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THE SOCIAL DEVELOPMENT MODEL AND DELINQUENT BEHAVIOR:
A CASE STUDY

A Thesis Paper

Submitted to Faculty of the Department of Justice Administration

UNIVERSITY OF LOUISVILLE

Louisville, KY

by

JESSICA MULLIKIN

In Partial Fulfillment of the
Requirements for the Degree of
MASTER OF SCIENCE

December 2006

The Social Development Model and Delinquent Behavior: A Case Study

By

Jessica Mullikin
B.S., University of Louisville, 2005

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ABSTRACT

The Social Development Model and Delinquent Behavior: A Case Study

Jessica Mullikin

December 2006

This study was conducted to examine the impact that extreme economic deprivation has on adolescent social development. Data for this study was collected from the 2000 U.S. Census Bureau. This study uses the Developmental Prevention model as a theoretical basis, a theory which posits that extreme economic deprivation, as measured by income, poverty, crime rates, racial composition of neighborhoods, and prevalence of mothers and grandparents as sole caregivers, is a risk factor for all delinquent behaviors. The specific delinquent behaviors examined in this study were teen pregnancy, school dropout, poor school attendance, and criminality. A study was conducted to compare high-risk neighborhoods and middle-upper class neighborhoods to assess whether extreme economic disparity was a factor in the occurrences of the specific delinquent behaviors.

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THE SOCIAL DEVELOPMENT MODEL AND DELINQUENT BEHAVIOR:

A CASE STUDY

INTRODUCTION

This paper discusses the effects of extreme economic deprivation on childhood development and delinquency. Children who grow up in homes and neighborhoods that have the characteristics of extreme economic deprivation are statistically less educated, earn less money, and are more likely to commit crimes and be incarcerated. Symptoms of economically deprived homes and neighborhoods include crowded dwellings, neighborhood disorganization, high crime rates, low educational attainment levels (in family and in neighborhood), and few available educational and occupational opportunities.

It is the hope that focusing prevention efforts on the at-risk children in these environments will deter them from becoming delinquent and subsequently criminal. This is an important issue due to the large number of children committing crimes and the increasing violence associated with juvenile crime.

In 2004, the Office of Juvenile Justice and Delinquency Prevention's Uniform Crime Report (UCR) indicated that 16% of all persons arrested were juveniles (less than 18 years of age). In raw numbers that equaled 1,598,247 juvenile offenders apprehended

by the police. This number obviously does not include the many juvenile offenses that go unreported or offenders that go undiscovered and thus do not become part of the national statistics (OJJDP, 2006).

Property offenses made up the majority of crimes for which juveniles were arrested. The most common property offenses were vandalism (74,808 reports), weapons possession (29,447 reports), and stolen property charges which included buying, receiving, and possessing (17,189 reports). Between 1980 and 1997, the rate of arrest for those under the age of 17 on drug violation charges increased by 145% (Snyder, 2003). The rate declined by 22% by 2003 but remains at twice the rate it was in 1990 with 600 juveniles out of every 100,000 charged with a drug violation.

The UCR also reports that between 1994 and 2003, the arrests of persons under the age of 18 for alcohol offenses—including various liquor law violations—increased 3.8%. Even though fewer people were using drugs by 1995 than they were a decade before (Hawkins, Arthur, & Catalano, 1995), more are being arrested and incarcerated on drug charges and admitted to emergency rooms and treatment centers for drug abuse due to the expanded efforts of the U.S. government's war on drugs (Hawkins, Arthur, & Catalano, 1995). The grim reality of the costs of substance abuse and the limitations of supply reduction and current treatment efforts has increased the focus on prevention and demand reduction (Hawkins, Arthur, & Catalano, 1995).

RELEVANT CRIMINOLOGICAL THEORY

Before presenting an explanation of Social Development, it is first necessary to state clearly what is meant by prevention and how it differs from most criminological ideas of treatment and sanctions. Patrick Tolan (1995) argues that it is not utilitarian to include “any and all activity oriented to understanding and affecting crime” (Tolan, 1995, p. 109) under the category of prevention. Instead, he claims that prevention should be “limited to actions intended to prevent the onset of criminal activity in individuals or the occurrence of criminal activities within a given location” (Tolan, 1995, p. 109).

Social Development strategies attempt to predict and thus prevent such onset by reducing the risk factors that have been shown to predict delinquency and increasing the protective factors that negate those risks (Tonry & Farrington, 1995). This perspective is based on the works of many criminologists, theorists, and developmental researchers in psychology, education, psychiatry, and public health settings (Tonry & Farrington, 1995).

Loeber and Dishion (1983), both psychologists, conducted an extensive review of the most important predictors of offending and found that poor parental child management, childhood antisocial behavior, offending by parents and siblings, low intelligence and educational attainment, and separation from a parent were the most

significant predictors. There is much agreement on the importance of these factors (Hirschi, 1969; Laub, Sampson, & Allen, 1994; Sutherland, 1947).

Travis Hirschi's (1969) Social Control theory claims that delinquency is the result of weak or absent bonds to the social institutions of family, school, and other social institutions of control. Laub, Sampson, and Allen (1994) also agree that most offenders have multiple risk factors in common, including poor family functioning and child rearing practices, poor school achievement, weak attachment to school, and associations with delinquent peers.

Another firm believer in the influence of delinquent peers was Edwin Sutherland. Sutherland's (1947) theory of Differential Association summarily states that individuals become delinquent due to an excess of definitions favorable to the violation of laws. These definitions, along with the skills and behaviors that go into the violations are learned from other delinquents through the same communication and learning processes that non-criminal behaviors are learned (Sutherland, 1947).

