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Causes and Correlates: Findings and Implications

Also

- Risk-Based Response to Gangs

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FEATURES

IN BRIEF

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A Message From OJJDP

The first step in solving any problem is to determine its causes. The most obvious solution may not be the best. When the problem is juvenile delinquency, the cost—in terms of human potential, public safety, and tax expenditures—is especially high. Research that assesses how and why children become delinquent is a sound investment because it can provide the foundation for effective intervention. This issue of *Juvenile Justice* focuses on such research and its value in preventing and combating delinquency.

The Program of Research on the Causes and Correlates of Delinquency works to improve the understanding of serious delinquency, violence, and drug use by examining youth development in the context of family, school, peers, and community. Researchers at the program's three sites are tracking the experiences of large samples of high-risk children throughout their developmental years. This longitudinal research provides important insights for program design, as principal investigators **Terence Thornberry, David Huizinga,** and **Rolf Loeber** note in their review of the studies' "Findings and Policy Implications."

A major finding from the Causes and Correlates studies is an association between gang involvement and delinquent behavior. **Phelan Wyrick** and **James Howell** discuss how communities can use research on risk factors to address their local gang problems more effectively through a "Strategic Risk-Based Response."

In this issue's In Brief section, **Susan Chibnall** and **Kate Abbruzzese** describe how three communities made measurable inroads against delinquency by addressing risk factors. Publications that can help communities identify their own risk factors and take action to create a brighter future for their children are also noted.

J. Robert Flores
Administrator

The Causes and Correlates Studies: Findings and Policy Implications

by Terence P. Thornberry, David Huizinga, and Rolf Loeber

Delinquent behavior has long been a serious and costly problem in American society. Although the U.S. delinquency rate has declined since the mid-1990s, it is still among the highest in the industrialized countries. To reduce delinquent behavior and improve societal well-being, it is essential to develop effective intervention programs. In turn, effective programs depend on a firm, scientific understanding of the origins of delinquency. The Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Program of Research on the Causes and Correlates of Delinquency constitutes the largest, most comprehensive investigation of the causes and correlates of delinquency ever undertaken.

For the past 17 years, the program, which consists of three longitudinal studies (the Denver Youth Survey, the Pittsburgh Youth Study, and the Rochester Youth Development Study) has contributed substantially to an understanding of delinquent behavior. This article summarizes a few of the many empirical findings generated by these studies and policy implications arising therefrom.[1]

The Studies

Each study uses a longitudinal design in which a sample of children and/or adolescents was selected and then followed over time to chart the course of their development. The studies oversampled youth at high risk for serious delinquency; however, because the studies used statistical weighting, the samples represent the broader population of urban adolescents.

Denver Youth Survey

The Denver Youth Survey is based on a probability sample of households in high-risk neighborhoods of Denver, CO, selected on the basis of their population, housing characteristics, and high official crime rates. The survey respondents

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include 1,527 children who were ages 7, 9, 11, 13, or 15 in 1987 and who lived in one of the more than 20,000 randomly selected households. The sample of children includes 806 boys and 721 girls. These respondents, along with a parent or primary caretaker, were interviewed annually from 1988 until 1992 and from 1995 until 1999. The younger two age groups were reinterviewed in 2003. The sample is composed of African Americans (33 percent), Latinos (45 percent), whites (10 percent), and youth of other ethnic groups (12 percent). To date, Denver researchers have studied subjects ranging in age from 7 through 27.

Pittsburgh Youth Study

The Pittsburgh Youth Study is based on a sample of 1,517 boys from Pittsburgh, PA, selected in 1987–88. To identify high-risk subjects, an initial screening assessment of problem behaviors was conducted in the first, fourth, and seventh grades of the Pittsburgh public school system. Boys who scored above the upper 30th percentile for their grade were identified as high risk, and approximately 250 of them were randomly selected for followup, along with 250 boys from the remaining 70 percent. The subjects, parents or primary caretakers, and teachers were interviewed at 6-month intervals for the first 5 years of the study, although the fourth grade sample was discontinued after seven assessments. Since the sixth year of the study, followups of the first and seventh grade samples have been conducted annually. In the followup period, researchers are studying data regarding the sampled youth from when they were age 7 to their current age of 25.

Rochester Youth Development Study

The Rochester Youth Development Study is based on a sample of 729 boys and 271 girls who were in the seventh and eighth grades (ages 13–14) in the public schools of Rochester, NY, in 1988. The sample is composed of African American (68 percent), Hispanic (17 percent), and white (15 percent) youth. Each student, along with a parent or primary caretaker, was interviewed at 6-month intervals for the first 4½ years of the study. From ages 20–22, the subjects and their caretakers were interviewed annually, and the subjects are currently being reinterviewed at ages 28 and 30.

The Studies Collectively

These studies provide data on delinquent behavior from 1987 to the present, and have included more than 4,000 subjects ranging in age from as young as 7 to as old as 30. The samples have a strong representation of serious, violent, and chronic offenders. To date, more than 100,000 personal interviews have been conducted, and volumes of additional data from schools, police, courts, social services, and other agencies have been collected.

The Causes and Correlates studies have addressed scores of different topics related to juvenile delinquency and juvenile justice. In the following pages, the authors summarize just a few of these many investigations. Some of the topics are specific to one of the projects; other topics are investigated with data from two or all three projects.

Patterns of Delinquency

The Causes and Correlates studies have provided descriptive data that trace the onset and development of delinquency. Three key topics are childhood aggression, developmental pathways to delinquency, and the overlap of problem behaviors.

Childhood Aggression

The vast majority of the youth in the Denver and Pittsburgh studies reported involvement in some form of physical aggression before age 13 (85 percent of the boys and 77 percent of the girls in Denver and 88 percent of the boys in Pittsburgh) (Espiritu et al., 2001). Well over half (roughly 60 percent of both genders in Denver and 80 percent of the Pittsburgh boys) reported such aggression before age 9. In addition, approximately half of the Denver children (57 percent of the boys, 40 percent of the girls) and 32 percent of the Pittsburgh boys reported more serious aggression in which the victim was hurt (bruised or worse), and 47 percent of the boys and 28 percent of the girls in Denver and 14 percent of the Pittsburgh boys reported assaults that resulted in more serious injuries to the victim (e.g., cuts, bleeding wounds, or injuries requiring medical treatment).

As these findings indicate, aggression during childhood is quite common, although exactly how widespread depends on how aggression is defined. Involvement in aggression, however, is not necessarily extensive or long lasting. A substantial amount of delinquency, including aggression, is limited to childhood. For example, only about half (49 percent) of the Denver children involved in minor violence in which the victim was hurt or injured continued this behavior for more than 2 years. In fact, much aggressive behavior, and an even larger proportion of other delinquency, appears to be limited to childhood. However, a large proportion—about half—of aggressive children continue to be aggressive for several years into at least early adolescence. Exactly what distinguishes children who cease to be aggressive and those who continue remains to be determined.

Developmental Pathways

Childhood aggression that continues and escalates as individuals age raises two key questions: Does the movement to serious delinquency progress in an orderly fashion, and is there a single dominant pathway or are there multiple pathways?

What distinguishes children who cease to be aggressive and those who continue?

The onset of minor aggression (e.g., arguing, bullying) tends to occur first, followed by the onset of physical fighting (including gang fighting), and then by the onset of other violence such as robbery or rape (Loeber and Hay, 1997). These results suggest that development toward serious forms of delinquency tends to be orderly.

