in delineating membership in the problem population of delinquents versus those comprising the population of non-delinquents. In fact, the methods by which one defines delinquency are not only crucial to the process of measurement, but as Hirschi and Selvin stated: "How one defines delinquency determines in large part how one will explain delinquency" (1969, p. 54).

Williams and Gold (1972) claimed that the utilization of samples of apprehended youths to analyze and categorize delinquent behavior ignores the vast amount of delinquent behavior which never becomes official delinquency (pp. 210-211). They stressed the necessity for delinquency researchers in general, and more specifically those employing self-report delinquency techniques, to make the distinctions between delinquent behavior and official delinquency.

Williams and Gold (1972) operationally defined delinquent behavior as: "the norm-violating behavior of a juvenile which if detected by an appropriate authority would expose the actor to legally prescribed sanctions" (p. 210). Official

delinquency, on the other hand, is a complex, multi-level concept defined by official response to alleged delinquent behavior. In short, official delinquency involves "the identification of and response to delinquent behavior by the police and courts" (Williams & Gold, 1972, p. 210).

Using both self-report and official archival records from a national sample of thirteen to sixteen year old boys and girls, Williams and Gold (1972) empirically demonstrated the utility and necessity of making the distinction between delinquent behavior and official delinquency.

Another problem that arises from utilizing delinquent versus non-delinquent populations in research studies employing self-report delinquency techniques, stems from the differential levels of risk involved in reporting incidences of delinquent behaviors (Kulik, et al., 1968; Williams & Gold, 1972). What this entails is that those juveniles who are already incarcerated tend to have few reasons to conceal delinquent acts, while those not currently under jurisdictions may react defensively regardless of all the researcher's attempts in guaranteeing the confidentiality and anonymity of the information being collected (Blakely, et al., 1979).

In short, then, early studies employing self-report delinquency techniques have been criticized along two important dimensions. First of all, their definition of the problem population is biased and consequently they overlook crucial sampling issues (Blakely, et al., 1979; Williams & Gold, 1972). Secondly, they failed to differentiate between

delinquent behaviors and official delinquency (Williams & Gold, 1972). As some researchers suggested, they even violate the definition of official delinquency.

Self-Report Delinquency Techniques

As self-report delinquency instruments became more widely accepted as an alternative measure of delinquency, various strategies of obtaining self-report delinquency data were experimentally tested and traditional issues of validity and reliability were examined. The two most often utilized techniques for obtaining self-report delinquency data were: 1) a structured interview; 2) a self-administered questionnaire (Clark & Wenninger, 1962; Dentler & Monroe, 1961; Gold, 1967; Krohn, et al., 1975; Voss, 1967).

Gold (1967) argued that the distinction in methodology, the use of either questionnaire or interview format, had implications for the apparent relationship between social class and delinquent behavior. He contended that the higher status respondents to a self-administered questionnaire tended to report more non-chargeable offenses. This fact, he argued negates the expected inverse relationship between social class and delinquent behavior. On the other hand, he also suggested that interviewing partially mitigates this problem because it assures the interviewer that the behavior being reported is indeed delinquent behavior.

The findings of studies employing the interview method of obtaining self-report delinquency data, for instance, Reiss and Rhodes (1961) could be cited to support Gold's position. In this study, Reiss and Rhodes (1961) conducted

personal interviews with boys in Nashville, Tennessee, asking them if they had ever done something, at one time or another, for which they would have been arrested if they had been caught. They found, as Gold suggested, that delinquency rates, in general, vary inversely with the ascribed social status of the respondent.

In his <u>Reply to Gold</u>, Voss (1967) warned against concluding that the method of self-reporting itself was principally responsible for findings of "no relationship" between social status and delinquency. To support his position he cited the findings of Stocum and Stone (1963) who had utilized selfreport delinquency interviews and similarly discovered no significant relationship between social class and delinquency.

A more recent study conducted by Williams and Gold (1972) supported the findings of Stocum and Stone (1963). Their study, which employed the interview technique of self-report delinquency on a nationwide sample of adolescent boys and girls, found no significant relationship between social class and delinquent behavior.

Lastly, Voss (1967) suggested that "while interviews may enhance validity by providing the opportunity to probe, anonymous questionnaires could afford more frank responses than could be elicited in the presence of an interviewer" (p. 546).

Research efforts have been directed at providing external validity checks for interview and questionnaire data. Unfortunately, such attempts besides being difficult and costly, have in many instances, also proved to be inconclusive. Neither Ball's (1967) interview study of narcotic addicts, nor

Hackler and Lautt's (1969) questionnaire study of juvenile delinquents, provided definitive evidence for the invalidity of either measure.

Attempts at more systematic validation have also proved to be inconclusive (Krohn, et al., 1975). For example, Gold (1970) attempted to validate the responses he obtained from interviews by using informants as an external criterion. He did this for a small percentage of his subjects and found that 72% of his subjects could be considered "truthtellers."

Similarly, Clark and Tifft (1966) utilized a polygraph examination as an external validity check on self-report delinquency data obtained via a questionnaire. They found the overall percentage of correct answers given by respondents to be 81.5%. However, they also discovered that all respondents under-reported the frequency of at least one behavior, and one half of the respondents over-reported on at least one behavioral item.

Other researchers (Gibson & Hawkins, 1968; Krohn, et al., 1975; McDonough & Rosenblum, 1965) directly addressed the question of whether different alternatives in the self-reporting methodology created a difference in the amount and type of delinquency reported by comparing interview and questionnaire self-report delinquency data. Generally, these studies failed to yield statistically significant differences between the responses to the two types of self-report delinquency techniques.

For instance, Krohn, Waldo and Chiricos (1975) conducted a study which compared the merits of questionnaire versus interview formats for self-report delinquency within a single

research setting. Their results indicated that "there was no statistically significant difference between the responses to the two types of administrations" (p. 552).

In short, then, although the current literature abounds with studies advocating the use of one self-report delinquency technique over the other, studies comparing both strategies within the same research setting have failed to yield statistically significant differences between the techniques. However, the literature clearly dictates the need to include self-report delinquency estimates of delinquent behavior in addition to official court and police records in the area of research and development in juvenile delinquency (Blakely, et al., 1979; Gold, 1966; Erickson & Empey, 1963; Hindelang & Hirschi, 1977; Krohn, et al., 1975; Williams & Gold, 1972). This need to include both self-report delinquency and official archival data in delinquency research is based on the fact that research evidence advocating the use of one type of data over another is at best, inconclusive and at worst, contradictory.

Controversy Between Self-Report Delinquency Data and Archival Record Data

Those who accept the traditional correlates of official delinquency argue that the self-report technique does not measure serious delinquent behavior. Secondly, they claim that because of difficulties in establishing reliability and validity, there is no compelling evidence to suggest the rejection of results based on official measures (Hindelang,

et al., 1977; Miller, 1975; Nettler, 1974; Reiss, 1975; Wolfgang, et al., 1972; West, 1973).

For instance, Nettler argued:

"Confessional data are at least as weak as the official statistics they were supposed to improve upon . . . An evaluation of these unofficial ways of counting crime does not fulfill the promise that they would provide a better enumeration of offensive activity" (1974, pp. 86, 96).

Similarly, Reiss (1975) asserted that:

"The methodological and technical foundations of these (self-report) studies do not invite confidence in the conclusions . . . Surveys of self-report delinquency pay little attention to the formulation of indicators and indexes, to problems of their validity and reliability and a general inattention to the standardization of instruments" (p. 215).

In fact, Reiss viewed the current situation in self-reported delinquent behavior as so deplorable that he advocated restructuring graduate training of survey researchers in sociology to emphasize the development of valid and reliable standardized instruments.

Those who accept the self-report delinquency findings continue to view the correlates of official delinquency as artifactual. They claim that the use of officially labeled delinquents in delinquency research is invalid because most of those engaging in delinquent behavior are not apprehended. Furthermore, those who are apprehended are a biased sample of those engaging in delinquent behavior. They argue that the differences between delinquents and non-delinquents are created by the discriminatory action of criminal justice agency personnel (Becker, 1958; Quinney, 1970; Schur, 1973; Turk, 1969; Taylor, Walton & Young, 1974). In short, self-report delinquency advocates contended that self-report techniques have:

- Cast doubts upon the presumption of an inverse relationship between delinquency and social class;
- 2) Sharpened the distinction between delinquent behavior and behavior that has been responded to by official agents of social control (Krohn, et al., 1975).

When responding to questions of the validity and reliability of self-report delinquency methods, advocates of the technique cite numerous research findings (Belson, 1968; Farrington, 1973; Krohn, et al., 1975). They defend the technique by mentioning numerous reliability measures which have been employed in estimating the reliability of self-report delinquency techniques. Among these are included: lie test, test-retest, split half, Guttman scaling and internal consistency alphas (Blakely, et al., 1979). Aside from this, they claim that although there have been inconsistencies in the literature, self-report strategies tend to be relatively stable over time (Belson, 1968) and fairly unidimensional (Farrington, 1973).

Furthermore, they contend that issues regarding the validity of self-report delinquency techniques have been addressed and satisfactorily evaluated by current researchers. Among the many external criterion variables utilized by those researchers, the following are included: 1) police records (Kulik, et al., 1968); 2) court convictions (Blackmore, 1974;

Erickson & Empey, 1963; Farrington, 1973); 3) informant records (Gold, 1970).

Lastly, these advocates of the self-report delinquency technique assert that although inconsistencies in the reliability and validity of self-report instruments exist, they are due to differences in the criterion measure, the subject samples, or item content, rather than an inherent weakness in the concept of self-reported delinquency estimates (Blakely, et al., 1979).