Burgess and Akers (1966) expanded on Sutherland's theory by adding that the learning process follows the principles of operant conditioning and that criminal behavior specifically "is a function of norms that are discriminative for criminal behavior, the learning of which takes place when such behavior is more highly reinforced than non-criminal behavior" (Sutherland, 1947, p. 6). Burgess and Akers (1966) thus contend that if delinquency is learned through the social learning process in naturally occurring environments, it should be possible to manipulate that process and the environment toward more pro-social behaviors and beliefs.

The individual characteristics that have been shown to have the strongest association with subsequent delinquency are considered to be risk factors. These include disruptive behaviors during childhood ranging from opposition, aggression, and hyperactivity to cognitive deficits such as low IQ, inattentiveness, and poor school performance (Tremblay & Craig, 1995). The strongest associations with family characteristics are found in parental deviance, parental rejection, parental discord, ineffective discipline, and poor supervision (Tremblay & Craig, 1995). The environmental characteristics most highly associated with subsequent delinquency are poorly organized neighborhoods with high crime rates, poorly organized schools, and associations with deviant peers (Tremblay & Craig, 1995). The effect of each specific risk and protective factor will vary in magnitude depending on the developmental stage of the individual.

The goals for the Social Development model are—once the risk and protective factors have been identified—to determine the causal relationships between these factors, identify those that are amenable to change, and identify the changes that will have the most effect on delinquency and substance abuse prevention (Bock & Whelan, 1991; Coie et al., 1993).

Tremblay and Craig (1995), in their book *Developmental Crime Prevention*, reviewed numerous studies that focused on understanding the causal links to delinquency and criminality by modifying an individual's environment or behavior to help in understanding the role of that environment or behavior in his or her development. Many

of these studies were based on the theories of learning and development developed by psychological researchers.

Most prominent is the work of developmental psychologist Jean Piaget (1896-1980). Piaget believed that as children develop, through their interaction with the environment around them, knowledge is invented and reinvented as they pass through the four stages of cognitive development. The first stage, the *sensorimotor* stage, occurs during the first two years of life. During this stage, the child's thoughts are influenced by sensation and movement through motor and reflex actions. This is the stage when the child begins to realize there is a world outside of its own view in which objects still exist without them being seen (Springhouse Corporation, 1990).

The *preoperational* stage begins when the child begins to speak and typically lasts until the age of 7 years old. Symbols, such as newly acquired language, begin to take on meaning. At this stage, the child perceives the world through his or her own fantasy of what he or she feels it should be like and assumes others see it the same way (Springhouse Corporation, 1990).

From around 6 years of age to early adolescence, the child is in the *concrete* stage. The learning in this stage takes on a more mental aspect. Up to this point, the child learned mainly through physical touch and sensory-motor manipulation. In the concrete stage, the child begins to mentally process abstractly and rationally. The final stage of development occurs in adolescence (Springhouse Corporation, 1990).

The *formal operations* stage completes cognitive development. By this stage, the adolescent should be fully capable of hypothetical judgments and deductive reasoning. In

order to achieve complete and healthy psychological development, it is essential that the child master each stage before moving on to the next (Springhouse Corporation, 1990).

Equally important is the attainment of *equilibration*. Equilibration is achieved when the child is able to assimilate and accommodate new information from events in his or her environment (Silverthorn, 1999). Erikson's Personality Development theory also plays a role in the design of developmental studies (Lally, Mangione, & Honig, 1988). Erikson believed that childhood is the most crucial time for personality development. Each stage of personality development is implicit at birth and "unfold[s] according to both an innate scheme and one's up-bringing in a family that expresses the values of a culture" (Davis & Clifton, 1995, p. 109). Based on physiological development and the demands placed on the child by parents and society (environment), each stage builds on the previous one; hence, this affirms Piaget's notion that the child must successfully complete one stage before he or she can develop into the next (Davis & Clifton, 1995).

Although there are limitations and research method issues with many of these experiments, Tremblay and Craig (1995) concluded these studies reliably show evidence that many of the factors thought to be causal factors for criminal behavior can be manipulated during childhood to reduce subsequent criminal behavior. One of the limitations of the studies cited in this paper is the small sample size utilized by the researchers.

This small sample size may influence the significance when attempting to generalize the results. Several of the experiments also did not include long-term follow-up studies; thereby, although they may have produced positive results, the extent of them

may remain questionable. Finally, the studies in this review have yet to be replicated; although a few large-scale experiments are currently taking place (Bierman et al., 1992; Coie et al., 1993; Guerra, Tolan, & Hammond, 1994; Peters & Russell, 1993) it may be at least 10 years before the results are assessed (Tremblay & Craig, 1995). Bierman et al. (in press), however, recently reported that the Fast Track study suggested children with socially positive characteristics can influence children with behavior problems when grouped together. Development of delinquent behaviors also was found to be associated with the delinquent behavior developed in other youths. Thus, the study concluded that more attention must be paid to group composition in its effect on delinquent peer influences. Unfortunately, this is the only study that has yet to publish follow up results.

It is important to have a clear understanding of the risk and protective factors associated with the Social Development theory. The following section consists of reviews of some of the experimental programs that have been attempted based on the concepts of the Social Development theory.

Since the *causal* factor depends on the life stage of development of the subject, the studies reviewed in this paper are divided by the particular study's focus on life stage, beginning with prenatal and infant development. The following examples illustrate the utilization of programs based on the Social Development theory in that they attempt to manipulate the risk and protective factors in an environment in order to reduce the outcome of criminal and delinquent behaviors of the affected children.

