A study of variables associated with re-arrest among graduates of a juvenile diversion program

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A STUDY OF VARIABLES ASSOCIATED WITH RE-ARREST AMONG GRADUATES OF A JUVENILE DIVERSION PROGRAM

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Eileen Gail Holguin
Melody June O’Neill
September 2001
ABSTRACT

The Home Run Program that operates in San Bernardino County was developed to address rehabilitation of high-risk youthful offenders using a Multi-disciplinary Team (MDT) approach to treatment. Despite the fact the program was developed to address recidivism among a delinquent population, recidivism continues to be an issue for participants. This study evaluated specific social and demographic factors and the bearing they had on successful rehabilitation outcome. A quantitative method using secondary data from existing case files was used. Data was analyzed using chi-square, cross tabulation tables, correlations and multiple regression in order to examine the association between selected risk factors and the occurrence of recidivism. It was hoped that by establishing relationships between these variables that target treatment protocols could be developed. However, the study did not support a relationship between the selected social and demographic factors and recidivism.
ACKNOWLEDGMENTS

The authors wish to acknowledge the San Bernardino County Probation Department, and, in particular, Raymond B. Wingerd, Chief Probation Officer, for their support to the California State University Master of Social Work Program and this research project. Further acknowledgment goes to Zane Hacker, Supervising Probation Officer, and Sabrina Worrell for their assistance with and knowledge of the Home Run Program and its data elements.

I, Eileen G. Holguin, would like to further acknowledge the following individuals at San Bernardino County Probation Department for allowing me to accommodate work schedules during the undertaking of this project: Daniel Bautista, Supervising Probation Officer; Michael Shaw, Supervising Group Counselor II; Wilbur Brown, Supervising Probation Officer (retired); Timothy Lomheim, Supervising Probation Officer (current). My sincere gratitude and appreciation goes to all.

I would also like to thank my parents, Jessie and Gloria Holguin; my siblings Corina, Jessie, Jr. and Jennifer, and cherished friend Alice Sanchez, for their faith in my ability to complete this project. Thank you for your understanding when I could not attend family functions or special events because a term paper was due.
Thank you for your words of encouragement to complete my goal of attaining a Masters degree when I thought I would not. Most importantly, I thank you all for your everlasting love and support—it means more than you know.

Melody O’Neill extends grateful appreciation to family, friends and colleagues whose support and patience have made this effort possible. A heartfelt thank you goes to her parents, Elaine and Kenneth O’Neill, without whose love and guidance nothing would have been possible.
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CHAPTER ONE

INTRODUCTION

Problem Statement

San Bernardino, the largest county in the 48 contiguous states, is challenged by circumstances and demographics which suggest grave problems for its youth. For example, the following information highlights significant risk factors related to crime and delinquency affecting children and families in the San Bernardino County:

- 1 out of 6 children are born to drug using mothers;
- 1 out of 5 children are on some kind of financial aid;
- A child between 10 and 19 years of age is more likely to die from a homicide than a car accident;
- There are more methamphetamine laboratories per capita in San Bernardino County than in any other jurisdiction in the United States;
- The county seat is located in one of the top 5 murder capitols of the United States;
Over 10,000 juveniles in the county are identified as gang members;
8 out of 10 San Bernardino youth who are referred to Juvenile Court do not attend school;
Two-thirds to three-fourths reported use of illegal drugs
(Challenge Grant Application, 1997, p. 5)

Today, San Bernardino is plagued with a high crime rate that shows no signs of receding. "In 1994, the city of San Bernardino ranked highest in the state and 17th in the nation for the number of violent crimes committed per capita" (San Bernardino, 1997, p. 5). In addition to high crime rates, law enforcement agencies continue to contend with inadequate resources and outdated facilities.

In 1990, San Bernardino contracted with different agencies in order to assess the county's juvenile justice needs. Their findings on delinquent and status offending populations revealed that a small portion (5-10%) of the young first offenders who come to the attention of the San Bernardino County Probation Department (SBCPD) each year go on to become habitual juvenile offenders (Challenge Grant Application, 1997; San Bernardino, 1997). This same population continues their delinquent behavior into adulthood becoming violent and habitual criminals.
Further research indicated that more than 12,000 juvenile crime reports are referred to the SBCPD each year. Data suggests that these offenses are committed by approximately 9,500 juveniles. Seventy percent of these minors are first offenders and commit half of the crime attributed to juveniles, while the thirty percent of juveniles who are repeat offenders commit the other half of all juvenile crime and the majority of violent crime. A follow-up study of SBCPD's first offender population discovered that within eighteen months of their first arrest one-quarter re-offended and six percent had three or more subsequent arrests in that time frame (Challenge Grant Application, 1997). "This amounts to four-hundred new serious, habitual offenders entering the juvenile justice system each year" (Challenge Grant Application, 1997, p. 6).

