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CHILD delinquency
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J. Robert Flores, Administrator **May 2003**

A Message From OJJDP

Juvenile courts are being challenged by an increase in the number of child delinquents coming before them. In 1997 alone, juvenile courts handled more than 180,000 juvenile offenders younger than 13 years old. These child delinquents account for 1 in 3 juvenile arrests for arson, 1 in 5 juvenile arrests for sex offenses, and 1 in 12 juvenile arrests for violent crime.

Because youth referred to juvenile court before the age of 13 are far more likely to become chronic juvenile offenders than youth whose initial contact occurs at a later age, there is reason for concern about the growing number of child delinquents.

This Bulletin summarizes the final report of OJJDP's 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 information provided by the findings of the Study Group on Very Young Offenders demonstrates the need to invest in effective early prevention and intervention efforts with such children.

Child Delinquency: Early Intervention and Prevention

Rolf Loeber, David P. Farrington, and David Petechuk

Sparked by high-profile cases involving children who commit violent crimes, public concerns regarding child delinquents have escalated. Compared with juveniles who first become involved in delinquency in their teens, child delinquents (offenders younger than age 13) face a much greater risk of becoming serious, violent, and chronic juvenile offenders. OJJDP formed the Study Group on Very Young Offenders to explore what is known about the prevalence and frequency of very young offending, investigate how very young offenders are handled by various systems (e.g., juvenile justice, mental health, and social services), and determine effective methods for preventing very young offending. The Study Group identified particular risk and protective factors that are crucial to developing early intervention and protection programs for very young offenders.

This Bulletin, the first in OJJDP's Child Delinquency Series, offers valuable information on the nature of child delinquency and describes early intervention and prevention programs that effectively reduce delinquent behavior. Subsequent Bulletins will present the latest information about child delinquency, including analyses of child delinquency statistics, insights into the early origins of very young offending, and descriptions of early intervention programs and approaches that work to prevent the development of delinquent behavior by focusing on risk and protective factors.

Some Key Findings

The number of child delinquents[1] (juveniles between the ages of 7 and 12) handled in the nation's juvenile courts has increased 33 percent over the last decade (Snyder, 2001). This development is cause for concern not only because offense patterns reflect more serious crimes among these youngsters, but also because these very young offenders are more likely to continue their involvement in crime. Child delinquents are two to three times more likely to become serious, violent, and chronic offenders[2] than adolescents whose delinquent behavior begins in their

[1] Child delinquents are not legally defined in the same way across the United States (Snyder and Sickmund, 1999; Wiig, 2001). For example, the minimum age of criminal responsibility varies from age 6 in North Carolina to age 10 in Arkansas and Colorado. In addition, many states do not have a legally defined age of criminal responsibility. In this Bulletin, child delinquents are defined as juveniles between the ages of 7 and 12, inclusive, who have committed a delinquent act according to criminal law—an act that would be a crime if committed by an adult.

[2] Chronic offenders are defined here as those with at least four referrals to juvenile court.

teens. Recent high-profile media cases of violence committed by children age 12 or younger also have drawn attention to the potential for child delinquents to inflict deadly harm. For these reasons alone, child delinquents represent a significant concern for both society and the juvenile justice system.

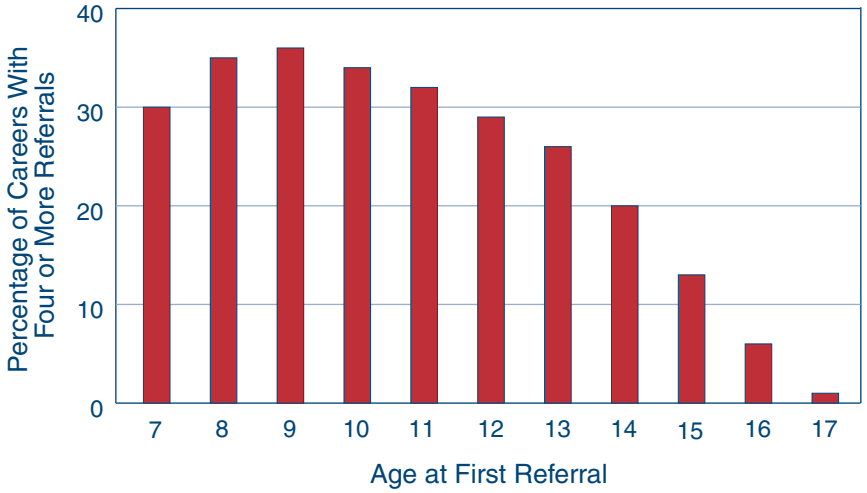
The arrest rate of child delinquents changed between 1988 and 1997: arrests for violent crimes increased by 45 percent (paralleling the increase in violence for all juveniles) and drug abuse violations increased by 156 percent. In contrast, arrests for property crimes decreased by 17 percent (Snyder, 2001). The Denver Youth Survey, which is a followup study of more than 1,500 high-risk youth, showed that at ages 11–12, about 10 percent of boys and girls had a police contact because of delinquency (Espiritu et al., 2001).

The total volume of child delinquency cases handled in the juvenile courts is large. In 1997, an estimated 181,300 delinquents were less than 13 years old at the time of court intake (Butts and Snyder, 1997; Snyder, 2001). Youth referred to court for a delinquency offense for the first time before the age of 13 were far more likely to become chronic juvenile offenders than youth first referred to court at an older age (see figure 1). It is important to note that because the upper age of juvenile court jurisdiction generally is 17, older first-time delinquents have fewer years of opportunity to develop into chronic juvenile offenders.

Figure 2 shows the overlap between juvenile offenders and serious, violent, and chronic offenders for two groups: child delinquents and older onset delinquents. A larger proportion of child delinquents, compared with later onset delinquents, become serious, violent, and chronic offenders. Also, a higher proportion of the violent child delinquents become chronic offenders.

Child delinquents have their own typical offense profile. They account for one-third of all juvenile arrests for arson, one-fifth of juvenile arrests for sex offenses and vandalism, one-eighth of juvenile arrests for burglary and forcible rape, and one-twelfth of juvenile arrests for violent crime (Snyder, 2001).