PRENATAL AND INFANT DEVELOPMENT

In an effort to prevent the onset of delinquent/criminal behavior, interventions have included support and training for parents (Patterson, Reid, Jones, & Conger, 1975). These interventions include education and information programs, parent training, job training, medical support, and family support.

The Syracuse Family Development Research Program conducted in 1969 attempted to end the cycle of poorly educated parents leading to educational difficulties for the child (Lally, Mangione, & Honig, 1988). The focus was on young, poor, pregnant women with a mean age of 18 years. The theoretical basis of the experimental design was drawn from several prominent criminologists, psychologists, and behavioral theorists.

By the end of the five-year study, 76% of the experiment group and 69% of the matched controls remained for assessment. When first assessed at age 3, the treated group had significantly higher IQ scores than the control group but this was no longer the case at the end of the five-year period. Follow-up assessments also were made at various ages up to 15 years. According to records provided by the New York Department of Probation on the children between the ages of 13 and 16, only 6% of the treated children (4 out of the remaining 65) had been on probation compared to 22% (12 of 54 remaining) of the control group (Tremblay & Craig, 1995).

This study was shown to have a positive effect on delinquency prevention as evidenced by the significantly fewer treated children with probationary records.

Unfortunately, the assessment did not provide information on the educational attainment of the participants. Since the focus was on ending the cycle of poor education, without this knowledge, there is not conclusive evidence as to whether it was effective in this regard.

Project CARE was designed to promote cognitive and behavioral development in preschool age children within the home and in daycare settings (Wasik, Ramey, Bryant, & Sparling, 1990). Similar to the Syracuse study, Project CARE chose its subjects on the criteria of parental educational and social circumstances. Wasik et al. (1990) theorized that parent-child interactions are influenced by the parents' education and intellectual knowledge and skills. They believed the children to be at risk of delayed development due to the disadvantaged educational and social circumstances of the parents.

The results indicated that the daycare curriculum had a positive effect in that the children who attended the daycare program responded significantly better on measures of cognitive development. Unfortunately, the same could not be said about the parent training program. Those who received only the parent training did not show any significant difference from the control group in the measures of parenting, parent-responsiveness, parent-satisfaction, or parent-child relationship. The researchers attributed the lack of improvement to insufficient training and supervision of home visitors and lack of prenatal intervention efforts. However, more research would need to be done to draw any decisive conclusions.

The Prenatal/Early Infancy Project, as the name would imply, did include prenatal intervention (Olds, Henderson, Chamberlain, & Tatelbaum, 1986). This study intended to

determine the effects of home visit interventions on preventing child maltreatment and various health and developmental problems. Aside from striving to prevent long-term negative outcomes, Olds et al. (1986) hoped to gain more understanding on the influences of mother and child outcomes. They theorized that nurse home-care visits are an optimal situation in which to identify and change factors within the home and family that may negatively influence or interfere with factors such as maternal health habits, infant care-giving, family planning, and accomplishments at work or in education. Women were chosen on the basis of relatively young age, single-parent status, being a first-time parent, and/or low socioeconomic status.

The two treatment groups that included nurse home visits were less likely than those in the control and transportation-only groups to restrict and punish the child, maltreat the child, and visit the emergency room. The mothers in the nurse-visited groups also had more months of employment and fewer subsequent pregnancies. Additionally, there were demonstrable improvements in the child's cognitive and behavioral functioning. Although the positive effects of nurse home visits on the quality of parenting and short-term child functioning were shown, a long-term follow-up would be needed to show the effects of such treatments on delinquency and crime prevention.

ELEMENTARY SCHOOL AGE INTERVENTIONS

The St. Louis Experiment took its premise from Sutherland's Differential Association theory (Feldman, 1992). Feldman believed that when children failed to bond to their parents or when the bonds were weak, the influence of peers was that much greater. This follows Hirschi's Social Control theory more closely, although in the research no credit was given to Hirschi.

Feldman (1992) wished to test Sutherland's hypothesis that through associations with similarly deviant others, children's deviant behaviors were reinforced and encouraged. He intended to treat the antisocial youths by placing them in an environment with pro-social youths in which they could apply the social learning process toward more positive beliefs and behaviors. Overall, the groups that had the more experienced leaders showed the most improvements regardless of the treatment type. Among the combination groups, made up of both anti and pro-social youths, 91% of the males showed a reduction in antisocial behaviors compared to only 50% of the heterogeneous groups. Interestingly, none of the non-antisocial youths in the combination groups showed an increase in antisocial behavior. This study supports the theory that pro-social peer influence can cause a decrease in antisocial behavior.

A study at the University of Pittsburgh by Kazdin, Siegel, and Bass (1992) tested the argument that many treatment programs are not effective when implemented separately, but when applied with a complementary treatment, they are more effective. Kazdin, Siegel, and Bass matched parent management training and cognitively-based problem solving skills training for the children. They chose these two treatments due to their belief that child rearing practices and cognitive processes are complimentary conceptual functions. The subjects were selected out of a group of children referred to a psychiatric clinic for help with aggressive and antisocial behaviors.

The results were determined during a one-year follow-up study on the measures of the child's behavior, the parent's adjustment level (stress, depression), and family functioning. The group that received the combination treatment showed significantly more positive results in both the child's behavior and the parent's adjustment. Although the problem-solving-only and the parent-management-only training groups did show some improvement in some of the measures, the results were not significant. These results support the experimenter's theory that a combination of complementary treatments will be more effective than a single treatment.