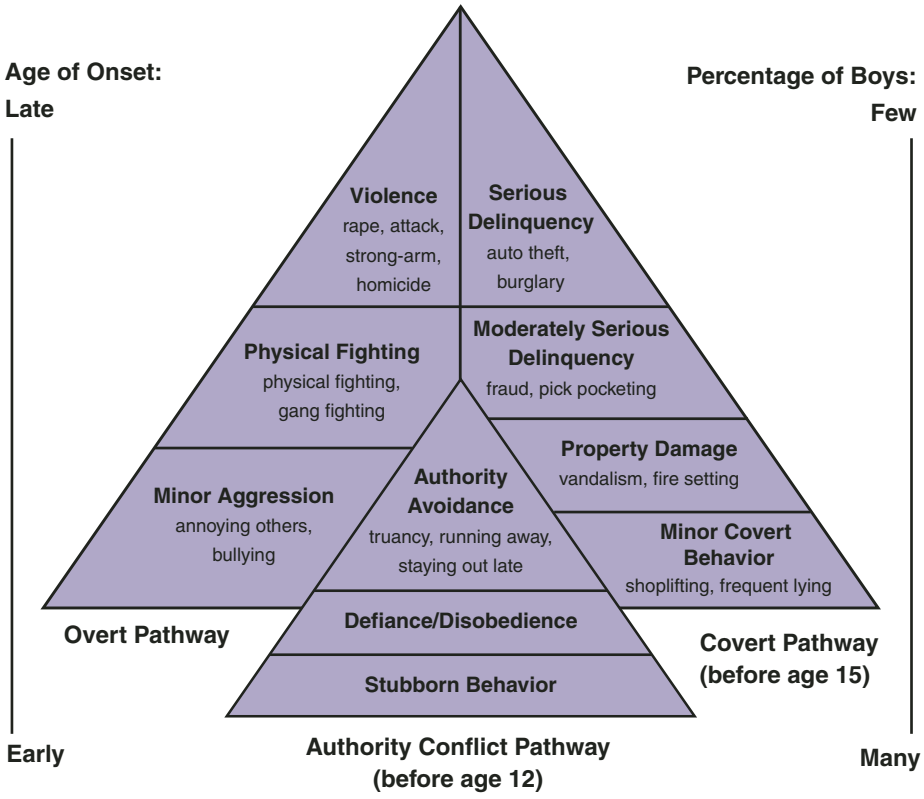
Initial research comparing single and multiple pathways found that a model of three distinct pathways (see figure 1) provided the best fit to the data:

- The Authority Conflict Pathway, which starts with stubborn behavior before age 12 and progresses to defiance and then to authority avoidance (e.g., truancy).
- The Covert Pathway, which starts with minor covert acts before age 15 and progresses to property damage and then to moderate and then to serious delinquency.
- The Overt Pathway starts with minor aggression and progresses to physical fighting and then to more severe violence (no minimum age is associated with this pathway).

These results were replicated for African American and white boys in Pittsburgh across three age samples (Loeber et al., 1993, 1998). They have also been replicated in a sample of African American and Hispanic adolescents in Chicago and in a nationally representative U.S. sample of adolescents (Tolan, Gorman-Smith, and Loeber, 2000). Replications also have been successfully undertaken in the Denver Youth Survey and the Rochester Youth Development Study (Loeber et al., 1999).

As they became older, some boys progressed on two or three pathways, indicating an increasing variety of problem behaviors over time (Kelley et al., 1997; Loeber et al., 1993; Loeber, Keenan, and Zhang, 1997). Researchers found some evidence that development along more than one pathway was orderly. For example, aggressive boys committing overt acts were particularly at risk of also committing covert acts, but not vice versa. Further, conflict with authority figures was either a precursor or a concomitant of boys' escalation in overt or covert acts (Loeber et al., 1993). Also, an early age of onset of problem behavior or delinquency was associated with escalation to more serious behaviors in all the pathways (Tolan, Gorman-Smith, and Loeber, 2000). The pathway model accounted for the majority of the most seriously delinquent boys, that is, those who self-reported high rates of offending (Loeber et al., 1993; Loeber, Keenan, and Zhang,

Figure 1: Developmental Pathways to Serious and Violent Offending



1997) or those who were court-reported delinquents (Loeber, Keenan, and Zhang, 1997).

The pathway model shows that the warning signs of early onset of disruptive behavior cannot necessarily be dismissed with a "this-will-soon-pass" attitude (Kelley et al., 1997). However, it is not yet possible to distinguish accurately between boys whose problem behaviors will worsen over time and those who will improve. The pathway model is a way to help identify youth at risk and optimize early interventions before problem behavior becomes entrenched and escalates.

The Overlap of Problem Behaviors

The pathways analyses found that many delinquent youth, especially the more serious offenders, engaged in multiple forms of delinquency. Many youth who commit serious offenses also experience difficulties in other areas of life. With the exception of drug use, however, little is known about the overlap of these problem behaviors in general populations. Do most youth who commit serious delinquent acts have school and mental health problems? Are most youth who have school or mental health problems also seriously delinquent?

The Causes and Correlates studies examined these questions in all three sites (Huizinga and Jakob-Chien, 1998; Huizinga, Loeber, and Thornberry, 1993; Huizinga et al., 2000). Recognizing that involvement in delinquency or in other problem behaviors can be transitory or intermittent, the studies examined the level of overlap of more persistent drug use, school problems, and mental health problems[2] that lasted for at least 2 of the 3 years examined (Huizinga et al., 2000).

There was some consistency of findings for males across sites. Although a sizeable proportion of persistent and serious offenders do have other behavioral problems, more than half do not. Thus, it would be incorrect to characterize persistent and serious delinquents generally as having drug, school, or mental health problems. On the other hand, drug, school, and mental health problems are strong risk factors for involvement in persistent and serious delinquency, and more than half (55–73 percent) of the male respondents in all three sites with two or more persistent problems were also persistent and serious delinquents.

For females, the findings were different and varied by site. As with the males, fewer than half of the persistent and serious female delinquents had drug, school, or mental health problems. In contrast to males, however, these problems alone or in combination were not strong risk factors for serious delinquency. This result stems, in part, from the fact that a substantially smaller proportion of girls (5 percent) than boys (20–30 percent) was involved in persistent and serious delinquency, while their rates (within sites) of other problem behaviors were roughly similar to those of males.

It is important to note that these findings are for general population samples. Additional analyses of the Denver data found substantial differences between population findings and findings among youth who had been arrested and became involved in the juvenile justice system (Huizinga and Elliott, 2003). Among males who were persistent and serious offenders, 69 percent of those who had been arrested had one or more problems, whereas only 37 percent of those who had not been arrested had such problems. Although there were too few persistent

serious offenders among females to permit control of delinquent involvement, 81 percent of the females who were arrested had one or more problems compared with only 1–2 percent among females who were not arrested.

Thus there appears to be a concentration of offenders entering the juvenile justice system who have drug use, school, or mental health-related problems. Accordingly, the capability to identify the particular configuration of problems facing individual offenders and provide interventions to address these problems is critical to the effectiveness of the juvenile justice system.

Two Key Risk Factors for Delinquency

The Causes and Correlates studies have investigated a host of risk factors involving child behavior, family functioning, peer behavior, school performance, and neighborhood characteristics that precede and potentially lead to delinquency. Findings on just two topics—child maltreatment and gangs—are summarized here.[3]

Child Maltreatment

Prior research indicates that child maltreatment (e.g., physical abuse, sexual abuse, neglect) that occurs at some point prior to age 18 is a risk factor for delinquency (Widom, 1989; Zingraff et al., 1993). This relationship was also observed in the Pittsburgh and Rochester studies (Smith and Thornberry, 1995; Stouthamer-Loeber et al., 2001, 2002). In the Rochester study, for example, Smith and Thornberry (1995) found that subjects maltreated before age 12, who may or may not also have been maltreated between ages 12 and 18, were significantly more likely to be arrested and to self-report more delinquency, especially serious and violent delinquency, than subjects who had not been maltreated prior to age 12 (see also Widom, 1989; Zingraff et al., 1993).

While prior studies have made important contributions to the literature, they do not explicitly take adolescent maltreatment into account. This results in two problems. First, the victims of childhood maltreatment referred to above actually contain two groups: those victimized in childhood only and those victimized in childhood and adolescence. Second, the comparison group, youth who were never maltreated, is likely to include some youth who were actually maltreated in adolescence (i.e., after age 12), but not in childhood. Because of these issues, it is hard to know if the previous conclusion—that childhood maltreatment is a risk factor for delinquency—is accurate. Relying on its longitudinal design, the Rochester project was able to reexamine the link between maltreatment and delinquency, taking into account when the maltreatment occurred (Ireland, Smith, and Thornberry, 2002; Thornberry, Ireland, and Smith, 2001).

Of the subjects in the Rochester study, 78 percent were never maltreated and 22 percent were. Of the latter, 11 percent were maltreated in childhood only (before age 12 but not after), 8 percent were maltreated in adolescence only, and 3 percent were persistently maltreated (i.e., they had at least one substantiated case in childhood and at least one in adolescence).

