An Investigation of Factors Associated with Recidivism Among Juvenile Offenders

Michael Gene Breci

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AN INVESTIGATION OF FACTORS ASSOCIATED
WITH RECIDIVISM AMONG JUVENILE OFFENDERS

BY

MICHAEL GENE BRECİ

A thesis submitted
in partial fulfillment of the requirements for the degree Master of Science
Major in Sociology

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1981
AN INVESTIGATION OF FACTORS ASSOCIATED
WITH RECIDIVISM AMONG JUVENILE OFFENDERS

This thesis is approved as a creditable and
independent investigation by a candidate for the degree,
Master of Science, and is acceptable for meeting the
thesis requirements for this degree. Acceptance of
this thesis does not imply that the conclusions reached
by the candidate are necessarily the conclusions of the
major department.

Dr. Robert O. Mendelsohn Date
Thesis Adviser

Dr. James L. Satterlee Date
Head, Rural Sociology
AN INVESTIGATION OF FACTORS ASSOCIATED WITH RECIDIVISM AMONG JUVENILE OFFENDERS

Abstract

MICHAEL G. BRECI

This study explored the factors that best differentiated first-time offenders from recidivists. The population investigated were youth adjudicated delinquent or child in need of supervision by the Brookings Juvenile Court between 1970 and 1977. There were 449 juveniles in this group, 122 were recidivists.

The first objective of this study was to profile the relevant characteristics of the juvenile population involved in this study. Several of the relevant characteristics this study discovered were that the delinquents were most often:

- male,
- 16 to 17 years old,
- from intact families,
- attending school,
- not involved in activities or work,
- from Brookings,
- one-time offenders who did not commit serious crimes, and
- accompanied by delinquent companions.
The second objective was to formulate null and research hypotheses and test them against the data. The following variables were found to be significant: gender, age at first adjudication, family size, broken home, school achievement, school drop out, employment status, involvement in activities, place of residence, delinquent associates and seriousness of offense. Three variables were found not to be significant: position of child in the family, IQ, and parent's socio-economic status.

The third objective was to analyze the relationship between the independent variables found to be significant and the dependent variable, recidivism. A stepwise multiple regression was utilized and produced a Multiple R of .54081. The results of the regression analysis suggest that a delinquent has a greater probability of becoming a recidivist if the juvenile commits a serious offense, is a school drop out, is between 13 and 15 years of age at first adjudication, and is not involved in activities.
ACKNOWLEDGMENTS

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Sociologists and criminal justice practitioners alike long have been interested in the phenomenon of juvenile delinquency. As an area of theoretical and empirical concern, juvenile delinquency is a complex phenomenon which to date has defied consensus in the development of causal images (Johnson, 1979:1). Consequently, the field has been replete with competing theoretical frameworks and contradictory empirical findings. Beyond disagreements among scholars as to the utility of given theories, the adequacy or appropriateness of data sources have often been subjected to a wide divergence of opinions, for example, a major axis of controversy revolves around using official statistics versus self-reported data (Liska, 1974:263).

Such divergences of opinion notwithstanding, investigations utilizing official as well as unofficial statistics have demonstrated consistent yearly increases in the incidence of delinquent behaviors. For example, official statistics collected for the U.S. between 1969 and 1974 depict a 15 percent increase in the arrest rates for juveniles (Krisberg and Austin, 1978:3). In 1975, young persons under 18 years of age accounted for 26 percent
of all arrests throughout the United States (Gottfredson et al, 1978:484). Given that the majority of these individuals comprising the 1975 data were between the ages of 13 and 17, their arrests were disproportionately high, relative to their age specific sectors of the total population.¹

Moreover, studies of unofficial, sometimes termed "hidden delinquency", indicate that a majority of all juveniles engage in unlawful activities from time to time (Gibbons, 1976:29). Recognizing that the bulk of youthful offenses are of a minor nature, those young persons who do engage in the more serious activities face a higher probability of arrest (Gibbons, 1976:30). Most importantly, juveniles who have engaged in the more serious crimes are also most likely to recidivate; that is continue to engage in delinquent behavior following treatment or punishment (Gibbons, 1976:28).²

This research will bring together related lines of sociological and criminal justice inquiry into an

¹In 1977, persons aged 10 through 17 made up approximately 15 percent of the total population, however they accounted for over 30 percent of all the arrests reported in the Uniform Crime Report (Jensen and Rojek, 1980:5-6).

²Recidivism is generally regarded as a major criterion of the success or lack thereof of any program of specific deterrence within the field of criminal justice (Solomon, 1976:349).
investigation of factors contributing to a causal interpretation of juvenile recidivism. In the course of developing this causal interpretation, this research will present a profile of major factors associated with juvenile delinquency in Brookings County, between 1970 and 1977.¹

Statement of the Problem

This research investigates the following problem:

What combination of factors, associated with delinquency, best differentiates first time offenders from recidivists?

Discussion of the Problem

This problem is important because of the impact juvenile crime has on society. For instance, Ferdinand and Cavan estimate that juvenile delinquency costs the country a billion dollars a year. In fact, in 1971 auto thefts and larcenies committed by juveniles caused losses of three hundred and seventy four million dollars (Carney, 1979:218). As will be evidenced through a

¹Juveniles included in this study have all been adjudicated by the juvenile court in one of two ways:
a. the juvenile court has found the child has committed a delinquent act and declared the juvenile a delinquent child, or
b. the juvenile court has found the child to be in need of supervision and declared the juvenile a Child in Need of Supervision (CHIN).
review of relevant literature, this problem is one social phenomenon that is of interest both to the sociologist and to the practitioner within the criminal justice arena.

Sociologists are concerned with establishing, through verifiable evidence, general patterns or regularities underlying the social phenomenon of crime. This study seeks to unravel factors underlying the delinquency of juveniles in Brookings County, South Dakota and attempts to show that there are regularities in factors that contribute to a juvenile's delinquency.

At the level of their every day experience, practitioners frequently encounter situations in which the offenses are committed by recidivists. To aid the practitioner in his or her mission, it is necessary to understand in a systematic way what factors are associated with recidivism and non-recidivism. If it can be demonstrated that a given set of factors occur more frequently among recidivists compared to one time offenders, then a model to predict recidivism could be developed. Such a model might serve as a diagnostic and planning tool. The model could be employed diagnostically, because the factors that have the most influence on a juvenile offender would be known. Planners would be able to develop programs geared to the first time offender who is most influenced by these various known factors so
that a juvenile could be helped before becoming a recidivist. If specific juveniles can be guided away from a cycle of crime, then it should be possible to make an inroad into state and national crime rates for serious offenses. Recalling that juveniles contribute substantially to such rates, it is important to note that even a statistically small reduction in juvenile rates could produce an important effect on the aggregated incidence of crime.

Objectives of this Study

The objectives of this study are to determine what variables are associated with the occurrence of recidivism among juvenile offenders, and to develop a means of distinguishing between different categories of those offenders.

Specific objectives are:

1. to profile the relevant characteristics of recidivists and one time offenders, using juvenile records from Brookings County between 1970 and 1977,
2. from that profile, develop a model for predictively differentiating recidivists from first time offenders, and
3. to provide suggestions to relevant agencies for the implementation of findings.
Organization of Thesis

The remainder of this thesis is organized as follows: Chapter Two examines pertinent literature for this study, Chapter Three presents the theoretical framework and research hypothesis, Chapter Four presents the research design, Chapter Five is an analysis of the data, and finally, Chapter Six includes a summary of relevant findings and provides suggestions for the implementation of findings in the field of criminal justice.
CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The study of juvenile delinquency delves into the nature of human action. At this time, however, there seems to be no set pattern for differentiating a child that will become a delinquent from one that will not. As this study is more interested in the child who is already delinquent, the first part of this chapter will review work done in the area of recidivism.

The delinquency phenomenon occurs throughout the United States, affecting children from every socio-economic class, ethnic group and religious background. Considerable research has been conducted by sociologists seeking to explain the relationship among delinquency factors; therefore the second part of this chapter examines selected social, social psychological and demographic factors prior research has associated with juvenile delinquency.

The last part of this chapter examines various theories of causation. Numerous sociologists have developed theoretical models about juvenile delinquency. The plurality of models is due to the difficulty
of devising a single overriding theoretical umbrella which would lend itself to the accurate prediction of this multifaceted phenomenon. The outcome of this search for a common cord of understanding has been responsible for the many theories, each incomplete in itself, but together providing an increasingly more complete picture of delinquency.

**Recidivism**

The first section of this chapter explores the problem of recidivism. An illustration of the immensity of this phenomenon can be seen by the Presidents Commission on Law Enforcement and Administration which considered recidivism the major factor associated with high crime rates in this country. The Commission also reported numerous studies of adult recidivists which show the majority began as juvenile delinquents (Cressey and Ward, 1969:56-57).

One of the most recent and extensive studies on delinquency was the Philadelphia cohort study by Wolfgang, Figlio and Sellin (1972). They investigated approximately 10,000 boys born in 1945 and residing in Philadelphia between their tenth and eighteenth birthday. Sixty-five percent of the boys were non-delinquent, while 35 percent had at least one contact with the police. Of
the delinquents, 54 percent committed more than one offense while the remaining 46 percent were one-time offenders. In an analysis of the variables associated with delinquency, the authors found: "Recidivists are more likely to be nonwhite in the lower SES, have lower IQ scores, fewer school years completed and lower achievement than one-time delinquents" (Wolfgang et al, 1972:65). The authors also note that nondelinquents and one-time offenders show less variance in the variables stated above than did multiple offenders when compared to one-time offenders.

Of the more than 10,000 offenses committed by the delinquents, 84 percent were committed by the recidivists. Wolfgang classified 18 percent of the recidivists as chronic offenders (those who commit five or more offenses) and they accounted for 52 percent of the delinquent acts. The recidivists were also responsible for the majority of the serious offenses committed.

Wolfgang's data indicate that 72 percent of the offenders had their first contact with the police between the ages of 12 and 16, with juveniles 16 years of age accounting for the highest percentage of these contacts (21 percent). From the data collected in the
cohort study, Wolfgang was able to devise a probability system for predicting recidivism. For those juveniles who have committed a first offense, Wolfgang contends that the probability of committing a second offense is approximately 50 percent. After committing a second offense, the probability increases to 65 percent for a third offense and levels off at about 70 to 80 percent for further offenses beyond the third (Wolfgang et al, 1972).

Glaser (1969) advanced a different approach to the recidivism problem. He examined the influences that increase the probability of a prisoner's return to prison. Glaser contended there are three major areas of concern when predicting recidivism: the offender's age, the nature of the offense and the prior criminal record. He asservates there is an inverse relationship between age and recidivism which "equates crimes with immaturity" (Glaser, 1969:19). He maintained that nearly half of all juveniles first arrested at age 14 for any type of crime continue in a life of crime. In comparison, only one in ten of those arrested for the first time over the age of 35 continue down the criminal path. Glaser asserted there is an additional reason for the inverse relationship between age and recidivism. Nearly 80 to 90 percent of the offenses committed by juveniles
involve two or more juveniles as associates in the offense. Glaser inferred that each offense may increase the youth's estrangement from school and home while enhancing his prestige and self-esteem in delinquent social circles.

The second area of concern was the nature of the offense. Glaser indicated that over 90 percent of all felony crimes reported to the police are economic offenses. Moreover, those offenders most likely to recidivate commit the following offenses: larceny, burglary, forgery and auto theft. According to Glaser, auto theft was primarily an offense committed by young people while forgers were generally older (Glaser, 1969: 22-24).

The final area Glaser studied was the offender's prior record. He contended, "all the evidence tends to support the conclusion that the extent of an offender's prior record will indicate the probability of his adding to it" (Glaser, 1969:27).

Glaser summed up noting that crime is a phenomenon of the very young and "is attributable to those youths who are least successful in school, at work and in their family relationships. These are the persons who have the least 'stake in conformity' and hence risk least when engaging in crime" (Glaser, 1969:320).
Cressey and Ward advanced the following conclusions about a juvenile delinquent's probability of becoming an adult offender:

1. the earlier a juvenile is arrested or brought to court for an offense, the more likely he is to carry on criminal activity into adult life;

2. the more serious the first offense for which a juvenile is arrested, the more likely he is to continue to commit serious crimes, especially in the case of major crimes against property;

3. the more frequently and extensively a juvenile is processed by the police, court and correctional system, the more likely he is to be arrested, charged, convicted and imprisoned as an adult; and

4. the most frequent pattern among adult offenders is one that starts with petty stealing and progresses to much more serious property offenses (Cressey and Ward, 1969:57).

Reckless (1961) developed the concept of "career criminal" to account for one dimension of recidivism. According to Reckless, the essential characteristics of the career criminal are:
1. Crime is his way of earning a living. The career criminal considers crime his main occupation thus he commits property offenses, such as robberies, burglaries and larcenies. He will probably not commit a crime of violence.

2. He develops techniques useful to the commission of property offenses.

3. The career criminal develops attitudes favorable to crime and unfavorable to the larger society. He or she sees the criminal justice system as dishonest.

4. The career criminal starts as a delinquent child. Most have records of juvenile delinquency. Most of them are of lower class origin.

5. The career criminal expects to spend some time in prison, this being a normal hazard of his occupation. In prison he learns new methods of criminality.

6. The career criminal is usually normal psychologically. He has chosen crime as his occupation, for him it is a "rational" choice (Haskell and Yablonsky, 1970:78-79).
The United States Parole Commission uses an actuarial device to assess an offender's likelihood of a favorable outcome upon release from prison. This instrument is known as the Salient Factor Score and is based on seven items: prior convictions, prior commitments, age at first commitment, nature of offense, parole and probation history, drug history and employment history. The items are scored and added together to provide a tally between zero and eleven, the higher the score, the higher the probability of a favorable outcome.

The Salient Factor Score was tested on two random samples of federal prisoners in the early 1970's. The scores were collapsed to form four risk categories: very good risks (11-9), good risks (8-6), fair risks (5-4) and poor risks (3-0). Hoffman and Adelberg grouped the parole applicants while they were still in prison into one of the four risk categories using the Salient Factor Score. Two years after the parolees release from prison, the authors conducted a follow-up investigation and classified the parole period as either favorable (no new arrests or parole violations) or unfavorable (a new arrest or parole violation). Table 1 shows that the score clearly separates the parolees into four distinguishable risk categories.


Table 1 indicates the predictive power of the instrument was maintained from the first sample to the second, clearly showing that offenders in the very good category have a 90 percent chance of not recidivating while those in the poor category have only a 50 percent chance of a favorable outcome (Hoffman and Adelberg, 1980: 44-49).

Pallone and Hennessy (1977) used multivariate research methods to study recidivism among a group of male felons (aged 18-25) confined to a single prison in a northeastern state. Their study encompassed the following phases. First, the 105 subjects in the sample were placed in one of five categories relating to the outcome of their parole 22 months after their release from prison. The five categories were:

1. subjects convicted of subsequent offenses

<table>
<thead>
<tr>
<th>SALIENT FACTOR SCORE</th>
<th>FIRST GROUP</th>
<th>SECOND GROUP</th>
<th>COMBINED SAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Good (11-9)</td>
<td>90.7%</td>
<td>94.5%</td>
<td>92.4%</td>
</tr>
<tr>
<td>Good (8-6)</td>
<td>75.9%</td>
<td>81.4%</td>
<td>78.4%</td>
</tr>
<tr>
<td>Fair (5-4)</td>
<td>64.4%</td>
<td>68.5%</td>
<td>66.3%</td>
</tr>
<tr>
<td>Poor (3-0)</td>
<td>55.0%</td>
<td>58.0%</td>
<td>56.4%</td>
</tr>
</tbody>
</table>

Table 1

PERCENT FAVORABLE OUTCOME
(12 percent of the sample),

2. subjects whose parole was revoked and had been returned to prison (21 percent of the sample),

3. subjects currently on parole and in good standing (25 percent of the sample),

4. subjects who had satisfactorily completed parole (32 percent of the sample), and

5. subjects who had absconded (8 percent of the sample).

Second, after placing the subjects in the appropriate groups, the authors determined the statistically significant bivariate relationships between recidivism and the following nineteen predictor variables: (1) place of residence, (2) race, (3) level of formal education, (4) place of birth, (5) marital status, (6) employment status, (7) religious affiliation, (8) socio-economic status, (9) age at first recorded arrest, (10) drug usage history, (11) alcohol usage history, (12) number of prior arrests, (13) length of sentence, (14) ratio of time served before release on parole to length of sentence, (15) nature of the offense, (16) number of counts associated with the confinement, (17) number of counts related to drug abuse associated with the confinement, (18) history of prior institutionalization, and (19) participation in rehabilitation
services offered in the institution.

Of the 19 predictor variables, the following six were significant \((p < .05)\) when measuring the bivariate relationships between the criterion and predictor variables: number of prior arrests, number of drug related counts associated with the confinement, length of sentence, marital status, nature of offense and religious affiliation.

Third, the authors combined the two groups that had positive outcomes (groups C and D) and the two groups with negative outcomes (groups A and B) and eliminated group E. Pallone and Hennessy then analyzed the data by means of a stepwise multiple regression with recidivism as the dependent variable.

The authors note that the first six predictor variables found in Table 2 have been multivariately identified as statistically the most powerful set of predictors of recidivism. Three of these variables represent offender characteristics, two represent aspects of the prior record and one represents an offense characteristic.