In the midst of this raging controversy, Hindelang, Hirschi and Weiss (1977) expounded that both of these competing views rest their arguments on the methodological shortcomings of the other. "Within the context of this debate, neither side had paid substantial research attention to the internal difficulties of its preferred method" (Hindelang, et al., 1977).

Consequently, until further empirical evidence is obtained, the area of research and development on juvenile delinquency should include both official court and police records, as well as, self-reported estimates of delinquent behaviors.

In a book entitled <u>Delinquency and Dropout</u>, Elliott and Voss (1974) supported the above stated position when they wrote:

"We view the analysis of delinquent behavior by means of self-reports as a viable alternative to exclusive reliance on cases known to the police and court. Our position is that selfreports are best conceived as complementary to official data, rather than as a potential replacement" (p. 88). These researchers conducted a longitudinal study examining the linkages between dropping out of school and juvenile delinquency. Their target sample consisted of all ninth grade students attending eight California schools in September of 1963. The researchers monitored and assessed these students at pre-established intervals throughout the course of the four year period ending in September of 1967.

A wide variety of measures and assessment procedures which included an annual student questionnaire, parent interviews, dropout interviews, teacher evaluations and others, were utilized in the study. However, the chief methodologies used to collect process and outcome delinquency data on the target sample consisted of both official (police) records and a self-report delinquency (SRD) instrument which was a modification of the Nye-Short delinquency checklist (1957). This instrument was included as part of the annual student questionnaire and administered to the sample during the ninth and twelfth grade. Lastly, school data were obtained through regular unobtrusive examinations of the participants' school records.

In analyzing the relationship between delinquency and dropout, these researchers discovered that delinquency was causally involved in dropout, and dropout in turn, lead to decreasing involvement in delinquency (Elliott & Voss, 1974). They suggested that the critical conditions for delinquency are: 1) real or anticipated failure; 2) extrapunitiveness; 3) normlessness (alienation); and 4) extensive exposure to delinquent persons or groups. Also, they provided a parallel

set of variables and causal sequences to explain high school dropout. These are: 1) failure to achieve valued goals; 2) intropunitiveness; 3) social isolation; and 4) exposure to dropout. Lastly, by utilizing correlational techniques, they established relationships between home and school predictors of dropout and delinquency.

Unlike many other researchers, Elliott and Voss (1974) tested their theoretical propositions utilizing both selfreport indices and police contacts. They found that the relationship between delinquency and dropout held consistently across both techniques.

Implications

It can be logically deduced from the literature reviewed that research evidence supporting the superiority of utilizing either self-report delinquency or official archival records as primary outcome data is inconclusive. Few of the studies reviewed (Elliott & Voss, 1974; Krohn, et al., 1975) examined these two approaches of measuring delinquency within the context of the same research setting. Instead of addressing the internal difficulties, or establishing the relationship or differences between the methods, researchers focused their energies on the methodological weaknesses of the opposing side (Hindelang, et al., 1977). Many researchers who theoretically advocated the use of both approaches in measuring delinquency, ended up testing their theoretical propositions on the basis of one or the other methodology.

Consequently, an ever-widening theoretical gulf currently divides proponents of these two methodologies. As a result,

the field is plagued by conceptual and empirical disputes which will be ameliorated when standardized methods and procedures for measuring delinquency with known reliability and validity are established. Unfortunately, before such a standardization can occur, researchers must empirically demonstrate the similarities and differences between these two methodologies.

In short, since the study of juvenile delinquency is contingent upon the adequacy, reliability and validity of the methods of measuring the dependent variable, research establishing the differences, similarities and interrelatedness of these two methods is desperately needed.

As a response to this need, the current researcher conducted a study designed to examine these two approaches. First of all, the researcher concentrated on establishing how these two methodologies were related across time, both within and across methods, placing special attention upon exploring the forward and backward predictive ability existing within and across assessment strategies. This entailed addressing the following research questions:

 What is the relationship between police and court records? Can one utilize court records to predict police involvement? Can police records be utilized to predict court involvement? Can these records be utilized to estimate the history of a youth's legal involvement?

2) What is the relationship between self-report delinquency data and both sets of archival records? Can self-report delinquency data be utilized to predict future court and/or police involvement? Can court and/or police involvement be utilized to predict self-report delinquency scores? Can either archival or self-report data be utilized to estimate the delinquency history of a youth?

Secondly, given the implications of the relationship between delinquency and school dropout proposed by Elliott and Voss (1974), the current researcher decided to test the generalizability of their findings across a population of juveniles involved in a typical delinquency intervention project. This entailed examining the relationship between school variables and delinquency in light of both self-report and official archival data. Consequently, this phase of the study attempted to answer the following research questions:

1) What is the relationship between self-report delinquency data and school performance? Can self-report delinquency data be utilized to predict school performance? Can school performance be utilized to predict future self-report delinquency scores? Can self-report delinquency scores be used to estimate the history of a youth's school performance?

2) What is the relationship between archival record data and school performance? Can archival record data be utilized to predict school performance? Can school performance be utilized to predict court/police involvement? Can archival data be utilized to estimate the history of a youth's school performance? METHOD

.

CHAPTER II

METHOD

Subjects

The target sample for this research consisted of 139 adolescent boys and girls who participated in the Adolescent Diversion Project (ADP) during the period from 1977 to 1979. The ADP was a federally funded program which offered delinquent youths an alternative to formal processing through the juvenile justice system. The program operated in East Lansing, Michigan, in conjunction with the Department of Psychology at Michigan State University. The target sample has been previously demonstrated (Blakely, et al., 1979) to be representative of the population of juveniles involved in typical delinquency intervention projects.

The age range of these adolescents, at the time of project referral, was between ten and sixteen years, with a mean of approximately 14.5. The racial distribution of the sample was as follows: two-thirds of the youths were Caucasians, with the remaining third being Black. Less than one-third of the sampled youths were females with roughly two-thirds being males. The sample of referred youth contained representatives from all socio-economic strata, however, the lower and lower-middle income strata were overrepresented.

Referral to said delinquency prevention project was contingent upon the youths' having been charged with either a minor or serious misdemeanor or minor felony, as well as, their admittance to the charges being levied against them. However, participation in the program was strictly voluntary. The youths and/or their parents always maintained the right to terminate project involvement at any time during the course of the intervention. The dropout rate for the project was less than 5%. The few youths that chose to terminate their project involvement early were returned to the court for processing as usual.

Self-Report Instrument (SRD)

The self-report delinquency (SRD) instrument utilized in the present study was developed by drawing and/or modifying items from the measures created by Lincoln, Teilmann, Klein and Labin (1977) and Gold (1970), as well as, some newly constructed items (refer to Appendix I for a copy of the instrument).

The item set was designed to determine self-reported incidences of behaviors representing a wide spectrum of frequently occurring delinquent activities (Blakely, et al., 1979). This implies that infrequently occurring behaviors, for instance murder, rape or any other extremely serious crime against a human being were not included in the item set. In short, the particular behaviors comprising the item set were representative of typical categorizations of delinquent acts such as those compiled by Sellin and Wolfgang (1964) and Rossi (1974).

In addition, five filler items depicting positive activities were included in the thirty-five item set. This was done in an attempt to minimize and discourage response patterns or bias.

The self-report instrument was structured in such a way that two responses were obtained for every item, with each of these responses corresponding to one of two time intervals. One response pertained to behaviors which occurred during the last six weeks and the other to those occurring within the last year. The response categories for each item were: once, twice, more than twice, or none at all, for the duration of the specified time period.

<u>Reliability</u>. Both test-retest and internal consistency methodologies have been employed to establish the reliability of the self-report delinquency instrument utilized in the current study (Blakely, et al., 1979).

Although research evidence (Farrington, 1973) consistently demonsrates that self-report measures tend to be unidimensional (that is, tend not to break into reliable subscales), some researchers (Blakely, et al., 1979) conducted a principal component analysis on this instrument and constructed subscales by rationally combining items according to their factor loadings. They then submitted the resulting four subscales: property crimes, crimes involving physical force, school related offenses, and offenses involving substance abuse, and the total scale to a reliability analysis.

The researchers utilized Cronbach's alpha coefficient of internal consistency to calculate internal consistency

estimates. The alpha for the total scale was .84, while those for the subscales were .78, .70, .72, and .67. Although the subscales were less reliable than the total scale, they nonetheless provided an adequate degree of internal consistency (Blakely, et al., 1979).

Test-retest calculations also yielded consistent information. Across time correlations were computed for each subscale and the total scale. Correlations were calculated for the youth's response to the one year category at each of the four data gathering points (to be subsequently described). Again, the total scale gave evidence of being the best measure available (Blakely, et al., 1979). In light of these findings, the current research utilized only the total scale as the experimental measure of self-report delinquency.

Cronbach's alpha coefficient of internal consistency was employed to calculate the reliability of the total scale at the one year time interval for both process and one year follow-up data sets (to be subsequently described). Cronbach's alpha coefficient for the process data set was .84, while for the one year follow-up data it was .87.

<u>Validity</u>. The validity of the instrument was assessed by subjecting the subscales to multitrait-multimethod analysis (Campbell & Fiske, 1959). Although the correlation matrices do not neatly fit the ideal pattern demonstrating convergent and discriminant properties, the patterns were nonetheless consistent (Blakely, et al., 1979). Although monotrait-heteromethod correlations provided strong evidence for the convergent properties of the scale, the evidence of
discriminant validity was lacking, a fact attributed to be a function of the unidimensionality of self-report measures in general. Lastly, the instrument also possessed face validity.