The severity of problems faced by young high risk offenders in San Bernardino County suggests a need for early, stronger interventions which divert youths away from formal or official contact with the juvenile justice system. Research indicates that diversion programs have become a routine part of juvenile justice since the 1960s and 1970s (Kammer, Minor, & Wells, 1997). "In general, the concept refers to the use of a wide range of interventions
as alternatives to either initial or continued formal processing" (Kammer et al., 1977, p. 51).

In response to crushing juvenile justice problems and increased recidivism rates, the San Bernardino County Probation Department has implemented a multidisciplinary team approach to diversion. The program is called Home Run and will "...provide immediate, effective, multidisciplinary services to youth identified as at high risk of serious delinquency" (Challenge Grant Application, 1997, p. 00). The program is designed to identify and provide immediate consequences for first offender behavior, school-based pre-offending, as well as reach the youth at risk of becoming "three strike" offenders before the delinquent behavior is established (San Bernardino, 1997). By utilizing an early triage at the point of first contact with the juvenile justice system it is hoped that repeat offenders will deter from further delinquency.

The Home Run program goals are to identify juveniles at high risk of delinquency through the use of predictors of delinquent behavior. The program has identified many variables that can affect their clients' overall level of functioning such as lack of supervision and control by parent, family discord, school truancy or tardiness, school performance, criminal family influence, gang
membership, and so on. The effect of the aforementioned risk factors are consistent with those of other researchers (Loeber & Stouthamer-Loeber, 1987).

If some aspects of the client's social history are greater predictors of recidivism in the juvenile justice system than others, it is necessary to identify these areas in order to better focus interventions. By establishing a relationship between select social and demographic factors of youth with failed successful rehabilitation, via completion of the Home Run Program, it is hoped that interventions may be better tailored to meet the needs of this "failed outcome" population. It is to the benefit of the youth and their family unit, to the taxpayer, to the victims of crime, and to society in general to find the most effective way to target intervention and effect long term change in this population, in order to reduce the deleterious effects of recidivism in the juvenile justice system.

Problem Focus

Literature supports that early invention programs provide a wide range of specialized services to divert the first time youthful offender from further serious delinquency. As juvenile crime rates continue to climb,
research suggests a need for early, stronger interventions that are linked to client environment and development, as well as recidivism rates (Kammer, et al., 1997; Pogrebin, Poole, & Regoli, 1984).

The Home Run Program is designed to focus on the young offender defined as “at risk” or “high risk” with particular attention on those who exhibit multiple risk factors. SBCPD has defined at risk/high risk as “...youth who come to the attention of the justice system for relatively minor offenses and those who appear to be at high risk for reoffending…” (Challenge Grant Application, 1997, p. 2). A Risk Assessment Worksheet was developed as a screening tool for use by Department staff that include Juvenile Hall Intake, Quick Draw Officers, and School Probation Officers working with teachers and administrators. The instrument identifies risk factors in four critical areas: 1) Family Issues; 2) School; 3) Substance Abuse; and 4) Delinquency. All the above stated staff complete the Risk Assessment Worksheet and then forward it to the Multidisciplinary Team (MDT).

The MDT team consists of professionals from Social Services, Schools, Mental Health, Public Health, Probation and the community. Inter-disciplinary teams provide intensive treatment to juveniles and their families. The
criteria for identification of cases appropriate for participation in the Home Run program are as follows:

- 17.5 years old or younger on referral date - must not turn 18 within the next 7 months.
- Resides in San Bernardino County.
- Never been a ward or on informal supervision in San Bernardino County or elsewhere.
- Is "high risk" as defined by specific parameters of a "Risk Assessment Worksheet"

(Criteria, 1998, p. 1)

This research project studied the occurrence of recidivism (dependent variable) and possible indicators of its cause. There are many variables that can affect client recidivism in the Home Run Program, however this study focused on the following independent variables:

1. Age
2. Gang membership
3. 601 or 602 referral
4. Substance Abuse
5. Victim of Child Abuse

This study was a longitudinal case study design that examined client failure rates after completion of the Home Run Program. The study compared the presence and/or absence of the already identified independent variables
between a client group that successfully maintained rehabilitation and one that failed. Although is it important to study gender issues when conducting this type of research, this study kept gender a constant (male) as the majority of this target sample is juvenile males.