The relationship to delinquency is intriguing. Figure 2 presents self-reported and official arrest data on the prevalence of delinquency for four groups of youth: those who were never maltreated, those who were maltreated in childhood only, those who were maltreated in adolescence only, and those who were persistently maltreated. For self-reported general delinquency that occurs from ages 16 to 18,[4] the subjects who were maltreated during childhood only were not at significantly

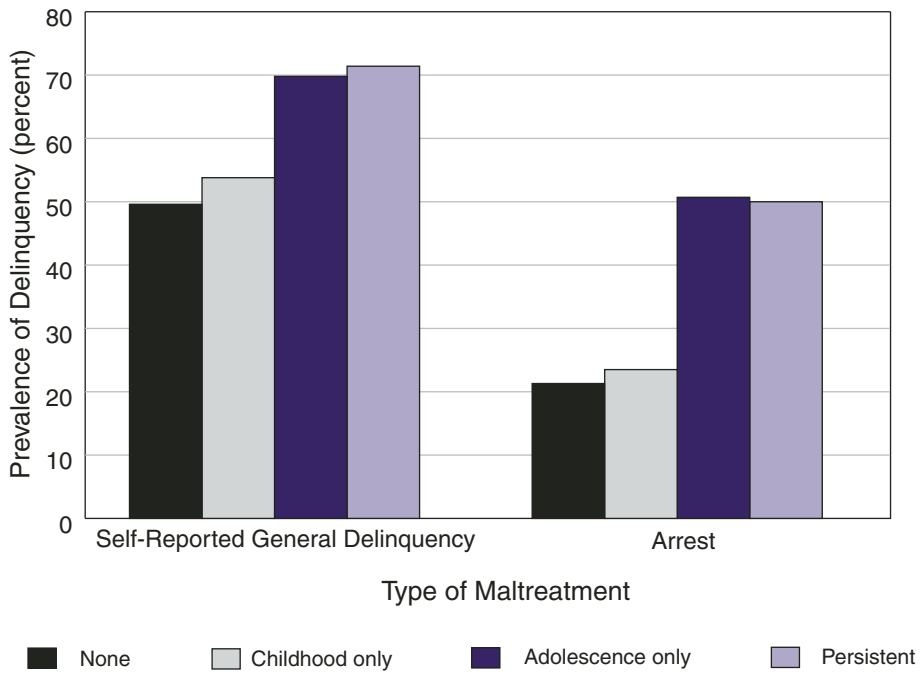
greater risk for delinquency (53.8 percent) than those who were never maltreated (49.6 percent). Subjects maltreated during adolescence, however, were at significantly greater risk. The delinquency level for the adolescence-only group (69.8 percent) was significantly higher than that for those who were never maltreated, and the delinquency level for those persistently maltreated—in both childhood and adolescence—was the highest (71.4 percent). The same pattern of results applies to other self-reported measures of delinquency: drug use, violent crime, and street crime (Ireland, Smith, and Thornberry, 2002). For official arrest records, 21.3 percent of youth who were never maltreated had arrest records and 23.5 percent of youth who were maltreated in childhood only had arrest records. In contrast, 50.7 percent of youth maltreated in adolescence had arrest records and 50.0 percent of youth maltreated in both developmental stages had been arrested. The latter rates are significantly higher than the rate for those never maltreated.

Gangs

The Rochester project also investigated how gang membership influences adolescent development. The results have recently been published in *Gangs and Delinquency in Developmental Perspective* (Thornberry et al., 2003). Key findings are summarized here, as are findings from the Denver Youth Survey.

Approximately 30 percent of the Rochester subjects joined a gang at some point during the 4-year period covering ages 14–18. The membership rate was virtually identical for boys (32 percent)

Figure 2: Maltreatment and Delinquency



and girls (29 percent). Gang membership turned out to be a rather fleeting experience for most of these youth. Half of the male gang members reported being in a gang for 1 year or less, and only 7 percent reported being a gang member for all 4 years. Two-thirds (66 percent) of the females were in a gang for 1 year or less and none reported being a member for all 4 years.

Although fleeting, gang membership had a tremendous impact on the lives of these youth. Gang members—both male and female—accounted for the lion's share of all delinquency. Although gang members were only 30 percent of the studied population, they were involved in 63 percent of all delinquent acts (excluding gang fights), 82 percent of serious delinquencies, 70 percent of drug sales, and 54 percent of all arrests.

Two explanations for the strong association between gang membership and delinquency are frequently raised. One focuses on the individual: gangs attract antisocial adolescents who will likely get into trouble whether or not they are in a gang. The second focuses on the group: individual gang members are not fundamentally different from nonmembers, but when they are in the gang, the gang facilitates their involvement in delinquency.

If the second explanation is correct, gang members should have higher rates of delinquency only during the period of membership, not before or after that period. That is precisely what the Rochester data showed, as illustrated in figure 3. This pattern is found across the 4-year period studied and is observed for various offenses, particularly violence, drug sales, and illegal gun ownership and use.

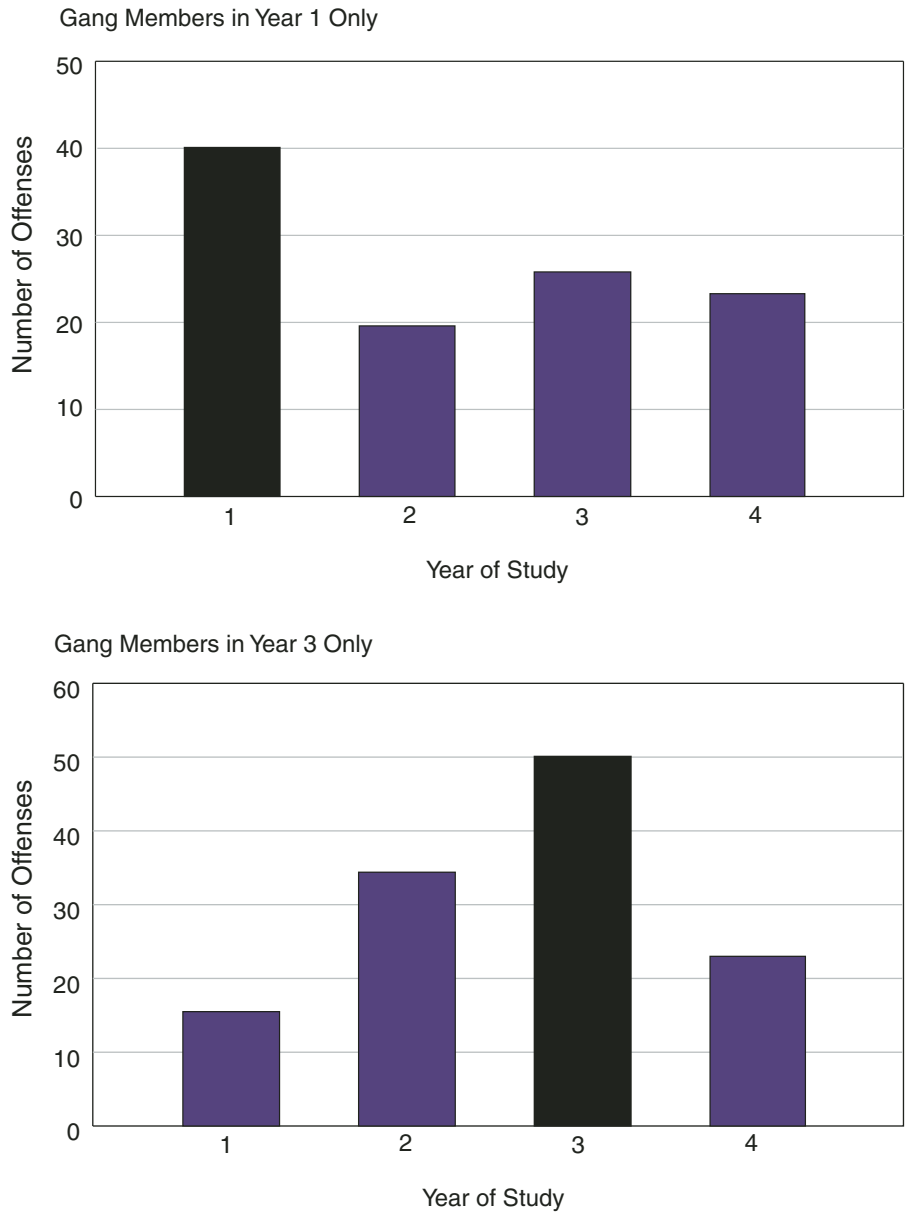
The impact of being in a street gang is not limited to its short-term effect on delinquent behavior. It also contributes to disorderly transitions from adolescence to adulthood. As compared with individuals who were never members of a gang, male gang members were significantly more likely to drop out of school, get a girl pregnant, become a teenage father, cohabit with a woman without being married, and have unstable employment. Female gang members were significantly more likely to become pregnant, become a teenage mother, and to have unstable employment.

The relationship between gang membership and delinquency has also been investigated in the Denver Youth Survey and in other studies, including a companion project in Bremen, Germany (Esbensen and Huizinga, 1993; Esbensen, Huizinga, and Weiher, 1993; Hill et al., 1996; Huizinga, 1997, 1998; Huizinga and Schumann, 2001). Many of Rochester's findings about gang membership were replicated in Denver's high-risk sample.