Administration Procedures for the SRD

The interviewers. The self-report delinquency instrument (SRD) was administered by undergraduate students enrolled in a Practicum in Field Research and Data Gathering offered at Michigan State University. This practicum which spanned the course of one academic year, or three full quarters, has been part of the regular psychology curriculum since 1978 and resulted from the collaborative efforts of ADP staff, the Psychology Department and the Criminal Justice Department at Michigan State University. It served the dual purpose of providing undergraduate students with the opportunity to obtain first hand research experience through participation in the data collection phase of a longitudinal field project (ADP), as well as, supplying the steady stream of interviewers mandated by the ADP's research design.

The practicum was taught by graduate students who were members of the ADP staff. During the first quarter, the role of the graduate students was that of teachers or trainers. The major part of the first quarter was spent training students in interviewing procedures and techniques as they applied to the needs of the ADP. Students also learned how to code the raw data obtained via these interviews and transform them into usable formats. Aside from this, such theoretical and ethical issues as confidentiality, anonymity and the

utilization of human subjects in research studies were discussed. Lastly, and most importantly, students were made aware of the role that they played as interviewers for the ADP. This was done both at the micro (the individual ADP experience and involvement) and at the macro (the ADP in terms of other field research) levels.

Towards the end of the first quarter and into the following quarters, students were assigned the actual cases of referred youths participating in the ADP. Once all cases were delegated, the role of the graduate students (ADP staff members) shifted to that of supervisors. At this time, the focus of the course also changed from training, to case responsibility and the perfection of students' interviewing techniques. Although it varied from year to year, the average number of cases assigned to each interviewer was five.

The interviewing process. The interviewing process was first explained to the youths and their parents as part of the project's intake procedures which were enacted at the Ingham County Probate Court. The ADP staff member conducting the intake informed them that they would be interviewed at four intervals during the course of the youths' involvement with the ADP. These time intervals were: a) at the point of referral to the project; b) six intervention weeks from referral; c) twelve intervention weeks from referral; and d) at the point of termination from the project which occurred eighteen intervention weeks from referral. They were also told that two more interviews would be conducted at one and two years following the termination of the youths' formal

affiliation with the project. During the course of this intake interview, great emphasis was placed upon the confidentiality and anonymity of the information that would be collected.

Once a youth decided to participate in the ADP, the case was assigned to one of the previously described interviews. As soon as possible, the interviewer contacted the youth and arranged a mutually convenient date and time, usually within three days of project referral, on which to conduct the initial interview. Similar contact procedures were followed in scheduling all other interviews. Although flexibility of interview location existed, most interviews were enacted at the domicile of the ADP participant.

Efforts were made to maintain a fairly relaxed atmosphere throughout the course of each interview which ranged, on the average, from one to one and one-half hours. These interviews consisted of a series of open-ended questions and paper and pencil measures aimed at gathering information relevant to the youth's project involvement. During each of these interviews, special attention was placed on ascertaining that the youth understood the confidentiality and anonymity of the data that was being collected. Lastly, upon completion of each interview, the youth was paid five dollars.

Administration of the Self-Report Delinquency Instrument. The SRD instrument was administered by the aforementioned undergraduate interviewers at each of the four previously described time intervals, as part of a process interview package. The initial administration was enacted prior to the

onset of the intervention and was the source of the pre experimental comparison base. A fifth administration of the instrument was conducted by a different group of interviewers one year after the youths had terminated their formal involvement with the ADP. These interviewers were enrolled in the practicum one year after the process data were obtained. In the last instance, the SRD was administered as part of a follow-up interview package.

In order to minimize the potentially biasing effects of differential reading ability among the respondents, the interviewer read each item aloud and recorded the participants' responses on an answer sheet. Lastly, to maximize the quality and extent of the data collected, the entire interview was audio recorded.

Official Archival Data

Official archival record data were collected by members of the ADP staff from the probate court, the county sheriff's office and several local city police departments. These staff members did not have access to the information obtained from the previously described interviews. Consequently, they were blind to the SRD data.

These archival data were recorded by quarters and collected according to three time periods: 1) the one year prior to the youth's referral to the ADP (Time 1); 2) the eighteen intervention week period during which the youth was a project participant (Time 2); and 3) the one year period immediately following the termination of the youths' formal involvement with the ADP (Time 3). These time periods

corresponded with the time periods for which self-report delinquency data were obtained.

Official police data. The collection of police outcome data involved searching through alphabetical card files to find information about ADP youths. Most police departments in the area kept alphabetized files of "contact cards" which were chronological lists of the contacts the specified individual had with the particular department. Once a card for an ADP youth was located, several bits of information about each contact were recorded on the youth's collection form. These were: a) the date of the alleged offense which precipitated the contact; b) the type of offense of which the youth was accused; c) the location of the offense; and d) the disposition of each contact. The following disposition code was utilized:

0 = none (no contact)

- 1 = warned and released
- 2 = petitioned

In the case of multiple contacts during a particular quarter, the most serious disposition which ensued was recorded.

Official court data. Similar procedures were followed in recording court outcome data. These procedures involved searching for the names of the ADP youths in both the active and inactive files located in the record room at the county courthouse. Once a project youth's file was found, the following information was recorded: a) the date of the offense; b) the type of offense on each petition; c) the location of the offense; and d) the dispotition of each

petition. The disposition code utilized was as follows:

- 0 = no petition
- 1 = petition denied or dismissed; or youth is referred to parents
- 2 = youth referred to community agency
- 3 = consent probation (informal processing)
- 4 = youth referred to caseworker; or placed on formal
 probation
- 5 = community residential placement (foster home, group home)
- 6 = institutionalization

In the cases where multiple petitions appeared for a particular quarter, the most serious disposition was recorded. Lastly, the length of time a youth was incarcerated or detained during each quarter was also recorded.

Aside from recording the above-mentioned information, both police and court data collectors assigned a seriousness code to each court petition or police contact according to the following guidelines:

- 1 = status offense (truancy, incorrigibility, runaway, minor in possession of alcohol, curfew)
- 2 = minor property crimes (larceny, receiving and concealing, malicious destruction with damanges under \$50.00; trespassing, entering without permission; drug offenses; eluding arrest)
- 3 = <u>major property crimes</u> (larceny, receiving and concealing, malicious destruction with damanges over \$50.00; breaking and entering, car theft,

unarmed robbery, burglary, minor crimes against person, i.e., assault, without weapon and without injury)

In the case of multiple petitions or police contacts within a particular quarter, an average of the seriousness of each of these petitions or contacts was recorded. This varied from the process utilized in recording the disposition variable where only the most serious disposition that ensued was retained.

School Data

Members of the ADP staff collected school data for all ADP participants. The data were recorded by quarters and collected according to time periods which corresponded with the time periods for which official archival and self-report delinquency data were obtained.

The collection of school data consisted of visiting the elementary, junior high, senior high and special education schools in the area and obtaining information from the report cards or transcripts, attendance records and permanent records of all ADP participants. The data collected from these records were: a) the number of credits possible (the number of classes taken each quarter times.25); b) the number of credits earned (the number of classes passed each quarter times.25); c) the grade point average (GPA) (the number of for classes-from 0.0 to 4.0--divided by the number of

graded classes); d) school status (whether in school, or out of school); and e) the percentage of days absent.

In cases where a youth was not enrolled in school, the reason for this was also recorded. If he or she had graduated, the data collector coded a 2. If he or she had dropped out, been suspended or expelled, a 3 was coded. Lastly, a sixth variable which consisted of the proportion of credits possible to credits earned was computed for each quarter. Procedure

All of the previously described data bits which were collected from the archival records of the police and the court were used as outcome variables. To summarize, the variables utilized to measure court involvement were: 1) the number of court petitions; 2) their seriousness weights; 3) their dispositions; and 4) incarceration. The variables utilized to measure police involvement were: 1) the number of police contacts; 2) their seriousness weights; and 3) their disposition.

The first variable in both data sets is self-explanatory, and was recorded as summed totals. The second and third variables were computed according to the previously defined procedures (refer to the section on archival data). The fourth variable, incarceration, consisted of the length of time the youth was detained.

The variables utilized to measure school performance were: 1) school status; 2) grade point average; 3) percentage of days absent, and 4) proportion of credits possible to credits earned. As previously defined (refer to the section

on school data), school status referred to whether the youth was in or out of school. Grade point average was computed by taking the number grade for all classes (from 0.0 to 4.0) and dividing them by the number of graded classes. The computations of the other two variables are self-explanatory, one being a percentage, and the other a proportion.

The raw data obtained from the participants' year responses on the self-report delinquency instrument were transformed into usable formats by computing their year self-report delinquency score (summed total) for each of the five previously described interviews.

All four data sets were standardized by dividing them into the three corresponding time periods and computing monthly rates for each of the twelve previously defined variables. These time periods were: 1) the one year period prior to the youth's referral to the ADP (Time 1); 2) the eighteen intervention week period during which the youth participated in the ADP (Time 2); and 3) the one year period following the termination of the youth's involvement with the ADP (Time 3). In short, all participants had monthly rate scores for each of the twelve experimental variables at each of the three previously defined time intervals.

Correlational techniques were utilized to determine the relationship between the two methods of measuring delinquency (archival records and self-report) and the school variables. A correlation matrix of Pearson-Product Moment correlation coefficients was computed from the data set and a two-tailed test of significance was applied to the ensuing correlations.

The resulting correlation matrix was studied and patterns of highly intercorrelated within measure variables were observed. These were then rationally combined to form one single variable so as to facilitate further analysis of the research hypotheses.