The purpose of this study was to determine: Does age gang membership, 601 or 602 referral, substance abuse and/or being a victim of child abuse predict re-arrest over a 6 month follow-up period among at-risk male youth who have graduated from the Home Run program?

Significance of the Project

Social workers are frequently called upon to participate in collaborative efforts as described in the Home Run Program. Operating from a systems perspective and supporting the "person-in-environment," the social worker is best qualified to clarify needs and strengths that can lead to early intervention for high-risk youth and their families. It was hoped this study would contribute to social work practice by helping the practitioner accurately identify individual and environmental factors that place youth and their families at high-risk of failed rehabilitation outcome. If this study could have established a relationship between the stated variables
and recidivism, then future research could continue to build upon the findings of this study in order to reduce recidivism rates in the juvenile justice system.
CHAPTER TWO

REVIEW OF THE LITERATURE

Social learning theory is one of several theories used to explain human behaviors in social settings. In 1941, psychologists Neil Miller and John Dollard reported study results demonstrating that "imitation" among humans was not a result of "instinct or biological programming." They posited the theory that these imitations were in fact the result of what they termed "social learning" (Wiggins, Wiggins, & Zandin, 1994).

Social learning theorists propose that learning occurs in two principal ways: through conditioning and imitation (Wiggins et al., 1994). In the arena of criminology, social learning theorists link delinquent behaviors of minors with the same theory of imitation and conditioning. Of these, Ronald L. Akers has been the primary theorist in the field linking crime and deviance to social learning theory (Akers, 1997).

Originally Akers collaborated with Robert L. Burgess to develop a "behavioristic reformulation of Edwin H. Sutherland's differential association theory of crime" (Akers, 1997, p. 59), and labeled it as "differential association-reinforcement theory" (p. 62). Akers
theoretical perspective was greatly influenced by the work of Sutherland, who had been labeled the foremost criminologist of the twentieth century (Akers). The following is an excerpt from Sutherland's 1947 theory:

1. "Criminal behavior is learned."

2. Criminal behavior is learned in interaction with other persons in a process of communication.

3. The principal part of the learning of criminal behavior occurs within intimate personal groups" (Akers, 1997, p. 60).

While there have been many criticisms of the social learning theory used by Akers, almost all research has supported that there is a "strong relationship in the theoretically expected direction between social learning variables and criminal, delinquent, and deviant behavior" (Akers, 1997, p. 73).

The intent of the current proposed study was to identify a pattern of juvenile behavior(s) or experiences that would be a predictor of recidivism. This would allow staff to better target interventions that interrupt deviant behaviors, via interactional skills such as modeling, role playing and reinforcement, using a cognitive behavioral model. Social learning theory emphasizes "family" environment in the socialization
process, and literature indicates that interventions which target the family also result in decreased oppositional behaviors (Gordon & Arbuthnot, 1987).

Numerous studies have made an association between substance use/abuse and delinquency (Catalano, Wells, Jenson, & Hawkins, 1989; Farrow & French, 1986; Hawkins, Jenson, Catalano, & Lishner, 1988; Hundleby, Carpenter, Ross, & Mercer, 1982; Loeber & Stouthamer-Loeber, 1987; Simonds & Kashani, 1980). While there is conflicting opinion as to whether substance use precedes or post dates delinquent behavior, the association between the two is supported throughout the literature.

Drug type or frequency of use was poorly addressed in the literature reviewed to date. Simonds and Kashani (1980) stated that the number of drugs abused by an offender were most predictive of crimes against persons. Farrow and French (1986) also cited studies by Tinklenberg, Murphy, Murphy and Pfefferbaum (1981) indicating that poly drug users were more likely to be "strongly associated" with violent crimes. In their own study, Farrow and French collected self disclosed data regarding substance type, frequency of use, and onset of use by juvenile offenders, but found it difficult to
“establish conclusively” that even daily substance use “affects commission of a crime” (1986, p. 958).