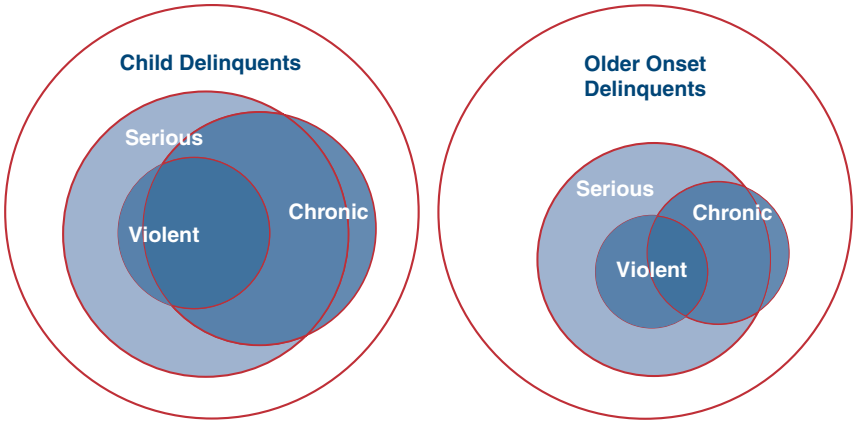
Figure 1: Proportion of Delinquency Careers That Eventually Had Four or More Delinquency Referrals, by Age at First Referral



Note: The proportion of careers with four or more referrals is likely to be underestimated for the first bar in this graph. Coding errors in the birth dates of a small number of youth first referred at age 17 caused them to be misclassified with an onset age of 7.

Source: Snyder, 2001.

Figure 2: Very Young Offenders Have a Greater Percentage of Serious, Violent, and Chronic Careers Than Older Onset Delinquents



Source: Snyder, 2001.

This Bulletin summarizes the final report of the Office of Juvenile Justice and Delinquency Prevention's (OJJDP's) Study Group on Very Young Offenders (the Study Group). See the box on page 3 for more information on the Study

OJJDP's Study Group on Very Young Offenders

Historically, delinquency studies have focused on later adolescence, the time when delinquency usually peaks. During the 1990s, numerous studies examined chronic juvenile offenders, a group responsible for a disproportionately large number of crimes (especially serious crimes). However, OJJDP's Study Group on Serious and Violent Juvenile Offenders—whose work was inspired by OJJDP's *Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders* (Wilson and Howell, 1993)—reported in 1998 that youth who are referred to juvenile court for their first delinquency offense before age 13 are far more likely to become chronic offenders than youth first referred to court at a later age. Specifically, this Study Group found that the onset of problem behaviors in male children starts, on average, much earlier than the average age of first court contact for Crime Index offenses.[1] The discovery that minor problem behavior leading to delinquency often begins at a very young age was a major impetus for OJJDP to develop a new initiative, the Study Group on Very Young Offenders, which began its work in 1998. This cooperative 2-year-long venture was undertaken to analyze existing data and to address key issues that had not previously been studied in the literature.

Consisting of 16 primary study group members and 23 coauthors who are experts on criminology, child delinquency, psychopathology, and the law, the Study Group on Very Young Offenders reviewed hundreds of studies, undertook many special analyses, and received valuable input from a survey of more than 100 practitioners in the field. The Study Group concentrated on the delinquent behavior of children ages 7 to 12 and on children's persistently disruptive and precociously deviant behavior from the toddler years up to adolescence.

This concerted effort produced valuable insights into the nature of child delinquency. The Study Group found evidence that some young children engage in very serious antisocial behavior and that, in some cases, this behavior foreshadows early delinquency. The Study Group also identified several important risk factors that, when combined, may be related to the onset of early offending. To better understand the early origins of child delinquency, the Study Group emphasizes that research should focus on the preschool and elementary years, a time during which early interventions can be implemented, before the accumulation of multiple offenses and the commission of serious offenses. The Study Group report concluded with a review of preventive and remedial interventions relevant to child delinquency.

The Child Delinquency Bulletin Series draws from the Study Group's final report, which was completed in 2001 under grant number 95–JD–FX–0018 and subsequently published by Sage Publications as *Child Delinquents: Development, Intervention, and Service Needs* (edited by Rolf Loeber and David P. Farrington). OJJDP encourages parents, educators, and the juvenile justice community to use this information to address the needs of young offenders by planning and implementing more effective interventions.

Study Group Members

The Study Group on Very Young Offenders was chaired by Rolf Loeber and David P. Farrington. The initial members of the Study Group were Barbara J. Burns, John D. Coie, Darnell F. Hawkins, J. David Hawkins, James C. Howell, David Huizinga, Kate Keenan, David R. Offord, Howard N. Snyder, Terence P. Thornberry, and Gail A. Wasserman. Leena K. Augimeri, Brandon C. Welsh, and Janet K. Wiig later joined these members. Over the years, many additional practitioners from the field have contributed to this effort.

[1] Index offenses include murder, robbery, rape, aggravated assault, burglary, larceny, auto theft, and arson.

Group. The report, *Child Delinquents: Development, Intervention, and Service Needs* (Loeber and Farrington, 2001), is the first volume published that presents empirical information on child delinquents from hundreds of studies, including data from several studies that were newly analyzed for the report. It summarizes knowledge concerning the nature of child delinquency, its developmental course, key risk and protective factors, and effective interventions. Child delinquency is an enduring and troubling phenomenon that requires more research and the efforts of a broader community to be fully understood and addressed. The work summarized in this Bulletin helps to advance knowledge about child delinquents and about fair and effective ways to deal with them.

Defining the Scope of Very Young Offenders

The Study Group was concerned with three categories of children:

- **Serious child delinquents** who have committed one or more of the following acts: homicide, aggravated assault, robbery, rape, or serious arson.
- **Other child delinquents** (excluding serious delinquents).
- **Children showing persistent disruptive behavior** (including truancy and incorrigibility), who are at risk of offending.

Generations of studies in criminology show that the best predictor of future

behavior is past behavior. Children showing persistent disruptive behavior are likely to become child delinquents and, in turn, child delinquents are likely to become serious, violent, or chronic juvenile offenders. Figure 3 summarizes the relationship between the three categories of youth behavior that are of greatest concern.

In more than 20 studies they reviewed, the Study Group found a significant relationship between an early onset of delinquency and later crime and delinquency. Child delinquents, compared with juveniles with a later onset of delinquency, are at greater risk of becoming serious, violent, and chronic offenders and have longer delinquency careers (Espiritu et al., 2001; Farrington, Lambert, and West, 1998; Krohn et al., 2001; Loeber, 1982, 1988; Loeber and Farrington, 1998b; Moffitt, 1993).