The Seattle Social Development Project (Hawkins et al., 1992) was based on the Social Development model (Farrington & Hawkins, 1991), Social Control (Hirschi, 1969), and Social Learning (Bandura, Adams, & Beyer, 1977) theories. The study intended to reduce the shared risk factors in childhood that lead to delinquency and substance abuse by enhancing the bonds to family and school. It was hypothesized that this could be done by increasing opportunities for pro-social interactions, improving

social interaction skills, and increasing the reinforcement of pro-social behavior, and participation at home and school. This study involved the public elementary schools in Seattle, Washington, and was started when the children entered the first grade and continued through their fourth grade year.

An analysis of continuous measures showed multiple, significant positive results in the intervention group. This group had more proactive family management by parents, increased family communication and bonding, and perceived school as more rewarding even though the subjects generally had lower standardized test scores. Despite there being no difference between the intervention and control groups in regard to beliefs on drug abuse, the intervention group had lower rates of alcohol use. Within the intervention group, only 45% of the children participated in some form of delinquent behavior(s) compared to 52% of the control group, a difference considered to be significant by the researchers. Overall, this study supports the theory that increased bonds and commitment to family and school can positively influence later delinquency.

Adolescent Interventions

These interventions target juveniles in the middle-high school age range. Many interventions at this stage focus on school and peer relationships because these are the primary social sources for adolescents.

Bry and George (1979) reviewed a study targeting school commitment. The study tested the theory that cognitive processes mediated behavioral changes and that problem behaviors are preceded by a low sense of competence and a cynicism about the predictability of the world. The hypothesis was that if subjects understood that their goals

could be achieved by their own actions, then they would increase their sense of competence and reduce their level of cynicism. Subjects were chosen by reviewing their sixth grade records for the following criteria: low academic achievement motivation, disregard for rules, and a feeling of distance from their families.

Results were assessed one year after the two-year treatment ended and county probation department records were checked five years after the end of treatment. The one-year follow-up showed that the treated group had significantly fewer serious school problems, higher rates of consistent employment, and fewer reports of drug abuse or criminal behavior. The five-year follow-up check of probation records found that only 10% of intervention subjects had “serious or chronic” delinquency problems compared to 30% of the control group. This study supports the hypothesis that an increase in competence and a reduction in cynicism about the world have an effect on delinquency and substance abuse.

The Student Training Through Urban Strategies Project attempted to prevent delinquency in high school students through a course for high-risk students (Gottfredson & Gottfredson, 1992). The course was based on the ideas of Strain and Opportunity theories and the premise that in order for an adolescent to become a law-abiding citizen with moral reasoning abilities, he or she must learn what his or her own responsibilities are along with the roles of the government, the law, and the criminal justice system. Applying Strain theory, Gottfredson and Gottfredson (1992) attempted to decrease the students’ sense of alienation by implementing participatory teaching techniques to

improve critical thinking and problem-solving skills, and increase academic success by teaching a curriculum of interest to the student.

The results were assessed at the end of the school year. Delinquency was measured by self-reports from the students and records of court contacts. The treatment group of 15- to 17-year-olds reported significantly less serious delinquency. The same held true for the treatment group of 12- to 14-year-olds, but not at a significant level. Court records also showed fewer contacts with the students in both treatment groups, although not a significant difference. Overall, this study does show some support of the positive effects of a targeted curriculum design on negative peer influence, attachment to school, and school success.

A study targeting cognitive skills by Arbuthnot and Gordon (1986) was conducted on the belief that moral reasoning was linked to delinquent behavior (Blasi, 1980; Jurkovic, 1980). Kohlberg (1969) built his cognitive developmental theory of moral reasoning on Piaget's stages of development, and Arbuthnot and Gordon used it as the basis for their study. They suggested that adolescents who are at an increased risk of delinquent behavior due to a behavior disorder use less advanced moral reasoning skills. They felt that, with training, adolescents could improve their reasoning skills and avoid delinquent behavior.

Outcomes were assessed at the end of the treatment and again at a one-year follow-up based on teacher ratings, subject assessments, and school and court records. At both the end of treatment assessment and at the one-year follow-up, the treated group performed significantly better on measures of socio-moral reasoning. The treated group

also did significantly better in terms of disciplinary referrals, school absenteeism and tardiness, and grade point averages. At the end of the treatment, the treated group had significantly fewer contacts with the police and courts but this difference disappeared at the one-year follow-up. This study does not support the hypothesis that improved moral reasoning has an effect on long-term delinquency prevention but does show positive results in school performance.

Although the programs reviewed vary in target population, technique, application, and results, they all illustrate the basic tenets of the Social Development theory. Specifically, each program focused on the importance of targeting the population at a specific stage of development, addressing specific risk factors, and emphasizing protective factors. Although these concepts make up the basic foundation of the theory, it is important to gain a deeper understanding of the background and evolution of the theory.

SOCIAL DEVELOPMENT THEORY

According to Tonry and Farrington (1995), Social Development theory is a relatively new frontier of crime prevention efforts. Although the concept was introduced more than a decade ago, it has made a slow but steady climb into recognition. Social Developmental preventions are those interventions designed to prevent the development of criminal potential in individuals by targeting the risk and protective factors associated with human development (Tonry & Farrington, 1995). Social Development theorists focus on interventions that aim to reduce these risk factors and increase the protective factors that are hypothesized to have the most effect on the child's development (Tremblay & Craig, 1995). Protective factors are those conditions that help protect children and adolescents from risk and promote positive development (including factors such as bonds and attachments to parents, family, school, and norms) as well as the promotion of developmental cognitive, social, communication, and problem-solving skills—as opposed to enabling antisocial behavior (Hawkins & Catalano, 1993).