For example, a fair proportion of both genders in Denver—18 percent of the males and 9 percent of the females—have been gang members. Denver findings also reveal that gang members accounted for a very disproportionate amount of crime, as do findings in the other studies (Hill et al., 1996; Huizinga and Schumann, 2001). Denver male and female gang members accounted for approximately 80 percent of all serious and violent crime (excluding gang fights) committed by the sample. Further, over a 5-year period, these individuals committed the vast majority of crimes while they were gang members (e.g., 85 percent of their serious violent offenses, 86 percent of their serious property offenses, and 80 percent of their drug sale offenses). The social processes of being an active gang member clearly facilitate or enhance involvement in delinquent behavior.

The studies have also investigated the developmental processes leading to gang

Figure 3: Self-Reported General Delinquency for Males Active in a Gang for 1 out of 4 Years Studied



membership. In the Denver sample, although gang members and nonmembers were similar in many respects, there were substantial differences between gang members and other serious delinquents in the years preceding gang membership. In the years before they became gang members, individuals were more likely to be involved in higher levels of minor and serious delinquency and drug use, were more involved with delinquent peers, and were less involved with conventional peers. They also displayed weaker beliefs about the wrongfulness

of delinquent behavior and a greater willingness to make excuses for involvement in delinquent behavior. The Rochester project found these variables, measured in early adolescence, to be significant risk factors for joining a gang as well (Thornberry et al., 2003). Poor school performance and brittle parent-child relationships also increased the risk of gang membership.

Because of the very high contribution of gang members to the volume of crime, developing effective gang prevention and intervention programs is important and urgent. Police data on gang crimes are helpful in identifying sites particularly affected by gang activity and in providing information for the evaluation of gang intervention activities. Among police departments that collect gang-related data, however, some define gang crimes as any crime committed by a gang member, others require that several gang members be involved in the offense, and yet others collect both kinds of information. The Denver study found that although gang members committed more group crimes than other delinquent youth, both before and after joining a gang, they also committed more offenses while alone than other youth. For example, more than one-third of their serious assaults were committed while alone (Huizinga, 1996). Thus, the measurement difference appears to be significant.

Given the large contribution of gang members to the total volume and location of crime, it would seem helpful for police departments to collect and separate both kinds of data to provide information about the nature of the local gang problem and to help plan local intervention activities. For more information on risk factors as they relate to gangs, see "Strategic Risk-Based Response to Youth Gangs" on page 20.

Responding to Delinquency

There are various ways to respond to juvenile crime, including interventions through the juvenile justice system and the provision of general social services or specialized prevention and treatment programs. The Causes and Correlates studies have investigated these different strategies, and the longitudinal results suggest alternative strategies.

Arrest

The Denver study conducted several examinations of the impact of arrest using various analytical strategies (Esbensen, Thornberry, and Huizinga, 1991; Huizinga and Esbensen, 1992; Huizinga, Esbensen, and Weiher, 1996; Huizinga et al., 2003). The findings from these studies are quite consistent. In general, arrest has little impact on subsequent delinquent behavior, and when it does have an impact, it is most likely an increase in future delinquent behavior. These findings are in agreement with several other studies of the impact of arrest (Klein, 1986; Sherman et al., 1997). In addition, those who are arrested and incarcerated as juveniles are substantially more likely to be incarcerated as adults (Huizinga, 2000).

There are different possible explanations for these findings. For example, those arrested may be more serious offenders who are on a different life trajectory than delinquents who are not arrested. However, arrest and sanctioning do not appear to have had the desired effect on the future offending of many delinquent youth. It should be noted that arrest and sanctions need not demonstrate an ameliorative effect to justify their use because the need to protect public safety, perceived needs for retribution, and the influence of

these actions on general deterrence within the population cannot be disregarded. Nevertheless, the findings do suggest that arrest and subsequent sanctions generally have not been a particularly viable strategy for the prevention of future delinquency and that other alternatives are needed. The findings also suggest that the use of the least restrictive sanctions, within the limits of public safety, and enhanced reentry assistance, monitoring, and support may reduce future delinquency.

Given these general observations, it also must be observed that progress has been made and continues to be made. There are some intervention programs within the juvenile justice system that have been shown to reduce future delinquency; other promising programs are currently being evaluated (Aos et al., 2001; Howell, 2003; Huizinga and Mihalic, 2003; Lipsey and Wilson, 1998; Mihalic et al., 2001; U.S. Department of Health and Human Services, 2001).

Utilization of Services

Several service-providing agencies can potentially help both youth involved in delinquency and their families. These agencies include the juvenile justice system and external agencies such as schools and social services. Are they utilized? The Pittsburgh Youth Study investigated this question by examining the extent to which the parents of delinquent boys received help for dealing with their problems (Stouthamer-Loeber, Loeber, and Thomas, 1992; Stouthamer-Loeber et al., 1995). The study considered help received from anyone (including lay people) and from professionals (especially mental health professionals). In general, seeking help for behavior problems was twice as common for the oldest boys as compared with the youngest (21 percent versus 11 percent, respectively). In 25 percent of the cases, however, seeking help resulted in only one contact with a help provider, and it is doubtful that positive results were achieved in one session.

Programs within the juvenile justice system have reduced future delinquency.

The percentage of parents who sought any help—help for behavior problems or help from mental health professionals—increased with the seriousness of the delinquency. However, less than half of the parents of seriously delinquent boys received any help, and only one-quarter of the parents of these boys received help from a mental health professional (Stouthamer-Loeber, Loeber, and Thomas, 1992).

Help in schools. Division of the Pittsburgh sample into four groups (nondelinquents, persistent nonserious offenders, persistent property offenders, and persistent violent offenders) showed that all three persistent offender groups were placed in special education classes for learning problems at the same rate as nondelinquents (less than 10 percent). However, more of the persistently delinquent boys, as compared with the nondelinquent boys, were placed in classes for behavior problems; this was particularly true for the violent boys (22.3 percent versus 2.8 percent of the nondelinquents). Nevertheless, three-quarters (77.7 percent) of the persistent violent offenders were never placed in a class for behavior problems, and two-thirds were never placed in any special class.

It is commonly believed that certain groups of boys receive a disproportionate share of resources from various agencies. When researchers examined persistent property and persistent violent offenders, they found that just under half did not receive any help inside or outside of school (about 48 percent), and only 15.4 percent of the persistent property offenders and persistent violent offenders received help from mental health professionals in addition to help in school.

Steps in developmental pathways. Stouthamer-Loeber and colleagues (1995) compared movement along the developmental pathways described above with seeking help for services. In general, the higher the advancement in multiple pathways, the higher the chances that help was sought. An early onset of disruptive behaviors, however, did not increase the frequency at which help was sought.

Court contact. Comparison of court-involved boys with those who had not had court contact showed that the former group received more intensive help. It may be possible that court intervention brought the necessity for help to the parents' attention. Only 17 percent of the boys' parents sought help before the year in which their boys were referred to the juvenile court.

In summary, the development of disruptive and delinquent behaviors was largely left unchecked by parents and helping agencies. These findings have important implications for policymakers and planners of preventive interventions. Merely having programs available may not be adequate; outreach to the most seriously delinquent youth and their families may also be essential.

Implications for Prevention

Although the projects of the Program of Research on the Causes and Correlates of Delinquency were not designed to evaluate preventive interventions, program findings have important implications for the design of appropriate interventions. Knowledge of developmental pathways is relevant for interventions, in that pathways reflect current problem behaviors in the context of the history of problem behaviors. Knowledge of pathways also helps identify future problem behaviors that need to be prevented.

The studies examined how long disruptive behaviors had been apparent in boys who eventually were referred to the juvenile court for an index offense[5] (Office of Juvenile Justice and Delinquency Prevention, 1998). The average age at which individuals took their first step in any of the pathways was approximately 7; moderately serious problem behavior began at about age 9.5 and serious delinquency at about age 12. The average age at which youth first came into contact with the juvenile court was 14.5. Thus, approximately 7½ years elapsed between the earliest emergence of disruptive behavior and the first contact with the juvenile court. It should be noted that delinquent boys who were not referred to the juvenile court also tended to have long histories of problem behaviors.