The authors concluded that "the substantive findings in this study may hold some conceptual interest, we believe that its principle significance lies in the demonstration of the applicability of multivariate
TABLE 2
PREDICTOR VARIABLES VERSUS RECIDIVISM GROUP

<table>
<thead>
<tr>
<th>STEP</th>
<th>VARIABLE ENTERED</th>
<th>MULTIPLE R</th>
<th>COMMON VARIANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Number of drug related counts</td>
<td>.33619</td>
<td>.11303</td>
</tr>
<tr>
<td>2</td>
<td>Number of prior arrests</td>
<td>.39419</td>
<td>.15539</td>
</tr>
<tr>
<td>3</td>
<td>Race</td>
<td>.44773</td>
<td>.20046</td>
</tr>
<tr>
<td>4</td>
<td>Prior institutionalization</td>
<td>.47796</td>
<td>.22844</td>
</tr>
<tr>
<td>5</td>
<td>Religious affiliation</td>
<td>.49218</td>
<td>.24224</td>
</tr>
<tr>
<td>6</td>
<td>Place of residence</td>
<td>.49925</td>
<td>.24925</td>
</tr>
<tr>
<td>7</td>
<td>Employment Status</td>
<td>.50688</td>
<td>.25963</td>
</tr>
<tr>
<td>8</td>
<td>Alcohol usage</td>
<td>.50914</td>
<td>.25923</td>
</tr>
<tr>
<td>9</td>
<td>Marital Status</td>
<td>.51066</td>
<td>.26077</td>
</tr>
<tr>
<td>10</td>
<td>Age at first arrest</td>
<td>.51157</td>
<td>.26170</td>
</tr>
<tr>
<td>11</td>
<td>Length of sentence</td>
<td>.51243</td>
<td>.26258</td>
</tr>
</tbody>
</table>

research methods to estimating recidivism proneness" (Pallone and Hennessy, 1977:95-110).

In summary form, the five major points associated with recidivism reviewed in this section were:

1. Many adult offenders began as juvenile
delinquents.

2. The earlier a juvenile is arrested for his first offense, the greater the likelihood of recidivating.

3. The more frequently a juvenile is processed by the criminal justice system, the more likely he or she is to be imprisoned as an adult.

4. Juvenile recidivists are more likely to commit serious offenses than are one time offenders.

5. Recidivists are more likely to commit property crimes.

Factors Associated with Delinquency

This section of the review will examine selected factors that have been associated with juvenile delinquency. Prior research by various sociologists indicate the following areas are germane to the topic: broken homes, sibling position, family size, gender, rural versus urban residence, school achievement, intelligence, delinquent offenses and delinquent companions.

Broken Homes

Since the turn of the century the degree of importance attributed to broken homes vis-a-vis delinquency,
has been widely debated by sociologists producing a wide divergence in findings and conclusions. The purpose of this section is to examine this diverse body of research, and draw conclusions relevant to the present investigation.

Prior to 1932, the detrimental effect of broken homes on the socialization of children and its direct relationship to delinquency had been generally accepted and relatively unquestioned. Shaw and McKay's studies of Chicago (1932) were critical of past studies for their lack of methodological rigor which resulted in biases leading to unsubstantiated relationships between delinquency and broken homes. In order to alleviate the shortcomings of past studies, Shaw and McKay undertook a comparative study of Chicago schoolboys and male juvenile delinquents. In checking the incidence of broken homes they discovered the variable could not be viewed as a significant causal factor in determining delinquency (Shaw and McKay, 1932:517).

Wattenberg and Saunders (1954) conducted a study using complaints received by the Youth Bureau of the Detroit Police Department against approximately 5,000 juveniles. They found that 44 percent of the boys and 59 percent of the girls came from broken homes. The authors mentioned that the incidence of broken homes
among the juveniles was an indication of the extent of family disharmony within existing family structures (Wattenberg and Saunders, 1954:27).

Toby also observed that the association between delinquency and broken homes was stronger with girls and pre-adolescents than boys and adolescents. He contended that in the breakdown of the family, the girls and pre-adolescents are not as able to cope with the stresses as well as the boys and adolescents (Cowie et al, 1968:104). He also suggested that the actual separation or divorce of the parents may not be the most important determining factor in associating broken homes with delinquency. The emotional conflicts which come about in the family relationships have more impact on the child (Knudten and Schafer, 1970:183-185).

Nye (1958) conducted one of the most thorough and comprehensive examinations of the problem of juvenile delinquency and broken homes up to that time. He drew a sample of 800 boys and girls from high schools in three Washington towns, and added an additional sample of 146 males that were in a state training school which he used for comparison purposes. Nye concluded from the results of his study that the amount of happiness and concern within the family had a stronger relationship on the incidence of juvenile delinquency than did the actual
break in the family. Furthermore, the increased rate of delinquency in juveniles from broken homes indicated a lessening of control within the family due to either the loss of a parent or the addition of a stepparent. He also contended that adolescents from broken homes are over-represented among delinquents in institutions due to possible differential police and judicial action (Nye, 1958:42-48).

Recent studies by sociologists emphasize the relationships between family members and the process of socialization. Schafer and Knudten recognized that the emotionally disintegrated and disharmonious families "are too often preoccupied with problems that arise from real or imagined tension" (Schafer and Knudten, 1970:198). These families are characterized by unhappiness because of parental strain and consequently values ordinarily taught in the family setting are neglected. According to Schafer and Knudten, the children gradually lose affectionate membership within the family, influencing them to try and resolve their feelings of insecurity outside the home. In so doing they run the risk of succumbing to delinquent pressures while handicapped by emotional disturbances (Schafer and Knudten, 1970:198).

The four major points associated with broken
homes and delinquency reviewed in this section were:

1. Broken homes have been found to be a contributing factor in the cause of delinquency.
2. Sociologists have questioned the strength of the relationship between broken homes and delinquency.
3. Females and pre-adolescents appear to be more influenced by the effects of a broken home than boys and adolescents.
4. Emotionally disintegrated and disharmonious families produce strain that can weaken the child's tie to the family and society.

**Sibling Position**

Sibling position, or the status a child occupies within the family in relation to other siblings (such as only, first, intermediate or last) has been investigated by various authors on delinquency. They have attempted to verify whether there is any association between the particular position a child occupies within the family and delinquency.

Early theorists believed that first borns, youngest and only children were more apt to be delinquent because of the stress placed on them by being in a
particular position within the family. Several studies, however, using samples of delinquent children, found that the middle child was more apt to be delinquent.

One of the first studies to refute the beliefs held by the early theorists on sibling position and delinquency was by the Gluecks (1950). Among delinquents in their study, the Gluecks found the majority (60 percent) were ranked as middle children. Among the delinquents, the youngest child constituted 20 percent, the firstborn 15 percent and the only child five percent of the delinquent total. In the control group of non-delinquents, the same general pattern held true with 48 percent of the group classified as middle children, 24 percent were the youngest, 19 percent were firstborns and only children constituted nine percent of the total.

From their data, the Gluecks concluded that "contrary to general expectations, lower proportions of the delinquent boys were only children, first children or youngest children" (Glueck and Glueck, 1950:120). The Gluecks did not, however, make any specific statement about the middle child.

West's findings (1973) regarding rank order of the child tend to uphold the research of the Gluecks. In his study, the oldest and youngest were less likely to become delinquent. Of the 170 middle born children he
investigated, 25 percent were delinquent compared to 19 percent of 100 youngest and 16 percent of 140 only and oldest children. West proclaimed the relationship between birth order and delinquency "was merely a secondary consequence of family size, because middle born children tended to come from larger families with higher delinquency potential" (West, 1973:33).

The two major points associated with sibling position and delinquency reviewed in this section were:

1. Middle children are more likely to be delinquent than only children, eldest or youngest children.

2. Family size appears to be of more significance than the position of the child.

Family Size

Family size is related to sibling position in its effect on children and delinquency, however, the number of studies dealing with this topic are few.

An early belief about family size was that delinquents came from large families. The Gluecks (1950) examined this issue and found that delinquents did come from families that were somewhat larger than their control group of nondelinquents. They concluded: "greater crowding of the home meant increased competition on the part of the children for parental attention, more
likelihood of emotional strain, tension, friction and loss of privacy with resulting sexual and other emotional trauma" (Glueck and Glueck, 1950:120).

Nye's explanation of the relationship between family size and delinquency conjectures that in smaller families there exists more closeness and intensity of emotional involvement and interaction. This causes cohesiveness among family members, resulting in lower rates of delinquency among children in the small family as compared to larger families (Nye, 1958:37).

The key point pertaining to family size reviewed in this section was:

1. Larger families tend to have a higher rate of delinquency.

Gender

Examination of gender distributions in arrest rates reveal that historically the ratio stayed relatively constant at four males to one female.\(^1\) Beginning in 1965, however, the rate of referrals for females increased more rapidly than males. By 1973, the ratio of males to females had narrowed to three to one. Historically,

\(^1\)For an early study confirming this ratio, see: Merrill, Maud, Problems of Child Delinquency, 1947: p65.
females were more likely to be engaged in nonaggressive, private offenses. Recently, females have engaged in more hostile behavior, and statistics indicate that theft is the second most frequent offense juvenile girls are arrested for (Griffin and Griffin, 1978: 60-61).

Greene and Esselestyn's review of delinquencies in California indicated that 44 percent of all juvenile arrests are for law violations while 56 percent are for delinquent tendencies, or beyond control behavior. Of the juveniles referred for law violations, boys were referred four to one over girls, but in the beyond control group, there were six boys to every five girls referred (Greene and Esselstyn, 1972:13-19).

The two main points associated with gender reviewed in this section were:

1. The ratio of male to female arrests is narrowing.

2. Females are more apt to be arrested for offenses that would not be law violations if the juvenile were an adult.

Rural Versus Urban Residence

The earliest studies on spatial patterning of juvenile delinquency occurred in the 1920's. Clifford Shaw (1942) used official court and police statistics
and mapped the concentration of crime in Chicago. Shaw found the highest rates of delinquency were near the center of the city, and the rates decreased out from the center to a low near the outer boundaries.

A recent study by the Griffins indicated the Uniform Crime Reports for 1975 designated that the nature of delinquency did not differ much from one type of geographic area to another. For example, property crime accounted for 36 percent of all juvenile arrests in the cities, 33 percent in the suburbs and 31 percent in rural areas. The urban areas account for more curfew violations than the rural, however, this might be explained by the fact that curfews are more likely to be enforced in urban areas over rural areas. Rural youth are more apt to be arrested for violating liquor laws and running away (Griffin and Griffin, 1978:67).

Jensen and Rojek examined the crime statistics for rural and urban areas and found that in 1977 large metropolitan areas experienced twelve times more robberies per 100,000 individuals than rural areas. Moreover, the auto theft rate was five times higher, larceny six times higher, the rape rate was two times greater and burglaries and assaults were two times higher. They also reviewed juvenile court statistics for 1971
and found the juvenile courts reported 42 delinquency cases per 1000 residents in urban jurisdictions compared to 21 cases per 1000 residents in rural areas (Jensen and Rojek, 1980:65).

The major point associated with rural versus urban residence reviewed in this section was:

1. The nature of delinquency does not differ substantially from one geographic area to another; however, the rate of delinquency is higher in large metropolitan areas as compared to rural areas.

School Achievement

Hirschi studied the relationship between academic competency and delinquency. Using numerous test scores available on school records, his research indicated "the higher the boy's score, the less likely he is to have committed delinquent acts and the less likely he is to have been picked up by the police" (Hirschi, 1969:113). Hirschi contended the academically competent boy is more likely to do better in school because he likes school. Hirschi's comparison of boys who liked school with those who do not indicated 49 percent of the boys who disliked school committed two or more delinquent acts while only nine percent of the boys who liked school committed two or more delinquent acts (Hirschi, 1969:115-122).
The school is an important socialization agency because virtually all children attend school for an extended period of time. The Griffins speculated that high schools discriminate against the students in the lower class because the curriculum is oriented to college bound students. Students who aspire to go to vocational school or who want to become either skilled or unskilled workers find the high school program not suited to their needs and possibly even antagonistic towards their values and goals. These lower class children tend not to adjust to the school routine (Griffin and Griffin, 1978:257).

Another factor contributing to poor school achievement is learning disabilities. Sawicki and Schaeffer contended there are two schools of thought that support the learning disabled, juvenile delinquency link. The first is based upon the labeling process which causes a student who is a problem to be grouped with other children that are problems thus developing a negative self-image that is reinforced by adults and peers. The learning disabled child becomes influenced by those most likely to drop out or become delinquent. The second school of thought states that a juvenile with learning disabilities is susceptible to a variety of socially troublesome personality characteristics, such as general impulsiveness, poor reception of social cues
and a poor ability to learn from experience. The child with a learning disability is not as receptive to the usual social sanctions and rewards, thus developing an increased susceptibility to committing delinquent acts (Sawicki and Schaeffer, 1979:11-15).

The three major points associated with school achievement and delinquency reviewed in this section were:

1. Juveniles with low school achievement tend to have a higher level of delinquency.
2. Schools are a major influence in a juvenile's socialization and they tend to discriminate against students in the lower class.
3. Learning disabilities have been linked to juvenile delinquency.

Intelligence

In his review of the literature on the intelligence of juvenile delinquents, Shulman discovered most samples of delinquents drawn from court arraigned cases indicated that the delinquents tested lower in general intelligence than the average population.

To verify these findings, Shulman tested children in different areas of New York City. He discovered that children in high delinquency areas tended to have a lower tested intelligence than school children in low delinquency
areas. He studied five public schools in high delinquency areas, finding an average IQ of 91 compared to an average IQ of 103 for public school children in low delinquency areas. Shulman concluded there appeared to be a relationship between low socio-economic and cultural status and low IQ. Shulman argues, however, that the cultural interpretation tests used to determine IQ are discriminatory, because they are not cultural-free tests. He also warned that there is a relationship between cultural status and court arraignment (Shulman, 1951:763-781).

In Wolfgang's cohort study, an analysis of IQ scores disclosed differences between the recidivist and one-time offender. Regardless of the variables of race or SES, the chronic offenders scored eight to ten points lower than the one-time offenders on IQ tests (Wolfgang et al, 1972:93).

The major point associated with intelligence and delinquency reviewed in this section was:

1. Recidivists have lower IQ's than one time offenders.

Delinquent Offenses

Despite the time span, studies by Healy and Bronner (1926), Merrill (1947), the Gluecks (1950), Robbins (1963), Hughes (1970) and West (1973) all reached
similar conclusions: the majority of the offenses committed by juveniles were crimes against property. The next largest category was that of status offenses. Aggressive crimes accounted for a very small percentage of juvenile crimes.

Sanders (1976) indicated only five percent of the juvenile population appears in court in any given year. Victimization studies show that 90 percent of the youth have committed some form of delinquent acts, but most were not caught or arrested. Sanders believes delinquency is just a phase or part of growing up (Sanders, 1976:19-20).

Matza also feels that delinquency is a phase encountered by juveniles and he relates this phase to the notion of a delinquent subculture. He contended subterranean traditions are stripped of their more intolerable aspects and experienced by broad segments of the youth population. Matza indicated that the experiences encountered by youth in their search for fun and thrills include many of the juvenile status offenses. Matza summed it up: "teenage culture may be conceived as a conventional version, a reasonable facsimile, of subcultural delinquency" (Matza, 1964:64).

Jensen and Rojek note that the Uniform Crime Report includes 32 types of offenses. Their research
indicated that for 13 of the offenses, the arrest rate is highest for individuals 18 and under. In an analysis of these 13 categories, Jensen and Rojek discovered that arrests for arson, vandalism and running away were highest for 15-year-olds. Burglary, larceny and auto theft peak out at age 16, robbery embezzlement, receiving stolen goods and liquor law violations peak out at 17, and 18 is the peak year for drug abuse, disorderly conduct and illegal weapons violations (Jensen and Rojek, 1980: 70-71).

The three major points associated with delinquent offenses reviewed in this section were:

1. Property crimes account for the majority of juvenile offenses.
2. Status offenses are the next largest category of delinquency.
3. Delinquency is a phase of growing up.

Delinquent Companions

Sociology's major contribution to the understanding of deviance consists of two fundamental insights. First, persistent deviance flourishes best when it receives group support. Second, deviance thrives in particular locales where there is a history supporting it. Matza infers from this that the "deviant is linked
to society in minimal form through companies of deviants and through local traditions" (Matza, 1964:63).

Erickson probed the question of delinquent companions. He stated: "Nearly all available data suggest the majority of the delinquent acts for which male offenders are apprehended involve more than one person" (Erickson, 1971:114). Erickson questioned the adequacy of official statistics, however, on the grounds of accuracy and representativeness. To find out if the high incidence of group delinquency prevalent in official statistics is also common when self report data is used, he developed a study utilizing self report data (Erickson, 1971:116).

Erickson interviewed 150 boys in Utah and found group violation rates differed considerably from offense to offense. The rates ranged from 91 percent for destruction of property to 17 percent for defying parents. The overall group violation rate was 65 percent. Erickson compared the overall rate of 65 percent, found in his study, with rates found in official statistics that average about 85 percent. He concluded that high group violation rates are associated with offenses such as theft and destruction of property which are more apt to come to the attention of official agencies (Erickson, 1971:120-121).
The two major points associated with delinquent companions reviewed in this section were:

1. Delinquent behavior flourishes best when it receives group support.
2. Certain offenses are higher group violation offenses, such as destruction of property and theft.

**Juvenile Delinquency - The Major Theories**

The delinquency phenomenon is so complex no single theory or cause exists for explaining every aspect of juvenile crime, therefore, a variety of explanations as to the nature of delinquency causation have been advanced. This problem is further complicated due to the related areas of criminology and deviant behavior into which the specific study of juvenile behavior often overlaps. In an attempt to isolate the common denominators across many explanations, Hirschi contends there are currently three fundamental perspectives on delinquency and deviant behavior.