Literature also supports a relationship between child abuse and subsequent abusive or criminal behavior of the victim (Howing, Wodarski, Kurtz, Gaudin, & Herbst, 1990; Kruttschnitt, Ward, & Sheble, 1987; Paperny & Deisher, 1983; Smith & Thornberry, 1995). Abused children have been found to be both more aggressive and have poorer impulse control (Paperny & Deisher, 1983). This would appear to support the hypothesis of the “cycle of violence” and its link to social learning theory (Kruttschnitt, et al., 1987).

Lourie (1977) also enumerates the different types of abuse that adolescents may have experienced (as cited in Paperny and Deisher, 1983). Lourie reported that most abuse began when the child reached adolescence, possibly a result of developmental tasks experienced in adolescence that create or increase family strain. This concept is further supported by Howing, et al. (1990) who questioned the sequencing and “causal relationship” (p. 244) between child abuse and delinquency. George and Main, 1979; Herrenkohl and Herrenkohl, 1979; Larrance and Twentyman, 1983; Woldfe and Manion, 1984 could not determine whether “aggression results from or precipitates” abuse (as cited
in Howing, et al., 1990, p. 244). In the end, Howing et al. determined that juvenile delinquency and child abuse are probably "causally linked in both directions" (1990, p. 247).

Peer delinquency has been identified as the most consistent predictor of individual delinquency (Battin, Hill, Abbott, Catalano, & Hawkins, 1998); however, the relationship between gang membership and delinquency has been somewhat less clear. The lack of clarity has been due to the inability to separate gang membership from the effects of delinquent peers (Battin, et al, 1998).

The very definition of gang has also been in question. In 1995 Ball and Curry, researching the criminological definition, quote Miller (1975) as stating, "At no time has there been anything close to consensus on what a gang might be—by scholars, by criminal justice workers, by the general public" (p. 225). Horowitz, 1990; Spergel, 1990; Decker and Kempf, 1991; Spergel and Chance, 1991 further supported a continuing disparity regarding definition of the term (as cited in Curry, & Spergel, 1992).

In their 1998 study, Battin, et al. cited studies by Thornberry and colleagues (1993) stating that they had "...found that gang members, when compared to non-gang
members did not have higher rates of delinquency before entering the gang. However, upon joining a gang, their delinquency rates increased significantly...” (p. 94). A definition of “gang” was not provided. What Battin, et al. (1998) did establish (using subject self report of gang membership) in their study of the simultaneous effects of gang membership and delinquent peers, was that gang membership did intensify delinquent behaviors. Again it appears that social learning theory is applicable to delinquency as it relates to gang membership.

In their 1991 study, Vischer, Lattimore, and Linster cited studies by Baird, et al. (1984) that identified eight factors associated with continued criminal involvement for juveniles. Four of the eight factors were: “age at first adjudication, frequency and severity of prior criminal behavior,...alcohol and drug abuse,...and negative peer influences...” (p. 330).

Two articles related to diversion programs were reviewed; both studied recidivism of a comparable population composed of first or second time offenders, and excluding violent offenders (Kammer, et al., 1997; Pogrebin, et al., 1984). The study by Kammer, et al. revealed that the program had a high recidivism rate among its graduates; the studied variables (age, ethnicity,
gender, custody status, and referral type) were determined not to be significant predictors of recidivism. The study by Pogrebin, et al., indicated a lower recidivism rate among graduates of a multi disciplinary team (MDT) diversion program (6%) than among the control group (11.5%), who received only a lecture and no treatment prior to release by an intake counselor. While the study states that the "...most plausible explanation..." (1984, p. 319) is the MDT diversion program, the specific aspect of the program that resulted in reduced recidivism cannot be established. Conflicting outcome data leaves one wondering exactly what in diversion programs has a positive or negative impact upon recidivism rate, or even if treatment versus no treatment, regardless of the type, was what resulted in a lower recidivism rate.

Literature reviewed to date clearly indicates that further study related to causality of recidivism is warranted, specifically with relation to early intervention programs. It is important to further understand the successes and/or failures of diversion programs, such as the Home Run Program, in order to effectively address the needs of the target population. By identifying immediate social factors of the target population as they relate to recidivism in the juvenile
justice system, it is hoped that programs will strengthen weaknesses and build upon strengths in order to improve delivery of services to at risk youth and their families.
CHAPTER THREE

METHODOLOGY

Study Design

This study addressed the occurrence of recidivism in the San Bernardino County Probation Department’s Home Run Program and some possible indicators of its cause. A longitudinal case study design that explored client failure rates after the completion of the Home Run Program was used. It compared the presence or absence of specific client variables in relation to recidivism. Using this design allowed comparison between clients who successfully maintained rehabilitation and ones that failed rehabilitation. Study outcome was limited to the degree that case file documentation was accurate and complete.