Research findings from all three Causes and Correlates projects show that youth who start their delinquency careers before age 13 are at higher risk of becoming serious and violent offenders than those who start their delinquency careers later (Huizinga, Esbensen, and Weiher, 1994;

Krohn et al., 2001; Loeber and Farrington, 1998, 2001). These results imply that preventive interventions to reduce offending should be available at least from the beginning of elementary school-age onward. However, it is important to be mindful of the results of the studies' investigation of childhood offending. Many of the aggressive children did not progress to serious involvement in serious juvenile crime. This suggests that great care is needed in the design of intervention programs for aggressive children. Not all programs are benign, and some may lead to or exacerbate later problems (Dishion, McCord, and Poulin, 1999).

Further research is needed to identify those individuals whose childhood aggression leads to violent behavior later in life. Intervention programs for aggressive children must be developed, and the outcomes for the children served by these programs must be carefully evaluated. The pathways model may be particularly helpful in designing these interventions. Overall, it seems that the judicious use of early interventions known to have long-term effectiveness is warranted.

In addition, although it is "never too early" to try to prevent offending, it is also "never too late" to intervene and attempt to reduce the risk of recidivism for serious offending (Loeber and Farrington, 1998). There is a complex relationship between when individuals begin to commit offenses and how long they persist. A full range of developmentally appropriate and scientifically validated programs is needed.

The Causes and Correlates results regarding the impact of maltreatment are consistent with the importance of developmentally appropriate interventions. It does not appear that childhood-only maltreatment, as long as it does not continue into adolescence, is a risk factor for delinquency. Sources of resiliency, including, perhaps, effective services, must come into play to help children overcome this adversity. Understanding these resiliency processes is an important goal for future research, as these processes have important implications for the design of programs.

Maltreatment that occurs during adolescence, however, appears to be a substantial risk factor for later delinquency. This

Program of Research on the Causes and Correlates of Delinquency

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suggests the need for enhanced services for adolescent victims and, in particular, for services that reduce the chances of delinquent behavior. As Garbarino (1989) has pointed out, however, few treatment programs for adolescent victims exist, and it is often quite difficult to enroll adolescent victims and their families in the available programs. Much greater attention needs to be devoted to the topic of adolescent maltreatment and how it functions as a risk factor for delinquency.

A general strategy for reducing youth crime also needs to be mindful of the sizeable impact that gang membership has on serious and violent delinquency. Working directly with gangs, however, has not yet proved successful and can even be counterproductive. It may be more productive for juvenile justice practitioners to use gang membership as a marker variable and send gang members, on an individual basis, to programs for serious delinquency that are proven effective (see Thornberry et al., 2003). Several excellent summaries identify and describe these programs (see Howell, 2003; Huizinga and Mihalic, 2003; Loeber and Farrington, 1998 (Part II); Mihalic et al., 2001; U.S. Department of Health and Human Services, 2001). Regardless of whether an indirect approach is used or whether gang members are sent individually to proven effective programs, intervening with gang members is an important component in reducing a community's level of youth crime and violence.

Notes

1. Longer, more detailed summaries of these studies can be found in *Taking Stock of Delinquency: An Overview of Findings from Contemporary Longitudinal Studies* (Thornberry and Krohn, 2003).

2. Drug use included use of marijuana, inhalants, and hard drugs. School problems included poor grades and dropping out of school. Mental health problems were indicated by scores in the top 10 percent of either an emotional problem or nondelinquent behavioral problem measure.

3. For information about other topics reviewed by the Causes and Correlates Studies, see box on page 15.

4. The authors focused on these ages to preserve proper temporal order, but the pattern of results presented here applies more generally.

5. The index crimes of the Federal Bureau of Investigation include homicide, rape, robbery, aggravated assault, burglary, larceny, auto theft, and arson.

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Strategic Risk-Based Response to Youth Gangs

by Phelan A. Wyrick and James C. Howell

Once a community pinpoints its most prevalent local problems and links them to specific risk factors, it is able to develop strategies that address the root causes of those problems. This article illustrates how local leaders can use risk factor research in their efforts to address one such problem that affects communities nationwide—gangs.

OJJDP and others have long advocated for comprehensive approaches to youth gangs that involve multiagency collaboration and a combination of prevention, intervention, and suppression efforts (Howell, 2000; Huff, 2002; Spergel, 1995). There is a sound theoretical basis and growing evidence (see Spergel et al., 1999) to support the belief that such approaches will likely have the greatest communitywide impact. Establishing a comprehensive communitywide approach is a long-term effort, however, and it may not be a practical option if, for example, key community agencies are unwilling or unable to make responding to youth gangs a priority.

This article presents a framework for a strategic risk-based response to youth gangs that can be adopted even without full communitywide collaboration and regardless of whether the primary focus is prevention, intervention, or suppression or a combination of these methods. The strategic risk-based response discussed in this article is not a specific program; rather, it is an approach to developing and implementing programs that draws on an understanding of youth gangs, risk factors, and state-of-the-art practices in program design. Comprehensive approaches still remain the ideal community-level response to youth gangs. Many communities, however, cannot implement comprehensive programs for a variety of legitimate reasons, and these communities can benefit from developing a strategic risk-based response to youth gangs.

A strategic risk-based response must be grounded in a general understanding of youth gangs combined with an indepth knowledge of local youth gang problems. A community's assessment of its gang problem, in turn, must be based on an understanding of how a variety of risk factors relate to the onset and persistence of local gang activity and youth violence. The strategic response should implement

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state-of-the-art practices in program design to focus activities, optimize resources, and allow for tracking of program effectiveness. These topics are each addressed below.

Understanding Youth Gangs

Most U.S. residents live in or around a city that has experienced youth gang activity since at least the mid-1990s (Egley, 2002), and much earlier in some cities. Researchers have repeatedly demonstrated that gang members commit property, weapons, drug, and violent offenses at significantly higher rates than youth who are not involved in gangs (Huff, 1998; Thornberry et al., 2003) and even than other delinquent youth (Battin et al., 1998). Throughout the nation, lives are lost and devastated every day because of youth gangs. Although thousands of programs have been implemented that, directly or indirectly, address gang involvement (Gottfredson and Gottfredson, 2001), the ongoing difficulties with youth gangs make one lesson very clear: there are no quick fixes or easy solutions for the problems that youth gangs create or the problems that create youth gangs.

Part of the challenge to effectively responding to youth gangs is countering common assumptions about gangs that may not accurately reflect local problems. For example, many people assume that youth gangs are hierarchical organizations that control complex criminal endeavors such as drug trafficking. In contrast, many researchers have concluded that youth gangs are typically loose in structure with low levels of organizational sophistication (Curry and Decker, 2003; Decker and Van Winkle, 1996; Klein, 1995; Weisel, 2002). Gangs in any given locality may be more or less sophisticated in their organization and criminality, but it is critical that communities not attempt to treat all gangs equally based on untested assumptions. Differences in organizational sophistication suggest differences in the responses that are likely to be effective.

Existing research and certain specialized law enforcement training can provide excellent information about how gangs operate generally. However, gangs vary tremendously across and within communities (see Howell, Egley, and Gleason, 2002; Valdez, 2000). Thus, general knowledge about gangs should be supplemented with information gathered through a local assessment of gang problems. The National Youth Gang Center (2002a) has developed a gang problem assessment protocol that has been tested in approximately 20 sites, ranging from small rural areas to large urban localities.[1] Quantitative and qualitative data are collected to answer key questions such as: What, where are, and when are gang crimes being committed? How have these changed over time? What are the characteristics of youth involved in gangs or at risk of gang involvement? How do residents and community leaders perceive and define the problem?

The problem assessment begins by clearly defining what is meant by gang, gang member, and gang-related offenses. A resource inventory is conducted to identify services in the community that are being provided or could be provided to at-risk youth, gang members, and their families. The assessment protocol is designed to be very thorough and requires considerable collaboration. Programs with limited resources can adapt the protocol by focusing on issues of highest relevance or making adjustments to obtain similar information at lower cost.[2]

A common challenge to conducting gang problem assessments is the availability of gang crime data. Many jurisdictions lack any mechanism for tracking gang crime, even though one can be quite simple to implement. A tracking system for gang crime requires little more than a check box on incident and arrest reports, a standard operational definition for determining whether an incident is gang related, and appropriate training and oversight of law enforcement personnel. Such a system provides a community baseline of gang activity that can be sorted in multiple ways and compared against future measures for evaluation purposes. In addition, tracking systems improve the ability to target resources during program implementation.

Risk Factors

Recent youth gang research has produced three important findings regarding the impact of risk factors on the likelihood of gang membership. First, risk factors for gang membership span all major risk factor domains—individual characteristics, family conditions, school performance, peer group influences, and the community context—that research has shown to be related to various adolescent problem behaviors, including serious violence and delinquency.