Not all disruptive children will become child delinquents, and not all child delinquents will become serious, violent, or chronic juvenile offenders. However, the majority of the eventual serious, violent, and chronic juvenile offenders have a history of problem behaviors that goes back to the childhood years. Research shows that the antisocial careers of male juvenile offenders start, on average, at age 7, much earlier than the average age of first court contact for Crime Index offenses, which is age 14.5 (see table 1). Because it is not yet possible to accurately predict which children will progress from serious problem behaviors to delinquency, it is better to tackle problem behaviors before they become more serious and ingrained.

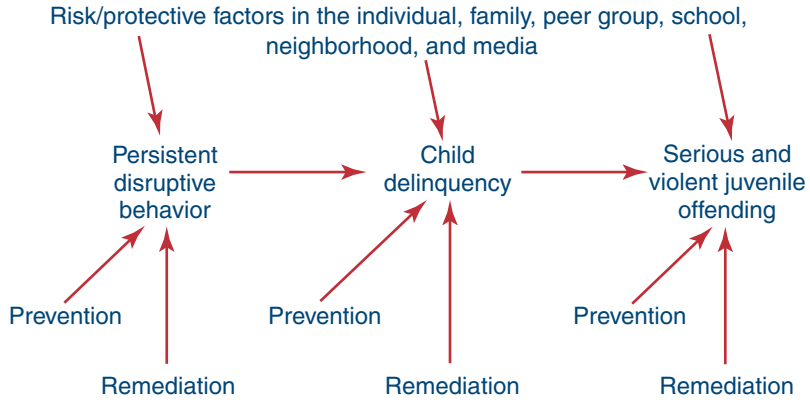
Early Disruptive Behavior

The preschool period is critical in setting a foundation for preventing the development of disruptive behavior and, eventually, child delinquency. There are four primary reasons why the preschool period may have important implications for understanding and preventing very young offending:

- Disruptive problem behavior, including serious aggression and chronic violation of the rights and property of others, is the most common source of referral to mental health services for preschool children (Keenan and Wakschlag, 2000).
- Studies have documented a predictive relationship between problem behaviors in preschool and later conduct disorder and child delinquency (Silva, 1990).
- Many important developmental skills (such as language development) begin during this period, and difficulties in developing these skills may weaken the foundation of learning and contribute to later disruptive behavior and child delinquency (Keenan, 2001).
- Understanding the early emergence of problem behaviors may help in the creation of earlier, effective interventions for the prevention of child delinquency (Kazdin and Kendall, 1998).

Behaviors that place a child at risk for an early career of disruptive behavior

Figure 3: Relationship Between Risk/Protective Factors, Development of Child Problem Behavior, and Interventions



Source: Loeber and Farrington, 2001.

Table 1: Average Age of Onset of Problem Behaviors and Delinquency in Male Juveniles

	Minor Problem Behavior	Moderately Serious Problem Behavior	Serious Delinquency	First Court Contact for Index Offenses*
Age	7.0	9.5	11.9	14.5

Note: The table shows the average age of onset of problem behaviors and delinquency for males who had their first contact with the juvenile court for an Index offense. Data are based on the statements of the oldest sample in the Pittsburgh Youth Study and on statements made by their mothers.

*Index offenses include murder, robbery, rape, aggravated assault, burglary, larceny, auto theft, and arson.

Source: Loeber and Farrington, 1998b.

and child delinquency may be present as young as 2 years of age (Keenan, 2001). Although the majority of child delinquents have a history of disruptive behavior—such as aggressive, inattentive, or sensation-seeking behavior in the preschool period—the majority of preschoolers with such behavior problems do not go on to become young offenders. The following factors may affect the development of pro- and antisocial behavior during preschool and beyond:

- **Language** is the primary means by which parents and others affect children's behavior. Delayed language development may increase a child's stress level, impede normal socialization, and be associated with later criminality up to age 30 (Stattin and Klackenberg-Larsson, 1993).
- **Temperamental characteristics** are individual predispositions for certain behavior characteristics that can be modified by environmental influences (Goldsmith et al., 1987). Difficult temperament (predominance of negative moods such as anger and difficulty in controlling behaviors and emotions) early in life may be a marker for the early antecedents of antisocial behavior and behavior problems (Earls and Jung, 1987; Prior et al., 1993; Guerin, Gottfried, and Thomas, 1997).
- **Low attachment to caregivers,** as in the early mother-infant bond, plays an important role in later behavior and delinquency problems (Egeland and Farber, 1984; Adams, Hillman, and Gaydos, 1994). The closer a child is to the mother, the less likely a child is to be at risk for delinquency.

Understandably, one of the difficulties in dealing with preschool children is the use of inappropriate labels such as "disruptive" for behaviors that may be developmentally normal. For example, aggression, noncompliance, and lying are common behaviors in the second year of life and are part of the development of self-identity, self-control, and understanding the nature of social relations (Landy and Peters, 1992; Kuczynski and Kochanska, 1990; Achenbach and Edelbrock, 1981). Another issue is whether young children are able to commit willful acts of aggression. A number of developmental researchers have demonstrated that preschool children do have a basic understanding of the impact of their behavior on others and can control their behavior based on internalized social norms (Kochanska, Murray, and Coy, 1997). Overall, the Study Group found sufficient evidence to conclude that some preschool children can engage in very serious antisocial behavior and that, in some but not all cases, preschool behavior problems foreshadow early delinquency.

Child Delinquency—Official Records

According to the Federal Bureau of Investigation's (FBI's) Uniform Crime Reports, in 1997 law enforcement agencies made an estimated 253,000 arrests of children age 12 or younger, and these made up 9 percent of all juvenile arrests (i.e., arrests of persons under age 18). Of these arrests of children, 17 percent (about 43,000) involved persons under the age of 10. Only 10 percent of these arrests were for status offenses (e.g., running away from home, curfew violations, and liquor law violations).

Interestingly, between 1988 and 1997, the total number of child arrests increased by only 6 percent, as compared with a 35-percent increase for all juveniles, and child arrests for property crimes dropped by 17 percent. However, during this same period, child arrests for violent crimes increased by 45 percent. Overall, child delinquents arrested in 1997 were relatively more likely to be charged with a violent crime, a weapons offense, or a drug law violation than a property offense (Snyder, 2001).