The study was based on the following research question: Does age, gang membership, 601 or 602 referral, substance abuse and/or being a victim of child abuse predict re-arrest over a 6 month follow-up period among at-risk male youth who have graduated from the Home Run program?

Sampling

The Home Run Program began in December 1997. This study examined 100% of male client cases that had
successfully completed the Home Run Program at least 6 months prior to data collection. Successful completion was defined as those clients who had completed the program and were returned to the community setting without continued Informal and/or Formal Probation supervision by the SBCPD.

Recognizing that quantity and availability of data are critical elements to successful research outcomes, these factors were explored prior to initiating this study. Through discussion with the Director of the Home Run Program, it was established that no fewer than 50 cases meeting the definition of "successful completion" would be available for review.

The target sample of this study was juvenile males; therefore, 188 female records were not used. In addition, another 68 male records were excluded due to missing and/or ambiguous data on the Initial Risk Assessment Worksheets. The absence and/or incompleteness of this tool did not allow for capture of social and demographic predictors of recidivism. This resulted in a study sample size of 120 (n = 120).

Data Collection and Instruments

The independent variables were operationalized in this study as follows:
1. Age: The age range of this target sample is between 12 and 17.5 years.

2. Gang membership: A minor who admits and/or is known to be
   a) A gang and/or tagging crewmember.
   b) Associated with a gang ("hangs out with" or "backs up").

3. 601 or 602 referral:
   a) 601 Status Offender (Those minors who have committed offenses that would not result in sanction if perpetrated as an adult.)
   b) 602 Delinquent Offender (Those minors who have committed a law violation.)

4. Substance Abuse: Self report of a specific substance used multiple times, or two or more substances used one or more times.

5. Victim of Child Abuse: Minor’s family has a prior or pending formal filing of abuse, neglect or abandonment.

Since the above variables were studied as predictors of recidivism, it is important to define recidivism. For the purposes of this study, recidivism is defined as re-arrest by law enforcement for a succeeding offense and/or
referral for continued probation services within 6-months of successful completion of the Home Run Program.

The above-identified variables (dependent and independent) were collected on each case and recorded on the attached data collection tool (Appendix A). Both nominal (categorical) and ratio (continuous) levels of measurement were used in this study. The variables of being a victim of child abuse, gang membership, substance abuse (type), and 601 and 602 referral were measured nominally. Age and frequency of substance use were measured using a ratio variable.

Procedure

Prior to the collection of data, permission to access files was granted after submission of the research proposal to SBCPD.

Case records were accessed at the Youth Justice Center in San Bernardino and were audited on the premises. Both researchers randomly assigned each client file with a case number (1, 2, 3, etc.). These numbers were annotated on the cover of each case file in pencil. At the end of the collection and analysis of data, the identifying numbers were removed from the cover of each case file.
Data was collected from the Risk Assessment Worksheet and MDT case notes located in each file and was recorded on the Data Collection Tool according to case number. Once data were recorded, cases were aggregated into two groups; those who successfully maintained rehabilitation and those who failed rehabilitation during the 6-month follow-up period. This was determined utilizing the SBCPD Juvenile Network (JNET) database.

Data collection was conducted during the Spring and Summer Quarters of the 2000/2001 school year at California State University, San Bernardino. Case files were available to researchers 7 days per week during the hours of 8:00 a.m. until 10:00 p.m.

Protection of Human Subjects

To maintain the confidentiality and anonymity of human subjects, there was no need to document personal names from the client files. Removal of identifying numbers from case files at the end of the data collection and analysis further ensured anonymity of subjects. The Data Collection Tool(s) were maintained at the homes of the researchers.
Data Analysis

The methods used to analyze the data in this study were both univariate and bivariate. First, a frequency distribution (univariate) was used to organize and summarize data collected related to the independent and dependent variables in order to show trends in data sets. Bivariate analysis then focused on the relationship between the variables using chi-square to show the difference between the observed and expected frequencies of the nominal level variables. Ratio data of age was examined using a Pearson’s correlation. The ratio data of frequency of substance use was analyzes using linear regression. The objective was to identify statistically significant relationships between the independent variables and the dependent variable of recidivism. Statistical analysis was generated using the SPSS computer analysis program.