The first perspective is strain or motivational theories. Strain theories hold that there are legitimate desires that conformity cannot satisfy and this forces a person into deviance. According to Hirschi, the purest example of strain theory is found in Merton's "Social Structure and Anomie" (1957).
The second perspective is cultural deviance theories. According to this theoretical perspective the deviant creates his own standards which are in opposition to the larger societies' standards. An influential work in this perspective is Sutherland's "Differential Association" (1960).

The final perspective is control and/or bond theories. According to these theories, ties to the conventional order have somehow been broken leaving a person free to commit delinquent acts. A frequently employed example of the control approach is Matza's drift hypothesis (1964) which states that when a juvenile breaks his ties with conventional society, he may drift into delinquency.

Each of the above theoretical perspectives will be examined respectively.

**Strain Theories**

The strain perspective views delinquency as a result of frustration people experience because they are unable to achieve legitimate social and financial success. Strain theorists agree that values and goals are shared by most people but the ability to achieve them is limited largely by socio-economic class. Strain does not exist for upper and middle class individuals because their goals are obtainable more readily due to education.
and occupation. Lower class people living in slums, however, have very little access to legitimate avenues for obtaining success. Given these conditions, individuals may resort to deviant methods to achieve their goals or they may reject socially accepted goals and substitute others for them. Strain theory holds the lower class youth will follow the second option and develop a separate value system that is in conflict with middle-class values and middle-class social control agents (Siegel and Senna, 1981:106).

The origin for all strain theories may be found in Durkheim (1897). Durkheim contended deviance was an integral part of all societies largely because of the normative structures which defined certain behaviors beyond the boundaries of acceptability. Through such normative processes, deviant definitions, often of a criminal nature, are conferred upon specific acts which in turn indicate the very parameters of which is acceptable. To account for certain forms of deviance, Durkheim developed the concept of "anomie", referring to situations within which an acute lack of clarity existed in societal norms, for example during times of extreme economic prosperity or depression. Given that a major function of the normative structure is to regulate the actions of humans, serious disruptions in the structure could lead to a breakdown of the social system. In the process of
such a breakdown, there is generated a milieu capable of producing crime, delinquency, deviance and a host of anti-social disorders (Mannheim, 1972:395).

The seminal extension of Durkheim's anomie was produced by Robert Merton in "Social Structure and Anomie" (1957). In applying Durkheim, Merton assumed contradictions were implicit in a stratified order wherein the culture dictates success goals for all citizens and simultaneously limits institutional access to these goals beyond the upper strata. Since the lower class strata are excluded, they retaliate by choosing deviant alternatives. Consequently, Merton viewed this problem as a contradiction. The lower class aspires to success but the social restrictions to the realization of the success ambition are not always obvious to the class being restricted. Moreover, Merton contended, "they are often aware of a discrepancy between individual worth and social rewards, but they do not necessarily see how this comes about" (Merton, 1957:145-147).

Since its publication, Merton's anomie theory has received praise for its scope and precision; it has also received considerable criticism. Cohen questions the theory's comprehensiveness by insisting human goals and beliefs are not fixed and that personal relationships may influence delinquent behavior. Siegel and Senna
contend that Merton's theory also fails to account for violent behavior which may be unrelated to the attainment of success (Siegel and Senna, 1981:109-110).

Cloward and Ohlin (1960) expanded Merton's theory noting that the environmental system produces strain due to a lack of legitimate alternatives to satisfy needs. They contended that "widespread tendencies toward delinquent practices in the lower class are modes of adaptation to structural strains and inconsistencies within the social order" (Cloward and Ohlin, 1960:106). Furthermore, these modes of adaptation are passed from one generation to the next dooming lower class adolescents to defeat and failure (Cloward and Ohlin, 1960:106-107).

Cloward and Ohlin stipulated that all persons occupy positions in both legitimate and illegitimate opportunity structures. The nature of the response towards legitimate or illegitimate means is determined by the position of the individual in his social milieu. Thus, in the lower class there is differential opportunity not only in an individual's access to legitimate means but also to his access of illegitimate means. Cloward and Ohlin maintain that the limited access to illegitimate roles have much to do with the type of delinquent subculture that develops (Cloward and Ohlin, 1960:150-151).
Trojanowicz criticized Cloward and Ohlin for the following shortcomings: first, there is a difficulty in testing and evaluating the theory empirically, and second, there is the difficulty of translating the assumptions into practical applications (Trojanowicz, 1973:41).

The final theory in the strain perspective is Albert Cohen's work, "Delinquent Boys" (1964). He stated delinquency is mainly a lower class, working class phenomenon that is a result of working class boys not being able to deal with middle class institutions. Cohen maintained these juveniles become frustrated and react against these institutions. These reactions are sanctioned by the delinquent subculture which, according to Cohen, "takes its norms from the larger culture but turns them upside down. The delinquents conduct is right by the standards of his subculture, precisely because it is wrong by the norms of the larger culture" (Cohen, 1964:28). Thus the group supports each other's reactions in the form of delinquency, and places the blame on the middle class.

Cohen contended an important function of the delinquent group is the legitimation of aggression. Working class boys feel hostility, bitterness and jealousy towards the middle class due to their own
status frustration. Thus the legitimation of aggression frees the juvenile to express his aggression against the source of his frustration. Cohen claimed that the delinquent culture's attack is on middle class values through the destruction of property and the misappropriation of goods (Cohen, 1964:131-134).

Cohen's work has been criticized due to the lack of empirical evidence to support its validity. Siegel and Senna claim recent self-report studies indicate status frustration may be unrelated to delinquent behavior. Also questioned is Cohen's categorization of delinquency as malicious and negativistic. Kitsuse and Detrick object, pointing to recent evidence that delinquent behavior is rational and calculated in most cases (Siegel and Senna, 1981:113).

Cultural Deviance Theories

Cultural deviance theories assume slum youth adhere to a unique value system that exists within the lower class which places them in conflict with the rules and norms of the middle class. The value system stimulates lower class youth into delinquent behavior, and then is transmitted from one generation to the next. The result of this transmission is stable pockets of delinquency created and perpetuated from one generation to the next (Siegel and Senna, 1981:98).
A major theory from this perspective is Sutherland's Differential Association. This theory attempted to make sense of the multiple factors known to be associated with crime by organizing and integrating these factors into an explanatory theory based on causal analysis (Sutherland & Cressey, 1960:74).

Sutherland stated there are two types of explanations for criminal behavior. The first is historical or genetic, and the second is situational. The situational explanation is important because it provides an opportunity for a criminal act to occur. When the individual perceives a situation and defines it as a "crime-committing" situation he will then act; however, the historical or genetic explanation determines whether the individual has the inclinations and abilities to commit the act. This last explanation is the basis for Sutherland's Differential Association theory (Sutherland and Cressey, 1960:77).

Sutherland's theory explains the lower class youth's value system through differential access to social organizations. The lower class youth's associations are limited to the area he is reared, thus, in a slum area access to value systems that are in conflict with middle class society are prevalent (Sutherland and Cressey, 1960:79-80).
The main criticism directed at Differential Association has been the vagueness of its terms and the difficulty of testing its assumptions. Despite these criticisms, Differential Association has been important as it offers an explanation for all types of delinquent and criminal behavior (Siegel and Senna, 1981:130).

The final theory in this perspective focuses on lower class members of adolescent street corner groups. Miller (1958) stated the lower class has a tradition different from the middle class, and illegal acts by members of the lower class are viewed as a positive effort to achieve what is valued within their milieu. Moreover, delinquency is a reflection of the lower class corner group's norms, values and beliefs (Miller, 1978:153).

Miller's view of the delinquent differs from the image presented by the strain perspective. Miller depicts delinquents as the most persevering and able members of their particular community. Miller has argued that in order for a boy to become a member of the gang he must subordinate his individual preference to the interests of the group. Thus, he sees the delinquent as a conformist who is in conflict with the law because the subculture's standards are different from the larger societies (Miller, 1978:149).
Miller's theory is primarily directed at explaining lower class gang behavior and does make an important contribution in understanding this phenomenon. However, Miller's work has been contradicted by "empirical studies that indicate lower class delinquents actually share many of the same values and attitudes as nondelinquents" (Siegel and Senna, 1981:106).

Control Theories

Control theories revolve around the assumption that delinquent acts result when an individual's bond to society is weak or broken. There are four elements that make up this bond to society:

1. Attachment - refers to the ties of the individual to others.

2. Commitment - is the fear that keeps individuals from deviating from the norm.

3. Involvement - assumes that an individual is too busy doing conventional things to engage in delinquent behavior.

4. Belief - refers to an individual's beliefs in the rules of society.

As these four elements are crucial to Control Theory, they will be examined in more detail.

Belief - Control theories assume within society
there is a common value system. When the norms are being violated, Control theory seeks the answer to: "Why does a man violate the rules in which he believes?" It is assumed the individual has been socialized into the group and thus he believes in the rules he is violating. Control theorists argue the delinquent rationalizes his behavior so he can maintain his belief in them while he is violating them (Hirschi, 1969:23-25).

**Attachment** - Control theories focus upon the bonds which tie an individual to society. Attachment is a concept that illustrates one such bond by explaining an individual's conforming behavior in society. An individual that displays this conforming behavior will be sensitive to others. This individual will have internalized the norms of society and will not violate these norms because it would be contrary to the expectations of other people. A person that is not bound by the norms of society will not care about the expectations of others and will feel free to deviate (Hirschi, 1969:16-19).

**Commitment** - Commitment is the rational component in the conformity of an individual. An individual considering a delinquent act must consider the cost of that behavior, and the risk he runs of losing the investment made in conventional behavior. Commitment assumes that the
interests of most people would be endangered if they were to engage in delinquent acts. Commitment also suggests that ambition and/or aspiration plays a part in producing conformity (Hirschi, 1969:20-21).

Involvement - The concept of involvement assumes that if one is engrossed in conventional activities there is little time for deviant behavior. Many sociologists hold the view that "Idle hands are the devil's workshop" and that too much leisure produces a set of values which lead to delinquency (Hirschi, 1969:22-23).

Thus the answer to the question, "Why don't we do it?" resides in the bonds one has to society. It appears the more closely an individual is tied to conventional society, the more likely one is to be bound by the four elements of the bond and thus to conventional behavior.

Containment Theory (originated by Walter Reckless) departed from prior sociological theories by devoting attention to the individual characteristics of the individual. Containment theory works on the assumption that there are two sources of control over an individual's behavior. One is an external social structure that holds people in line and the other is an internal structure which keeps individuals from deviating from the social and legal norms. The two containments work together as
a defense against deviation from these social and legal norms (Reckless, 1978:188).

Although outer and inner containment are often viewed as distinct entities, they are very interrelated. The basic component of inner containment is the individual's self concept, while the basic components of outer containment are the institutions within which the individual is involved. The individual's inner containment, or self concept, is influenced by, and partly made up of, perceptions of the environment and the institutions in which one participates (Reckless, 1973:195).

Containment Theory's major strength is its ability to explain both conforming and deviant behavior of youth in high crime areas. The major shortcomings are ambiguity of terms, the inability of the theory to be tested empirically and its failure to distinguish between types of delinquent behavior (Siegel and Senna, 1981:142).

Similar to Containment Theory, Matza's Drift Theory attempted to explain both delinquent and non-delinquent behavior. Matza defined drift as episodic release from moral constraint. He contended that an individual that drifts is "neither compelled nor committed to deeds nor freely choosing them: neither different in any simple or fundamental sense from the law abiding, nor the same; conforming to certain traditions in American life while partially un receptive to other more conventional
traditions" (Matza, 1964:28). The delinquent is involved in delinquent behavior and in a wide variety of conventional activity. Thus the individual who is involved in delinquent behavior is neither committed to delinquent or conventional behavior. According to Matza, the delinquent as drifter "more approximates the substantial majority of juvenile delinquents who do not become adult criminals than the minority who do" (Matza, 1964:29).

Drift Theory makes several major contributions to the field of delinquency. First, the theory accounts for the teenage delinquent who does not become an adult criminal. Second, it does not presuppose that juvenile delinquents reject all middle class values and beliefs. Finally, the theory provides a logical explanation for many delinquent activities other theoretical orientations were unable to explain.

The major criticism of Drift Theory is it fails to distinguish why certain juveniles consistently drift into delinquency and others do not (Siegel and Senna, 1981:135).

Johnson (1979) developed a causal model of delinquent behavior containing many of the elements found in Control Theory, but also incorporating various elements found in Strain and Cultural Deviance theories. According to Johnson, his model is based on the following seven
variables considered relevant to delinquent behavior:

1. social class,
2. parent-child relationships,
3. school experiences,
4. future-oriented strain,
5. delinquent associates,
6. delinquent values, and
7. deterrence through fear of threatened punishment.

Johnson contended the most crucial elements of the model are the adolescents' attachments to parents and school. (Johnson, 1979:116).

Summary

Based on studies presented in the review of the literature, one may conclude that recidivists appear to be responsible for a large proportion of the crimes committed throughout the nation. Of particular interest to this study is the conclusion made by many researchers that juvenile recidivists have a higher probability of becoming adult offenders than any other group of juveniles or adults. These conclusions indicate the need for a

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1 The theoretical orientation for this investigation is based on Johnson's causal model. For an expanded analysis of his model, see Chapter III.
causal model that will predict which juvenile offenders will be most likely of becoming recidivists. An attempt at such a model is Pallone and Hennessy's study on recidivism proneness among parolees which was reviewed in this chapter. Through the use of multivariate research methods, the authors determined which predictor variables best explained recidivism. They also emphasized the importance of using multivariate research methods in predicting recidivism. Pallone and Hennessy's study is important to this investigation because it sets a precedence for using multivariate research methods in predicting recidivism, however, the population under study for this investigation is considerably different than the parolees used in the Pallone and Hennessy study.

To aid in the development of a causal model suitable for juveniles, various factors associated with delinquency were examined. Broken homes as a causal factor has generated considerable debate among sociologists. The broken home has run the gambit from being the most important variable influencing delinquency to having no influence at all. Currently, many sociologists contend that the disharmony in the home, be it an intact or broken home, weakens the juvenile's ties to society and increases the likelihood of delinquency.
The spatial patterning of delinquency appears to be a significant variable for the causal model. Several studies indicate that the nature of delinquency appears to be the same between rural and urban settings, however, the incidence of delinquency appears to be lower in rural areas. Also of importance to the model is the factor of school achievement. Studies indicate the juvenile that does poorly in school is more likely to be involved in delinquent behavior than the child that does well in school. The final variable of importance to this study is that of delinquent companions. Research into this area indicates that most delinquency is committed with delinquent peers.

The variables of sibling position and family size appear to be indirect causal factors that are of significance when combined with the variable broken home. The variable of IQ has produced conflicting views among sociologists as to its effect on delinquency. Numerous studies indicate the delinquent has scored lower on IQ tests, however these scores have been criticized on the grounds they lack cultural interpretation.

The final section in this review of the literature examined the Strain, Cultural Deviance and Control perspectives. These major theories offer differing explanations for the cause and effect the above stated factors have on delinquency. Strain theorists contend
adolescents are driven to delinquency as a result of frustration experienced because of an inability to achieve legitimate success goals. Therefore, juveniles commit crimes to gain commodities that society has convinced them as being important to obtain.

Cultural deviance theorists stress the adherence to the norms and expectations of juveniles to their associates. Therefore, the adolescent is drawn into delinquent acts in an attempt to live up to perceived expectations of delinquent associates.

Control theorists state a juvenile's stake in conformity revolves around the formation of bonds to society. Control theories account for many of the factors associated with delinquency examined in this investigation. The family is a primary bond to society. Therefore, juveniles from broken homes, juveniles who are intermediate children and juveniles from large families have increased prospects of becoming involved in delinquent behavior because of their weak bonds to society. The school also forms a major bond to society for adolescents. Therefore, juveniles who do not perform well in school are more likely to commit delinquent acts because of their weak bonds to society.
Johnson attempts to pull these three perspectives together into a workable model. He contends that each of the theoretical orientations contain insights into the understanding of delinquent behavior. Johnson states that his model incorporates the most promising insights from various perspectives into a single causal model, with the goal of predicting delinquent behavior (Johnson, 1979:138).

Chapter III will pull together the major theoretical orientations through Johnson's model.
CHAPTER III

THEORETICAL FRAMEWORK

Introduction

The purpose of this chapter is to develop a theoretical framework that will describe, explain and predict delinquency. According to Hirschi, the three major perspectives best accounting for delinquency are Strain, Control and Cultural Deviance Theories. Each of these perspectives was reviewed in Chapter II. Johnson selects elements from each perspective and incorporates them into a causal model for delinquency (Johnson, 1979:1). This model will be used as the theoretical framework guiding the present investigation.

The remainder of this chapter will examine Johnson's causal model of delinquency and apply his framework to this investigation by developing testable hypotheses pertinent to this study.

Assumptions

In developing a causal model utilizing numerous perspectives, Johnson makes three assumptions about juveniles and delinquency. First, he aggregates all delinquent acts and assumes there is a commonality in the causal mechanisms. Second, he contends his model
applies to all American juvenile males and females, regardless of race, social class or adolescent age range. Third, his model focuses on the way American society is today, and it is not concerned with cross cultural comparisons. Johnson assumes, moreover, that most delinquency is uniform throughout the country, with little evidence of any delinquent subcultures existing. Johnson sums up by stating the purpose of the model is to "formulate an explanation of a wide variety of law violations committed by a wide variety of juveniles, focusing on social and especially social psychological processes" (Johnson, 1979:42-45).