Because the first four court variables were consistently correlated within time, the researcher selected the number of court petitions as the most representative of the court variables since the others were contingent upon it. Aside from this, the number of court petitions was the most frequently utilized court outcome variable in the current literature. The same criterion was applied to selecting the most representative police variable which was the number of police contacts.

In the case of the school variables, a very similar selection criterion was applied since all variables were consistently highly correlated. Again, the most representative variable, school status, was selected. School status was chosen because all other variables were contingent upon the youth's having been enrolled in school.

To summarize, the twelve variables used in the initial analysis were rationally reduced, wherever applicable, to form one single variable for each measurement category. SRD scores were the only ones that were not reduced since they were already a single variable. The number of court petitions and the number of police contacts remained as measures of court and police involvement, while school status remained as the measure of school performance. These four variables, SRD scores, court petitions, police contacts and school

status were analyzed utilizing a cross-lagged panel correlational technique initially discussed by Simon (1954) and then formally presented by Campbell (1963). This technique has been refined and utilized successfully by a number of researchers (Calsyn, 1976; Crano & Mellon, 1978; Fitzgerald, 1980).

Like most quasi-experimental techniques, cross-lagged panel analysis has its limitations which have been documented in the literature (Feldman, 1975; Kenny, 1975; Rogosa, 1980). It is imperative to realize that the technique does not establish causality in the way that a true experiment does. However, it does allow researchers to differentiate the relative plausibilities of competing causal or directional interpretations between two variables (Huch, Cormier, & Bounds, 1974).

As is evident in Figure 1, this technique can only be utilized in studies which have, like the current one, repeated measures across time. Two constructs and two measuring periods generate four variables, which themselves generate six correlations:

a) two autocorrelations

(^rSRD₁SRD₂ and ^rSTATUS₁STATUS₂)

- b) two synchronous correlations
 (^rSRD₁STATUS₁ and ^rSRD₂STATUS₂)
- c) two cross-lagged correlations $(^{r}SRD_{2}STATUS_{1} \text{ and } ^{r}SRD_{1}STATUS_{2})$

In the example found in Figure 1, if SRD caused school status, then the magnitude of the correlations should be that: ${}^{r}SRD_{1}STATUS_{2} > {}^{r}SRD_{2}STATUS_{1}$. However, as Kenny (1975) and others have suggested, it is imperative to test for the equality of the synchronous correlations before a valid interpretation of the cross-lag differences can be made. Consequently, the equation should read:

rSRD₁STATUS₂ > (rSRD₁STATUS₁=rSRD₂STATUS₂) > rSRD₂STATUS₁

There are two hypotheses being tested in cross-lagged analysis. First, there is the equality of the synchronous correlations to test for synchronicity and stationarity; secondly, the equality of the cross-lags to test for spurious-The first of these, synchronicity refers to the two ness. constructs being measured at the same point in time, while stationarity mandates that the causal or structural equation not be different at the two points of measurement (Kenny, 1975). Spuriousness, or the third variable hypothesis, refers to the possibility that the relationship between the two constructs is not due to the causal effects of either, but is the effect of a third variable or co-symptoms of some set of common causes (Kenny, 1975). Theoretically, then, cross-lagged panel analysis requires at least moderate sample size, variables that change (lagged effects) and equal synchronous correlations.

However, in many cases, synchronous correlations have been demonstrated to be unequal due to attenuation by measurement error (Kenny, 1975; Crano, Kenny & Campbell, 1972). A correction procedure consisting of the calculation of a







reliability ratio applied to the cross-lagged correlations prior to the calculation of the test of the differences has been developed (Kenny, 1975; Crano, 1979). As a result of this, the cross-lagged panel analysis utilized in the study which was developed by Crano, corrected all correlations for reliability. Consequently, only these corrected correlations will be presented in the subsequent pages.

Because of this correction factor, the synchronous correlations presented in the upcoming tables appear to have unequal values across the different panels. When interpreting these tables, it is imperative to realize that most uncorrected synchronous correlations across the different panels were equal. Since the reliability correction factor was applied within each panel, the corrected correlations of two variables are often different across panels. For instance, the corrected synchronous correlation of SRD₂ and STATUS₂ in panel 1 is different from the synchronous correlation of these same variables in the second panel (refer to Table 11).

RESULTS

P

N.Y.Y.

CHAPTER III

RESULTS

In this section, the results of the analysis employed to answer the previously postulated research questions will be introduced. Each research question will be independently addressed and all relevant data analysis will be presented. All significant findings will also be highlighted.

Although four court, three police and four school variables were originally studied, the consistently high pattern of intercorrelations which emerged did not justify the presentation of all court, police and school variables. As can be seen in Tables 1, 2, and 3, all within source and within time correlations were highly significant. Consequently, in the subsequent pages, only the most representative of traditional outcome variables will be presented.

The number of court petitions and the number of police contacts were selected as the most **rep**resentative of **the** court and police variables respectively, since the other variables were contingent upon these. Likewise, school status was selected because all other school variables depended upon whether the youth was enrolled or not enrolled in school.

.

TIME 1		1	2	3	4
Petitions	(1)		- <u></u>		
Seriousness	(2)	• 52			
Disposition	(3)	• 50	• 58		
Incarceratio	n(4)	•43	.15	.10	
TIME 2		1	2	3	4
Petitions	(1)				
Seriousness	(2)	•90			
Disposition	(3)	.87	.83		
Incarceratio	n(4)	•23	.28	.40	
TIME 3		1	2	3	4
Petitions	(1)				
Seriousness	(2)	.88			
Disposition	(3)	•92	.91		
Incarceratio	n(4)	• 57	.31	•44	

Intercorrelation of Court Variables

 $r > .22 (p \angle .009)$

Intercorrelation of Police Variables

TIME 1		1	2	3	
Contacts	(1)				
Seriousness	(2)	.72			
Disposition	(3)	•77	•90		

.

TIME 2		1	2	3	
Contacts	(1)				
Seriousness	(2)	•75			
Disposition	(3)	.80	•95		

TIME 3		1	2	3	
Contacts	(1)				
Seriousness	(2)	•75			
Disposition	(3)	•76	•96		

r>.27 (p∠.001)

Intercorrelation of School Variables

TIME 1		1	2	3	4	
Status	(1)					
G.P.A.	(2)	29				
Absences	(3)	.52	48	5		
Proportion of Credits	(4)	•34	.85	545		

TIME 2		1	2	3	4	
Status	(1)					
G.P.A.	(2)	40				
Absences	(3)	.65	65	5		
Proportion of Credits	(4)	47	.89	66		

TIME 3		1	2	3	4
Status	(1)				
G.P.A.	(2)	41			
Absences	(3)	•78	65		
Proportion of Credits	(4)	45	.89	68	

r >.27 (p∠.001)

41

Relationship Between Court and Police Records

The first question examined by the current research attempted to establish the relationship between the court and police records. How are these two sets of official archival records related? Can one utilize court records to predict police involvement? Can police records be utilized to predict court involvement? Can these records be utilized to estimate the history of a youth's legal involvement?

As is evident in Table 4, the two sets of archival records were significantly correlated within time (p <.001). Thus, at any given time period, one could predict court variables from police data, and police variables could be predicted from court data. The across time correlations became significant as one progressed from Time 1 to Time 2, and from Time 2 to Time 3. In short, the number of court petitions at Time 1 did not predict the number of police contacts at either Time 2 or Time 3. However, the number of court petitions at Time 2 were predictive of the number of police contacts at both Times 2 and 3. Likewise, at Time 3, police records could be utilized to estimate court involvement at Time 2, but not at Time 1. Such a relationship is not surprising since other researchers (Blakely, 1980; Emshoff, 1979) have found similar patterns using comparable data sets.

Table 5 shows the cross-lagged panel analysis of court petitions and police contacts. As is evident in the table, the analysis yielded a significant corrected z-score of 2.22 for the second panel which correlated Times 2 and 3. The direction of causality suggested that court petitions at

Tabl	.e 4
------	------

Intercorrelation of Court and Police Records

	Pl.Contact ₁	Pl.Contact ₂	Pl.Contact 3
Ct.Petitions1	.48	. 04	.00
Ct.Petitions2	.14	.83	• 53
Ct.Petitions3	.13	• 39	•75

r>.27 (p∠.001)



Cross-Lagged Panel Correlations of Court Petitions & Police Contact



Time 2 effect police contacts at Time 3. However, the relationship was not evident across the different time lags so the data must be interpreted with caution (Kenny, 1975).

Although the limitations of cross-lagged panel analysis have been previously discussed (refer to pages 33-36 in the Procedure), the issues involved in the interpretation of these warrant further explanation. As stated beforehand, cross-lagged panel analysis requires at least moderate sample size, variables that change, and at least moderate synchronous correlations which mandate that the measurement instruments be reliable. Consequently, it is not a high power statistical technique, which urges conservative interpretations. As a result of this, Kenny suggested that cross-lagged differences should be replicated across: a) different time lags; b) different groups of subjects; and c) different operationalizations of the same construct. He warned against making causal inferences based on only one cross-lagged differential.

Because of these reasons and the limited nature of the current research, cross-lagged differences were interpreted with extreme caution. Only in those instances when both cross-lag differences were significant and the current literature supported the emergent direction of causality were directional causal hypotheses entertained.