In order to further explore relationships between recidivism and the independent variables, the independent variables were grouped into nominal categories (e.g. gang membership and substance used) so that further measurement of statistically significant patterns could be examined. Chi-square was used to examine the relationship between nominal variables in the sample.
CHAPTER FOUR
FINDINGS AND RESULTS

One hundred and twenty youthful offenders were included in the study. The subjects were male youths between the ages of 146 and 227 months of age that completed the Home Run Program between January 28, 1998 and October 14, 2000 with the mean age of 189.51 months, a median age of 191.5 months and a mode of 191 months. Of the sample 19.2% experienced physical abuse, 4.2% experienced sexual abuse, 18.3% experienced neglect and 6.7% experienced multiple forms of abuse. Gang membership among the sample was at 42.5% and an additional 27.5% associated with gang members. Arrest rates were 25% for a status offense and 56.7% for a criminal offense.

All subjects admitted to the program had a history of substance use. Marijuana was used by 93.3% of the sample, alcohol was used by 74.2% and methamphetamine use was at 19.2%. These variables were selected for study because they had the most variance. Due to low rates of use of LSD (5.8%), cocaine and PCP (3.8%), and heroin (0.8%) these predictors lacked enough variance to be meaningful; therefore, did not warrant inclusion in the analysis.
The study showed that 20% of the subjects were re-arrested during the 6-month follow up period. Of those re-arrested 23.3% had been initially arrested for a status offense, and 17.6% were for a criminal offense. Re-arrest of gang members and gang associates was 21.6% and 9.1% respectively. Re-arrests for individuals experiencing abuse were 26.1% for physical, 20% for sexual and 18.2% for neglect. Interestingly, none of the eight individuals who experienced multiple types of abuse experienced any re-arrest. Individuals who used marijuana, alcohol and methamphetamine had a re-arrest rate of 18.7%, 20.2% and 30.4% respectively.

The data was analyzed using correlations, multiple regression and chi-square. Pearson’s Correlation Coefficient was used to study the relationship between age and re-arrest. No significant correlation was established as demonstrated by a 2-tailed significance level of .896 ($r = -.012, p = .896$).

Using multiple regression, multiple correlation was used to express the correlation between the dependent variable, re-arrest, and the independent variables, frequency of use of marijuana, alcohol and methamphetamine. The multiple $R$ for the multiple regression analysis under consideration was .124. This
indicates how well the independent variables collectively correlated with the dependent variable.

$R^2$ represents the proportion of variation explained by the entire set of independent variables ($R^2 = .015$). In this study, 1.5% (.015) of the variation in re-arrest was explained by all three variables acting in concert.

Multiple regression also calculates a statistic called the standardized regression coefficient or beta weight, for each predictor variable. The higher the beta weight, the greater the relative effect of the particular predictor variable on the dependent variable when all other predictor variables are controlled. Multiple regression also tests for the statistical significance of each beta weight, thus identifying which particular predictor variables are significantly related to the dependent variable after controlling for all other predictor variables. While there was no statistically significant predictor variable in this study, the one with the highest beta weight (.102) and the most significance (.328) was frequency of methamphetamine use. This would indicate that frequency of methamphetamine use most strongly affected re-arrest when the other two predictor
variables, frequency of alcohol and marijuana use, were controlled.

Chi-square ($\chi^2$) was used to test for association between the dependent variable, re-arrest, and the independent variables, gang membership ($\chi^2 = 3.89$, df = 2, $p = .14$), 601 and/or 602 referral ($\chi^2 = .28$, df = 1, $p = .60$) and child abuse ($\chi^2 = 2.61$, df = 4, $p = .62$). This level of measurement was used for the purpose of testing statistical significance. The use of the $\chi^2$ statistic failed to detect significant associations among variables. The observed standard residuals were also examined by cell and none of the individual cell standardized residuals approached statistical rarity.
CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS

This study investigated the relationship between age, gang membership, 601 and/or 602 referral, substance abuse and/or being a victim of child abuse and re-arrest during the 6-month follow-up period after successful completion of the Home Run Program.

This study did not support the hypothesis that age, gang membership, 601 and/or 602 referral, substance abuse and/or being a victim of child abuse are predictors of re-arrest in the sample studied. However, it is established in literature that the factors of peer delinquency, substance use and child abuse are relational to delinquency and criminal behaviors.