A Model of Delinquent Behavior

In Johnson's model of delinquent behavior, there are eleven elements which contribute either directly or indirectly to the causation of delinquency. Each element has been drawn from the traditions of research in Control, Strain and Cultural Deviance theories as reviewed in Chapter II. For the sake of precision, the definition of the terms covered in Chapter II, Review of the Literature, will be rephrased in the vocabulary used by Johnson.

Attachment to Parents - refers to the closeness of the parent-child relationship. "It entails feelings
of love, respect, desire to be near and to please parents, and it includes the actual sharing of time and feelings with them." The unstated assumption is the control theory reasoning that the attached youth has a greater stake in conformity (Johnson, 1979:48).

**Attachment to School** - "entails enjoyment of school and school related activities, positive feelings about teachers and a willingness to put forth the effort necessary to succeed" (Johnson, 1979:49).

**Love/Concern of Parent for Child** - "should reflect itself in the ways the child feels he or she is treated by the parents." The greater the parents' love, the greater the self-esteem felt by the child which is a major cause of the child's attachment to parents (Johnson, 1979:50-51).

**Success of Performance in School** - is in part dependent upon the amount of success the adolescent has enjoyed there in the past. Poor school performance appears to be related to dislike for school (Johnson, 1979:52).

**Future-Oriented Perceived Strain** - is presumed to be one mechanism through which school failure leads to detachment from school (Johnson, 1979:54).

**Social Class** - as used by Johnson employs the
underclass/earning class model. This is a dichotomous conception of the very poor versus the rest of society. Being from a very poor family (underclass) is presumed "to affect negatively the child's chances for school success and for receiving rewarding, esteem-building treatment from his or her parents" (Johnson, 1979:55).

**Delinquent Associates** - refers to being in the company of others - each with a degree of situational acceptance of delinquent behavior "in the name of such socially valued ends as excitement, loyalty to friends, daring, retributive justice or possession of expensive goods - is likely sometimes to result in misbehavior" (Johnson, 1979:59).

**Delinquent Values** - are viewed on a continuum, along which the likelihood of accepting law violations varies under certain circumstances. "In other words, adolescents are sometimes motivated into illegalities by seeing those acts as situationally acceptable" (Johnson, 1979:59).

**Anticipated Peer Approval for Delinquency** - is a common shared misunderstanding among adolescents that delinquent behavior is situationally expected and/or approved by their associates. "Delinquent acts seem more acceptable in the group context than they appear
to be in isolation" (Johnson, 1979:65).

**Perceived Risk of Apprehension** - is altered by:

1. minimizing the chances of being caught because numerous delinquent acts that are committed go undetected, and
2. being in the presence of peers confers a safety-in-numbers feeling on the adolescent (Johnson, 1979:65).

**Susceptibility to Peer Influence** - is best avoided by forming attachments to conventional society. However, those who have weak ties to conventional society will tend to flock together with others who are similarly less controlled from deviance and more accepting of illegalities (Johnson, 1979:67-68).

According to Johnson, the basic and most crucial elements of the model are the attachments that an adolescent forms to his parents and to his school. In a sense these are the building blocks of his model which presumes that a youth who feels attachment to others will have a greater stake in conformity. The model begins with this basic building block:

```
Attachment to Parents → + → Delinquent Behavior
|                         |
| Attachment to School    |
```

59
Johnson declares that an adolescent who feels attachment to his parents will have a close parent-child relationship. Similarly, a juvenile who has a positive feeling about school and is willing to put forth enough effort to succeed will feel attachment towards school. In both instances, the greater the degree of attachment the less chance of being involved in delinquent behavior as noted in the model by the (−) which indicates an inverse relation.

The arrow from Attachment to parents to Attachment to school indicates an adolescent's conforming to his parent's view that school success is important. The child that is attached to his parents will strive to "please" by doing well in school. This is indicated in the model by a single arrow as it does not reflect a direct link to delinquency (Johnson, 1979:48-50).

Johnson expands the model to reflect the strength of the adolescent's attachments to parents and school.

```
Attachment to Parents

Love/concern of parent for child

Success of performance in school

attachment

Attachment to School

Delinquent Behavior

attachment
```
Johnson contends the search for self-esteem by adolescents is "the invisible mechanism through which parental love and school success lead to attachments to parents and schools" (Johnson, 1979:50). Self-esteem is the key to a formation of a bond to society by children. This bond, formed through relationships with members of society, is the foremost aid in the prevention of delinquency. The most important bond is the parent-child relationship. In the parent-child relationship, the amount of love or concern the parent reflects on the child is directly related to how a child feels about himself or herself. The more the child perceives the parents love, the more attachment the child will feel towards the parent. On the other hand, if a child perceives parental rejection, he or she will feel less attachment to parents and consequently his or her stake in conformity is lowered. Similarly, the attachment an adolescent feels towards school is directly related to the child's success in school. The final path in this part of the model represents the influence a parent's love and concern for the child has on the adolescent's chances for success in school. Johnson affirms that a parent who cares for his or her child is willing to support and aid the child in school, thus enhancing the child's chances at success in school (Johnson, 1979:50-52).
The model is further extended with the addition of social class and strain:

Johnson takes into account the role of Strain in context with school success. However, he points out that Strain plays a relatively minor role in the model. Johnson states that strain is "one mechanism through which school failure leads to detachment from school, but only one possible route" (Johnson, 1979:54).

Johnson relates social class to attachment to parents and to attachment to school. In dealing with social class, he utilizes the underclass/earning class model for social class. This model presumes the very poor family negatively affects the child's chances for school success and for esteem building by the parents. Johnson points out that "social class will not be presumed to relate to delinquent behavior in any way other than through generating differentials in parent and school attachment" (Johnson, 1979:55).
Johnson builds on to the model by including delinquent associates and delinquent values.

Adolescents who are less attached to parents and school are more apt to seek out other's companionship who also feel little attachment and thus little desire for conformity in society. Related to delinquent associates is delinquent values. The more an individual begins to relate to other delinquent companions, the more likely he is to alter his values away from conventional values to delinquent values (Johnson, 1979:60-62).

The last three elements of the model are anticipated peer approval for delinquency, perceived risk of apprehension for delinquency and susceptibility to peer influences. Johnson contends the search for peer approval is a powerful influence used by delinquent companions for generating delinquent conduct. Also of importance is the perceived risk of apprehension. Delinquent associates influence other adolescents by minimizing the risk of
apprehension. Finally, Johnson includes susceptibility to peer influence. The adolescents' self-esteem is formed through attachments to society. Positive self-esteem is developed through rewarding relationships with parents and school. When these are absent, the adolescent must search elsewhere to fulfill these needs and becomes more susceptible to delinquent companions (Johnson, 1979: 67-70).

Johnson's basic theoretical framework states:

"it is based on numerous empirical findings and incorporates causal processes from apparently widely divergent orientations. It can be characterized as an 'attachment' brand of control theory, but it also includes an appreciation for the roles in generating delinquent behavior of class, strain, peers, values and perceived risks. It could also be tagged as a brand of differential association theory that includes a place for social controls and so forth. Indeed, perhaps one of its greatest assets is the difficulty in naming it. It is truly a step in the direction of integrating many prominent, often competing, conceptions into one testable formulation" (Johnson, 1979:70).
Johnson's conceptual framework, the review of the literature and generally held principles from the discipline of sociology suggest the following theoretical propositions:

I. The family is a major source for transmitting societal norms.

A. The child who is attached to his/her parents is likely to follow the norms of society.

B. A weakening of the family weakens the attachment process.

C. Family composition affects the family
1. Juveniles from large families are not as likely to be strongly attached to parents as juveniles from small families.

2. Juveniles who are intermediate children are not as likely to be strongly attached to parents as juveniles occupying other positions in the family structure.

D. Social Class affects the attachment process between parents and children.

1. Lower social class membership decreases the likelihood of strong attachments to parents.

II. The school is a major source for transmitting societal norms, one of which is conformity.

A. Positive experiences in school increase the adolescent's stake in conformity.

1. Poor school achievement decreases the likelihood of the student feeling committed to societal norms.

2. Juveniles who drop out of school have a greater probability of poor academic achievement, thus feeling
less commitment to society.

B. Intelligence (measured by IQ) affects the amount of school achievement the juvenile attains.

1. Juveniles with below average intelligence are not as likely to attain school success as those with average and above intelligence, and thus they feel lower attachment to societal norms.

C. Involvement in conventional activities leads to greater societal bonding.

D. School functions and work are major forms of conventional activities.

1. The greater a juvenile's involvement in school activities and work, the more likely he/she is to be committed to societal norms.

2. Juveniles who are not involved in conventional activities are more likely to commit serious offenses than juveniles involved in conventional activities.

III. Peer groups are a major transmitter of societal norms.
A. Positive experiences with law-abiding peers leads to a commitment to societal norms.

1. Juveniles who associate with delinquents are likely to be less committed to societal norms.

IV. Community size affects attachment to societal norms.

A. Larger communities, as compared to smaller communities, exert less normative influence on juveniles.

1. Juveniles from farming communities and small towns are more likely to be attached to the norms of the community than juveniles from cities.

V. Beliefs are means of bonding an individual to the norms of society.

A. Beliefs about sexual values influence juvenile behaviors which may be at variance with the norms of society.

1. Males are less likely to follow the norms of society than females.

B. Conflicting beliefs about the status of adolescents in society leads to role
confusion for adolescents.

1. The younger the juvenile, the more likely he/she is to continually violate the norms of society.

Based on the theoretical propositions stated, the following fourteen null and research hypotheses are tested in this investigation:

HN<sub>1</sub> There will be no difference between male and female juveniles and recidivism.

HR<sub>1</sub> Males will exhibit higher rates of recidivism than females.

HN<sub>2</sub> There will be no difference between a juvenile's age at his or her first adjudication and recidivism.

HR<sub>2</sub> The younger the juvenile at his or her first adjudication the higher the rate of recidivism.

HN<sub>3</sub> There will be no difference between the size of a juvenile's family and recidivism.

HR<sub>3</sub> The larger the size of a juvenile's family, the higher the rate of recidivism.

HN<sub>4</sub> There will be no difference between a juvenile's position in the family and recidivism.

HR<sub>4</sub> Juveniles classified as middle children will have higher rates of recidivism than children classified as oldest, youngest or only children.
HN$_5$ There will be no difference between juveniles from broken homes and recidivism.

HR$_5$ Juveniles from broken homes will have higher rates of recidivism than juveniles from intact homes.

HN$_6$ There will be no difference between a juvenile's school achievement and recidivism.

HR$_6$ Juveniles with low school achievement will have higher rates of recidivism than juveniles with average or high school achievement.

HN$_7$ There will be no difference between completion of school and recidivism.

HR$_7$ Juveniles who drop out of school will exhibit higher rates of recidivism than juveniles who stay in school.

HN$_8$ There will be no difference between a juvenile's employment status and recidivism.

HR$_8$ Juveniles who do not work will exhibit higher rates of recidivism than juveniles that do work.

HN$_9$ There will be no difference between a juvenile's involvement in conventional activities and recidivism.

HR$_9$ Juveniles who are not involved in conventional activities will exhibit higher rates of recidivism than juveniles who are involved in conventional
activities.

HN_{10} There will be no difference between a juvenile's place of residence and recidivism.

HR_{10} Juveniles residing in the city will exhibit higher rates of recidivism than juveniles residing within the county.

HN_{11} There will be no difference between a delinquent's associates and recidivism.

HR_{11} Juveniles who commit offenses with delinquent associates will exhibit higher rates of recidivism than juveniles who commit their offenses alone.

HN_{12} There will be no difference between the seriousness of offense and recidivism.

HR_{12} Juveniles who commit serious offenses will exhibit higher rates of recidivism than juveniles who do not commit serious offenses.

HN_{13} There will be no difference between a juvenile's intelligence and recidivism.

HR_{13} Juveniles with below normal intelligence will exhibit higher rates of recidivism than juveniles with normal or above normal intelligence.
HN₁₄ There will be no difference between the socio-economic status of a juvenile's parents and recidivism of the juvenile.

HR₁₄ A juvenile with parents who have a low socio-economic status will exhibit higher rates of recidivism than a juvenile with parents who have an average or above socio-economic status.

Each of the variables presented in the null and research hypotheses will be operationally specified in the following chapter, Research Design.
CHAPTER IV

RESEARCH DESIGN

Introduction

This chapter presents this investigation's research design which describes the units of analysis, the data collection techniques, the operational specifications of major variables, the modes of analyses and the level of significance.

Units of Analysis

For the purpose of this study, the population being investigated is those juveniles adjudicated either as a delinquent or as a Child in Need of Supervision (CHIN) by the Brookings Juvenile Court between 1970 and 1977. The total CHIN/delinquent population for this study numbers 449.

The smallest unit for this study would be each individual juvenile who has been adjudicated by the juvenile court between 1970 and 1977. The major focus, however, is upon the total group, given that the purpose of this investigation is to find trends that best characterize behavior at that group level.

Data Collection

Data pertinent to each of the variables were
collected from the juvenile probation files for Brookings County for the time period 1970-1977. The data were coded, key punched and verified for computer manipulation using standard statistical measures and mathematical applications.

Data were collected to:
1. provide a descriptive analysis of the characteristics that best portray the delinquent child in Brookings County from 1970 through 1977,
2. determine the extent of the variance between the one-time offender and the recidivist,
3. develop a model that will predict which one-time offenders have a greater probability of becoming recidivists, and
4. finally, to draw appropriate implications for recommendations.

Dependent Variable: Recidivism

The dependent variable for this study is recidivism. Recidivism is operationalized by the following criteria: a juvenile has had more than one adjudication by the Brookings Juvenile Court for
either CHIN or delinquent offenses.\footnote{For this study, a child can be adjudicated in one of two ways:
  a. the juvenile court finds the child has committed a delinquent act and declares the juvenile a delinquent child, or
  b. the juvenile court finds the child to be in need of supervision and declares the juvenile a Child in Need of Supervision.}

**Independent Variables**

The data for the independent variables used in this study were contained in the juvenile probation files and operationalized as follows:

- \(X_1\) Gender - male and female.
- \(X_2\) Age - the age of the juvenile at the time of his or her first adjudication. Children under 10 years of age were coded as 10.
- \(X_3\) Number of children in family - the total number of children in the family including the delinquent child. For families with more than nine children, the code of nine was used.
- \(X_4\) Position of the child in the family - the position the delinquent child occupies within the family. There were four coded positions: only child, first child, intermediate child or last child.
X_5 Broken home - whether one or both of the biological parents of the delinquent have experienced a death, divorce, desertion or separation. There were two coded categories: intact homes\(^1\) and broken homes.

X_6 School achievement - measured by the grades obtained in school by the delinquent prior to his or her adjudication. The grades were averaged and coded using the following scale: F = Failure, D = Below Average, C = Average, B = Above Average, A = Outstanding.

X_7 School dropout - whether the juvenile has dropped out of school (according to school records found in the probation files) prior to his first or subsequent adjudication. There were two coded positions; yes and no.

X_8 Juvenile employment - whether the juvenile has a job, be it part time or full time, prior to his first or subsequent adjudication. There were two coded positions; yes and no.

\(^1\)An intact home indicates that the delinquent's biological parents have never experienced a family disruption, such as death or divorce.
$X_9$ Involvement in organized activities - this variable indicates whether or not the juvenile is involved in one or more activities, includes both school and extracurricular activities connected with the school, such as FFA. There were two coded positions; yes and no.

$X_{10}$ Residence of juvenile - refers to the locale where the juvenile's home is located, this was coded using the following categories: Brookings, rural farm (the family lives on and works the farm), rural non-farm (the family lives in the country, but not on a working farm) and rural town (includes all the towns in Brookings County, excluding the city of Brookings).

$X_{11}$ Delinquent companions - this variable indicates whether the delinquent was assisted by one or more companions during the commission of his or her delinquent act. There were two coded positions; yes and no.

$X_{12}$ Seriousness of offense - the delinquent acts committed by juveniles in this study were coded into two classifications: serious and non-serious. The following offenses were
considered serious: assault, burglary, fraud, grand theft and sex offenses. All other offenses were defined as non-serious.

$X_{13}$ Intelligence - the intelligence of each juvenile was measured by IQ tests given in the schools and at the Guidance Center. The scores were coded using the Stanford Binet Scale, with the lowest IQ for this study being 75 and the highest being 130.

$X_{14}$ Parent's socio-economic status - the parent's socio-economic status was measured using the father's and mother's occupation (if any) as coded on the Duncan SES Index. Duncan's Index ranges from 1 to 99. For this study, the scores were divided into three groups: blue collar (scores 1 through 39 on Duncan's SES Index), white collar (40 through 64 on Duncan's Index) and professionals (65 through 99 on Duncan's Index).

**Mode of Analysis**

The initial analysis sought to determine whether a statistical difference existed between each independent variable and the dependent variable. To test for
independence, the chi-square test was utilized \((p < .05)\).\(^1\)

The next step measured the correlation between the independent variables found to be significant at the .05 level and the dependent variable. Kendall's \(\text{tau}\) was used to measure the association. \(\text{tau}_b\) was used with square tables while \(\text{tau}_c\) was used with rectangular tables. Kendall's \(\text{tau}\) illustrates the direction and the strength of the ordering of pairs. Kendall's \(\text{tau}\) ranges from +1 (when the positive value of the concordant pairs predominate) to -1 (when the negative value of the discordant pairs predominate) (Nie et al., 1975:227-228).