From 1988 to 1997, the number of cases disposed by juvenile courts involving child delinquents (age 12 or younger) increased by 33 percent to a total of 181,300 cases in 1997, far more than the corresponding increase in child arrests (Snyder, 2001). These data indicate that law enforcement agencies referred a larger percentage of the child delinquents they arrested to juvenile court in 1997 than they had in 1988, probably because the offenses committed became relatively more violent. The racial breakdown of juvenile court referrals also changed during this 10-year period, with court cases of child delinquents increasing by 41 percent for nonwhite youth and 28 percent for white youth. In addition, a greater proportion of the 1997 nonwhite cases (45 percent nonwhite cases versus 37 percent white cases) were placed on the court docket for an adjudicatory hearing (Snyder, 2001).

Overall, from 1988 to 1997, the juvenile courts experienced a substantial change in both the number and types of child delinquents sent to them for processing: child delinquents in 1997 were significantly more likely than their predecessors from a decade earlier to have been charged with a violent offense. In turn, juvenile courts significantly intervened in the lives of a growing number of child delinquents; the number of cases that

resulted in formal court-ordered probation increased 73 percent and placements to residential facilities increased 49 percent. Based on data from the 1997 Census of Juveniles in Residential Placement—which consisted of a roster of all juveniles in all residential facilities on 1 day—about 19 of every 100,000 youth ages 10–12 were being held in a juvenile facility on a typical day in the United States (Snyder, 2001).

Self-Reports of Delinquency

Official statistics reflect the delinquent behavior of youth that is both known to and recorded by authorities. Self-reports of delinquency are more comprehensive in that they include those behaviors not reported, or not otherwise known, to the authorities. Research indicates that young people are willing to report accurate information about their minor and serious delinquent acts (Farrington et al., 1996). Another advantage of self-report research (and research using parent and teacher reports) is that it focuses on misbehaviors (e.g., disobedience, defiance, aggression, and conduct disorder) that are not in themselves delinquent but may serve as precursors to some children's later involvement in delinquency. The Study Group's review of previous and current self-reported delinquency studies revealed the following (Espiritu et al., 2001):

- Although the vast majority of youth age 12 or younger (85 percent of boys, 77 percent of girls) reported involvement in some form of aggression or violence, only about 5 percent of children (9 percent of boys, 3 percent of girls) were involved in serious violence, that is, violence considered to be a delinquent/criminal offense. (Denver Youth Survey and Pittsburgh Youth Study data.)
- Roughly one-third of children age 12 or younger reported property offenses, one-quarter reported property damage, one-fifth reported status offenses, and less than one-tenth reported burglary or arson. (Denver Youth Survey and Pittsburgh Youth Study data.)
- Self-report rates for major forms of delinquency were practically the same in 1976 and 1998; for example, 16–17 percent of children ages 11–12 reported felony assault in 1976, compared with 14 percent in 1998. (National Youth Survey and National Longitudinal Survey of Youth data.)

Risk Factors and Predictors

Many of the risk factors and predictors (and possibly causes) of child delinquency tend to be somewhat different from those of offending by older juveniles. Risk factors for offending at a young age are more likely to be biological, individual, and family factors.

The causal status of known risk factors remains to be clarified, and no single risk factor can explain child delinquency. Rather, the greater the number of risk factors (e.g., poor parental supervision coupled with poor academic performance) or the greater the number of risk factor domains (e.g., risk in the family and the school), the greater the likelihood of early-onset offending (Loeber and Farrington, 1998b; Stouthamer-Loeber et al., 2002).

Early Risk Factors

During the preschool years, the most important risk factors stem from the individual and family. Particular predictors, such as aggressiveness and a child's level of impulsivity or sensation seeking, result from numerous influences—from genetics to the child's environment—over a period of years. Aggression appears to be the best predictor of delinquency up to age 12. For example, physical aggression rated by kindergarten teachers is the best predictor of later self-reported violent delinquency (Haapasalo and Tremblay, 1994; Tremblay et al., 1994). On the other hand, prosocial behavior rated by kindergarten teachers is a protective factor against delinquency.

Six longitudinal studies conducted in five countries (Canada, England, New Zealand, Sweden, and the United States) on three continents confirmed that childhood antisocial behavior tends to be the best predictor of early-onset delinquency for boys. For example, an Oregon study found that antisocial behavior (such as aggression), as rated by parents, teachers, peers, and the children themselves, was the best predictor of age at first arrest, compared with other factors such as family disadvantage, parental monitoring, and parental discipline (Patterson, Crosby, and Vuchinich, 1992).

Research findings consistently have shown that the onset of many conduct problems usually predates the onset of serious delinquency by several years

Homicide

Recent instances of children committing homicides have come to national attention and have attracted intense media scrutiny. Despite the nationwide outrage in response to some of these cases, the number of juveniles age 12 or younger who are involved in murder is relatively small. Between 1980 and 1997, about 2 percent (or 600 cases) of murders involved such child offenders, and the annual number of these murders was relatively stable, averaging about 30 per year. According to the FBI's Supplementary Homicide Reports (Snyder, 2001):

- The large majority (84 percent) of children who murdered were male.
- Seventy percent of the murder victims of child delinquents were male and likely to be acquaintances or family members.
- More than one-half (54 percent) of the murder victims of child delinquents were killed with a firearm.

(Loeber and Stouthamer-Loeber, 1998) (see table 1, page 4). Loeber (1988) postulated that juveniles who eventually engage in both property offenses and violence show the following behaviors:

- Onset of conduct problems in the preschool years.
- Aggressive and covert problem behaviors, such as lying and shoplifting.
- Hyperactive/impulsive behavior at a young age.

In addition to early antisocial behavior, family characteristics are important predictors of early-onset offending. The number of family risk factors to which a child is exposed and the child's length of exposure to these stressors also are important (Williams et al., 1990). Some family characteristics that may contribute to early-onset child delinquency include the following:

- Antisocial parents.
- Substance-abusing parents.
- Parental psychopathology (e.g., Lahey et al., 1988).
- Poor parenting practices, such as lack of monitoring (Patterson, Crosby, and Vuchinich, 1992) and/or a lack of positive reinforcement (Bor et al., 1997).
- The prevalence of physical abuse.
- A history of family violence.
- Large family size.