Relationship Between Self-Report Delinquency and Archival Records

The second major area of analysis consisted of examining the relationship existing between self-report delinquency responses and official records of police and court. Can

self-report delinquency data be utilized to predict future court and/or police involvement? Can court and/or police involvement be utilized to predict self-report delinquency scores? Can either set of archival data and/or self-report delinquency scores be utilized to estimate the delinquency history of a youth?

Tables 6 and 7 demonstrate the intercorrelations and the across time correlations of SRD scores and archival records respectively. As is evident in Table 6, at Time 1, only SRD scores and police contacts were correlated. At Time 2, SRD scores were only correlated with variables at Time 1 and with none other. Likewise, at Time 3, SRD scores were correlated only with court petitions.

In short, the intercorrelations of SRD scores and archival records demonstrated the existence of only a slight relationship between the two methods of measuring delinquency. At Time 1, SRD scores could only be utilized to predict police involvement. At Time 2, SRD scores could predict both court and police involvement at Time 1, but they were not related to archival records data at either Times 2 or 3. Lastly, at Time 3, SRD scores predicted court involvement, but no evidence of backward predictive ability was found. This is to say, one could not utilize variables at Time 3 to estimate a youth's delinquency history.

The cross-lagged panel analyses evident in Tables 8 and 9, yielded significant results in the first panel which correlated Times 1 and 2. This held consistently for both court petitions and police contacts. In both instances, the

Intercorrelation of	SRD	Scores	and	Archival	Records
---------------------	-----	--------	-----	----------	---------

	SRD ₁	SRD2	SRD3
Ct.Petitions1	.12	.17	.00
Pol.Contacts ₁	.20	.24	03
Ct.Petitions2	.04	.06	.07
Pol.Contacts ₂	.03	.06	.10
Ct.Petitions3	.06	.14	.28
Pol.Contacts3	.10	.10	•14

r>.17 (p∠.05)

Table	7
-------	---

Across Time Correlations of SRD Scores and Archival Records

TIME 1				
TIME. 2		1	2	3
SRD	(1)	•75	.17	.24
Ct.Petitions	(2)	.04	.09	.14
Pol.Contacts	(3)	.03	.04	.23
TIME 1				
TIME 2		1	2	3
SRD	(1)	•35	00	03
Ct.Petitions	(2)	.06	01	.13
Pol.Contacts	(3)	.10	.00	•25
TIME 2				
TIME 3		1	2	3
SRD	(1)	•37	.07	.10
Ct.Petitions	(2)	•14	.43	•39
Pol.Contacts	(3)	.10	. 52	• 59

r>.16 (p∠.05)







Cross-lagged Panel Correlations of





Ct Z= 1.12

probable direction of causality was that of court and police involvement at Time 1 producing self-report delinquency scores at Time 2. Again, this must be interpreted with caution since the relationship did not hold up consistently across the other time lags (Kenny, 1975).

Relationship Between Self-Report Delinquency Scores and School Performance

A third major area upon which the current study focused was the relationship between self-report delinquency scores and school performance. Can self-report delinquency data be utilized to predict school performance? Can school performance be utilized to predict self-report delinquency scores? Can self-report delinquency scores be used to estimate the history of a youth's school performance?

Table 10 shows the across time correlations of SRD scores and school performance. As is evident from the table, school status at Time 1 did not correlate with SRD scores at any of the three time intervals. This fact was not at all surprising since at the first time interval school status had little variance because all the youths were of school age at the point of project referral. However, school status at Times 2 and 3 correlated with SRD scores at Times 1 and 2.

In short, the results of this study demonstrated that SRD scores at both Times 1 and 2 could be utilized to predict school performance at Times 2 and 3. Self-report delinquency scores appeared to have forward predictive ability in relation to school performance. However, SRD scores could not be utilized to estimate a youth's school history.

Across Time Correlations of SRD Scores and School Status

	SRD1	SRD ₂	SRD3	
Status ₁	.11	.08	06	
Status ₂	.19	.25	06	
Status ₃	.26	.27	.12	

r>.18 (p∠.02)

Table 11 demonstrates the cross-lagged correlations of SRD scores and school status. As is evident in the table, the corrected z-score for the second panel which correlated Times 2 and 3 was 3.45. Likewise, a significant corrected z-score of 2.56 was found in the third panel which correlated Times 1 and 3. In both instances, it appeared that SRD scores affected school performance.

Relationship Between Official Archival Record Data and School Performance

The last major area upon which this study concentrated was in determining the relationship that existed between archival record data and school performance. Can archival record data be utilized to predict school performance? Can school performance be utilized to predict court/police involvement? Can archival record data be used to estimate the history of a youth's school performance?

Table 12 illustrates the across time correlations of school status with archival records. As is evident from the table, there appeared to be no relationship between school performance and legal involvement. No significant correlation between school status and either court petitions or police contacts was found in the matrix. Likewise, as Tables 13 and 14 demonstrate, the cross-lagged panel analysis yielded similar results. None of the cross-lagged differentials were significant.

In short, the results of this study failed to detect the existence of a relationship between official legal



Cross-lagged Panel Correlations of SRD Scores



and School Status

Ct Z= 2.56

Across Time Correlations of School

Status and Archiv	al Records
-------------------	------------

	Status ₁	Status ₂	Status ₃
Ct.Petiitons1	02	06	.13
Pol. Contacts ₁	.04	01	.12
Ct.Petitions2	.02	04	.06
Pol.Contacts ₂	06	07	08
Ct.Petitions3	09	10	.04
Pol.Contacts 3	06	04	.07

r>.16 (p∠.05)



Cross-Lagged Panel Correlations of Court Petitions and School Status



Ct Z = 1.84

Cross-lagged Panel Correlations

of Police Contacts and School Status



Ct Z= 1.53
involvement and school performance. No evidence of forward or backward predictive ability was found.

Summary of Results

The results of this study demonstrated that official archival record data were related within time and that their predictive ability increased with the passage of time. Official archival record data were not related to selfreported indices of delinquency which suggested that there was more than one type of delinquency being measured. Selfreport delinquency scores predicted school performance from Time 1 to Time 2 and from Time 2 to Time 3. Youths that had high levels of self-reported delinquent activity in Times 1 and 2 tended not to be enrolled in school during the third time period. No consistent relationship was detected between legal involvement and school performance. DISCUSSION

CHAPTER IV

DISCUSSION

In this chapter, the specific research questions which were formulated at the onset of this study will be examined. All pertinent data will be summarized and plausible alternative explanations will be presented. Special emphasis will be given to the possible limitations and confounds of the research. General conclusions will be drawn and their relevance and significance discussed. Lastly, implications and directions for future research will be suggested.

Questions Posed By This Study

Relationship among court records, police records and self-report delinquency. The results of this study suggested that court and police records were related within time and that their predictive ability increased as one progressed from Time 1 to Time 2, and from Time 2 to Time 3. No consistent relationship was found between self-report delinquency scores and official legal involvement as measured through court petitions and police contacts.

Numerous explanations of these results come to mind. First of all, the particular nature of the archival data set utilized may have artificially inflated the court and police variables at Time 1. Since project referral was contingent

upon the youth's having been petitioned to court, all youths had at least one court petition at the first measurement interval. As a result of this, the variance for Time 1 was artificially reduced which could have theoretically accounted for the lack of predictive ability among the court variables found during this time period.

A similar case could be constructed for the police data set. Although not all court petitions were precipitated by police contacts, a great many, nonetheless, were. Over 90% of the sampled youth had only one police contact at the first measurement period which could account for the pattern of intercorrelations found at this interval. The self-report data set, on the other hand, was less susceptible to this bias to the extent that self-report delinquency scores were not related to archival records.

Another plausible explanation of the intercorrelation patterns of archival records stems from labeling theory. Many researchers (Becker, 1963; Gold & Williams, 1969; Schur, 1971) have suggested that contact with the official juvenile justice system often leads to further legal involvement. This perspective suggested that the experience of being caught and publicly labeled delinquent is the most crucial step in the development of a stable pattern of delinquent behavior (Gove, 1980). In short, such labeling, in and of itself, serves as the impetus for increased contact with the formal authorities because these youths, thusly labeled "delinquent," become the thing that they are alleged to be.

In a study aimed at examining the effects of apprehension as a cause of subsequent delinquency, Gold and Williams (1969) demonstrated that apprehension itself encouraged rather than deterred further delinquency. In two independent studies which were part of a larger study of adolescents in America called The National Survey of Youth, these researchers found that those juveniles who had been apprehended were more prone to subsequent delinquent activity than those juveniles whose delinquent behavior went unapprehended. In short, apprehension by the legal authority which marked youth as delinquents resulted in an increase of delinquent activity by these apprehended youths.

Under such a theoretical perspective, one would expect the relationship between police and court records to increase with the passage of time. As youths penetrate deeper and deeper into the legal system, they become better known to the police and court officials which strengthen the effects of labeling. This, in turn, propels the youth towards more delinquent activity. The results of this study demonstrated that the pattern of intercorrelations between court and police involvement gained significance as one progressed from Time 1 to Time 2, and from Time 2 to Time 3. The more contact that a youth had with the legal authorities, the more likely that he or she was of being apprehended for further delinquent activity. Proponents of the labeling perspective could cite these results in supporting their position.

Other researchers (Klein, 1979; Williams & Gold, 1972) have demonstrated that only official contacts with the juvenile

justice system increase as a function of an initial penetration into the system. Actual offense rates of delinquent activity as measured through self-report indices of delinquency do not. These results were explained by differentiating between official delinquency and delinquent behaviors. Official delinquency involves "the identification of and response to delinquent behavior by the police and court" (William & Gold, 1972, p. 210), while delinquent behavior is "the norm-violating behavior of a juvenile which if detected by an appropriate authority would expose the actor to legally prescribed sanctions" (Williams & Gold, 1972, p. 210). In short, what this suggests is that official delinquency as measured through archival records of court and police, is not related to actual delinquency as substantiated through selfreport indices.