Risk factors are conditions or variables that increase the chances of a child or adolescent engaging in harmful activities and those which hinder positive development (Channing Bete Company, Inc., 2004). Tremblay and Craig (1995) identified three broad categories of risk and protective factors: individual characteristics, family characteristics,

and environmental characteristics. Crime prevention from a Social Developmental perspective is based on the proposition that criminality is determined by attitude and behavioral patterns that are learned during development (Tremblay & Craig, 1995).

Ideally, intervention would occur early enough to prevent the risk factors from becoming too ingrained (Tonry & Farrington, 1995) based on the hypothesis that patterns of behavior are plastic in early childhood but gain rigidity as the child grows (Condry, 1983; Gottfredson & Hirschi, 1990; Huesmann & Eron, 1989; Parke & Slaby, 1983). Although there is some disagreement, it is a widespread belief that programs to prevent adult and youth offenders from recidivating will continue to be largely unsuccessful (Gottfredson & Hirschi, 1990). Thus, many researchers are shifting the emphasis on prevention geared toward at-risk children (Gendreau & Ross, 1987).

In the Communities That Care model of risk-focused prevention, which was designed using the Social Development strategy created by Hawkins and Catalano (1993), the authors assert that parents who have high expectations for their children's school success and achievement and clear standards against criminal activity have a protective effect. Yet it is difficult for children who grow up in high-risk neighborhoods plagued with poverty, low educational attainment, unemployment, and other environmental risk factors to establish clear, pro-social standards. With this contention as the basis, this research sought to show that neighborhoods that have high levels of the latter characteristics, also have higher levels of criminal offenses and victimization. This correlation is important in our understanding of preventative measures because it is

important that we focus prevention strategies on those children at the greatest risk of becoming criminals, victims, or both.

METHODS

A comparison study was made to examine the risk factors (independent variables) of crime commission (dependant variables) present in two different neighborhoods in Louisville, Kentucky. Several independent variables in regard to income, poverty, educational attainment, main caregiver status, and employment were pulled from the U.S. Census Bureau website and compared between the two collectively represented areas based on census tract. The independent variables were median income, percent living in poverty, prevalence of single-parent and grandparent headed households with children, educational attainment, and employment rates.

The first area is made up of three census tracts. This area is classified, for the purposes of this study, as Smoketown, a high-risk neighborhood based on the prevalence of poverty, unemployment, and low educational attainment. The comparison neighborhood is classified as low-risk based on the low levels of the same characteristics. This area is made up of five census tracts and is collectively known as St. Matthews.

The information used to conduct this comparison study was collected by the Louisville Metro Police Department, the Uniform Crime Reports, and the U.S. Census Bureau and organized by census tract. Much of this data is displayed on www.census.gov and available to the public. Census tracts are, according to the U.S. Census Bureau (2006)

glossary, “small, relatively permanent statistical subdivisions of a county... delineated by a local committee of census data users... Boundaries normally follow visible features, but may follow governmental unit boundaries and other non-visible features... within counties” (§ 1).

A clarification of the definitions of terms used by the U.S. Census Bureau in its data collection is necessary to gain a complete understanding of the meaning of these statistics. In the employment statistics, the percentages of persons age 16 years and older were counted to measure those in the labor force, employed, unemployed, and those not in the labor force. The labor force generally includes all persons age 16 and above classified in the civilian labor force, plus those members of the U.S. Armed Forces—both employed and unemployed. For the purposes of this study, however, only the civilian labor force was examined.

The U.S. Census Bureau (2006) classification of the employed status includes:

All civilians 16 years old and over who were either (1) "at work"—those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were "with a job but not at work"—those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also

excluded are people on active duty in the United States Armed Forces. The reference week is the calendar week proceeding the date on which the respondents completed their questionnaires or were interviewed. This week may not be the same for all respondents. (§ 1)

People are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last four weeks. All civilians 16 years old and over are classified as unemployed if (3) they were available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness. (§ 2)

Individuals who are considered not in the labor force (but who are 16 years old and older) are primarily "students, housewives, retired workers, seasonal workers interviewed in an off season who were not looking for work, institutionalized people, and people doing only incidental unpaid family work (less than 15 hours during the reference week)" (U.S. Census Bureau, 2006, § 2).

The U.S. Census Bureau (2006) classifies poverty by using:

...A set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level." (§ 4)

ANALYSIS

Using data gathered by the U.S. Census Bureau on each census tract, an analysis was conducted to determine the community and economic characteristics most important to the purposes of this study. Since the Communities That Care model of crime prevention lists extreme economic deprivation as the only risk factor associated with virtually all adolescent problem behaviors (Hawkins & Catalano, 1993), it appears that extreme economic deprivation is one of the strongest predictors of the greatest number of issues; this observation is highly significant for the interests of this research. Therefore, the characteristics selected for analysis in this study were those symptomatic of extreme economic deprivation.

The specific characteristics, or variables, used to measure extreme economic deprivation were income level, poverty, educational attainment, employment, and primary caregivers in population. Racial composition was also included to illustrate the race of those most greatly affected. Much of these data were given in percentage of population but the data that was given in numbers of individuals was converted to percentage of population to make up for the significant differences in population sizes between the two neighborhoods. The data were reviewed on the U.S. Census Bureau data spreadsheets. The variables of interest were then selected and downloaded onto both

individual tract data set charts and with data on the aggregated tracts charted side by side for simpler comparison.