There were several factors that may have affected recidivism in the sample examined. The Home Run Program was designed to be an immediate consequence for first offender and school-based pre-offending behaviors; therefore, individuals had not established persistent or habitual patterns of delinquency that would result in re-arrest.

Lower incidence of re-arrest may have been due to effective MDT intervention of the Home Run Program.
Pogrebin, et al. (1984) indicated in their study that MDT was "...the most plausible explanation..." (p. 319) for a 5.5% difference in recidivism between the individuals who received MDT services and those who did not.

The fact that arrests made for violation of terms and conditions of probation during MDT intervention were not considered in this study may have impacted re-arrest during the follow-up period. Loss of sensitivity in the levels of arrest/re-arrest limited variance and, thereby, limited potential for covariance. Also, focused intervention as a result of these violations could have affected later delinquency outcomes.

In addition, twelve cases were absent 601 and/or 602 referral documentation. This could have occurred due to habitual truancy or other behaviors at the school level that did not necessarily require formal reporting as 601 and/or 602 offenses by School Probation Officers and/or law enforcement. In lieu of formal citation, individuals were given the option of participating in the Home Run Program. There is the possibility that the lack of documentation could have skewed outcomes related to this predictor and re-arrest.

As previously mentioned, there were some limitations to this study and further research is needed. It is
established in literature that factors of peer delinquency, substance use and child abuse are relational to delinquency and criminal behaviors. It is recommended the following issues be addressed prior to further study.

Since the Risk Assessment Tool lacked documented frequency of drug use in 10 cases reviewed, this could have skewed outcomes related to this predictor and re-arrest. Staff training on the importance of accurate and thorough completion of the document should be stressed prior to use of the tool. Continued reinforcement of the need for accuracy should be made to staff throughout the duration of the program.

Multiple Risk Assessment Tools were found in some case files. These tools were often completed by different individuals at different points in the intake process and contained disparate information. Consistency of intake points and training of all associated staff would better standardize information and decrease contradiction of information reported.

The Risk Assessment Tool format was modified during the period of January 28, 1998 to October 14, 2000. Change in data collection elements of the tool could have resulted in different interpretations by intake officers, thus leading to measurement errors. Any time that there is
a change in an assessment tool, it is essential that staff be made aware of how to complete the form to assure maximum accuracy and consistency of reported information.

The inclusion of probation violations incurred during the program might give a truer measure of potential for recidivism within this sample. If the predictors previously identified could be associated with recidivism during the program, then these predictors could be targeted at entry into the program and possibly de-escalate in-program delinquent behaviors.

There are other factors identified in the Risk Assessment Tool that were not measured by this study and that might predict re-arrest in this sample. They include family issues related to lack of supervision and control, criminal family influence and family stressors of divorce, death, abandonment, illness, frequent relocations and financial problems. Also included are school issues of truancy, tardiness and absence, failure of a class and/or expulsion or suspension.

While San Bernardino County Probation Department utilized a control group that did not receive the services of the MDT, this study looked only at a sample receiving MDT intervention. If this study had included a sample from the SBCPD control group, it might have better determined
if the identified predictors impacted re-arrest within the population as a whole.

Although this study did not indicate a statistically significant relationship of age, gang membership, 601 and 602 referral, substance abuse and/or being a victim of child abuse to re-arrest, it did support that recidivism, at a rate of 20%, continues to be a significant issue in juvenile rehabilitation and warrants further study.
APPENDIX

DATA COLLECTION TOOL
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<th>Status Offense</th>
<th>Delinquent Offense</th>
<th>Age</th>
<th>Gang</th>
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REFERENCES


ASSIGNED RESPONSIBILITIES

This was a two-person project where authors collaborated throughout. These responsibilities were assigned in the manner listed below.

1. Chapter One: Problem Statement/Problem Focus
   
   Primary: Eileen G. Holguin
   Secondary: Melody J. O’Neill

2. Chapter Two: Literature Review
   
   Primary: Melody J. O’Neill
   Secondary: Eileen G. Holguin

3. Chapter Three: Methodology
   
   Collaborative Effort: Eileen G. Holguin
   Melody J. O’Neill

4. Chapter Four: Results
   
   Collaborative Effort: Eileen G. Holguin
   Melody J. O’Neill

5. Chapter Five: Conclusions and Recommendations
   
   Collaborative Effort: Eileen G. Holguin
   Melody J. O’Neill