The third portion of the analysis involved an examination of the relationship between the independent variables and the dependent variable utilizing the stepwise multiple regression statistical technique.\(^2\) Multiple regression can be used as a descriptive tool "by which

\(^1\)The chi-square tests statistical significance. It helps "determine whether a systematic relationship exists between two variables." Small values of chi-square indicate the absence of a relationship, or statistical independence, while large chi-squares imply "a systematic relationship of some sort exists between the variables" (Nie et al., 1975:223-224).

\(^2\)For a comprehensive description of the formula, interpretation and computer programming for multiple regression, see Chapter 20 in the SPSS manual (Nie et al., 1975).
the linear dependence of one variable on others is summarized and decomposed" (Nie et al, 1975:321). There are three important uses of multiple regression as a descriptive tool that are pertinent to this research:

1. "To find the best linear prediction equation and evaluate its prediction accuracy."

2. "To control for other confounding factors in order to evaluate the contribution of a specific variable or set of variables."

3. "To find structural relations and provide explanations for seemingly complex multivariate relationships" (Nie et al, 1975:321).

The formula for the regression equation assumed the form: \( Y' = A + B_1 X_1 + B_2 X_2 + \ldots + B_k X_k \) (Nie et al, 1975:328).

**Significance Level**

The level of significance specified throughout this investigation was \( p < .05 \).
CHAPTER V

ANALYSIS OF THE FINDINGS

Introduction

This chapter reports the findings for this study. The findings are divided into four sections in order to profile the data following the objectives for this study. The first section is a descriptive analysis of the data, the second is a test of the null and research hypotheses, the third section controls for extraneous variance and the last section is a regression analysis.

Descriptive Analysis

Objective one of this study was to profile the relevant characteristics of the 449 juveniles adjudicated in the Brookings Juvenile Court between 1970 and 1977.

The first characteristic divides the juvenile population by gender. Table 3 indicates that 78 percent of the 449 juveniles were male while 22 percent were female.

TABLE 3
GENDER

<table>
<thead>
<tr>
<th>Sex</th>
<th>Absolute Frequency</th>
<th>Relative Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>350</td>
<td>78</td>
</tr>
<tr>
<td>Female</td>
<td>99</td>
<td>22</td>
</tr>
</tbody>
</table>

N=449
The second characteristic reflects the age of the juvenile at his or her first adjudication in juvenile court. Table 4 indicates that a majority of the juveniles, 53 percent, were in their late teens (16 and 17 years old) when first adjudicated. On the other hand, juveniles in their pre-teens (10, 11 and 12) only account for 8.2 percent of the total. Juveniles in their early teens (13, 14 and 15) account for 38.8 percent of the delinquent population.

TABLE 4

AGE AT FIRST ADJUDICATION

<table>
<thead>
<tr>
<th>Age</th>
<th>Absolute Frequency</th>
<th>Relative Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>7</td>
<td>1.6</td>
</tr>
<tr>
<td>11</td>
<td>13</td>
<td>2.9</td>
</tr>
<tr>
<td>12</td>
<td>17</td>
<td>3.8</td>
</tr>
<tr>
<td>13</td>
<td>39</td>
<td>8.7</td>
</tr>
<tr>
<td>14</td>
<td>57</td>
<td>12.7</td>
</tr>
<tr>
<td>15</td>
<td>78</td>
<td>17.4</td>
</tr>
<tr>
<td>16</td>
<td>113</td>
<td>25.2</td>
</tr>
<tr>
<td>17</td>
<td>125</td>
<td>27.8</td>
</tr>
</tbody>
</table>

N=449

The next category indicates the actual number of children in the family, including the delinquent.
Families with nine or more children were classified as having nine children. Small families (one and two children) accounted for 11.7 percent of the delinquent population using the adjusted frequency.

**TABLE 5**

**TOTAL NUMBER OF CHILDREN IN FAMILY**

<table>
<thead>
<tr>
<th>Number of Children</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>2</td>
<td>36</td>
<td>8.0</td>
<td>9.0</td>
</tr>
<tr>
<td>3</td>
<td>76</td>
<td>16.9</td>
<td>19.0</td>
</tr>
<tr>
<td>4</td>
<td>92</td>
<td>20.5</td>
<td>23.0</td>
</tr>
<tr>
<td>5</td>
<td>68</td>
<td>15.1</td>
<td>17.0</td>
</tr>
<tr>
<td>6</td>
<td>54</td>
<td>12.0</td>
<td>13.5</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
<td>5.3</td>
<td>6.5</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>3.3</td>
<td>3.7</td>
</tr>
<tr>
<td>9</td>
<td>22</td>
<td>4.9</td>
<td>5.5</td>
</tr>
<tr>
<td>Unknown</td>
<td>49</td>
<td>10.9</td>
<td>--</td>
</tr>
</tbody>
</table>

N=449

Middle size families (three, four and five children) totaled 59 percent while large families (families with six or more children) numbered 29.2 percent of the four hundred cases where the data were
known. In almost 11 percent of the cases the family size was unknown.

The fourth category shows the child's position in the family. Table 6 indicates that a majority, 49.7 percent, of the juveniles were intermediate children while first children (20.7 percent) and last children (26.7 percent) were close percentage wise. Only children accounted for 2.7 percent of the delinquent population.

**TABLE 6**

CHILD'S POSITION IN THE FAMILY

<table>
<thead>
<tr>
<th>Position</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only</td>
<td>11</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>First</td>
<td>83</td>
<td>18.5</td>
<td>20.7</td>
</tr>
<tr>
<td>Intermediate</td>
<td>199</td>
<td>44.3</td>
<td>49.7</td>
</tr>
<tr>
<td>Last</td>
<td>107</td>
<td>23.8</td>
<td>26.7</td>
</tr>
<tr>
<td>Unknown</td>
<td>49</td>
<td>10.9</td>
<td>----</td>
</tr>
</tbody>
</table>

N=449

The fifth variable analyzed was that of the broken home. Table 7 shows that 76.8 percent of the delinquent population comes from intact homes while 23.2 percent come from broken homes.
TABLE 7
BROKEN HOME

<table>
<thead>
<tr>
<th>Type</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broken Home</td>
<td>104</td>
<td>23.2</td>
</tr>
<tr>
<td>Intact Home</td>
<td>345</td>
<td>76.8</td>
</tr>
</tbody>
</table>

N=449

The sixth category looks at the child's achievement in school. "A" indicates excellent, "B" good, "C" average, "D" poor and "F" failure. Table 8 points out that of the 449 cases, the data for 26.5 percent were not available. Of the known cases, 48.2 percent achieved average grades. Only 2.1 percent were in the failure range, while 2.4 percent were in the excellent range. Slightly more of the delinquents were in the poor range (29.1 percent) compared to 18.2 percent in the good range.

TABLE 8
SCHOOL ACHIEVEMENT

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>7</td>
<td>1.6</td>
<td>2.1</td>
</tr>
<tr>
<td>D</td>
<td>96</td>
<td>21.4</td>
<td>29.1</td>
</tr>
</tbody>
</table>
Table 8 (Continued)

<table>
<thead>
<tr>
<th>Achievement</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>159</td>
<td>35.4</td>
<td>48.2</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>13.4</td>
<td>18.2</td>
</tr>
<tr>
<td>A</td>
<td>8</td>
<td>1.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Unknown</td>
<td>249</td>
<td>26.5</td>
<td>----</td>
</tr>
</tbody>
</table>

N=449

The seventh category identifies the number of school drop outs among the delinquent population. Table 9 shows only 12.5 percent of the delinquents had dropped out of school.

TABLE 9
SCHOOL DROP OUT

<table>
<thead>
<tr>
<th>School Drop Out</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>56</td>
<td>12.5</td>
</tr>
<tr>
<td>No</td>
<td>393</td>
<td>87.5</td>
</tr>
</tbody>
</table>

N=449

The eighth characteristic examined was that of the delinquent's IQ. The data were split up into three areas, Below Average, Average, and Above Average. According to the revised Stanford Binet scale, individuals in
the 90 to 109 IQ range are classified as having average intelligence (Merrill, 1947:55). Using the 90 to 109 range as average, everything above 109 was categorized as above average (130 was the highest IQ score) and everything below 90 was categorized as below average (75 was the lowest IQ score). As Table 10 points out, for 62.4 percent of the 449 cases, the data were missing.

TABLE 10

IQ

<table>
<thead>
<tr>
<th>IQ Range</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Average</td>
<td>20</td>
<td>4.5</td>
<td>11.8</td>
</tr>
<tr>
<td>Average</td>
<td>120</td>
<td>26.7</td>
<td>71.0</td>
</tr>
<tr>
<td>Above Average</td>
<td>29</td>
<td>6.5</td>
<td>17.2</td>
</tr>
<tr>
<td>Unknown</td>
<td>280</td>
<td>62.4</td>
<td>----</td>
</tr>
</tbody>
</table>

N=449

Of the 169 cases where the data are known, the majority, 71 percent, fall into the average range. The below average (11.8% percent) and the above average range (17.2 percent) are fairly close percentage-wise.

The ninth category looks at the number of juveniles employed. Table 11 indicates that of the 399 cases where the data are known, 46.4 percent of the juveniles
are employed; 53.6 percent are not employed.

TABLE 11

JUVENILE EMPLOYMENT

<table>
<thead>
<tr>
<th>Employed</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>185</td>
<td>41.2</td>
<td>46.4</td>
</tr>
<tr>
<td>No</td>
<td>214</td>
<td>47.7</td>
<td>53.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>50</td>
<td>11.1</td>
<td>--</td>
</tr>
</tbody>
</table>

N=449

The tenth characteristic shows the juvenile's involvement in activities. Table 12 indicates that 32.6 percent of the 393 cases where the data are known, the juvenile is involved in activities. The majority of the delinquents, 67.2 percent, however, are not involved in activities.

TABLE 12

JUVENILE INVOLVEMENT IN ACTIVITIES

<table>
<thead>
<tr>
<th>Involved</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>129</td>
<td>28.7</td>
<td>32.8</td>
</tr>
<tr>
<td>No</td>
<td>264</td>
<td>58.8</td>
<td>67.2</td>
</tr>
<tr>
<td>Unknown</td>
<td>56</td>
<td>12.5</td>
<td>--</td>
</tr>
</tbody>
</table>

N=449


**TABLE 13**

<table>
<thead>
<tr>
<th>Religion</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lutheran</td>
<td>183</td>
<td>40.8</td>
<td>45.2</td>
</tr>
<tr>
<td>Catholic</td>
<td>83</td>
<td>18.5</td>
<td>20.5</td>
</tr>
<tr>
<td>Baptist</td>
<td>10</td>
<td>2.2</td>
<td>2.5</td>
</tr>
<tr>
<td>Methodist</td>
<td>58</td>
<td>12.9</td>
<td>14.3</td>
</tr>
<tr>
<td>Presbyterian</td>
<td>26</td>
<td>5.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
<td>7.6</td>
<td>8.4</td>
</tr>
<tr>
<td>None</td>
<td>11</td>
<td>2.4</td>
<td>2.7</td>
</tr>
<tr>
<td>Unknown</td>
<td>44</td>
<td>9.8</td>
<td>---</td>
</tr>
</tbody>
</table>

N=449

The eleventh characteristic looks at the juvenile's religious preference. Table 13 indicates 45.2 percent of the juveniles are Lutheran while the other 54.8 percent are split up among various religious denominations; 2.7 percent of the juveniles expressed no religious preference.

The twelfth category indicates the church attendance of the delinquents. Table 14 points out that of the 391 cases where the data were known, 57.7 percent of the juveniles contend they attend church regularly; 26.5 percent of the delinquents state they attend occasionally.
and 15.6 percent say they do not attend church at all.

TABLE 14
CHURCH ATTENDANCE

<table>
<thead>
<tr>
<th>Attendance</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>226</td>
<td>50.3</td>
<td>57.8</td>
</tr>
<tr>
<td>No</td>
<td>61</td>
<td>13.6</td>
<td>15.6</td>
</tr>
<tr>
<td>Occasional</td>
<td>104</td>
<td>23.2</td>
<td>26.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>58</td>
<td>12.9</td>
<td>----</td>
</tr>
</tbody>
</table>

N=449

The thirteenth characteristic identifies the juveniles place of residence. Table 15 indicates that 57 percent of the juveniles live in Brookings, 19.6 percent live on the family farm, 8.7 percent reside in a rural setting other than a farm or rural town and 14.7 percent live in one of the rural towns in Brookings County.

TABLE 15
PLACE OF RESIDENCE

<table>
<thead>
<tr>
<th>Residence</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brookings</td>
<td>256</td>
<td>57.0</td>
</tr>
<tr>
<td>Farm</td>
<td>88</td>
<td>19.6</td>
</tr>
<tr>
<td>Rural Non-Farm</td>
<td>39</td>
<td>8.7</td>
</tr>
</tbody>
</table>
Table 15 (Continued)

<table>
<thead>
<tr>
<th>Residence</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Town</td>
<td>66</td>
<td>14.7</td>
</tr>
</tbody>
</table>

N=449

The fourteenth category breaks down the employment patterns of the delinquent's parents. Table 16 shows that of the 416 known cases, in 54.1 percent of the families, the father is the sole parent employed. In 7.2 percent of the families the mother is the only employed parent while in 35.1 percent of the families both parents are employed. This data suggest that in 42.3 percent of the families the mother works outside of the home. Table 16 also indicates that in 3.6 percent of the families, neither parent (if two are present, if not, then the one parent present) is unemployed (this category does not include mothers who are housewives by choice).

**TABLE 16**

**PARENTS' EMPLOYED**

<table>
<thead>
<tr>
<th>Employed</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father Only</td>
<td>225</td>
<td>50.1</td>
<td>54.1</td>
</tr>
<tr>
<td>Mother Only</td>
<td>30</td>
<td>6.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Both Parents</td>
<td>146</td>
<td>32.5</td>
<td>35.1</td>
</tr>
<tr>
<td>Unemployed</td>
<td>15</td>
<td>3.3</td>
<td>3.6</td>
</tr>
</tbody>
</table>
The fifteenth characteristic is that of the father's employment. Of the cases where the father's employment was known, it was rated on Duncan's SES scale. The scale was then divided into Blue collar workers, White collar workers and Professionals. As Table 17 points out, the majority of the father's employment falls into the Blue collar rating, due partly to the large number of fathers that are farmers in this study. The Professionals topped the White collar workers by less than a percentage point, this is possibly due to the number of college professors in the study who were fathers of delinquents. Thirteen of the fathers were unemployed, and 78 of the cases were unknown.

<table>
<thead>
<tr>
<th>Table 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>FATHER'S EMPLOYMENT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rating</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Collar</td>
<td>237</td>
<td>52.8</td>
<td>63.9</td>
</tr>
<tr>
<td>White Collar</td>
<td>59</td>
<td>13.1</td>
<td>16.0</td>
</tr>
</tbody>
</table>

N=449
The sixteenth category looks at the mother's employment. As with the father's employment, the mother's was rated on Duncan's SES scale. Table 18 indicates that 26.2 percent of the mothers fall into the Blue collar rating while 14.6 percent are White collar workers. Three percent of the mothers are professionals. The majority of the mothers, however, are housewives, comprising 56.2 percent of the total; 11.6 percent of the cases are unknown.

**TABLE 18**

**MOTHER'S EMPLOYMENT**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Collar</td>
<td>104</td>
<td>23.2</td>
<td>26.2</td>
</tr>
<tr>
<td>White Collar</td>
<td>58</td>
<td>12.9</td>
<td>14.6</td>
</tr>
<tr>
<td>Professional</td>
<td>12</td>
<td>2.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Housewife</td>
<td>223</td>
<td>49.7</td>
<td>56.2</td>
</tr>
<tr>
<td>Unknown</td>
<td>52</td>
<td>11.6</td>
<td>----</td>
</tr>
</tbody>
</table>

N=449
The seventeenth category measures the father's education. Table 19 points out that in 55.7 percent of the cases the data on the father's education are missing. Of the 199 cases where the father's education is known, 36.7 percent of the fathers had a high school education, 31.7 percent did not graduate from high school and 4.5 percent had some college, and 27.1 percent of the fathers have a college degree or more.

TABLE 19
FATHER'S EDUCATION

<table>
<thead>
<tr>
<th>Education</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12</td>
<td>63</td>
<td>14.0</td>
<td>31.7</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>73</td>
<td>16.3</td>
<td>36.7</td>
</tr>
<tr>
<td>Some College</td>
<td>9</td>
<td>2.0</td>
<td>4.5</td>
</tr>
<tr>
<td>College Degree Plus</td>
<td>54</td>
<td>12.0</td>
<td>27.1</td>
</tr>
<tr>
<td>Unknown</td>
<td>250</td>
<td>55.7</td>
<td>---</td>
</tr>
</tbody>
</table>

N=449

The eighteenth category indicates the mother's education. Once again, as with the father's education, there is a large amount of missing data. However, of the 192 cases, 49.5 percent of the mothers had high school
educations. Table 20 also points out that 20.8 percent of the mothers did not graduate from high school. Of the mothers going to college, 14.6 percent had some college while 15.1 percent had college degrees and more.