RESULTS

Percentages

	smoketown	st.matthews	Louisville	Lou minus smoketown
Families Living in Poverty				
	92.6	4.90	15.0	13.6
Income per Families (\$)				
less than 10,000	37.6	4.3	17.5	33.6
10-14,900	13.6	1.9	9.4	18.3
15-24,900	13.9	8.2	17	33.4
25-34,900	11.3	9.7	14.6	28.8
35-49,900	9.2	16.2	15.9	31.4
50 and up	13.9	59.7	25.6	50.7
median income	16,336	56,473	28,843	
Employment Rates				
Employed	80.4	9173	56.2	59.8
Unemployed	19.6	281	4.5	4.5
Female headed Families,no husbands				
	89.6	2.75	12.7	11.4
Percent of Households with Grandparents raising grandchildren				
	12.8	0.87	5.0	4.8
Educational Attainment for population over 25 Years of Age				
less than 9th gr	10.1	2.7	7.2	7.6
9-12 no diploma	31.0	6.4	16.7	17.4
H.S. grad (or equiv)	30.2	19	28.9	31
some college (no grad)	16.5	23.1	21.1	22.9
associates	2.46	4.9	4.8	5.25
bachelors	6.24	27.7	12.6	13.8
grad or prof. degree	3.5	16.2	8.7	9.6

St. Matthews Crime Report

		% of total	Rate per 1,000 people
Violent	81	9.7	
Property	753	80.6	
Total	834		52.6

Louisville Crime Report

		% of total	Rate per 1,000
Violent	2309	15.1	
Property	13022	84.9	
Total	15331		59.8

Smoketown Crime Report

		% of total	Rate per 1,000
Violent	348	27.6	
Property	911	72.3	
Total	1259		122.07

Louisville Minus Smoketown

		% of total	Rate per 1,000
Violent	1961	14	
Property	12038	86	
Total	13999		57.06

These results show that the Smoketown neighborhood has a crime rate of 122.07 crimes per 1000 people, a rate double that of both St. Matthews and the rest of the city of Louisville. In Smoketown, 92.6 percent of all families with children under the age of

eighteen live in poverty and 89.6 of all families with children under the age of eighteen are single mothers. Also, 12.8 percent of grandparents are responsible for raising their grandchildren.

Smoketown also has a significantly under educated population with only 12.2 percent of residents over twenty-five years of age with a college degree and 41.1 percent without a high school diploma or its equivalent. The unemployment rate among residents sixteen years and older is 19.6 percent. And, the median annual income among families with children to support is only \$16,336.

These figures are significantly more troubling than those for St. Matthews and the rest of the city of Louisville. Only 4.9 percent of families in St. Matthews and 15 percent of families in the rest of Louisville live in poverty. Single mothers represent only 2.75 percent of families in St. Matthews and 12.7 percent of Louisville families. Only .87 percent of families in St. Matthews are grandparents raising their grandchildren and 5 percent in Louisville.

Educational differences were just as striking. Almost half (48.8%) of all St. Matthews residents over twenty-five had a college degree while only 9.1 percent had not graduated high school. In the rest of Louisville, 26.1 percent of all those twenty-five and older have a college degree and 23.9 percent do not have a high school diploma. Although these numbers for the city of Louisville are not high, they are far more positive than those of Smoketown.

The unemployment rates in St. Matthews and Louisville are 3 and 4.5 percent respectively. Although St. Matthews enjoys the highest average annual income for

families with children under eighteen at \$56,473, Louisvilles average of \$28,843 is still significantly higher than the average in Smoketown.

DISCUSSION

Although the contrasts between the comparable data for each area may be obvious, the significance of the findings may not be. This discussion explains the significance in the context of the Social Developmental model of crime prevention.

Tim Hope, in his 1995 essay *Community Crime Prevention*, refers to a point made by W. J. Wilson (1987) in that he claims “crime prevention needs to address the possibility that informal resources for prevention within contemporary high-crime residential communities are being undermined by their increasing economic, social, and political isolation from the rest of society” (Wilson, 1987, p. 77). In other words, both Hope and Wilson believe that efforts and resources would be better used (or should concurrently be used) to attempt to understand and address the economic, social, and political problems prevalent in high-risk neighborhoods if social reformers are going to attempt to manage the crime problems of those neighborhoods.

Hope (1995) goes on to exemplify the importance of education by referring to social institutions (in this case, schools) as “conduits between the community and the wider sources of wealth and power” (Kornhouser, 1978, p. 77). In the St. Matthews area, the majority of the population had earned high school diplomas and engaged in further education in college. In the Smoketown neighborhood, the majority had attained only a

high school diploma or less. This lack of education, along with other issues soon to be discussed, substantially reduces possible employment opportunities. Wilson's economic isolation is referred to by Hope (1995) as *poverty concentration*, characterized by the movement of employment out of the inner-city and the inability of inner-city residents to move out geographically or up economically. The high rate of joblessness in a community appears to have a strong influence on the community's crime rates (Sampson, 1985). As seen in the employment, poverty, and crime rates, respectively, the Smoketown area is characterized by high rates of poverty, joblessness, and crime.

The post-industrial redistribution and concentrated economic inequality is accompanied by higher rates of not only criminality but violent crime. The youth in these inner-city areas are more likely to turn to street robbery and drug dealing in their own neighborhoods to make up for the lack of legitimate economic opportunity (Anderson, 1990; Sullivan, 1989). On the theory that the youths engage in these behaviors in their own neighborhoods (Hope, 1995), it is predominately their own neighbors that become the victims of their violent acts and the users of the drugs they sell. Also, acknowledging that many of the residents that make up these communities are parents and their children, the role models for these children are mainly the other unemployed, undereducated, and poverty-stricken residents.

These community characteristics are significant in that one of the protective factors needed to counter the risk factors is that parents must set healthy behaviors and clear expectations for their children. When these children grow up in communities

plagued by these unhealthy behaviors, it is difficult for them to establish healthy behavior patterns and expectations for themselves.