The results of the current study failed to detect a consistent relationship between court and police involvement and self-report delinquency scores. They support the existence of the distinction between official delinquency and actual delinquency postulated by the previously mentioned researchers. The research evidence suggested that one is dealing with more than one construct. One of these, official delinquency, was measured through the archival records of court and police, while the other, actual delinquency, was substantiated through the self-report delinquency instrument. If selfreport delinquency instruments and official archival records of the court and the police measured the same construct, a strong pattern of intercorrelations between the data sets would have been observed. This, however, was not the case.

Relationship among school performance, self-report delinquency scores and court and police involvement. The results of this study demonstrated the existence of a relationship between self-report delinquency scores and school performance, but no evidence of a relationship was found between school performance and either court or police involvement. SRD scores at Times 1 and 2 were found to predict school performance at Times 2 and 3.

As was previously mentioned, the correlation patterns of status at Time 1 can be partially attributed to the lack of inherent variability among the project participants at this time period. Since all youths were between 10 and 16 years of age at the time of project referral, over 88% of these were enrolled in school during the year immediately preceding participation in the program. Hence, there was little variance in the values of school status for the first measurement interval. As time passed and more youths arrived at the legal age for dropping out of school, the variance was increased which could have augmented the likelihood of significant correlations.

The most renowned work on the relationship between delinquency and school performance was conducted by Elliott and Voss (1974). In their book entitled, <u>Delinquency and Dropout</u>, they postulated the existence of an inverse relationship between delinquency and dropout. They claimed that delinquency increased the probability of dropout which in turn decreased the probability of delinquency. They also

stipulated that extensive involvement in delinquent behavior, whether or not it led to official action, increased the probability of dropout.

The results of the present study supported the existence of the relationship between delinquency and dropout postulated by Elliott and Voss (1974). Since school status was an index of whether a youth was enrolled or had dropped out of school, the corroborating evidence can be most clearly perceived by studying the intercorrelation patterns of school status at Time 2 and SRD scores across time. This period was selected because across time changes in SRD scores were more readily apparent here than at any other time period since it allowed for comparisons at all three measurement intervals. However, before continuing, it might be useful to more clearly define the variable, school status, and demonstrate how it measures school dropout.

As was previously described, school status was a dichotomously coded variable. A one was coded when youths were enrolled in school, while a two was coded when they were not enrolled. Out of the 139 youths who participated in the present study, 121 of these were enrolled in school at the second measurement interval and eighteen had dropped out. Consequently, a high status value indicated that the youth was not enrolled in school, ergo dropped out, while a low status value substantiated the opposite. In the current, as well as Elliott and Voss's research, both voluntary and involuntary (i.e., suspension or expulsion) motives for dropping out of school were included in the data.

In order to further examine the relationship between school status and SRD scores, a repeated measures analysis of variance was computed. The youths were split into those who had dropped out of school at the second time period and those who had not. Their respective SRD scores at Times 2 and 3 were utilized as the dependent measures. The results of the analysis are presented in Table 15.

As is evident in Table 15, there was a significant drop in SRD scores from Time 2 to Time 3 among those youths who were not enrolled in school at Time 2. This indicated that self-reported indices of delinquent behaviors decreased when youths dropped out of school which was the precise pattern found by Elliott and Voss (1974). Figure 2 plots the graph of these results.

Further support for Elliott and Voss's position that self-report indices of delinquency were causally involved in dropout was evidenced in the cross-lagged panel analysis. The only cross-lagged correlations which held consistently across the different panels were those between self-report scores and school status. The direction of causality which these correlations yielded was the same one found by Elliott and Voss (1974). Again, one needs to interpret these with caution.

In addition, Elliott and Voss (1974) also proposed that this relationship was maintained regardless of official action or response to delinquent behavior. Consequently, this relationship does not necessarily have to be evident when one utilizes official measures of delinquency rather

Table 15

School Status at Time 2 and SRD Scores Across Times 2 and 3



in v out at Time 2 F= 10.97 p <.01

ANALYSIS OF VARIANCE

Source	Df	MS	<u>F</u>	Prob
Time (T)	1	16.07	12.47	.001
Status (S)	1	13.79	5.01	.03
Subjects (R)	137	2.75		
ΤxS	- 1	16.11	12.50	.001
RχT	137	1.29		



School Status at Time 2 and SRD Scores Across Times 2 and 3





than those obtained from self-reports. Utilizing police records as indexes of delinquency, these researchers (Elliott & Voss, 1974) found evidence of the previously described relationship, the present research did not.

In testing the validity of the relationship between delinquency and dropout when utilizing official measures of delinquency, the present study went one step further than that of Elliott and Voss by using both police and court records in the analysis. However, the relationship did not hold up when official records were used to measure the dependent variable.

One plausible explanation of these results stems from the fact that the current sample of youths participated in the delinquency intervention project that was previously mentioned. The sample utilized by Elliott and Voss (1974) was obtained from the general population of adolescents. Consequently, in interpreting the results of the current research, one must question their generalizability to the at-large population of adolescents.

The sampled youth utilized in the present study had had at least one contact with the juvenile court. Also, intake workers and other court personnel were aware of which youths participated in the project since project referral was done at the Probate Court. At the present time, the researcher cannot differentiate the impact that project participation had upon the subsequent decisions of legal system workers. If a youth was petitioned to court during the time he or she participated in the project, was he or she more harshly

sentenced, or did the opposite occur? Questions of this type still remain unanswered, and must be considered in interpreting the present results. In short, the researcher has no way of ascertaining to what extent the present correlations are the effect of the treatment program as opposed to being naturally occurring phenomenons in the juvenile population.

Aside from this, the results of the current study can be explained in light of the theoretical position which postulates that delinquency and dropout are alternative responses to the experience of failure and frustration generated primarily in the context of school (Elliott & Voss, 1974; Elliott, 1966; Goodman, 1967; Cloward & Ohlin, 1960). Such a theoretical perspective views failure to achieve desired goals as a key element in motivating youths to seek some type of adaptive response among which delinquency and dropout are included. In the context of school, such goals are determined by achievement in school related activities. Failure to achieve these goals in either the formal academic or informal peer culture may result in frustrating, demoralizing and humiliating experiences at school. Students who fail in these areas tend to be shunned and excluded by other students, teachers and by the school system in general (Gold, 1963; Kvaraceus, 1945; Schafer & Polk, 1967). Consequently, delinquency and ultimately dropout, become adaptive responses to the experience of school failure. By dropping out of school a youth terminates the endless chain of frustration and failure created by the school system. If this

perspective is correct, then delinquency rates should decrease after youths drop out of school. As was previously described, self-reported indices of delinquent behaviors decreased after youths had dropped out of school. Official delinquency rates as measured through court and police records did not.

General Conclusions

Because of the difficulties and inherent biases in the data sets that have been previously mentioned the general conclusions from this study must be of a very conservative nature. With this in mind, there are two major conclusions that can be drawn from the current research.

First of all, the current evidence validates the existence of an inverse relationship between delinquency and dropout that was postulated by Elliott and Voss (1974). The present research demonstrated that self-reported indices of delinquent behaviors decrease after youths dropped out of school.

Secondly, the overall findings support the previously described position that official delinquency, as measured through archival records of court and police, and actual delinquency as substantiated through self-reported indices are not different methodological approaches to measure the same dependent variable. Consistently, the results failed to detect the existence of a relationship between official archival records and self-reported indices of delinquent behaviors. Likewise, the relationship between school performance and legal system involvement was very different than that between school performance and self-report

delinquency scores. The evidence suggests that there are at least two empirical constructs that delinquency researchers must address. One which deals with official response to delinquent behavior, and the other which references actual indices of delinquent acts.

Implications and Direction for Future Research

The results of the current study have methodological implications for research in the area of crime and delinquency. As was previously stated, the field is plagued by conceptual and empirical disputes concerning the different methodologies currently employed to measure the dependent variable. The findings of this research suggest that such a methodological dispute is unwarranted and possibly stems from an inherent failure to account for the multidimensional nature of delinquency as a social phenomenon. Evidence of this has already been hinted at by Williams and Gold (1972) when they suggested the distinction between official delinquency and delinquent behaviors. When delinquency is envisioned as multidimensional, the importance of the controversy between selfreport instruments and archival records as methodological approaches is greatly ameliorated. Under this alternative perspective, these methodologies would be viewed as complimentary and not antagonistic.

Currently, two major dimensions of delinquency have been identified, official or adjudicated delinquency, and delinquent behaviors or behaviors which deviates from societal norms. Evidence does not suggest that these are all inclusive (Zimmerman & Broder, 1980). Consequently, delinquency

could be viewed on a continuum spanning from official adjudication on one end, to the absence of norm violating behavior on the other. Between these two ends, one could conceive of numerous gradations or dimensions of norm violating behaviors which theoretically could be identified through research.

Consequently, the current research findings advocate for the adoption of a multivariate approach to the study of delinquency. Researchers must either be clear on the dimension of delinquency which they are addressing and/or they must incorporate multiple dependent measures in their research designs. Rather than continuing with methodological debates, the existing methodologies should be utilized to derive more accurate and sensitive indices of delinquency. Questions such as "When does norm violating behavior become delinquency?" should be addressed by future research.