Many of the family risk factors interact with other social systems, such as peers and the community environment. Nevertheless, a recent study found that the strongest predictors of early-onset violence included large family size, poor parenting skills, and antisocial parents (Derzon and Lipsey, 2000).

Peers

Although much more research is needed, the Study Group believes that an accelerated path toward child delinquency and subsequent more serious offending may be the result of a combination of the following factors:

- Antisocial tendencies of children with persistent early disruptive behaviors.
- Associations with peers who already show deviant behavior.
- Negative consequences of peer rejection.

As children get older, attend school, and become integrated into their community, the array of risk factors for child delinquency expands (see table 2, page 9). Many studies show a relation between deviant peer associations and juvenile offending (Elliott and Menard, 1996). A major issue is whether "birds of a feather flock together" or "bad company corrupts." Most hypotheses suggest that deviant peers can lead some youth with no previous history of delinquent behavior to initiate delinquent acts and may influence already delinquent youth to increase their delinquency. Youth who associate with deviant peers are likely to be arrested earlier than youth who do not associate with such peers (Coie et al., 1995). In addition, studies emphasize that a delinquent sibling can greatly encourage a child to become delinquent, especially when the siblings are close in age and have a close relationship (Reiss and Farrington, 1991; Rowe and Gulley, 1992).

A more recent issue is peer rejection as a risk factor for antisocial behavior. In the Oregon Youth Study, investigators found, after controlling for earlier antisocial behavior, that peer rejection in the fourth grade predicted antisocial behavior 2 years later (Patterson and Bank, 1989). Another study that followed children from first through fourth grade found that aggressive behavior and rejection by peers in the first grade predicted later self-reported delinquency. This indicates that first-grade rejection may be a useful marker for the early starter pathway to antisocial behavior (Miller-Johnson et al., 1997).

Peer rejection may also influence child and adolescent delinquency by inducing the rejected child to associate with deviant peer groups and gangs (Patterson, Capaldi, and Bank, 1991). Gang membership provides a ready source of co-offenders for juvenile delinquency and reflects the greatest degree of deviant peer influence on offending. Also, youth tend to join gangs at younger ages than in the past, which leads to an increased number of youthful offenders (Howell, 1998). The importance of having accomplices cannot be overstressed in child delinquency. For example, a recent study found that less than 5 percent of offenders who committed their first offense at age 12 or younger acted alone (McCord and Conway, 2002). Gang membership has a strong relationship

How Early Can We Tell?

A critical question from a scientific and policy standpoint concerning child delinquency is, "How early can we tell?" It is difficult, however, to obtain a clear answer to this question. For example, many children engage in problem behaviors of a relatively minor nature, but only for a short period. Few tools are available to distinguish those youth who will continue with behaviors that may lead them to become child delinquents. Although the foundations for both prosocial and disruptive behaviors are laid in the first 5 years of life (Keenan, 2001), it is important to point out that the majority of preschoolers with behavior problems do not go on to become child delinquents.

The Study Group has identified several important warning signs of later problems:

- Disruptive behavior that is either much more frequent or more severe than what other children in the same age group display.
- Disruptive behavior, such as temper tantrums and aggression, that persists beyond the "terrible twos and threes."
- A history of aggressive, inattentive, or sensation-seeking behavior in the preschool years.

to violent delinquency, even when associations with delinquent peers, family poverty, poor parental supervision, low commitment to school, negative life events, and prior involvement in violence are controlled for (Battin et al., 2000; Battin-Pearson et al., 1998).

School and Community

Risk factors for child delinquency within the school and community have not been as well documented as individual, family, and peer risk factors (see table 2). The Study Group hypothesized that children who developed strong bonds to school (high commitment) would conform to the norms and values that schools promote, thereby reducing their probability of antisocial behavior.

Studies addressing school influences on antisocial behavior have consistently shown that poor academic performance is related to child behavior problems and to the prevalence, onset, and seriousness of delinquency (Brewer et al., 1995; Maguin and Loeber, 1996). Weak bonds to school (low commitment), low educational aspirations, and poor motivation place children at risk for offending (Hawkins et al., 1987; Hawkins et al., 1998).

School organization and process also may play a role as risk factors. Schools with fewer teachers and higher student enrollment had higher levels of teacher victimization, and poor rule enforcement within schools was associated with higher levels of student victimization (Gottfredson and Gottfredson, 1985). Although research on the relationship between school processes and offending is sparse, evidence suggests that many school characteristics, including the following, may be linked to antisocial behavior in children (Herrenkohl et al., 2001):

- Low levels of teacher satisfaction.
- Little cooperation among teachers.
- Poor student-teacher relations.
- The prevalence of norms and values that support antisocial behavior.
- Poorly defined rules and expectations for conduct.
- Inadequate rule enforcement.

Several community factors, such as a high level of poverty in the neighborhood, are important in the development of child antisocial behavior (Catalano and Hawkins, 1996). In addition, disorganized neighborhoods with weak social controls (i.e., attempts by adults to control the behavior of youth) allow delinquent activity to go unmonitored and even unnoticed (Sampson, Raudenbush, and Earls, 1997). At the extreme end of the spectrum, some neighborhoods may even provide opportunities for antisocial behavior. For example, youth living in high-crime neighborhoods may be at high risk for offending because they are exposed to more norms favorable to crime (Developmental Research and Programs, 1996).

Race and Gender

The intersection of race, gender, and early childhood offending is a largely unexplored terrain. Too often, policymakers, law enforcement agents, and social services agencies rely on stereotypes and assumptions concerning race and gender when dealing with juveniles.

Youth of color—particularly African American males—are overrepresented in arrest rates (especially arrests for serious or violent offenses) in relation to their proportion in the population (Kempf-Leonard, Chesney-Lind, and Hawkins, 2001). Conversely, in relation to their proportion in the population, females are underrepresented in arrests for serious or violent offenses but overrepresented in arrests for status offenses and child welfare cases. However, rates of court referrals are rising faster for females than for males. When self-report data are considered, the race and gender gaps apparent in official records are less pronounced.