The analysis of educational attainment by age groups data presented on the U.S. Census, however, indicated a pattern consistent among both neighborhoods—but to different degrees. It appears that in both neighborhoods, the younger generations are receiving more high school and advanced degrees than the older generations before them. This is significant in that younger generations are beginning to see the need and value of education more than their parents and grandparents did. This also may be a positive sign in the struggle to break the cycles of poverty and ignorance prevalent in so many areas.

PROTECTIVE FACTORS

One of the protective factors that can be used to offset the risk factor of extreme economic deprivation is clear and healthy standards set by parents and other adults. But it is only half the story to say that clear standards must be set. According to the Communities That Care model, it is the content of these standards that protects young people (Hawkins & Catalano, 1993).

The model also emphasizes that, if young people are to follow these standards, the standards must be widely and consistent recognition for successes and consequences for not following the standards. Young people must be bonded to, or hold strong attachments with, those who set the standards. They are then motivated to abide by these standards by the desire to maintain their positive relationship. Although most small children naturally bond to their mothers and/or caregivers, Hawkins, Arthur, and Catalano (1995) identified three conditions necessary to build and maintain bonds to individuals and social structures: church, family, and/or school.

Children must have the opportunity to contribute to their community, family, or social institutions such as churches or schools. They must be taught the skills needed in order to take advantage of the opportunity to contribute, and they must be recognized and acknowledged for their contributions. Having opportunities allows the children to

exercise responsibility and feel important. If they do not have the needed skills they will end up frustrated and feel that they have failed. Recognition and acknowledgement are rewards for their successes and encouragement to continue trying.

Without the preventative factors of pro-social attachments, clear and consistent standards, and the skills needed to succeed, children are more vulnerable to the risk factors present in their environments. For neighborhoods like Smoketown, plagued by high levels of poverty and little legitimate economic opportunity, the children are at far greater risk for delinquency and criminality than those in the more affluent neighborhoods such as St. Matthews. This area has a higher degree of protective factors such as more positive, pro-social role models, greater economic opportunity, and greater access to higher education.

Policy Implications

As Wilson and Hope pointed out, if we as a society are serious about managing and controlling crime, we must understand and address the economic, social, and political problems of the high-crime neighborhoods. Hope (1995) distills down this concept even more to two main features of high-crime neighborhoods that demand attention. First, he reports that areas with high crime concentrations are also the same areas with high victimization rates. Therefore, efforts must go to more social control over the delinquent and violent youth as well as to protecting vulnerable youth. The responsibility for these efforts falls mainly on parents and community members. It is the parents responsibility to set positive standards of behavior for their children and to enforce those standards through discipline. But, it is difficult, especially for single parents, to monitor their

childrens behavior away from home. The community as a whole must be aware of the activities of the neighborhood youth and help each other look out for their children. The Neighborhood Watch program concept could be applied to not only criminal behavior but all forms of undesirable behavior. The vulnerable should be protected, among other reasons, to reduce the number of those who succeed and then immediately flee the high-crime areas to the detriment of communal social stability. It is understandable, however, that no one would want to continue to live an area where they are repeatedly victimized. And there is a general fear among citizens in higher crime neighborhoods, that if they were to report these crimes or assist the police in any way, they would be subjecting themselves and their families to retaliation. This is a vicious cycle with no clear solution but, in many cities, police have established anonymous tip lines in hopes of drawing out information. Also, many communities are forming activist groups that protest the crime and violence in their area. The violent and delinquent offenders also must be dealt with in such a way as not to reduce the protection level of the innocent but also not so harshly that they are worse off for it. We must begin to rely much less on incarceration, especially for youthful offenders. Although incarceration does remove the problem temporarily, many offenders come out of prison worse off than they went in. They learned better ways of committing their crimes, they have been toughened by the dangers of prison life, and they are even less likely to get a good job with a criminal record. Sentencing youths to education and life training programs, instead of detention centers or prisons, would remove them from their negative influences while teaching them self respect and self efficiency. By providing them with the means to be successful

legitimately, they will have far fewer reasons to return to their old ways when they have completed their sentence.

The second factor that demands attention is the breakdown of informal social institutions. Shaw and McKay's (1969) work emphasized the importance of social institutions in socializing the community's youth. This is where the school as a "conduit between the community and the wider sources of wealth and power" (Kornhouser, 1978, p. 77) comes in to play.

Children must develop strong bonds to schools and teachers. The educational experience must be a positive one with opportunities for success and encouragement for students if they are to attain higher levels of achievement. The Communities That Care model notes that academic failure increases the risk of many delinquent behaviors including early dropout (Hawkins & Catalano, 1993). It emphasizes that it is not necessarily the lack of ability but the experience of failure itself that increases the risk for problem behavior. Black, Hispanic, and Native American children have disproportionately higher rates of failure than white children; this implies a need for school improvements to reduce academic failures (Hawkins & Catalano, 1993).

The issue of funding is ever present in the public school system, but it has been theorized, recently by Bill and Melinda Gates who have been active in bettering public schools, that one reason funding is such an issue is that much of the funding is wasted. This raises an issue that must be addressed. The funding for education is not likely to increase significantly in the near future so school administrators should refigure their budgets and perhaps more audits should be done to ensure that the money is actually

going where it is supposed to be. With that in mind, there are several changes that also need to be made. It is vital that a child's progress be monitored so that those who are not performing up to acceptable standards are caught before they fall too far behind. Ideally, this would be a major role of the parent, but teachers must also pay attention to children's performance. Children who find it difficult to keep up with their classmates should not be allowed to barely get by. There should be programs in place such as individual tutoring or perhaps even summer classes that will help the children who need special attention.