TABLE 20
MOTHER'S EDUCATION

<table>
<thead>
<tr>
<th>Education</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
<th>Adjusted Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12</td>
<td>40</td>
<td>8.9</td>
<td>20.8</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>95</td>
<td>21.2</td>
<td>49.5</td>
</tr>
<tr>
<td>Some College</td>
<td>28</td>
<td>6.2</td>
<td>14.6</td>
</tr>
<tr>
<td>College Degree Plus</td>
<td>29</td>
<td>6.5</td>
<td>15.1</td>
</tr>
<tr>
<td>Unknown</td>
<td>257</td>
<td>57.2</td>
<td>---</td>
</tr>
</tbody>
</table>

N=449

The nineteenth variable indicates whether or not the juvenile is a recidivist. Of the 449 delinquents in this study, 27.2 percent were recidivists. The overwhelming majority of the delinquents (72.8 percent) was one time offenders.
TABLE 21
RECIDIVIST

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>122</td>
<td>27.2</td>
</tr>
<tr>
<td>No</td>
<td>327</td>
<td>72.8</td>
</tr>
</tbody>
</table>

N=449

The twentieth category shows the number of delinquents who committed offenses with delinquent companions. Table 22 indicates that of the 449 juveniles, 68.4 percent of them committed offenses with companions, while 31.6 percent committed offenses without companions.

TABLE 22
DELINQUENT COMPANIONS

<table>
<thead>
<tr>
<th>Companions</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>307</td>
<td>68.4</td>
</tr>
<tr>
<td>No</td>
<td>142</td>
<td>31.6</td>
</tr>
</tbody>
</table>

N=449

The final category looks at the seriousness of the offense. Table 23 shows that of the 449 juveniles, 343, or 76.4 percent did not commit a serious offense, while 23.6 percent of the delinquents did commit serious
offenses. The following offenses were considered serious: assault, burglary, fraud, grand theft, and sex offenses (example, rape). The rest of the offenses that were committed by the juveniles in this study were grouped in the not serious area: alcohol offenses, petty theft, drug violations, tampering, traffic offenses, vandalism, CHIN, municipal ordinances, DWI, misuse of the telephone, check charges, malicious mischief, probation violations and other delinquencies.

TABLE 23
SERIOUSNESS OF OFFENSE

<table>
<thead>
<tr>
<th>Serious</th>
<th>Absolute Frequency</th>
<th>Relative Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>106</td>
<td>23.6</td>
</tr>
<tr>
<td>No</td>
<td>343</td>
<td>76.4</td>
</tr>
</tbody>
</table>

N=449

Descriptive Analysis Profile

Based on Tables 3 through 23, the data would suggest that the following profile of characteristics is relevant for the majority of delinquents in Brookings County, South Dakota for the years 1970 through 1977.
The delinquent is most frequently:

- male (78%)
- 16 or 17 years old (53%)
- from a middle size (3, 4 or 5 children) family (59%)
- is an intermediate child (50%)
- from an intact family (77%)
- attending school (88%)
- an average student (48%)
- with an average IQ (71%)
- not employed (54%)
- not involved in activities (67%)
- Lutheran (45%)
- who regularly attends church services (58%)
- resides in Brookings (57%)
- delinquent's father is the only parent working (54%)
- delinquent's father is a blue collar worker (64%)
- delinquent's mother is a housewife (56%)
- delinquent's father has a high school education (37%)
- delinquent's mother has a high school education (50%)
- not a recidivist (73%)
- has delinquent companions (68%)
- and has not committed a serious offense (76%).
Tests of the Null and Research Hypotheses

To meet the second objective of this study, a series of null and research hypotheses was developed and tested. In order to give a concise presentation of the findings, each null hypothesis will be presented first followed by its corresponding research hypothesis. Chi-square will be used to test statistical independence. The significance level for this study is $p < .05$. Immediately following the test of each null hypothesis, a test of the research hypothesis will be made subject to appropriateness.

Kendall's tau will be used to test the research hypothesis and illustrate the direction and the strength of the ordering of pairs. Kendall's tau ranges from +1 (when the positive value of the concordant pairs predominate) to -1 (when the negative value of the discordant pairs predominate). Kendall's tau may be interpreted in much the same manner as Spearman's rho due to the many similar characteristics that are common to tau and rho (Williams, 1979:135). Both, therefore are interpretable as Pearson's Product Moment Correlational Coefficients.
HN₁: There will be no difference between male and female juveniles and recidivism.

### TABLE 24

**GENDER AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>Yes</td>
<td>104 (85.2)</td>
</tr>
<tr>
<td></td>
<td>(29.7)</td>
</tr>
<tr>
<td>No</td>
<td>246 (75.2)</td>
</tr>
<tr>
<td></td>
<td>(70.3)</td>
</tr>
</tbody>
</table>

N=449

\[ p < .05 \]

\[ \chi^2 = 5.186, \text{ df}=1 \]

The data from Table 24 graphically display the effect of gender on recidivism. 85.2 percent of the recidivists were males. However, considering that 78 percent of the delinquents were male, the high proportion of male recidivists was not too far out of line with the data. Similarly, the table reflects the importance of gender on recidivism when the comparison is between sexes. Thirty percent of the delinquent boys were recidivists compared to only 18.2 percent of the girls. Chi-square (5.186, df=1) was significant at the .05 level, thus the null hypothesis was not accepted. Tau indicated
a positive association of .11, and supports the following research hypothesis: \( HR_1 \): Males will exhibit higher rates of recidivism than females.

\( HN_2 \): There will be no difference between a juvenile's age at his or her first adjudication and recidivism.

**TABLE 25**

**AGE AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Pre-Teen</th>
<th>Early Teen</th>
<th>Late Teen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11 (9.0)</td>
<td>71 (58.2)</td>
<td>40 (32.8)</td>
</tr>
<tr>
<td></td>
<td>(29.7)</td>
<td>(40.8)</td>
<td>(16.8)</td>
</tr>
<tr>
<td>No</td>
<td>26 (8.0)</td>
<td>103 (31.5)</td>
<td>198 (60.6)</td>
</tr>
<tr>
<td></td>
<td>(70.3)</td>
<td>(59.2)</td>
<td>(83.2)</td>
</tr>
</tbody>
</table>

\[ p < .05 \]

\[ \chi^2 = 29.385, \text{ df}=2 \]

Table 25 was collapsed in order to clarify the relationship between age and recidivism. In this table, the pre-teens consist of juvenile 10, 11 and 12 years old. The early teens consist of juveniles 13, 14 and 15 years old and finally, those juveniles 16 and 17 were classified as in their late teens.

Juveniles in their early teens accounted for 38.8
percent of all recidivists. Juveniles in their pre-teens only comprised 8.2 percent of the delinquents, however, 29.7 percent of those in their pre-teens were recidivists. The findings for this table do not conform with the literature. Juveniles in their pre-teens should have had a higher rate of recidivism than juveniles in their early teens. This was not the case. Of the juveniles in their early teens, 40.8 percent were recidivists while 29.7 percent in their pre-teens were recidivists. Juveniles in their late teens accounted for 53 percent of the delinquents, but only 16.8 percent of them were recidivists, this finding conforms to the literature.

In this study, there are only 37 juveniles out of 449 that were first adjudicated between the ages of 10 and 12. The relatively small number might be one explanation for the discrepancy between the findings in this study and the findings in the review of the literature.

Chi-square (29.385, df=2) was significant at the .05 level and thus there was a failure to accept the null hypothesis. Tau at .21 indicates a positive relationship. The findings did not uphold the research hypothesis put forth in Chapter III, it did however suggest for future research the following hypothesis: HR\(_2\): Juveniles first adjudicated while in their early
teens will have a higher rate of recidivism than juveniles in their pre-teens or late teens.

The findings from this table suggest that juveniles in Broome County adjudicated between 1970 and 1977 had a greater likelihood of becoming recidivists when first adjudicated in their early teens, compared to those in their mid-teens or late teens.

**H0:** There will be no difference between the size of a juvenile's family and recidivism.

**TABLE 26**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Family Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small Family</td>
</tr>
<tr>
<td>Yes</td>
<td>12 (10.0)</td>
</tr>
<tr>
<td></td>
<td>(25.6)</td>
</tr>
<tr>
<td>No</td>
<td>35 (12.5)</td>
</tr>
<tr>
<td></td>
<td>(74.5)</td>
</tr>
</tbody>
</table>

p < .05

**X^2 = 6.348, df=2**

Data presented in Table 26 were collapsed. The small families consist of one or two children, including the delinquent. Medium size families were those with
three, four and five children, while the large families have six or more children.

The data from Table 26 show that 59 percent of the delinquents were from medium size families, and comprise 68.3 percent of the recidivists. Due to the large number of juveniles from medium size families, the 68.3 percent does not appear to be too far out of line with the proportion of children from middle size families. When each category of family size is analyzed separately, children from medium sized families make up a larger percentage of recidivists, 34.7 percent, compared to 25.5 percent and 22.2 percent for small families and large families respectively. Data for 49 of the juveniles were not found in the files for this variable.

Chi-square (6.348, df=2) was significant for this table thus there was a failure to accept the null hypothesis. Tau at .07 reflects a positive relationship, however it should reflect a negative relationship. The literature indicates that juveniles from large families have a greater likelihood of becoming recidivists than juveniles from small or medium size families. The findings for this study are inconsistent with the literature, and appear to indicate that juveniles from medium size families have a greater likelihood of becoming recidivists than children from large families. The
correlation, however, is very weak. Once again the findings did not support the research hypothesis put forth in Chapter III. The findings, however, suggest for future research the following research hypothesis: HR₃: Juveniles from medium size families will have higher rates of recidivism than juveniles from small or large families.

As stated above, the correlation is very weak, and probably indicates that for Brookings County the size of the family is not strongly related to recidivism.

HN₄: There will be no difference between a juvenile's position in the family and recidivism.

TABLE 27
CHILD'S POSITION AND RECIDIVISM

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Child's Position in Family</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intermediate</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>54 (45.0)</td>
<td>66 (55.0)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(27.1)</td>
<td>(32.8)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>145 (51.8)</td>
<td>135 (48.2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>72.9)</td>
<td>(67.2)</td>
<td></td>
</tr>
</tbody>
</table>

p > .05

x² = 1.547, df=1

N = 400

Table 27 was collapsed in order to compare the
findings in this investigation against the findings in the review of the literature. Findings from the review of the literature suggest that juveniles that occupy the intermediate position in the family are more likely to be delinquent than juveniles classified as only, first or last children. The findings in Table 27 suggest there is not much difference between intermediate children and those classified as other. About 50 percent of the juveniles were classified as intermediate children, and 27 percent of those were recidivists, while juveniles classified as other accounted for approximately 50 percent of the juveniles, and 33 percent of those were recidivists. Forty-nine of the cases were missing information on this variable.

Chi-square (1.547, df=1) was not significant at the .05 level, therefore the null hypothesis was accepted. From the data in Table 27, it would appear for juveniles in Brookings County a child's position in the family has little bearing on whether or not he or she will become a recidivist.

H0: There will be no difference between juveniles from broken homes and recidivism.

Table 28 shows that the percentage of juveniles from broken homes (36.5 percent) were more likely to be recidivists than juveniles from intact homes (24.3 percent).
The percentages are not large, however, there is a twelve percent difference in favor of the broken home. It is also important to note that only 23.2 percent of the juveniles come from broken homes, but they make up 31.1 percent of all recidivists.

TABLE 28
BROKEN HOMES AND RECIDIVISM

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Broken Home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>38 (31.1)</td>
</tr>
<tr>
<td></td>
<td>(36.5)</td>
</tr>
<tr>
<td>No</td>
<td>66 (20.2)</td>
</tr>
<tr>
<td></td>
<td>(63.5)</td>
</tr>
</tbody>
</table>

p < .05

\[X^2 = 6.001, \text{df}=1\]

Chi-square (6.001, df=1) was significant and therefore the null hypothesis was not accepted. Tau (.12) supports the following research hypothesis:

HR5: Juveniles from broken homes will have higher rates of recidivism than juveniles from intact homes.
Although \( \tau \) indicates a positive association, the strength of the relationship is not very strong.

HN\(_6\): There will be no difference between a juvenile's school achievement and recidivism.

**TABLE 29**

**SCHOOL ACHIEVEMENT AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>School Achievement</th>
<th>Below Average</th>
<th>Average and Above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td>45 (42.9)</td>
<td>60 (57.1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(43.7)</td>
<td>(26.4)</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>58 (25.8)</td>
<td>167 (74.2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(56.3)</td>
<td>(73.6)</td>
</tr>
</tbody>
</table>

\( p < .05 \)  
\( \chi^2 = 9.726, \ df=1 \)

School achievement was collapsed into two categories; below average, which includes the F and D achievement scores, and average and above, which includes the C, B and A scores. Table 29 clearly indicates that juveniles in the below average range have a higher proportion of recidivists (43.7 percent) compared to juveniles in the average and above range (26.4 percent).
Juveniles achieving below average comprise 31.2 percent of all delinquents yet they account for 42.9 percent of all the recidivists. School achievement was missing for 119 of the delinquents.

Chi-square (9.726, df=1) was significant for this table, thus the null hypothesis was not accepted. Tau, (.17) indicates a positive relationship supporting the research hypothesis. HR₆: Juveniles with low school achievement will have higher rates of recidivism than juveniles with average or high school achievement.

HN₇: There will be no difference between completion of school and recidivism.

**TABLE 30**

**SCHOOL DROPOUT AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>School Dropout</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>37 (30.3)</td>
</tr>
<tr>
<td></td>
<td>(66.1)</td>
</tr>
<tr>
<td>No</td>
<td>19 (5.8)</td>
</tr>
<tr>
<td></td>
<td>(33.9)</td>
</tr>
</tbody>
</table>

p < .05

\[ X^2 = 48.924, \text{ df}=1 \]

Table 30 clearly portrays that school dropouts
had a higher rate of recidivism (66.1 percent) than the juveniles who stayed in school (21.6 percent). The delinquent dropouts comprised only 12.5 percent of the entire juvenile population in this study, yet they composed 30.3 percent of all recidivists.

Chi-square (48.924, df=1) was significant and therefore the null hypothesis was not accepted. Tau portrayed a very strong positive association of .33, emphasizing the strong link between school dropouts and recidivists. Tau supports the following research hypothesis: $HR_7$: Juveniles who drop out of school will exhibit higher rates of recidivism than juveniles who stay in school.

$HN_8$: There will be no difference between a juvenile's employment status and recidivism.

**TABLE 31**

**EMPLOYMENT STATUS AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Juvenile Employed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (percent)</td>
</tr>
<tr>
<td>Yes</td>
<td>46 (37.7)</td>
</tr>
<tr>
<td></td>
<td>(24.9)</td>
</tr>
<tr>
<td>No</td>
<td>139 (50.2)</td>
</tr>
<tr>
<td></td>
<td>(75.1)</td>
</tr>
</tbody>
</table>

$p < .05$  
$X^2 = 5.300$, df=1

$N = 339$
Table 31 indicates that the percentage of juveniles who are not employed comprise a higher rate of recidivists (35.5 percent) than those who are employed (24.9 percent). The number of juveniles that are employed (46.4 percent) and those that are not employed (53.6 percent) are fairly close. However, the gap between the recidivists who are not employed (62.3 percent) and those that are employed (37.7 percent) is fairly substantial. There are 50 cases where the data were unknown for this variable.

Chi-square (5.300, df=1) was significant at the .05 level therefore leading to a failure to accept the null hypothesis. Tau, (-.12) upholds the following research hypothesis: H$_{R8}$: Juveniles who do not work will exhibit higher rates of recidivism than juveniles that do work.

H$_{N9}^*$: There will be no difference between a juvenile's involvement in conventional activities and recidivism.

Table 32 relates a juvenile's involvement in activities with recidivism. The data show that the juveniles who were involved in activities were less likely to be recidivists (20.2 percent) compared to the juveniles who were not involved in activities (36.4 percent). Juveniles involved in activities composed
32.8 percent of all the delinquents, yet accounted for only 21.3 percent of all the recidivists. In 56 of the files the data were missing.

**TABLE 32**
**INVESTIGATION IN ACTIVITIES AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Involved in Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes 26 (21.3) (20.2)</td>
</tr>
<tr>
<td></td>
<td>No 96 (78.7) (36.4)</td>
</tr>
<tr>
<td>No</td>
<td>Yes 103 (38.0) (79.8)</td>
</tr>
<tr>
<td></td>
<td>No 168 (62.0) (63.6)</td>
</tr>
</tbody>
</table>

\[ p < .05 \quad N = 393 \]

\[ X^2 = 10.635, \text{ df}=1 \]

Chi-square (10.635, df=1) was significant and therefore the null hypothesis was not accepted. Tau had a negative association of -.16, supporting the following research hypothesis: HRg: Juveniles who are not involved in conventional activities will exhibit higher rates of recidivism than juveniles involved in conventional activities.

HN10': There will be no difference between a juvenile's place of residence and recidivism.
TABLE 33
RESIDENCE AND RECIDIVISM

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Residence</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brookings</td>
<td>Farm</td>
<td>Rural</td>
<td>Rural</td>
</tr>
<tr>
<td>Yes</td>
<td>81 (66.4)</td>
<td>20 (16.4)</td>
<td>11 (9.0)</td>
<td>10 (8.2)</td>
</tr>
<tr>
<td></td>
<td>(31.6)</td>
<td>(22.7)</td>
<td>(28.2)</td>
<td>(15.2)</td>
</tr>
<tr>
<td>No</td>
<td>175 (53.5)</td>
<td>68 (20.8)</td>
<td>28 (8.6)</td>
<td>56 (17.1)</td>
</tr>
<tr>
<td></td>
<td>(68.4)</td>
<td>(77.3)</td>
<td>(71.8)</td>
<td>(84.8)</td>
</tr>
</tbody>
</table>

p < .05
$X^2 = 8.302$, df=3

Table 33 portrays the association between recidivism and the juvenile's place of residence. It is evident that the majority of the delinquents in this study reside in Brookings (57 percent) and because of their sheer numbers they comprise the majority of recidivists (66.4 percent). However, when the percentage of recidivists are broken down for each group, the variance between Brookings (31.6 percent) and rural non-farm (28.2 percent) is quite small, and the farm category (22.7 percent) is not far behind.