The Study Group recommends that race and gender comparisons be routinely conducted in research on child delinquency. For example, in the Pittsburgh Youth Study, researchers found no race differences in offending once adequate controls were included for "underclass" status of neighborhoods (Peeples and Loeber, 1994). The Study Group also reanalyzed the 1958 Philadelphia birth

Table 2: Approximate Developmental Ordering of Risk Factors Associated With Disruptive and Delinquent Behavior

Risk Factors Emerging During Pregnancy and From Infancy Onward	
Child	Pregnancy and delivery complications
	Neurological insult
	Exposure to neurotoxins after birth
	Difficult temperament
	Hyperactivity/impulsivity/attention problems
	Low intelligence
	Male gender
Family	Maternal smoking/alcohol consumption/drug use during pregnancy
	Teenage mother
	High turnover of caretakers
	Poorly educated parent
	Maternal depression
	Parental substance abuse/antisocial or criminal behavior
	Poor parent-child communication
	Poverty/low socioeconomic status
	Serious marital discord
	Large family size
Risk Factors Emerging From the Toddler Years Onward	
Child	Aggressive/disruptive behavior
	Persistent lying
	Risk taking and sensation seeking
	Lack of guilt, lack of empathy
Family	Harsh and/or erratic discipline practices
	Maltreatment or neglect
Community	Television violence
Risk Factors Emerging From Midchildhood Onward	
Child	Stealing and general delinquency
	Early onset of other disruptive behaviors
	Early onset of substance use and sexual activity
	Depressed mood
	Withdrawn behavior
	Positive attitude toward problem behavior
	Victimization and exposure to violence
Family	Poor parental supervision
School	Poor academic achievement
	Repeating grade(s)
	Truancy
	Negative attitude toward school
	Poorly organized and functioning schools
Peer	Peer rejection
	Association with deviant peers/siblings
Community	Residence in a disadvantaged neighborhood
	Residence in a disorganized neighborhood
	Availability of weapons
Risk Factors Emerging From Midadolescence Onward	
Child	Weapon carrying
	Drug dealing
	Unemployment
School	School dropout
Peer	Gang membership

Source: Adapted from Loeber and Farrington, 1998a.

cohort data to investigate race and gender associations with child delinquency (Kempf-Leonard, Chesney-Lind, and Hawkins, 2001). The analyses showed that, regardless of race and gender, serious and chronic delinquency were more prevalent among early-onset offenders. More of this type of information is needed to identify and understand race and gender differences in developmental pathways leading to child delinquency.

Interventions

Most juvenile justice, child welfare, and school resources currently focus on adolescent juvenile offenders and problem children whose behaviors are already persistent or on education and behavior management programs for youth in middle and high schools rather than on children in elementary schools or preschools. Interventions usually seek to remediate disruptive behavior, child delinquency, and serious and violent offending after these behaviors have emerged.

The Study Group concluded that prevention is a better approach. Of all known interventions to reduce juvenile delinquency, preventive interventions that focus on child delinquency will probably take the largest "bite" out of crime. Specifically, these efforts should be directed first at the prevention of persistent disruptive behavior in children in general; second, at the prevention of child delinquency, particularly among disruptive children; and third, at the prevention of serious and violent juvenile offending, particularly among child delinquents. "The earlier the better" is a key theme in establishing interventions to prevent child delinquency, whether these interventions focus on the individual child, the home and family, or the school and community.

Support for prevention and early intervention was generally endorsed by practitioners. An opinion survey of practitioners conducted by the Study Group found that nearly three-quarters (71 percent) thought that effective

methods were available to deal with child delinquents to reduce their risk of future offending. On the other hand, only 3–6 percent of the practitioners thought that current juvenile justice, mental health, or child welfare programs were effective in achieving this goal (Farrington, Loeber, and Kalb, 2001).

Following a public health approach to intervention, the Study Group recommended preventive and remedial interventions that focus on known risk factors and on knowledge of the behavior development of juveniles (see figure 3, page 4). However, the Study Group cautions that there is no single magic bullet for preventing or correcting child delinquency. Investigation of interventions for child delinquency clearly demonstrates that multiple risk factors, their relationships with one another, and their complexity pose important challenges for implementing interventions. Comprehensive public health interventions should focus on changing both the conditions and institutions that influence offending in the community (Farrington, 1994, 2000).

In addition, mental health, welfare, and juvenile justice interventions for child delinquency must deal with the multiple problems stemming from dysfunctional families.

Promising Interventions

The most promising school and community prevention programs for child delinquency focus on several risk domains (Herrenkohl et al., 2001). The Study Group recommends integrating the following types of school and community prevention programs:

- Classroom and behavior management programs.
- Multicomponent classroom-based programs.
- Social competence promotion curriculums.
- Conflict resolution and violence prevention curriculums.

- Bullying prevention.
- Afterschool recreation programs.
- Mentoring programs.
- School organization programs.
- Comprehensive community interventions.

Several unique programs have demonstrated that interventions with young children can reduce later delinquency. The High/Scope Perry Preschool Project focuses on 3- and 4-year-olds at risk for school failure. In this program, treatment group participants, when compared with control group participants, showed a number of benefits across a range of prosocial functioning indicators, including fewer than half the lifetime arrests (Schweinhart, Barnes, and Weikart, 1993). The Elmira Prenatal/Early Infancy Project sent nurses to the homes of pregnant, unmarried women in households with low socioeconomic status. These visits began during pregnancy and continued to the end of the second year after the child's birth. By the time the children were 15 years old, the positive impact of the visits was reflected in a decrease in children's reports of arrests, convictions, violation of probation, consumption of alcohol, sexual activity, and running away from home (Olds et al., 1998). As another example, Webster-Stratton (1998) has developed a comprehensive and successful training program for parents of Head Start children that includes a focus on social skills and prosocial behavior.

The Study Group's analyses of three recent service delivery studies—the Great Smoky Mountains Study of youth in North Carolina, the Patterns of Care program in San Diego, CA, and the southwestern Pennsylvania Costs of Services in Medicaid Study (Burns et al., 2001)—strongly indicate that the first step toward obtaining effective treatment is to provide families with access to mental health and other services. While the very early detection of emotional and behavior problems is a public health goal, results have not been encouraging. The delay between symptom onset and help seeking is apparent, and the rates of mental health interventions in juvenile justice are extremely low. Clearly, a mechanism for obtaining timely, specialized help is imperative. Such help could also alleviate the high cost of care—both psychiatric and general medical—for youth with the diagnosis of conduct disorder.