Aside from this, the present finding of the relationship between delinquency and dropout has policy implications. Currently a bill has been submitted to the Michigan legislature which proposes altering the legal age for dropping out of school from 16 to 14. Initially, given the present findings, such a proposition does not sound too outrageous. Yet upon closer analysis, it is symptomatic of a conservative political trend which is sweeping the country. The prevailing attitudes of the sixties and seventies focused on working with youths towards improving their life situation. Government policies aimed at establishing programs that would help realize these goals. Bills, as the one previously described,

appear to have diametrically opposed objectives. The emphasis has shifted from "helping the trouble maker cope" to "getting the trouble maker out."

Rather than supporting "solutions" such as those proposed by the legislator from Dansville, Michigan, the results of the present research suggest the need to re-organize the American school system, as well as, re-evaluate current political decisions. Although dropping out of school decreases the incidence of self-reported delinquency in the short run, no one has experimentally evaluated the long range effects of such a move. This is further complicated by the fact that effective functioning in adult society is largely predicated upon the ability to maintain satisfying employment throughout the life cycle. Without basic educational skills, the employability of the dropouts in the labor force is severely limited. If as Elliott and Voss (1974) suggested, delinquency and dropout are adaptive reactions to frustrations encountered in the school milieu, how will these individuals adapt to the frustrations created by inability to secure stable employment? What are the future implications of dropping out of school? Does dropping out of school, while decreasing the incidences of delinquency in the short run, increase the probability of committing criminal acts as an adult? Before any policy decisions based on these findings are made, research must answer these and other related issues.

To summarize, then, the findings of the current research while enlightening in and of themselves, are neither definitive nor conclusive. The study could be envisioned as a

.

APPENDIX I

SELF-REPORT DELINQUENCY INSTRUMENT

SELF REPORT DELINQUENCY (SRD)

HOW OFTEN HAVE YOU: HOW OFTEN HAS YOUR SON/DAUGHTER: HOW OFTEN HAS YOUR YOUTH:

ų,

IN THE LAST <u>6 WEEKS YEAR</u>

2085 SKIPPED CLASS WHEN YOU/HE/SHE WAS IN SCHOOL?

- 2086 GONE ONTO SOMEONE'S LAND WHEN THEY DIDN'T WANT YOU/HIM/HER TO BE THERE, OR WITHOUT THEIR PERMISSION?
- 2087 GONE INTO A HOUSE OR BUILDING WHEN YOU/HE/SHE WASN'T SUPPOSED TO BE THERE?
- 2088 PLAYED ON A SCHOOL ATHLETIC TEAM?
- 2089 THREATENED TO HURT SOMEONE?
- 2090 BEEN TOLD TO BRING YOUR/HIS/HER PARENTS TO SCHOOL FOR SOMETHING YOU/HE/SHE DID WRONG?
- 2091 DAMAGED OR MESSED UP SOMETHING NOT BELONGING TO YOU/HIM/HER?
- 2092 HURT SOMEONE BADLY ENOUGH FOR HIM/HER TO NEED BANDAGES OR A DOCTOR?
- 2093 GOTTEN ON THE HONOR ROLL FOR GOOD GRADES IN SCHOOL?
- 2094 TAKEN SOME PART OF A CAR OR SOME GASOLINE?
- 2095 HIT A MEMBER OF YOUR/HIS/HER FAMILY? (IN ANGER)
- 2096 HAS NOT BEEN ALLOWED TO GO TO SCHOOL UNTIL THE SUPERINTENDANT OR PRINCIPAL TOLD YOU/HIM/HER THAT YOU/HE/SHE COULD GO AGAIN? (BEEN SUSPENDED)

- 2097 TAKEN SOMETHING NOT BELINGING TO YOU/HIM/HER WORTH LESS THAN \$2.00?
- 2098 EARNED SOME MONEY AT A JOB?
- 2099 DRUNK BEER OR LIQUOR? (INCLUDES SIPS)
- 2100 RUN AWAY FROM HOME?
- 2101 SKIPPED A FULL DAY OF SCHOOL?
- 2102 BEEN SENT TO THE SCHOOL PRINCIPAL'S OFFICE FOR BAD BEHAVIOR IN CLASS?
- 2103 CARRIED A GUN OR A KNIFE?
- 2104 WORKED ON A SCHOOL NEWSPAPER OR YEARBOOK?
- 2105 TAKEN SOMETHING NOT BELONGING TO YOU/HIM/HER WORTH OVER \$50.00?
- 2106 DONE SOMETHING AROUND THE HOUSE OR FOR THE FAMILY THAT REALLY PLEASED YOUR/HIS/HER FAMILY?
- 2107 SET FIRE TO SOMEONE ELSE'S PROPERTY?
- 2108 USED OR THREATENED TO USE A WEAPON TO GET SOMETHING FROM A PERSON?
- 2109 TAKEN SOMETHING FROM A STORE WITHOUT PAYING FOR IT? (REGARDLESS OF PRICE)
- 2110 SMOKED WITHOUT YOUR PARENTS/YOUR/HIS PARENTS KNOWING ABOUT IT OR WITHOUT PERMISSION? (REGULAR CIGS.)
- 2111 WORKED FREE FOR A CHARITY ORGANIZATION?
- 2112 TAKEN A CAR WITHOUT THE OWNER'S PERMISSION? (INCLUDES

2113 SMOKED MARIJUANA?

- 2114 TAKEN SOMETHING FROM A PERSON BY FORCE? (MAY OR MAY NOT USE A WEAPON)
- 2115 BEATEN UP ON SOMEBODY OR FOUGHT SOMEONE (PHYSICALLY)?
- 2116 TAKEN DRUGS OR PILLS, OTHER THAN MARIJUANA?
- 2117 BOUGHT OR GOTTEN SOMETHING THAT WAS STOLEN BY SOMEONE ELSE?
- 2118 BROKEN INTO A PLACE AND STOLEN SOMETHING?
- 2119 TAKEN THEINGS WORTH LESS THAN \$50.00? (OVER \$2.00)

REFERENCES

REFERENCES

- Ball, T. The reliability and validity of interview data obtained from 59 narcotic drug addicts. <u>American</u> <u>Journal of Sociology</u>, 1967, <u>72</u>, 650.
- Becker, H. S. The <u>Outsiders</u>. New York: The Free Press, 1963.
- Belson, W. A. <u>The development of a procedure for elicit-</u> <u>ing information from boys about the nature and extent</u> <u>of their stealing.</u> London: Survey Research Center, London School of Economics and Political Science, 1968.
- Blackmore, J. The relationship between self-reported delinquency and official convictions amongst adolescent boys. <u>British Journal of Criminology</u>, 1974, <u>14</u>, 172-176.
- Blakely, C. H. The diversion of juvenile delinquents: A first step toward the dissemination of a successful intervention. Unpublished doctoral dissertaion, Michigan State University, 1981.
- Blakely, C. H., Kushler, M. G., Parisian, J. A., & Davidson, W. S. <u>Alternative scaling procedures for constructing</u> <u>a self-report delinquency measure</u>. Paper presented at the 87th annual convention of the American Psychological Association, New York, 1979.
- Blakely, C. H., Kushler, M. G., Parisian, J. A., & Davidson, W. S. <u>Self-reported delinquency as an evaluation</u> <u>measure: Comparative reliability and validity of alter-</u> <u>nate weighting schemes</u>. Paper presented at the 87th annual convention of the American Psychological Association, New York, 1979.
- Campbell, D. T., & Fiske, D. J. Convergent and discriminant validation by the multitrait-multimethod matrix. <u>Psy-</u> <u>chological Bulletin</u>, 1959, <u>56</u>, 81-105.
- Campbell, D. T. From description to experimentation: Interpreting trends as quasi-experiments. In C. W. Harris (Ed.), <u>Problems in measuring change</u>. Madison: University of Wisconsin Press, 1963.

- Calsyn, R. J. Guidelines for using cross-lagged panel correlation. <u>Representative Research in Social Psycho-</u> <u>logy.</u> 1976, <u>7</u>, 105-119.
- Chapman, F. <u>Sociology and the stereotype of the criminal</u>. London: Tavistock, 1968.
- Cicourel, A. V., & Kitsuse, J. I. <u>The educational decision</u>-<u>makers</u>. Indianapolis: Bobbs-Merrill, 1963.
- Clark, J., & Tifft. Polygraph and interview validation of self-reported deviant behavior. <u>American Sociological</u> <u>Review</u>, 1966, <u>31</u>, 516.
- Clark, J. P., & Wenninger, E. P. Socio-economic class and area as correlates of illegal behavior among juveniles. <u>American Sociological Review</u>, 1962, <u>27</u>, 826-834.
- Cloward, R. A., & Ohlin, L. E. <u>Delinquency</u> and <u>opportunity</u>. Glencoe, Ill: The Free Press, 1960.
- Cohen, A. <u>Delinquent boys</u>: <u>The culture of the gang</u>. Glencoe, Ill: The Free Press, 1955.
- Crano, W. D. Causal analysis of the effects of socioeconomic status and initial intellectual endowment on patterns of cognitive and academic achievement. In D. R. Green (Ed.), <u>The aptitude-achievement distinction</u>. New York: Mc Graw Hill, 1973.
- Crano, W. D., Kenny, D. A., & Campbell, D. T. Does intelligence cause achievement?: A cross-lagged panel analysis. Journal of Educational Psychology, 1972, <u>63</u>, 258-275.
- Crano, W. D., & Mellon, P. M. Causal influences of teachers' expectations on children's academic performance: A cross-lagged panel analysis. <u>Journal of Educational</u> <u>Psychology</u>, 1978, <u>70</u>, 39-49.
- Cressey, D. R. <u>Other people's money</u>. New York: The Free Press, 1963.
- Davidson, W. S. The diversion of juvenile offenders: A comparison of the process and relative efficacy of behavioral contracting and child advocacy. Unpublished doctoral dissertation, University of Illinois, 1976.
- Dentler, R. A., & Monroe, L. J. Social correlates of early adolescent theft. <u>American Sociological Review</u>, 1961, <u>26</u>, 733-743.