Second, the accumulation of risk factors greatly increases the likelihood of gang involvement, just as it increases the likelihood of other problem behaviors. Researchers in a Seattle study (Hill et al., 1999) found that the presence of risk factors from any of the five major domains in youth ages 10–12 was predictive of their joining a gang at ages 13–18. Children with 7 or more risk factors were 13 times more likely to join a gang than children with no risk factors or only 1.

Third, the presence of risk factors in multiple domains appears to increase the likelihood of gang involvement even more than the general accumulation of risk factors.[3] Researchers in the Rochester Youth Development Study (Thornberry et al., 2003) found that a majority (61 percent) of the boys and 40 percent of the girls who scored above the median in seven risk factor domains[4] were gang members. Approximately 20 percent of the Rochester youth who experienced risk in four to six domains joined a gang.

These findings demonstrate that there is no single cause for youth gang membership or delinquency. Therefore, isolated efforts to target a single risk factor or even a single domain are unlikely to have much success in reducing a community's gang problems. It is the accumulation of risk factors across domains that greatly contributes to the likelihood of gang membership and delinquency. Thus, communities need to address not only multiple risk factors, but multiple risk factor domains. One way to do this is to implement a comprehensive communitywide approach to gang prevention, intervention, and suppression involving a broad representation of community leaders and including community grassroots efforts (see National Youth Gang Center, 2002b).

Another way to address multiple risk factors across domains is through a coordinated partnership between programs that have succeeded in eliminating a single risk factor or risk domain or in neutralizing its negative impact. To be effective in reducing gang problems, such a partnership must be developed and managed with a broad understanding of local risk factors across domains. The partnership must also coordinate existing programs that address complimentary risk factors

in the same population. For example, a partnership could involve an intensive probation program that ensures accountability of youth with a history of violence (individual-level risk factor), an after-school program that provides prosocial activities and tutoring to improve school attitudes and performance (school risk factor), and a parenting skills program that addresses childcare and parent-child relationships (family risk factor). This partnership is likely to have the greatest impact if the programs involve the same high-risk population (Howell, 2003a).

Beyond addressing multiple risk factors across domains, consideration should be given to the relative importance of the risk factor. Researchers have not developed a definitive ranking of risk factors that are consistently more or less important in predicting gang membership and violent behavior, and such a list may not be forthcoming soon. However, Lipsey and Derzon's (1998) meta-analysis of 34 independent longitudinal studies identified five levels of risk factors based on how important they were for predicting violence and serious delinquency at ages 15–25 when measured at ages 6–11 and 12–14. The most important predictors at ages 12–14 were having antisocial peers such as gang members or having few social ties at all. The next set of ranked risk factors included poor school attitude and performance, aggression, poor parent-child relationships, psychological conditions, prior physical violence, and being a male. Important predictors for the younger group (ages 6–11) were general delinquency, substance use, being a male, coming from a disadvantaged family, and having antisocial parents. Research-based rankings can be important starting points, but communities should confirm or modify such information based on data and knowledge of local risk factors.

Communities should also consider the feasibility of modifying conditions of risk. Certain risk factors—gender, for example—cannot be affected by any kind of program. Others, such as community disorganization, are quite difficult to influence and may require very long commitments, and still others, such as school performance, may be more amenable to change with fewer resources.

Acknowledging a risk factor's importance and amenability to change may allow for effective use of limited resources.

Acknowledging both a risk factor's importance and its amenability to change may allow for more effective use of limited resources. If the risk factors most important to the local gang problem are also the most difficult to change, it is likely that chances for success will hinge on whether the effort is well funded, broad stakeholder support is present at the highest levels, and the effort focuses on the long term in achieving results. Absent such resources, a sizeable community-level impact may still be realized by addressing risk factors that are more amenable to change but are perhaps of lower overall importance.

The following sections identify key risk factors for gang membership by domain, including those that are the most likely to be amenable to change by gang prevention and intervention programs. For a detailed review of risk factors found in

longitudinal studies, see "Youth Gangs: Prevention and Intervention" (Howell, 2003b); for a complete list of risk factors found in other kinds of studies, see *Youth Gangs: An Overview* (Howell, 1998, pp. 6–7).

Individual Risk Factors

The most dysfunctional youth, particularly those on a trajectory of worsening antisocial behavior, are most likely to join gangs (Lahey et al., 1999). The individual risk factors for future gang membership appear at a very early age (Howell, 2003b). For example, increasing levels of conduct disorders—measured thus far as early as the first grade—predict gang involvement. Youth who use drugs and who are also involved in delinquency—violent delinquency in particular—are more likely to become gang members than those who are not as involved in delinquency and drug use (Thornberry et al., 2003). Early dating, precocious sexual activity, and negative life events[5] are also strong predictors. It is very difficult to influence early conduct disorders and negative life events, but programs that prevent or postpone sexual activity and deter drug use among delinquent youth may hold greater chances for success.

Family Risk Factors

Key family risk factors for gang membership include the family structure (e.g., broken home), family poverty, child abuse or neglect, and gang involvement of family members (Howell, 2003b). Poor family management, including poor parental supervision (monitoring) and control of children, has been shown to be a strong predictor of gang membership (Hill et al., 1999; Le Blanc and Lanctot, 1998; Thornberry, 1998; Thornberry et al., 2003). Among these risk factors, poor family management may be the most amenable to change, primarily through parenting classes and, in some cases, family counseling.

School Risk Factors

One of the strongest school-related risk factors for gang membership is low achievement in school, particularly at the elementary level (Hill et al., 1999; Le Blanc and Lanctot, 1998; Thornberry et al., 2003). This in turn is related to low academic aspirations, a low degree of commitment to school, and teachers' negative labeling of youth (Howell, 2003b). Early tutoring and appropriate mentoring can address school achievement, academic aspirations, and school commitment. Many future gang members also have problems with truancy (Lahey et al., 1999). Another school-related risk factor for gang membership is feeling

unsafe at school (Gottfredson and Gottfredson, 2001). Increasing individuals' feelings of safety at school may be more difficult (Gottfredson and Gottfredson, 2001). Nevertheless, such programs (e.g., Safe Schools/Healthy Students) are essential for creating an environment in which opportunities for educational achievement can be enhanced.

Peer Group Risk Factors

Association with peers who engage in delinquency is one of the strongest risk factors for gang membership (Thornberry et al., 2003). Association with aggressive peers, whether or not they are involved in delinquency during adolescence, also is a strong predictor (Howell, 2003b). However, limiting youth's choice of peers can be very difficult. A more feasible approach would be to increase adult supervision of youth since lack of adult supervision is integrally related to the negative impact of delinquent peers on a youth's decision to join a gang (Le Blanc and Lanctot, 1998; Thornberry, 1998).

Community Risk Factors

Longitudinal studies have identified the availability of drugs, the presence of many neighborhood youth who are in trouble, youth's feelings of being unsafe in the neighborhood, low neighborhood attachment, low levels of neighborhood integration, area poverty, and neighborhood disorganization (i.e., low informal social control) as the strongest community risk factors for gang membership (Howell, 2003b). Each of these risk factors, however, is very difficult to modify. Another important community risk factor—one with greater potential to be changed—is the presence of gangs in the neighborhood. Gangs tend to cluster in high-crime, socially disorganized neighborhoods. The clustering of gangs in such high-crime communities has a negative influence and provides ample opportunity for recruitment of at-risk youth into gangs. Suppression, curfew enforcement, and civil abatement activities such as public nuisance ordinances may help reduce this negative influence.

Program Design and Management

The importance of strategic program planning is too often overlooked in favor of expediency. Sometimes it takes a tragic act of violence before communities openly recognize their youth gang problem. Determined to respond quickly, community leaders may launch into program activities with only minimal attention paid to program planning and development. Efforts aimed at achieving rapid results, however, often undercut the careful planning required to optimize resources and maximize effects on the complex social problems related to youth gangs.

Helpful Resources

A number of resources are available to help communities develop and implement strategic risk-based responses to youth gangs. Some of these resources are grouped according to topic below.