It is extremely important to communicate to mental health and other services what treatments are effective. For example, many juvenile offender intervention programs, such as Multisystemic Therapy (MST) (Henggeler, Pickrel, and Brondino, 1999), have had

a significant impact on reducing the rates of felonies. Currently, OJJDP is testing the ability to disseminate MST in a large, three-city study, with the goals of identifying effective methods for dissemination, retraining clinicians, and developing approaches to ensure quality implementation.

Juvenile Justice Programs

Because children are malleable, adolescence has generally been recognized as "a stage of developmental immaturity that rendered youths' transgressions less blameworthy than those of adults and required a special legal response" (Grisso, 1996). Traditionally, juvenile courts do not adjudicate very young, first-time offenders and step in only when such institutions as families, social and child protective services, and schools fail in their efforts with children.

Unfortunately, the juvenile court has long served as a dumping ground for a wide variety of problem behaviors of children that other institutions (e.g., social, mental health, and child protective services) fail to serve adequately (Kupperstein, 1971; Office of Juvenile Justice and Delinquency Prevention, 1995). Although collaboration between juvenile justice and child and adolescent social services was once considered the cornerstone of a comprehensive childcare system, the two systems are severely fragmented. The deinstitutionalization and diversion policies of the past 25 years have turned child delinquents away from juvenile courts, resulting in sparse program development for these children.

Although few programs in the juvenile justice system are explicitly designed for child delinquents, new models are being developed. Currently, only a few well-organized, integrated programs for child delinquents exist in North America (Howell, 2001). Most of them involve coordinated efforts among police, the public, prosecutors, judges, schools, and mental health services. These programs have yet to be evaluated, and their long-term success may depend on receiving consistent funding from year to year. Several of the most promising programs are listed below:

- **Michigan Early Offender Program.** This program provides specialized, intensive, in-home interventions to youth who are age 13 or younger at the time of first adjudication and who have two or more prior police contacts (Howitt and Moore, 1991).
- **Minnesota Delinquents Under 10 Program.** This program includes interventions such as sending parents an admonishment letter from the county attorney, referring delinquents to child protective services and other agencies, identifying diversion programs, identifying children in need of protection or services petitions, and targeting early intervention for high-risk children (see, e.g., Stevens, Owen, and Lahti-Johnson, 1999).
- **Toronto Under 12 Outreach Project.** This fully developed Canadian program emphasizes a multisystemic approach combining interventions that target children, parents, schools, and communities. It includes a centralized police protocol to expedite services for children who engage in delinquent activity (Hrynkiw-Augimeri, Pepler, and Goldberg, 1993).
- **Sacramento County Community Intervention Program.** This program provides services coordinated by a community intervention specialist who conducts an indepth, strength-based family assessment, including physical and mental health, substance abuse, economic strengths/needs, vocational strengths/needs, family functioning, and social functioning (Brooks and Pettit, 1997).

All multisystemic programs designed to deal with child delinquency rely on particular approaches and programs targeting the child, the family, peers, the school, and the community. Many programs either have proven to be effective or hold promise within these domains, such as Parent Management Training (Patterson, Reid, and Dishion, 1992), Functional Family Therapy (Sexton and Alexander, 2000), and MST (Henggeler, Pickrel, and Brondino, 1999). In terms of peer interventions, care must be taken when delinquent or highly disruptive children are brought together for group therapy because of the potential contaminating effects (Dishion, McCord, and Poulin, 1999). Peer interventions are best undertaken in conjunction with other programs (Coie and Miller-Johnson, 2001). School programs (e.g., the Good Behavior Game and the FastTrack Program [Herrenkohl et al., 2001]) and community programs (e.g., Communities That Care [Hawkins and Catalano, 1992]) may help alleviate risk factors for child delinquency.

Child Delinquents, Incarceration, and Legal Sanctions

The Study Group found no studies showing that incarceration of serious child delinquents results in a substantial reduction in recidivism or the prevention of later serious and violent offending. In addition, victimization by older, serious delinquent offenders in correctional facilities may fuel criminal propensities in child delinquents. Likewise, the Study Group does not advocate increased legal sanctions for nonserious child delinquents. Instead, more programs that specifically target child delinquents are needed, including specific procedures on how to deal with child delinquents when there is an absolute need for their detention. Nonserious child delinquents can best be dealt with in the mental health and the child welfare systems, with a focus on interventions involving the children's parents.

A community policing program has also demonstrated some success in working with child delinquents. The OJJDP-funded New Haven Child Development–Community Policing Program (Marans and Berkman, 1997) brings police officers and mental health professionals together to provide each other with training, consultation, and support and to provide direct interdisciplinary intervention to children who are victims of, witnesses to, or perpetrators of violent crimes.

Interagency Mechanism

Because child delinquents often have many concurrent problems, including antisocial behavior, learning difficulties, mood problems, and exposure to child abuse and neglect, a number of agencies have typically provided services to this group. Practitioners almost unanimously agree that more coordination among the juvenile justice system, schools, child welfare agencies, and mental health agencies is needed to deal with very young offenders (Farrington, Loeber, and Kalb, 2001). However, such integrated programs are extremely rare, and their effectiveness remains to be evaluated. The Study Group suggests that one of the following three mechanisms may be needed to coordinate and fully integrate a continuum of care and sanctions for child delinquents:

- A governing body or interagency council that, at minimum, includes representatives from all juvenile justice-related human services organizations and agencies and has the authority to convene these agencies to develop a comprehensive strategy for dealing with child delinquents.
- A front-end mechanism within the juvenile justice system that can make comprehensive assessments of referred child delinquents, such as Community Assessment Centers that provide a single point of entry (Dembo and Brown, 1994; Oldenettel and Wordes, 1999).
- A mechanism to ensure interagency coordination and collaboration in the delivery of services in the postadjudication phase, such as wraparound services that can be applied to children and families in a flexible and individualized manner (Duchnowski and Kutash, 1996).