- Emshoff, J. G. The diversion of juvenile delinquents: A comparison of intervention within the family with all life systems. Unpublished doctoral dissertation, Michigan State University, 1980.
- Elliott, D. S. Delinquency, school attendance and dropout. Social Problems, 1966, 13, 307-314.
- Elliott, D. S., & Voss, H. L. <u>Delinquency</u> and <u>dropout</u>. Lexington: D. C. Heath and Company, 1974.
- Erickson, M. L., & Empey, L. T. Court records, undetected delinquency and decision making. <u>Journal of Criminal</u> <u>Law, Criminology and Police Science</u>, 1963, <u>54</u>, 456-469.
- Farrington, D. Self-reports of deviant behavior: Predictive and stable? <u>Journal of Criminal Law</u>, <u>Criminology</u>, <u>and Police Science</u>, 1973, <u>64</u>, 99-110.
- Feldman, J. Considerations in the use of causal correlational techniques in applied psychology. <u>Journal of</u> <u>Applied Psychology</u>, 1975, <u>60</u>, 663-670.
- Fitzgerald, M. Self-esteem, locus of control and the job experience: A causal analysis. Unpublished master's thesis, Michigan State University, 1980.
- Gibson, H., & Hawkins. Interviews versus questionnaires. <u>American Behavioral Science</u>, 1968, <u>12</u>, 9-11.
- Glueck, S., & Glueck, E. <u>Unraveling juvenile delinquency</u>. Cambridge, Mass: Harvard University Press, 1951.
- Gold, M. Undetected delinquent behavior. <u>Journal of Re-</u> search in Crime and Delinquency, 1966, <u>13</u>, 127-143.
- Gold, M. <u>Delinquent behavior in an American city</u>. Belmont, CA: Brooks-Cole, 1970.
- Gold, M., & Williams, J. R. The effects of "getting caught": Apprehension of the juvenile offender as a cause of subsequent delinquencies. National study of the aftermath of apprehension. <u>Prospectus</u>, 1969, <u>3</u>(1), 3-12.
- Goodman, P. <u>The universal trap.</u> In D. Schreiber (Ed.), Profile of the school dropout. New York: Random House, 1967.
- Gove, W. R. Labeling and mental illness: A critique postscript. In W. R. Gove (ED.), <u>The labeling of deviance</u>. Beverly Hill, CA: Saga Publications, Inc., 1980.

- Hackler, & Lautt. Systematic bias in measuring self-report delinquency. <u>Can. Rev. Sociology</u> and <u>Anthropology</u>, 1969, <u>6</u>, 92.
- Hardt, R. H., & Peterson-Hardt, S. On determining the quality of the delinquency self-report method. <u>Journal</u> <u>of Research in Crime and Delinquency</u>, 1977, <u>14</u>(2), 247-261.
- Hindelang, M. J., Hirschi, T., & Weiss, J. G. HEW Grant Application #MH27778-03, 1977.
- Hirschi, T. <u>Causes of delinquency</u>. California: University of California Press, Ltd., 1971.
- Hirschi, T., & Selvin, H. Delinquency research: An appraisal of analytic methods. <u>Journal of Criminal Law and</u> <u>Criminology</u>, 1969, <u>43</u>, 177-200.
- Huch, S. W., Cormier, W. H., & Bounds, W. G. <u>Reading</u> <u>statistics and research.</u> New York, NY: Harper and Row, Publishers, Inc., 1974.
- Kantrowitz, R. E., Davidson, W. S., Blakely, C. H., & Kushler, M. G. The effect of training supervision of nonprofessional intervention with delinquents. Paper presented at the 86th annual convention of the American Psychological Association, Toronto, Canada, 1978.
- Kenny, D. A. Cross-lagged panel correlation: A test for spuriousness. <u>Psychological Bulletin</u>, 1975, <u>82</u>(6), 887-903.
- Kenny, D. A. <u>Correlation</u> and <u>causality</u>. New York, NY: John Wiley and Sons, 1979.
- Klein, M. W. The knowns and unknowns of diversion research. Paper presented at the 87th annual convention of the American Psychological Association, New York, New York, 1979.
- Krohn, M., Waldo, G. P., & Chiricos, T. Self-report delinquency: A comparison of structured interviews and self-administered checklists. <u>Journal of Criminal Law</u> and <u>Criminology</u>, 1975, <u>65</u>(4), 545-553.
- Kulik, J., Stein, K., & Sarbin, T. Disclosure of delinquent behavior under conditions of anonymity and non-anonymity. <u>Journal of Consulting and Clinical Psychology</u>, 1968, <u>32</u>, 375-382.

Kvaraceus, W. C. Juvenile delinquency and social class.

Journal of Educational Sociology, 1944, 18, 51-54.

- Lincoln, S. B., Teillmann, K. S., Klein, M. W., & Labin, S. Recidivism rates of diverted juvenile offenders. Paper presented at the National Conference on Criminal Justice Evaluation, Washington, D. C., 1977.
- Mc Donough, & Rosemblum. A comparison of mailed questionnaires and subsequent structured interviews. <u>Public</u> <u>Opinion Quarterly</u>, 1965, 29, 131.
- Miller, W. B. Personal communications. New York, 1975.
- Miller, A. Lower class culture as a generating milieu of gang delinquency. <u>Journal of Social Issues</u>, 1958, <u>5</u>, 14.
- Nettler, G. <u>Explaining crime</u>. New York: Mc Graw Hill, 1974.
- Nye, I., & Short, J. Scaling delinquent behavior. <u>Ameri-</u> <u>can Sociological Review</u>, 1957, <u>22</u>, 321-326.
- Piliavin, I., & Briar, S. Police encounters with juveniles. <u>American Journal of Sociology</u>, 1964, <u>70</u>, 206-214.
- Peterson, L. M., Urban, H. B., & Vondracek, F. W. Selfreport measurement of "delinquent orientation" in institutionalized delinquent and high school boys. <u>Criminal Justice and Behavior</u>, 1975, <u>2</u>, 4.
- Quinney, R. <u>The social reality of crime</u>. Boston, Mass: Little, Brown, 1970.
- Rappaport, J. <u>Community Psychology</u>. New York: Holt, Rinehart, & Winston, 1977.
- Reiss, A. J. Inappropriate theories and inadequate methods as policy plaques: Self-reported delinquency and the law. In N. J. Demerath, et al., (Eds.), <u>Social policy</u> and <u>sociology</u>. New York: Academic Press, 1975.
- Reiss, A. J., & Rhodes, A. L. The distribution of juvenile delinquency in the social class structure. <u>American</u> <u>Sociological Review</u>, 1961, 10, 720-732.
- Rogosa, D. A critique of cross-lagged correlation. <u>Psy-</u> <u>chological</u> <u>Bulletin</u>, 1980, <u>88</u> (2), 245-258.
- Rossi, P. H., Waite, E., Bose, C. E., & Berk, R. E. The seriousness of crimes: Normative structure and individual differences. <u>American Sociological Review</u>,

1974, <u>39</u>, 224-237.

- Schafer, W. E., & Polk, K. Delinquency and the schools. In President's Commission on Law Enforcement and Administration of Justice, <u>Juvenile delinquency and</u> <u>youth crime</u>. Washington, D. C.: U.S. Government Printing Office, 1967, 222-277.
- Schur, E. M. <u>Radical non-intervention</u>: <u>Rethinking the</u> <u>delinquency problem</u>. Englewood Cliffs, NJ: Prentice-Hall, 1973.
- Schur, E. M. Comments. In W. R. Gove (Ed.), <u>The labeling</u> of <u>deviance</u>. New York, NY: Wiley, 1975.
- Sellin, T., & Wolfgang, M. E. <u>The measurement of delin-</u> <u>quency</u>. New York: NY: Wiley, 1964.
- Shaw, C., & Mc Kay, H. D. <u>Juvenile</u> <u>delinquency</u> <u>in</u> <u>urban</u> <u>areas</u>. Chicago: University of Chicago Press, 1942.
- Slocum, & Stone. Family culture patterns and delinquenttype behavior. <u>Marriage</u> and <u>Family Living</u>, 1963, <u>25</u>, 202.
- Taylor, I., Walton, & Young. <u>The new criminology</u>. New York, NY: Harper and Row, 1974.
- West, D. J. <u>Who becomes delinquent</u>? London: Heinemann, 1973.
- Wheeler, S. Criminal statistics: A reformulation of the problem. <u>Journal of Criminal Law</u>, <u>Criminology and</u> <u>Police Science</u>, 1967, <u>58</u>, 317-324.
- Williams, J. R., & Gold, M. From delinquent behavior to official delinquency. <u>Social Problems</u>, 1972, <u>20</u>, 209-229.
- Wolfgang, M., Figlio, R., & Sellin, T. <u>Delinquency in a</u> <u>birth cohort</u>. Chicago: University of Chicago Press, 1974.

Voss, H. A reply to Gold. Social Problems, 1967, 15, 116.

•.

Zimmerman, J., & Broder, P. K. Comparison of different delinquency measures derived from self-report data. Journal of Criminal Justice, 1980, 8, 147-162.