Overview of General Gang Issues

The American Street Gang (Klein, 1995)

Preventing and Reducing Juvenile Delinquency: A Comprehensive Framework (Howell, 2003a)

The Youth Gang Problem (Spergel, 1995)

Youth Gangs: An Overview (Howell, 1998)

"Youth Gangs: Prevention and Intervention" (Howell, 2003b)

Assessment of Local Gang Problems and Resources

Addressing Community Gang Problems: A Practical Guide (Bureau of Justice Assistance, 1998)

A Guide to Assessing Your Community's Youth Gang Problem (National Youth Gang Center, 2002a)

Information on Developing Program Designs

Addressing Community Gang Problems: A Practical Guide (Bureau of Justice Assistance, 1998)

Designing and Managing Programs: An Effectiveness-Based Approach (Kettner, Moroney, and Martin, 1999)

Planning for Implementation (National Youth Gang Center, 2002b)

Guidance for Developing Program Monitoring or Evaluation Plans

Addressing Community Gang Problems: A Practical Guide (Bureau of Justice Assistance, 1998)

Evaluation: A Systematic Approach (Rossi, Lipsey, and Freeman, 2003)

Kettner, Moroney, and Martin (1999) describe what they call an effectiveness-based approach to program planning that includes problem analysis, developing a program hypothesis, developing a hierarchical set of goals and objectives, and evaluation and performance measurement. In general, problem analysis seeks to determine the nature and distribution of the problem, the characteristics of those experiencing the problem, how key terms are defined, and the causes or origins of the problem. Note that the first three of these items reflect in general terms the key questions answered through the National Youth Gang Center's (2002a) gang problem assessment protocol (see page 21). The last item—determining the causes or origins of the problem—relates back to an examination of local risk factors for violence and gang membership.

The second element of the effectiveness-based approach to program planning, the program hypothesis, specifies cause-and-effect relationships between risk factors and describes consequences or problem behaviors in an if/then format. The program hypothesis clarifies the relationship between problems to be addressed and activities, links program activities to outcomes, and provides a framework for ongoing monitoring and evaluation. Based on this information, a hierarchical set of goals and objectives is developed to describe how program activities relate to overall goals and to an evidence-based understanding of the nature of the local gang problem. The National Youth Gang Center (2002b) has developed parallel guidance that provides more detail specific to constructing implementation

plans for comprehensive gang programs. However, the basic elements of effective program design remain the same.

Evaluation and performance measurement are critical components of program planning. Evaluation activities must begin early to determine whether a program was delivered as designed (process evaluation) and whether it had the intended effects (impact evaluation). An evaluation's level of complexity and scientific rigor directly affect its cost and the technical expertise necessary to conduct the evaluation. However, even relatively inexpensive program monitoring can be very beneficial when carefully planned. In any event, communities should make some effort to measure both the process and the impact of their programs. As previously noted, a tracking system for gang crime may be one critical community-level indicator for evaluating impact for many programs. Determining individual-level outcomes may require data collection (e.g., through surveys, interviews, individual police histories) before and after program participation.

Putting It All Together

The most desirable program is comprehensive and communitywide. Failing that, programs should involve strategic partnerships among diverse providers serving the same high-risk population. As stated earlier, these strategic risk-based responses to youth gangs synthesize general knowledge of youth gangs with indepth knowledge of local gang problems, risk factor research, and state-of-the-art practices in program design. Developing such a response may seem too daunting a task to complete before service delivery. However, costs associated with program design can be spread across partners and can be justified based on improved resource targeting and program feedback mechanisms. In addition, the use of sound program documentation and evaluation increases a community's ability to access outside funding.

There are no easy solutions to community gang problems. However, with proper program planning and development, local policymakers and practitioners can make informed decisions on the efficient use of limited resources to respond to youth gangs.

Notes

1. For more information about this assessment protocol, please visit NYGC's Web site at www.iir.com/nygc/acgp/assessment.htm.

2. Note that this latter strategy could potentially detract from data quality.

3. It is important to recognize that risk factor research suggests probabilities for groups of youth who display certain characteristics, and thus are not predictions pertaining to each individual in the group. Not all high-risk youth join gangs.

4. The Rochester study, part of OJJDP's Program of Research on the Causes and Correlates of Delinquency, examined seven risk factor domains: area characteristics, family sociodemographic characteristics, parent-child relationships, school, peers, individual characteristics, and early delinquency. Findings from this study are discussed in "The Causes and Correlates Studies: Findings and Policy Implications," page 3.

5. These include failing a course at school, being suspended or expelled from school, breaking up with a boyfriend or girlfriend, having a big fight or problem with a friend, and the death of someone close (Thornberry et al., 2003).

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A Community Approach to Reducing Risk Factors

by Susan H. Chibnall and Kate Abbruzzese

By 2000, OJJDP's Title V Community Prevention Grants Program provided incentive grants and capacity-building tools to nearly 1,100 local delinquency prevention programs nationwide. The risk and protective factor approach to prevention is the cornerstone of the Community Prevention Grants Program model. Communities that use prevention efforts with a risk and protective factor approach maximize their chances of reducing juvenile delinquency and related problems. The experiences of the three Title V communities presented below substantiate this view.

Youth and Families with Promise

In its local risk and resource assessments, the Utah State University Cooperative Extension Service identified several local concerns involving youth—specifically, academic and behavioral problems in school and the community and a lack of parental support and involvement in structured activities. Responding to these concerns, the Cooperative Extension Service used a Title V grant to implement the Youth and Families with Promise (YFP) program in Carbon and Weber Counties, UT.

YFP, a multigenerational mentoring program, targets youth ages 10–14 who exhibit low self-confidence, act out in school or the community, or are experiencing academic difficulty. Mentors tutor youth in reading and academic skills and participate with them in structured group settings, including recreational and community service activities. Youth, their parents, and their mentors also attend "Family Night Out," a monthly event designed to strengthen family bonds.

In 2000, a self-evaluation of the program found that family relationships improved and that youth demonstrated greater respect for parents and increased self-confidence. Youth also demonstrated improved attitudes toward school, completed more homework, received better grades, and engaged in less cheating, truancy, violence, and visits to the principal's office. Among youth who had been involved in problem behaviors in the community, there were statistically significant decreases in police referrals and incidents of stealing, damaging or destroying property, alcohol consumption, gang activity, and violence. In addition, parents reported praising their children more often, feeling less overwhelmed and closer to them, and responding more consistently to their behavior problems.

Parent Project

Concerned with the number of youth accused of destructive behaviors, a number of citizens in Minidoka County, ID, joined forces to implement the Parent Project, a research-based program created for parents with difficult or out-of-control adolescents. Since the program's implementation in 1997, nearly 1,000 families in Minidoka County have attended Parent Project classes.

To help curb poor school performance, substance use, violence, and similar behaviors, the program helps parents learn and practice identification, prevention, and intervention strategies (e.g., establishing rules and expectations, learning how to discipline). During weekly sessions for 10 to 16 weeks, facilitators provide activity-based instruction and

step-by-step plans to help parents learn how to manage adolescent behavior problems at home. Parents also attend support groups where they receive emotional and practical support from facilitators and other parents and practice implementing newly acquired skills and techniques (e.g., addressing problem behaviors, managing conflict, building positive self-concepts in their children).

The program also trains court and school staff and other youth-involved groups in parenting techniques and offers a teen component that stresses good decisionmaking skills and resilience-based characteristics (e.g., community involvement, positive relationships with adults). Using a Title V grant, Minidoka County expanded the project to include an educator component for use in schools; this component has helped the project provide a more comprehensive approach to identified risk factors.

According to a program evaluation study, the number of petitions filed for juvenile offenses decreased 33 percent, the number of minors on probation for any cause declined more than 30 percent, the number of drug-related probation violations was down 20 percent, and the number of days spent by youth in detention decreased 24 percent. In addition, the school dropout rate fell from 17 percent to 0 percent, and school expulsions plummeted from 72 to 0. The Parent Project was recognized for its achievements by the Idaho Supreme Court in 1999 and is the state's model for programs involving the prevention of juvenile crime.

Adopt-A-Class

After identifying several risk factors present in the community—including the availability of drugs and alcohol, early onset of problem behaviors, and family management problems—community leaders in Easton, PA, used a Title V grant to implement a program appropriate to its risk-factor profile: Adopt-A-Class (AAC).

AAC is a school-based program designed to provide youth with mentors with whom they can develop a prosocial bond and who can assist them with schoolwork and family life issues. The program, which was implemented in 1999, is following a cohort of students from fifth grade through their high school graduation. Community volunteers serving as mentors work with students in school for one class period per week. In these sessions, students and mentors engage in activities such as academic tutoring, reading books, and playing games together. In its first year, AAC served approximately 450 students per week with the support of 50 trained mentors.

In comparisons of students who have been involved in the program for 2 years with new students (those involved less than 2 years), 26 percent of the former group have reported a more positive attitude toward school. They also are almost three times more likely to be involved in community volunteer projects than the newer students. In addition, the Easton Area Middle School improved attendance by more than 1.3 percent in the 1999–2000 school year.