Chi-square (8.302, df=3) was significant and therefore the null hypothesis was not accepted. **Tau, (.12)** portrays a positive association and supports the
following research hypothesis: \( H_{10} \): Juveniles residing in the city will exhibit higher rates of recidivism than juveniles residing within the county.

\( H_{11} \): There will be no difference between a delinquent's associates and recidivism.

**TABLE 34**

**DELINQUENT ASSOCIATES AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Delinquent Associates</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>94 (77.0)</td>
</tr>
<tr>
<td></td>
<td>(30.6)</td>
</tr>
<tr>
<td>No</td>
<td>213 (65.1)</td>
</tr>
<tr>
<td></td>
<td>(69.4)</td>
</tr>
</tbody>
</table>

\( p < .05 \)

\( X^2 = 5.829, \text{ df}=1 \)

\( N = 449 \)

Table 34 clearly shows the impact that delinquent companions have on delinquency. 68.4 percent of all the delinquents had companions while committing an offense. In looking at the recidivist, 77 percent had delinquent associates. When comparing the delinquent associate group with the nondelinquent associate group, Table 34 indicates that 30.6 percent of the juveniles who had delinquent companions were recidivists compared to 19.7
percent of those juveniles who did not have delinquent associates.

Chi-square (5.829, df=1) was significant therefore leading to a failure to accept the null hypothesis. Tau (.11) shows a positive association, thus supporting the following research hypothesis:

HR₁₁: Juveniles who commit offenses with delinquent associates will exhibit higher rates of recidivism than juveniles who commit their offense alone.

HN₁₂: There will be no difference between the seriousness of offense and recidivism.

### TABLE 35

SERIOUSNESS OF OFFENSE AND RECIDIVISM

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Seriousness of Offense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Serious</td>
</tr>
<tr>
<td>Yes</td>
<td>63 (51.6) (59.4)</td>
</tr>
<tr>
<td>No</td>
<td>43 (13.1) (40.6)</td>
</tr>
</tbody>
</table>

p < .05  
N = 449

\( X^2 = 72.985, \text{ df}=1 \)

Table 35 displays the relationship between the
seriousness of the offense and recidivism. Juveniles committing serious offenses make up only 23.6 percent of the total juvenile population, yet they account for 51.6 percent of all the recidivists. In comparing the percentage of juveniles who commit serious offenses (59.4) with those who do not (17.2), the differences are even more striking.

Chi-square ($72.985$, $df=1$) was significant and therefore the null hypothesis was not accepted. Tau showed a very strong positive association of .40, reinforcing the following research hypothesis: $HR_{12}$: Juveniles who commit serious offenses will exhibit higher rates of recidivism than juveniles who do not commit serious offenses.

$HN_{13}$: There will be no difference between a juvenile's intelligence and recidivism.

Table 36 looks at the relationship between intelligence and recidivism. The information in this table suffers from a lack of data, 62 percent (280) of the cases were missing. In the table, the data does not present any type of pattern, the column totals are generally reflected in the rest of the table. For example, 71 percent of the juveniles had average IQ's, in the recidivist category, 73.6 percent had average IQ's.
compared to 69.1 percent of the nonrecidivists, a less than three point spread in either direction. Also of significance in this table is the number of recidivists for which the information is known (42.6 percent) compared to nonrecidivists (57.4 percent). This table reflects the disproportionate effect of information for recidivists compared to nonrecidivists.

TABLE 36
INTELLIGENCE AND RECIDIVISM

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>9 (12.5)</td>
<td>53 (73.6)</td>
<td>10 (13.9)</td>
</tr>
<tr>
<td></td>
<td>(45.0)</td>
<td>(44.2)</td>
<td>(34.5)</td>
</tr>
<tr>
<td>No</td>
<td>11 (11.3)</td>
<td>67 (69.1)</td>
<td>19 (19.6)</td>
</tr>
<tr>
<td></td>
<td>(55.0)</td>
<td>(55.8)</td>
<td>(65.5)</td>
</tr>
</tbody>
</table>

$p > .05$  

$\chi^2 = .948$, $df = 2$

Chi-square (.948, $df=2$) was not significant and thus the null hypothesis was accepted. However, it could be speculated that with the addition of the missing data to the table, there would be a greater probability of showing some sort of trend in the data.
HN14: There will be no difference between the socio-economic status of a juvenile's parents and recidivism of the juvenile.

The following two tables will present the relationship between SES and recidivism.

**TABLE 37**

**FATHER'S SES AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Father's SES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blue Collar</td>
</tr>
<tr>
<td>Yes</td>
<td>72 (71.3)</td>
</tr>
<tr>
<td>No</td>
<td>165 (69.2)</td>
</tr>
</tbody>
</table>

\[ p > .05 \]

\[ X^2 = 1.747, df=2 \]

**TABLE 38**

**MOTHER'S SES AND RECIDIVISM**

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Mother's SES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blue Collar</td>
</tr>
<tr>
<td>Yes</td>
<td>36 (60.0)</td>
</tr>
<tr>
<td>No</td>
<td>68 (59.6)</td>
</tr>
</tbody>
</table>

\[ p > .05 \]

\[ X^2 = .007, df=2 \]
Table 37 indicates the delinquent's father's socio-economic status by means of his employment. The categories are divided into blue collar, white collar and professional. As Table 37 shows, there was very little trend in the data. The column totals are generally reflected in the rest of the table. Juveniles with fathers who are in the blue collar rating have the highest percentage of recidivists, 71.3 percent, but the blue collar rating covers 66.2 percent of all the juveniles in the table. When the rate of recidivism was compared between each group, there was less than an eight point spread between the highest (blue collar, 30.4 percent) and the lowest rate (professional, 22.6 percent). Chi-square (1.747, df=2) was not significant. Data for 78 of the cases were missing, while 13 were not applicable.

Table 38 relates the mother's socio-economic status to the delinquent's recidivism. This table had a large proportion of the data not applicable because the mother was not employed outside of the home (223 cases). However, of the mothers that did work, there was little trend in the data. When the rates of recidivism are compared between groups, the percentages are almost identical, 34.6, 34.5 and 33.3. The highest percentage of juveniles that are recidivists have
mothers that are blue collar workers (60.0 percent), but the blue collar rating consists of 59.8 percent of the total juvenile population in this table. Chi-square (.007, df=2) was not significant, however, one of the cells did not meet the mandatory cell frequency of 5. Information for 52 of the cases was missing.

The chi-squares for both Table 35 and 36 are not significant at the .05 level and thus the null hypothesis was accepted.

Control Tables

The purpose of this section is to examine the influence of potentially extraneous variance on certain independent variables. In the review of the literature, it was suggested that several of the variables may be influenced by other variables, the most notable being the influence of the broken home on females. To determine whether the relationship between the dependent variable, recidivism, and selected independent variables was influenced by extraneous variance, crosstabulations controlling for spuriousness were made.¹

¹Several of the variables that the review of the literature section indicates might be influenced by extraneous variance were not presented here because the sample was not large enough to fill the valid cells.
The first two tables control for gender when analyzing the effect of broken home on recidivism.

**TABLE 39**

BROKEN HOME AND RECIDIVISM - CONTROLLING FOR GENDER (MALE)

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Broken Home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>30  (28.8)</td>
</tr>
<tr>
<td></td>
<td>(39.5)</td>
</tr>
<tr>
<td>No</td>
<td>46  (18.7)</td>
</tr>
<tr>
<td></td>
<td>(60.5)</td>
</tr>
</tbody>
</table>

\[ p < .05 \]
\[ N = 350 \]
\[ X^2 = 4.427, df=1 \]

**TABLE 40**

BROKEN HOME AND RECIDIVISM-CONTROLLING FOR GENDER (FEMALE)

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Broken Home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>8   (44.4)</td>
</tr>
<tr>
<td></td>
<td>(28.6)</td>
</tr>
<tr>
<td>No</td>
<td>20  (24.7)</td>
</tr>
<tr>
<td></td>
<td>(71.4)</td>
</tr>
</tbody>
</table>

\[ p > .05 \]
\[ N = 99 \]
\[ X^2 = 2.833, df=1 \]
Table 39 indicates that males are influenced by broken homes, while Table 40 shows that females are not. Table 39 graphically displays that 22 percent of the males are from broken homes, yet 40 percent of those are recidivists. Conversely, Table 40 indicates that 28 percent of the females are from broken homes and 29 percent of those are recidivists.

Chi-square (4.427, df=1) for Table 39 was significant at the .05 level while the chi-square (2.833, df=1) for Table 40 was not significant at the .05 level. This variance in the chi-squares indicates that the relationship between recidivism and broken homes is weakened due to the effect broken homes has on males but not females.

The second set of tables controls for school achievement when analyzing the effect of involvement in activities on recidivism.

Tables 41 and 42 examine the relationship between involvement in activities and recidivism when controlling for school achievement. Table 41 indicates that 79 percent of those with below average school achievement were not involved in school or outside activities. Of those, 48 percent were recidivists. Twenty-one percent of the delinquents with below average school achievement were
involved in activities, of those, 27 percent were recidivists. The chi-square (3.064, df=1) is not significant at the .05 level and the data appear to indicate that when controlling for below average school achievement, there is no effect on the relationship between involvement in activities and recidivism.

TABLE 41

INVOlvEMENT IN ACTIVITIES AND RECIDIVISM
CONTROLLING FOR SCHOOL ACHIEVEMENT (BELOW AVERAGE)

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Involvement in Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>6   (13.3)</td>
</tr>
<tr>
<td></td>
<td>(27.3)</td>
</tr>
<tr>
<td>No</td>
<td>16 (27.6)</td>
</tr>
<tr>
<td></td>
<td>(72.7)</td>
</tr>
</tbody>
</table>

p > .05

\[ X^2 = 3.064 \text{, df}=1 \]

Table 42 shows that 41 percent of those juveniles with average and above school achievement were involved in activities, however only 19 percent of those were recidivists. The chi-square (5.446, df=1) is significant at the .05 level and indicates that school achievement
does influence recidivism's relationship with involvement in activities.

**TABLE 42**

**INVOLVEMENT IN ACTIVITIES AND RECIDIVISM**

CONTROLLING FOR SCHOOL ACHIEVEMENT (AVERAGE AND ABOVE)

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Involvement in Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>17</td>
</tr>
<tr>
<td>No</td>
<td>74</td>
</tr>
</tbody>
</table>

\[ p < .05 \quad N = 222 \]
\[ x^2 = 5.446, \ df=1 \]

The variance in the chi-squares for Tables 41 and 42 indicate that a juvenile's school achievement does not affect the relationship between involvement in activities and recidivism unless the juvenile is in the average and above category thus weakening the relationship.

The chi-square for Table 43 (62.055, \( \text{df}=1 \)) and Table 44 (9.307, \( \text{df}=1 \)) were both significant at the .05 level. Kendall's \( \tau \) indicates that the strength of the
relationship was stronger for Table 43 (.45) than Table 44 (.26), however, the relationship between seriousness of offense and recidivism is not affected when controlling for delinquent companions.

**TABLE 43**

SERIOUSNESS OF OFFENSE AND RECIDIVISM
CONTROLLING FOR DELINQUENT COMPANIONS (WITH)

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Seriousness of Offense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>186</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ P < .05 \]
\[ \chi^2 = 62.055, \, df=1 \]

**N = 307**

**TABLE 44**

SERIOUSNESS OF OFFENSE AND RECIDIVISM
CONTROLLING FOR DELINQUENT COMPANIONS (WITHOUT)

<table>
<thead>
<tr>
<th>Recidivist</th>
<th>Seriousness of Offense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Yes</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>98</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ P < .05 \]
\[ \chi^2 = 9.307, \, df=1 \]

**N = 142**
Summary of Control Table Findings

Tables 39 and 40 indicate that the relationship between broken homes and recidivism was weakened due to the effect the broken home had on males but not females. Similarly, Tables 41 and 42 show that the relationship between involvement in activities and recidivism was weakened because those juveniles in the below average school achievement category were not affected by involvement in activities, whereas those in the average and above category were.

Table 43 and 44 indicate that the relationship between seriousness of offense and recidivism was not affected when controlling for delinquent companions.

Regression Analysis

Multiple regression is a statistical technique through which the relationship between a dependent variable and a group of independent variables can be analyzed. For this study, the dependent variable was recidivism. The following independent variables were used in the forward stepwise multiple regression technique; gender, age at first adjudication, children in family, broken home, school achievement, school drop out, juvenile's employment status, involvement in activities, residence, delinquent associates and serious-
ness of offense. These eleven independent variables tested in the null hypotheses section were found to be statistically significant at the .05 level. The variables; child's position in family, intelligence and parent's socio-economic status were not found to be statistically significant at the .05 level; therefore they were not entered into the multiple regression analysis.

The first variable selected (seriousness of offense) by this technique accounts for the greatest variance in the dependent variable. In this case, seriousness of offense explained over 16 percent ($R^2$) of the variance in recidivism. The simple $r$ indicates that the relationship between seriousness of offense and recidivism is positive. The Beta weight indicates the expected change in the dependent variable (recidivism) when there is a unit change (.268) in the independent variable (seriousness of offense) while the other independent variables are held constant.

The statistical significance of the combined influence of both the dependent and independent variables can be tested by calculating an F-ratio. The following formula was utilized:

$$F = \frac{R^2 (n - k - 1)}{(1 - R^2) (k)}$$

When using the F-ratio, Melichar contends: "The analyst
should not make significance tests on differences between two coefficients within a group unless the F-ratio for the group as a whole is significant" (Melichar, 1965:10). For this regression, the group F-ratio for all eleven steps was significant at the .05 level.

For the first variable entered (seriousness of offense) the F-ratio was 86.76443, df 1/447. The F-ratio was significant at the .05 level.

School dropout was the next variable selected in the regression analysis. An $R^2$ of .22978 indicates that there was an increase of .06723 with the inclusion of school dropout into the analysis. The $r$ shows that the relationship was positive, and the relative strength of the relationship at .33 was only seven percent less than seriousness of offense. The multiple $R$ of .47935 indicates a seven percent increase in the relative strength of the relationship between the dependent and independent variables.

In order to determine if the second variable entered into the regression equation was statistically significant, the following F-ratio was calculated:

$$F = \frac{(R_A^2 - R_B^2)}{(n - k_1 - k_2 - 1) (1 - R_A^2)}$$

(Melichar, 1965:9) The F-ratio for school dropout was
### TABLE 45

**SUMMARY OF REGRESSION ANALYSIS**

**DEPENDENT VARIABLE - RECIDIVISM**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>( r )</th>
<th>Multiple ( R )</th>
<th>( R^2 )</th>
<th>( R^2 ) Adj</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Seriousness of Offense</td>
<td>0.40318</td>
<td>0.40518</td>
<td>0.16255</td>
<td>0.268</td>
</tr>
<tr>
<td>2. School Drop Out</td>
<td>0.33010</td>
<td>0.47935</td>
<td>0.22978</td>
<td>0.265</td>
</tr>
<tr>
<td>3. Age at First Adjudication</td>
<td>0.22704</td>
<td>0.50108</td>
<td>0.25108</td>
<td>0.157</td>
</tr>
<tr>
<td>4. Involvement in Activities</td>
<td>-0.28009</td>
<td>0.51994</td>
<td>0.27034</td>
<td>-0.116</td>
</tr>
<tr>
<td>5. Gender</td>
<td>0.10748</td>
<td>0.53052</td>
<td>0.28145</td>
<td>0.103</td>
</tr>
<tr>
<td>6. Delinquent Companions</td>
<td>0.11395</td>
<td>0.53592</td>
<td>0.28721</td>
<td>0.071</td>
</tr>
<tr>
<td>7. School Achievement</td>
<td>-0.06290</td>
<td>0.53896</td>
<td>0.29047</td>
<td>-0.059</td>
</tr>
<tr>
<td>8. Residence</td>
<td>0.12097</td>
<td>0.54038</td>
<td>0.29201</td>
<td>0.043</td>
</tr>
<tr>
<td>9. Children in Family</td>
<td>-0.09133</td>
<td>0.54057</td>
<td>0.29221</td>
<td>-0.017</td>
</tr>
<tr>
<td>10. Broken Home</td>
<td>0.11561</td>
<td>0.54073</td>
<td>0.29239</td>
<td>0.014</td>
</tr>
<tr>
<td>11. Juvenile Employment</td>
<td>-0.20800</td>
<td>0.54081</td>
<td>0.29248</td>
<td>0.012</td>
</tr>
</tbody>
</table>
19.421, df 2/446. The F-ratio was significant at the .05 level.

Age at first adjudication increased the coefficient of determination ($R^2$) from .22978 to .25108. The $r$ for this variable reflects a positive relationship while the Multiple $R$ increased to .50108. The Beta weight (.187) indicates the relative effect of the independent variable (age at first adjudication) on recidivism. The F-ratio for the inclusion of this variable into the analysis was 3.4325, df 3/445. This was significant at the .05 level.

The fourth variable entered in the regression analysis was involvement in activities (F-ratio = 2.91, df 4/444, $p < .05$). The $R^2$ increased to .27034, a .01926 increase. The $r$ indicates an inverse relationship between recidivism and involvement in activities. The Beta weight reflects the expected change in recidivism with a change of one unit (-.116) in the independent variable. Multiple $R$ for the first four variables was .51994.