Perceiving little economic opportunity also reduces the child's lack of commitment to school, meaning they no longer view their role as a student as worthwhile (Hawkins & Catalano, 1993). Therefore, it is important to guide business and employment opportunities toward those who need it most. In Louisville, developing commercial areas downtown and providing public transportation to those business areas would increase access to such opportunities. The post-industrial job market is placing increased emphasis on skilled and professional labor and minimizing the need for physical labor jobs. This consequently demands a need for more education especially at higher degree levels.

CONCLUSIONS

If poor children are to compete in the job market, they must have access to quality education in public schools. They must be prepared for post high school education and they must come equipped with the tools and skills needed to integrate into the programs, including an orientation with application procedures for admittance and financial aid options. All the resources and efforts in the world, however, cannot be successful if the children are not first taught to value themselves, their lives, and their futures.

Of all the social problems that plague America's inner-city, a nihilistic lack of hope among youth is the one that claims the most victims. Inner-city youth feel isolated and disenfranchised from the greater society. They are bombarded with images of success but not given the tools to achieve it. Through pervasive mediums such as television and popular magazines, children are inundated with stories of wealth and power and the comforts and securities that education and professional success provide, but seldom do children view the same kind of success as an attainable reality.

Youth in poor, inner-city neighborhoods only see first-hand material success achieved by illegitimate means that require sacrificing comfort and security. In these areas, rare, individual success stories often end in a successful child quickly fleeing for safer neighborhoods. These children need positive role models, better education, and

more opportunity if they are to resist the more immediate and accessible allure of criminal life.

The purpose of this paper is to familiarize the reader with an emerging approach to crime control in the hopes of gaining a fresh perspective on the problems of teen pregnancy, school dropout, and juvenile crime. Social Development strategies are being tested and applied by researchers across North America and Europe with promising results. These researchers are attempting to prevent the onset of delinquency and criminality by addressing the risk factors that have been identified as predictors of such behaviors.

Once these risk factors have been identified, protective factors in the child's environment can be applied, enhanced, and/or manipulated to mitigate their negative effects. It is the hope that by identifying these behaviors before they are internalized, delinquency can be not only reduced but also avoided all together. There are, however, some limitations and flaws in this perspective.

Those at especially high risk are constantly exposed to several risk factors at once (Garnezy, 1983) with little access to protective factors. This makes it unlikely that programs designed to target only one or a few risk factors will be effective (Hawkins, Arthur, & Catalano, 1995). It is suggested that prevention programs be customized to meet the needs of the specific population they are targeting (Gilchrist, 1991).

Prevention interventions for risk reduction require a broad focus on not only the individual but also parents, teachers, community health and social service providers, and law enforcement personnel. In order for such strategies to work, community and

participant “ownership” is essential (Catalano, 1993). As Laycock and Tilley (1995) point out, however, this is typically problematic because “the natural response of both the public and agencies and organizations with a crime problem is to look to the criminal justice system for its solution” (p. 578). Laycock and Tilley go on to suggest that preemptive action and commitment are not strategies often agreed upon by those that would benefit most.

Despite these limitations, the identifying and correcting of risk factors has been shown to be an effective strategy against the initiation of delinquency (Hawkins & Catalano, 1995; Tonry & Farrington, 1995; Tremblay & Craig, 1995). By educating children on the harms of such behaviors and alternative methods for coping with problems and achieving their goals, parents, teachers, and community leaders can help to buffer them from the pressures to engage in negative behaviors.

For instance, educational efforts focused on parents have shown to improve parenting techniques, family management, and family attachments which also act to negate risk factors (Dishion, Patterson, & Kavanagh, 1992; Olds et al., 1986; Wasik et al., 1990). Community-wide involvement, although the most difficult to attain, has proven to be the most effective aspect of Social Developmental prevention (Laycock & Tilley, 1995). By coordinating the community members, schools, and social services, an environment can be created that fosters the healthy growth and development of all of its young members.

LIMITATIONS

The major limitation of this study is the small sample size. The sample size was intentionally kept small in order to conduct a true neighborhood comparison. It is acknowledged that this small sample size reduces the generalizability of this research to any area other than the neighborhoods in the study. But it was not the intention of this study to directly benefit any other neighborhoods.

This study was conducted in the hopes of providing the community leaders in the Smoketown area with a greater understanding of the issues they must address in order to improve the lives of the children in their community. It is a key point of the Social Development theory that preventative programs be tailored to the areas in which they are to be applied. This is the theoretical basis that drove this research to focus on this small population. Although an argument could be made that the characteristics represented in the Smoketown neighborhood are just as prevalent in many other neighborhoods, there are also several other factors to consider when generalizing research findings. Perhaps this study could be used as a basis or inspiration for other studies that do intend to generalize to the larger population. If that becomes a researcher's intention, he or she may feel it necessary to widen the sample population.

Other limitations include the use of U.S. Census Bureau data from the year 2000. It is also acknowledged that these numbers have changed over the last six years but this is the most recent data available. Although J. David Hawkins and Richard Catalano have been working through this theory since the early 1980s, there has been a slow acceptance by a limited number of researchers. Although most of the experimental programs and studies based on the theory have been successful, more attention is needed.

RECOMMENDATIONS FOR FURTHER STUDY

As shown in the literature review, many programs borne out of the Social Development model have been successful in preventing delinquent behaviors and helping children succeed. Further studies should focus on refining and adjusting these concepts so that they can be applied to larger groups of children in several different types of communities.

Future research also should be conducted in order to bring these ideas to the attention of policymakers. It is not only the responsibility of social scientists to develop new and better ways of serving society, but it is imperative that their findings be disseminated to those that have the power to apply them to society.

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