The Easton community also used Title V funds to implement Educating Children for Parenting, a program that teaches caring and compassionate behavior to young children in the hopes that such lessons will reduce their risk factors for delinquency.

Conclusion

The findings from local communities implementing Title V provide encouraging evidence that a risk-focused prevention model can help communities facilitate positive youth development and reduce risk factors and problem behaviors. As communities continue to evaluate their prevention efforts and report positive changes, it will become easier to demonstrate that local prevention and early intervention efforts are making a difference in the lives of the nation's youth and families.

Risk and Protective Factors of Child Delinquency

This Child Delinquency Series Bulletin (NCJ 193409) focuses on four types of risk and protective factors: individual, family, peer, and school and community. It is derived from the chapters devoted to these critical areas for prevention and intervention in OJJDP's Study Group on Very Young Offenders' final report, *Child Delinquents: Development, Intervention, and Service Needs*.

The Study Group stresses that the focus on risk factors that appear at a young age is the key to preventing child delinquency and its escalation into chronic criminality. With early intervention, young children will be less likely to succumb to the accumulating risks that arise later in childhood and adolescence and less likely to incur the negative social and personal consequences of several years of disruptive and delinquent behaviors.

In addition to focusing on risk factors, it is equally important to examine protective factors that reduce the risk of delinquency in order to identify interventions that are likely to work. The proportion of protective factors to risk factors has a significant influence on child delinquency, and protective factors may offset the influence of children's exposure to multiple risk factors.

Co-occurrence of Delinquency and Other Problem Behaviors

Using data from the first 3 years of OJJDP's Program of Research on the Causes and Correlates of Delinquency, this Youth Development Series Bulletin (NCJ 182211) examines the co-occurrence of serious delinquency with specific areas, namely, school behavior, drug use, mental health, and combinations of these areas. Preliminary findings show that a large proportion of serious delinquents are not involved in persistent drug use, nor do they have persistent school or mental health problems; the problem that co-occurs most frequently with serious delinquency is drug use; and, as the number of problem behaviors other than delinquency increases for males, so does the likelihood that they will become serious delinquents.

Many youth are only intermittently involved in serious delinquency, violence, or gang membership, and involvement often lasts only a single year during adolescence. Of greater concern are youth whose involvement in delinquency is more sustained and, therefore, considered more problematic and serious. Accordingly, the study reported on in this Bulletin focuses on persistent, serious delinquency and persistent school and mental health problems lasting 2 years or more.

Unless otherwise noted, publications are available on OJJDP's Web site at www.ojp.usdoj.gov/ojjdp. Some may also be ordered by contacting the Juvenile Justice Clearinghouse (see the inside back cover).

Juvenile Delinquency and Serious Injury Victimization

To explore the interrelationship between delinquency and victimization, this Youth Development Series Bulletin (NCJ 188676) draws on data from two of the longitudinal studies in OJJDP's Program of Research on the Causes and Correlates of Delinquency—the Denver Youth Survey and the Pittsburgh Youth Study. It focuses on victims of violence who sustained serious injuries as a result of the victimization.

The longitudinal, multisite approach used by these studies makes it possible to answer the following questions concerning victimization involving serious injury: (1) What is the prevalence of victimization involving serious injury in the general juvenile population? (2) What are the proximal and distal factors associated with becoming a victim who sustains a serious injury? (3) Which risk factors or combinations of risk factors best predict victimization involving serious injury?

The studies found that many victims were prone to engage in illegal activities, associate with delinquent peers, victimize other delinquents, and avoid legal recourse in resolving conflicts. A clearer understanding of the patterns and predictors of victimization offers the potential for increased effectiveness in designing and implementing strategies to reduce both victimization and offending.

Child Delinquency: Early Intervention and Prevention

This Bulletin (NCJ 186162), the first in OJJDP's Child Delinquency Series, summarizes the final report of the Study Group on Very Young Offenders, *Child Delinquents: Development, Intervention, and Service Needs*. The report draws on hundreds of studies to describe the developmental course of child delinquency and delineate key risk and protective factors. It also identifies effective and promising prevention and intervention programs that help reduce the incidence of delinquency while offering significant cost savings to society.

The Study Group concluded that interventions that focus on preventing child delinquency probably have the greatest impact on crime. These efforts should be directed first at preventing persistent disruptive behavior in children in general; second, at preventing child delinquency, particularly among disruptive children; and third, at preventing serious and violent juvenile offending, particularly among child delinquents.

The information presented in this Bulletin will benefit future studies and interventions that attempt to prevent offending among the very young and to change the behavior of those children who are already involved in offending.

Teenage Fatherhood and Delinquent Behavior

This Bulletin (NCJ 178899) presents findings from the Rochester Youth Development Study and the Pittsburgh Youth Study on risk factors for teenage paternity, specifically, the role of delinquency in early fatherhood. Although previous research has found associations between teenage fatherhood and delinquency, these studies provide a clearer assessment of the significant risk factors for teen fatherhood.

These risk factors come from a wide range of domains, including race, community characteristics, family structure, parental stress, school, early sexual activity, peers, individual characteristics, and deviant behaviors.

Both studies concluded that early delinquency is a significant risk factor for becoming a teen father. In addition, the Rochester study reported that the possibility of teen paternity rises dramatically as risk factors accumulate, and the Pittsburgh study found that teen fatherhood may be followed by greater involvement in delinquency. The consistency of agreement between the Pittsburgh and Rochester studies reinforces the conclusion that, although there is no single explanation or decisive risk factor for teen fatherhood, early delinquency is one of the most significant risk factors for becoming a teen father.

Prevalence and Development of Child Delinquency

According to the latest statistics, children younger than 13 are involved in almost 1 in 10 juvenile arrests. This Bulletin (NCJ 193411), part of OJJDP's Child Delinquency Series, provides information on very young offenders (those between the ages of 7 and 12) who become involved with the juvenile justice system.

These youth account for more than one-third of juvenile arrests for arson and nearly one-fifth of juvenile arrests for sex offenses and vandalism. Compared with juveniles who become involved in delinquency in adolescence, very young delinquents are at greater risk of becoming serious, violent, and chronic offenders. They are also more likely than older delinquents to continue their delinquency for extended periods of time. Consequently, over their lifetimes, these offenders may pose a disproportionate threat to persons and property. In addition, these offenders have the potential to place significant demands on the funds and resources of educational, justice, and social services agencies.

The information presented in this Bulletin provides a basis for bringing some of these issues into focus. The long-term goal is to use this information to foster effective interventions that target very young children before they accumulate multiple offenses and develop a pattern of chronic offending.

Treatment, Services, and Intervention Programs for Child Delinquents

Research indicates that very young offenders (younger than age 13) are at an age when interventions are most likely to succeed in diverting them from chronic delinquency. Drawing on findings from OJJDP's Study Group on Very Young Offenders, this Bulletin (NCJ 193410) explores various treatments, services, and intervention programs designed to mitigate the disruptive behavior of child delinquents.

The Bulletin, part of OJJDP's Child Delinquency Series, examines the efficacy and cost effectiveness of particular interventions. In addition, the authors discuss juvenile justice system programs and strategies for very young offenders. Four promising interventions for child delinquents—the Michigan Early Offender Program, the Minnesota Delinquents Under 10 Program, the Sacramento County Community Intervention Program, and the Toronto Under 12 Outreach Project—are reviewed. In addition, the Bulletin outlines a model for comprehensive interventions and examines the Canadian approach to child delinquency, which may serve as a guide for prevention efforts in the United States and Europe.

Timely provision of effective treatment, services, and intervention programs while child delinquents are still young and impressionable may prevent their progression to chronic criminality and save the expense of later interventions.

Related Resources

Publications

The following publications can be printed and downloaded from the OJJDP Web site at www.ojp.usdoj.gov/ojjdp.

- *Causes and Correlates of Delinquency Program* (Fact Sheet). FS 99100.
- *Developmental Pathways in Boys' Disruptive and Delinquent Behavior* (Bulletin). NCJ 165692.
- *Family Disruption and Delinquency* (Bulletin). NCJ 178285.
- *Prevalence and Development of Child Delinquency* (Bulletin). NCJ 193411.
- *Short- and Long-Term Consequences of Adolescent Victimization* (Bulletin). NCJ 191210.
- *Treatment, Services, and Intervention Programs for Child Delinquents* (Bulletin). NCJ 193410.

Videotapes

- *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions* (Teleconference video, VHS format). NCJ 172860. $15 (U.S.), $17 (Canada and other countries).
- *Child Delinquency: Early Intervention and Prevention* (Teleconference video, VHS format). NCJ 185594. $15 (U.S.), $17 (Canada and other countries).

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