Gender increased the Multiple $R$ to .53052 and $R^2$ to .28145. The $r$ reflects a positive relationship. The F-ratio for gender (1.3575, df 5/443) indicates that this independent variable is not significant at the .05 level.

Although Multiple $R$ increased beyond the fifth
step (gender) to the eleventh step (juvenile employment) minimal increases were observed beyond the fifth step, in fact, the last six variables explain less than one percent of the variance in the dependent variable (recidivism). The F-ratio for each variable entered after the fourth step was not significant at the .05 level.

The first four variables account for over 27 percent of the explained variance of recidivism. The regression analysis seems to suggest that a delinquent has a greater probability of becoming a recidivist if:

1. the juvenile commits a serious offense,
2. the juvenile is a school dropout,
3. the juvenile is between 13 and 15 years of age at the time of his or her first adjudication, and
4. the juvenile is not involved in activities.
CHAPTER VI

SUMMARY AND CONCLUSION

Introduction

In order to review the findings of this investigation, the first part of this chapter is divided into three sections; summary, general findings and specific findings. The final part of this chapter is divided into four parts; conclusions, limitations of the study, implications for further study and a final note.

Summary

The purpose of this thesis was to discover "What combination of factors, demonstrated germane to delinquency, best differentiates first time offenders from recidivists?" To answer this question, four objectives guided this research.

The first objective was to develop a multi-factor approach to delinquent behavior. Based on the review of the literature, the following 14 characteristics were found to be relevant in the causation of delinquency: gender, age at first adjudication, size of family, position in the family, broken home, school achievement; school drop out, employment status, involvement in activities, place of residence, delinquent associates,
seriousness of offense, IQ and parent's SES.

Probation records for juveniles adjudicated in Brookings County between 1970 and 1977 were examined and the following descriptive analysis was developed for best describing the delinquent population. In Brookings County between 1970 and 1977 the delinquent is most frequently: male (78%), 16 or 17 year olds (53%), from a middle size family (59%), a middle child (50%), from an intact family (77%), attends school (88%), an average student (48%), with an average IQ (71%), not employed (54%), and not involved in activities (67%), a Lutheran (45%), who regularly attends church services (58%), resides in Brookings (57%), whose father is the only parent working (54%), and is a blue collar worker (64%), whose mother is a housewife (56%), the father has a high school education (37%) and the mother has a high school education (50%), the delinquent is not a recidivist (73%), but does have delinquent companions (68%), and has not committed a serious offense (76%).

The third objective was to develop and test null and research hypotheses based upon the characteristics found to be relevant in the review of the literature. Of the fourteen null hypotheses developed, eleven were found to be significant ($P < .05$); therefore there was
a failure to accept the null hypotheses which utilized the following independent variables: gender, age at first adjudication, family size, broken home, school achievement, school drop out, employment status, involvement in activities, place of residence, delinquent associates, and seriousness of offense. The null hypotheses which were accepted were: position of child in the family, IQ and parent's SES.

The final objective was to analyze the relationship between the eleven independent variables found to be statistically significant and the dependent variable, recidivism. A multiple regression utilizing the forward stepwise technique indicated that seriousness of offense explained the most variance in the dependent variable (16 percent). School drop out, age at first adjudication, and involvement in activities, were the next variables added respectfully, and together with seriousness of offense account for over 27 percent of the explained variance in recidivism. The next seven variables, gender, delinquent companions, school achievement, residence, children in family, broken home and juvenile employment account for two percent of the variance. The regression analysis suggests that a delinquent has a greater probability of becoming a recidivist if:
1. the juvenile commits a serious offense,
2. the juvenile is a school drop out,
3. the juvenile is between 13 and 15 years of age at first adjudication, and
4. the juvenile is not involved in activities.

General Findings

The result of the stepwise multiple regression analysis was capable of statistically explaining 29 percent of the variance in the dependent variable, recidivism. Eleven independent variables were entered into the regression analysis, however, the first four variables selected (seriousness of offense, school drop out, age at first adjudication, involvement in activities) accounted for 27 percent of the variance and appear to be the strongest predictor variables of recidivism.

It is, of course, always difficult to make a final determination as to the generalizability and compatibility of a single study. In order to place the present research into a broader context, a comparison of the findings from this instant case are compared to Pallone and Hennessy's study on "Recidivism Proneness
Among Paroles." The populations under study differ, nevertheless both studies utilized the same dependent variable, recidivism. Also, the independent variables used were similar as both sets of variables reflect social and demographic characteristics as well as aspects of the offense and the prior records of the offenders. Moreover, in Pallone and Hennessy's study, 11 independent variables explained 26 percent of the variance in the dependent variable, recidivism. Pallone and Hennessy identify the first six variables (number of drug related counts, number of prior arrests, race, prior institutionalization, religious affiliation and place of residence) as the most powerful predictors of recidivism.

The results of the Pallone and Hennessy study are compatible with the findings presented in this thesis. Both studies entered 11 independent variables in the regression analysis in an attempt to predict recidivism. Pallone and Hennessy's study was able to explain 26 percent of the variance in the dependent variable while this investigation explained 29 percent of the variance.

Specific Findings

This section will present the findings pertaining to each independent variable's association with the
dependent variable, recidivism.

Gender

In this study, the gender distributions of delinquent males (78 percent) to delinquent females (22 percent) closely approximated the expected division found in the review of the literature. Several authors noted that the delinquent is generally a male, 75 to 80 percent of the time (Renshaw, 1979; Griffin and Griffin, 1978; and Greene and Esselstyn, 1972).

As noted above, males consist of 78 percent of the delinquent population in this research, but comprised 85 percent of the recidivists. Thus, gender was found to be significant and the research hypothesis was accepted. There was a moderate association between gender and recidivism thus placing gender fifth in the statistical array of variables that made up the regression analysis.

Age at First Adjudication

Juveniles that were adjudicated for the first time while in their early teens (13, 14 and 15) comprised 39 percent of the delinquent population but go on to account for 58 percent of all recidivists in this study. The literature indicated that the earlier a juvenile is arrested, the more likely he or she is to recidivate
The implication being that juveniles in their pre-teens would be more likely to recidivate than juveniles in their early or late teens. The research clearly indicated that juveniles in their pre-teens comprised eight percent of the delinquent population and accounted for nine percent of the recidivists. A possible explanation for the apparent discrepancy between the literature and the research findings might be caused by the small number of juveniles brought to court in the pre-teenage sector. Because of the size of Brookings, and the attitude of the police, juveniles in their pre-teens might be handled informally thus avoiding the court.

Age at first adjudication was found to be significant and the null hypothesis was not accepted. There was a fairly strong relationship between age at first adjudication and recidivism thus placing the independent variable third in the regression analysis.

The implication of the research was that juveniles who are first adjudicated delinquent between the ages of 13 and 15 have a higher probability of becoming recidivists than juveniles in the other age brackets.

Size of Family

Based on the review of the literature, it was
deduced that children from larger families tended to have a greater probability of becoming delinquent. This did not show up in this research however. Children from large families (six or more children) accounted for 29 percent of the delinquent total and only 22 percent of the recidivists, while juveniles from medium size families (three, four and five children) comprised 59 percent of the delinquents and 68 percent of the recidivists. Children from small families (one and two children) only accounted for 12 percent of the delinquents and 10 percent of the recidivists.

The association between family size and recidivism was found to be significant and the null hypothesis was not accepted. However, the relationship was not very strong and this was reflected in the regression analysis where family size was the ninth variable entered out of eleven.

The implication seemed to be that the size of a juvenile's family has little effect on recidivism. As noted in the review of the literature, family size is probably of more significance when combined with a juvenile's position in the family and broken home.

Broken Home

The effect of broken homes on delinquency is
unclear in the literature. Some authors support the idea that broken homes are a cause of delinquency (Glueck and Glueck, 1950; Wattenberg and Saunders, 1954; Monahan, 1957 and Hirschi, 1969) while others contend that it is the disharmonious family that causes delinquency (Toby, 1968; Nye, 1958; Schaffer and Knudten, 1970 and Griffin and Griffin, 1978).

In this study, the relationship between broken homes and recidivism was not very strong as indicated in the regression analysis where broken homes was the tenth independent variable entered out of eleven. Nevertheless, the association between broken homes and recidivism is significant and therefore the null hypothesis was not accepted.

School Achievement

Authors cited in the review of the literature agree that a juvenile with poor school achievement is more likely to commit delinquent acts than juveniles with high school achievement (Wolfgang, 1972; Glueck and Glueck, 1950; Hirschi, 1969 and Sawicki and Schaeffer, 1979). In this study, the majority of the delinquents (69 percent) fell into the category of average to above average achievement while juveniles with low school achievement comprised only 31 percent of the total. However, the
juveniles with below average achievement accounted for 43 percent of the recidivists.

The association between school achievement and recidivism was positive, with a moderate relationship. In the multiple regression analysis, school achievement was entered seventh out of 11 independent variables.

The implication from the review of the literature was that the relationship between school achievement and recidivism would be much stronger. There are a couple of possible explanations for the moderate relationship: one, there were 119 of the juvenile's records on school achievement missing and, two, the majority of the offenses committed by juveniles in this study were minor and of a one-time nature.

**School Drop Out**

Juveniles that drop out of school are probably the same juveniles that were performing poorly while in school so the literature found in the section on school achievement would also apply to this variable.

The association between school drop out and recidivism is dramatic. There were only 56 school drop outs in this study, yet 66 percent of them were recidivists compared to 22 percent of the 393 juveniles who stayed in school. The regression analysis also
verified the strength of the relationship between school drop out and recidivism as it was entered second in the analysis.

The implication from the research and the literature clearly portrays the significance school drop out has on recidivism.

**Employment Status**

Control Theory states that an individual that is busy doing conventional things will not have time for delinquent behavior. The implication for this research being that those juveniles that do not work will have a higher probability of becoming recidivists. The research substantiates this to a point. There was an almost even split between juveniles who were employed and those not employed, yet 62 percent of those not employed were recidivists compared to 38 percent of those juveniles employed.

There was a negative relationship between the independent and dependent variable indicating an inverse relationship. However, the relationship was weak as substantiated in the regression analysis where employment status was the last variable entered into the analysis.

**Involvement in Activities**
Once again, Control Theory's involvement in conventional activities was the basis for this independent variable. In this case, however, the results of the research are more dramatic. Of the recidivists, 79 percent were not involved in activities. Juveniles that were involved in activities accounted for 33 percent of the delinquent total, but only comprised 21 percent of the recidivists.

The association between involvement in activities and recidivism is negative, indicating an inverse relationship. The regression analysis shows that involvement in activities was entered fourth in the regression, showing a fairly strong relationship between the independent variable and recidivism.

Residence

Based on the review of the literature, it would be expected that the amount of delinquency would be higher for children from the city (Brookings) than from rural areas, but the types of delinquency would be the same (Shaw, 1942; Clark and Wenninger, 1962; and Jensen and Rojek, 1980). This was verified in the present research. Fifty-seven percent of the delinquents resided in Brookings, compared to 20 percent living on farms, nine percent living in rural areas (non-farms) and 15 percent
living in rural towns in Brookings County.

The rate of recidivism between each group was not very significant. Of the delinquents from Brookings, 32 percent were recidivists while of the juveniles from rural non-farms, 28 percent were recidivists. Of the farm children, 23 percent were recidivists compared to 15 percent of the delinquents from rural towns.

The findings for the amount of delinquency was upheld in the literature, as was the findings for the rates of recidivism. Residence, however, does not have a very strong relationship with recidivism in this study, as illustrated in the regression analysis where it was selected eight out of 11 independent variables.

Delinquent Associates

The research indicated that the majority of delinquent acts involved more than one person (Matza, 1964; Liska, 1973; and Erickson, 1971). The data for this investigation confirmed the prior research. Sixty-eight percent of all delinquencies involved more than one juvenile while 77 percent of the recidivists were accompanied by delinquent companions.

There was a moderate relationship between delinquent associates and recidivism. This was reflected in the regression analysis, as delinquent associates was
selected sixth. The variable delinquent associates clearly has a powerful impact on delinquency, but appears to only have a moderate impact on predicting recidivism.

Seriousness of Offense

Seriousness of Offense proved to be the most significant predictor of recidivism in the regression analysis. This was also emphasized in the review of the literature (Wolfgang, 1972; Glaser, 1969; Cressey and Ward, 1969).

The relationship between seriousness of offense and recidivism was strong. Fifty-two percent of the recidivists committed serious offenses while only 24 percent of all the delinquents committed a serious offense.

Conclusions

This investigation utilized Johnson's causal model for predicting delinquency to guide the theoretical framework. Johnson takes elements from each of the major theories (Strain, Cultural Deviance and Control) and pulls them together into a workable model with a goal of predicting delinquent behavior. Johnson contends that his model is based in Control Theory and revolves around attachments to society, but it also involves strain,
delinquent values and delinquent peers. Johnson uses a path analysis model to trace the implications of a set of causal variables leading to delinquency.

This investigation did not use the path analysis model utilized by Johnson. Data for Johnson's variables were gathered through self-administered anonymous questionnaires. The data for this study were gathered from official files and consequently did not contain information for some of the variables used in Johnson's model. Due to the lack of data for several of the variables, it was decided not to attempt a path analysis at this time.

Nevertheless, Johnson's model was influential in the development of the theoretical propositions and the hypotheses that guided this study.

According to Johnson, the most crucial elements of his model are the attachments an adolescent forms to parents and school. This study tested three variables that are associated with attachment to parents; broken homes, sibling position and family size. None of these variables portrayed a strong correlation with recidivism (the dependent variable). Two variables were used in this study to measure school attachments; school achievement and school drop out. School drop out was strongly correlated with recidivism and reinforced Johnson's
contention that juveniles who are not attached to school will have a higher probability of committing delinquent acts. School achievement was not strongly correlated to recidivism in this study.

Johnson relates social class to attachment to parents and to attachment to school. He contends social class does not cause delinquent behavior directly but instead operates by generating differentials in parent and school attachments. Social class was not found to be a significant factor in predicting recidivism in this investigation and consequently reinforced Johnson's theory.

Johnson contends adolescents who seek delinquent companions are less attached to parents and schools. In this investigation, 68 percent of all the delinquent acts were committed with associates. However, the correlation between delinquent associates and recidivism was weak.

Johnson's model also included future oriented perceived strain, love/concern of parent for child, delinquent values, perceived risk of apprehension for delinquency, anticipated peer approval for delinquency and susceptibility to peer influence. This investigation was not able to develop these variables with the information contained in the probation files.
Johnson includes the major variables associated with delinquency in his model. This researcher believes Johnson has created a workable tool for predicting delinquency. Nevertheless, the model could be improved by combining self-report data with official data. Such a project is currently in the planning stages.

Limitations of the Study

A question of the validity and reliability of some of the information found in the records on several of the variables may be raised regarding this study. For instance, IQ scores found in the records were mainly obtained from school records. However, some of the scores were obtained from the Mental Health Center and others from the State Hospital in Yankton. Moreover, the IQ tests given by the school in Brookings differed from those given in the small rural schools.

A second limitation of this study was the lack of an actual measure of the individual's self-concept because there was little information in the probation files for developing this variable. Due to the lack of information in the files, several variables used in Johnson's model were not available to this researcher. Thus, it seemed inappropriate to run a path analysis following Johnson's model.
This study also was limited by a lack of data on certain variables found in the files. For instance, 26 percent of the files had no information on school achievement, 62 percent of the IQ scores were missing and 17 percent of the files had missing information on the father's employment.

Finally, this study is limited by its reliance on official data for the investigation. Because all the information comes from probation files, there is no control group of nondelinquents available for comparison. This study was also limited to the delinquent acts the juvenile was officially adjudicated for. The actual number of delinquent offenses committed by juveniles in this study is not known as no self reported measures were utilized.

Implications for Further Study

If follow-up studies are to be conducted, the information found in official records should be combined with self report studies. This combination of information should provide a more realistic account of delinquency in the Brookings area.

Second, a measure for self concept should be developed and utilized.

Third, future research should investigate
various threshold and interactive effects of the major variables. For example, a variable such as a broken home may interact with size of family and the position of the child in the family. An effort needs to be undertaken to determine the influence of each of the variables on themselves when used in various interactive combinations. Quite possibly the influence of the various family factors would reveal an even more distinctive picture of the total impact of the family situation when correlated with recidivism among juveniles.

Finally, the findings in this study for the variables age at first adjudication and family size did not correlate with those found in the review of the literature. Future research should attempt to discover if the findings for these two variables can be replicated, and if so, are these findings representative of rural areas compared to urban areas.

An investigation is currently in the development stages that will attempt to account for the factors stated above.

A Final Note

This investigation is of particular interest to this researcher because of the potential it holds for helping practitioners combat recidivism. High rates
of recidivism are of course an indication that the juvenile justice system is not working effectively; however, through studies such as this one, practitioners can be alerted to the factors that are most likely to indicate which first-time offenders may become recidivists.

Being a practitioner, this researcher understands the frustrations fellow colleagues feel observing the same juveniles parade through court, time after time. With the aid of a predictive model, the practitioner would be able to pinpoint groups of juveniles who have the highest probability of becoming recidivists. Consequently, the cycle might be retardable, and hopefully crime rates might stabilize or even on occasion, drop. Most importantly, practitioners would be focusing on juveniles that need the most help in avoiding the "merry-go-round" of crime.
BIBLIOGRAPHY