Legal Issues

In addition to overall policy and research issues, many important legal issues concerning child delinquents must be resolved, including the following (Wiig, 2001):

- **Jurisdiction.** States differ greatly in their minimum age for delinquency jurisdiction and their enactment of alternative grounds for court jurisdiction (such as dependency and children in need of protective services).
- **Competency.** The competency of most child delinquents is debatable in terms of their ability to understand the severity of charges, court proceedings, and the implications of sentences.
- **Counsel.** The right to counsel and other constitutional rights are of importance to all juvenile delinquents but are complicated for children because of their inability to understand rights (e.g., the Miranda warning or the privilege against self-incrimination).
- **Parental responsibility.** The value both of making parents more legally responsible for their children's delinquency and of followup sanctions for parents needs to be investigated.
- **Alternatives to court jurisdiction.** Alternatives for handling child delinquents outside the courts (e.g., either informally by the police or through a voluntary referral to a child-serving agency) may represent an important and promising approach to deflecting children from future delinquency.

Key Research Priorities

There are many gaps in current knowledge about the development of child delinquency, the risk and protective factors associated with it, and appropriate prevention/intervention methods. In addition to reanalysis of existing data and collection of additional data in ongoing studies, new research projects that focus specifically on child delinquents are needed. This is especially true for very serious young offenders, who represent a small group about which little systematic knowledge has been gathered. The Study Group recommends that additional research should focus on the following areas:

- Child delinquent development and epidemiology, based on self-reports and official records of offending.
- The relation between child delinquency and co-occurring problem behaviors.
- Escalation from child delinquency to serious and violent offending.
- Risk and protective factors that influence continuity and escalation in the severity of delinquency after its childhood onset.
- Longitudinal studies to investigate questions about development, risk and protective factors, and risk assessment.
- The major service agencies' methods for dealing with child delinquents.
- Cost-benefit analyses of prevention/intervention programs.
- Studies with experimental and control groups and random assignment of participants to investigate prevention/intervention strategies.

Costs and Benefits

Although literature reviews of early interventions to prevent the development of criminal potential demonstrate that this approach is promising for

reducing delinquency and later offending (see Zigler, Taussig, and Black, 1992; Farrington and Welsh, 1999), there has been little discussion of economic costs and benefits. The potential benefits of prevention programs targeting delinquents or high-risk youth are indicated by estimates that a typical, single criminal career encompassing the juvenile and adult years costs society between $1.7 and $2.3 million in 1997 dollars (Cohen, 1998).

Although cost-benefit studies are relatively rare, a few studies have provided important evidence on the economic efficiency of early developmental delinquency prevention programs. For example, the High/Scope Perry Preschool Project—founded in 1962 in Michigan—focused on preschool programs to help children (ages 3–4) in poverty make a better start in their transition from home to school and community, including setting them on paths to becoming economically self-sufficient and socially responsible adults (Schweinhart, Barnes, and Weikart, 1993; Parks, 2000). The most recent followup data, collected when these children were 27, revealed several differences in outcomes between the children who received treatment and those who did not (the controls). Among children who received treatment, there was less delinquency, a lower rate of absenteeism from school, less need for remedial and supportive school services, and less likelihood of aggressive, predelinquent behavior. A cost-benefit analysis of the High/Scope Perry Preschool Project (Barnett, 1993) found that for every dollar spent on the project, taxpayers and crime victims were saved more than $7. The total costs of the program were estimated at $12,356 per participant; total benefits, when adjusted for inflation and a 3-percent discount rate, were estimated at $88,433 per participant (Welsh, 2001).

In addition to showing promise as economically efficient approaches to reducing delinquency, several intervention programs have revealed other important spinoff benefits, such as improved outcomes in educational achievement, health, and parent-child relationships. A cost-benefit analysis of the Elmira Prenatal/Early Infancy Project in New York, NY, for example, showed a reduction in welfare and health costs and a higher tax base because of increased employment (Karoly et al., 1998).

Although many programs claim cost savings based on overall effectiveness, more economic evaluation is needed to assess the monetary value of programs and to help answer important questions facing policymakers.

Conclusions and Policy Recommendations

Child delinquents constitute a population not usually recognized as needing services to prevent them from becoming tomorrow's serious, violent, and chronic juvenile offenders. The Study Group's work has clear implications for policymakers at the federal, state, county, and municipal levels who can influence the day-to-day and long-term operation of agencies and/or their funding to maintain, improve, or create new programs. Indirectly, the Study Group also addresses the frontline workers who deal every day with child delinquents and children with persistent disruptive behavior, whose voices and concerns should be heard by policymakers.

Policymakers should be concerned about child delinquents and children with persistent disruptive behavior for the key reasons discussed below (Farrington, Loeber, and Kalb, 2001).

Child delinquents constitute a significant problem for society. Child delinquents, compared with later onset offenders, are two to three times more likely to become tomorrow's serious offenders. Part of this likelihood depends on the presence of risk and protective factors. Stouthamer-Loeber and colleagues (2002) examined the degree to which protective domains buffered the effect of risk domains in the Pittsburgh Youth Study. Using a total score of protective and risk domains for each participant, the study found that children whose balance between protective and risk domains favored one or more risk domains had an elevenfold increase in the likelihood of becoming persistent serious delinquents in adolescence, compared with children who had an overall balance of fewer risk domains and more protective domains.

There is a real risk that some children will become serious offenders. However, this danger is not general public knowledge and, consequently, is rarely addressed to prevent the development of serious, violent, and chronic juvenile offending.

Information about child delinquency is inadequate. Society does not have the information about child delinquents that is necessary to reduce this pervasive social problem. Such knowledge is crucial for planning services for child offenders at an early stage in their delinquency careers. Child delinquents need to be included in national, regional, and citywide surveys of offenders and victims to address important questions such as how common serious child delinquency is and whether serious child delinquents are qualitatively or quantitatively different from other child delinquents.

The Study Group noted the absence of annual surveys focusing on the prevalence of persistent disruptive children in elementary schools. In addition, there appears to be no consistent tracking of the number of referrals child welfare offices receive from police for children age 12 or younger who have committed delinquent acts. Annual police reports of juvenile delinquency are available. However, jurisdictional differences in the minimum age of criminal responsibility and possible differences in police practices for recording delinquent acts committed by children call into question

the accuracy and comprehensiveness of the information collected on child delinquents. Policymakers need to step forward and insist on informing society, in a timely fashion, about the prevalence of child delinquents and their persistent disruptive behaviors; the proportion of such children who do or do not receive services for their problem behaviors; the number of risk factors for these children, who are routinely targeted for intervention; and the dissemination of effective and replicated interventions.

Child delinquents are expensive to taxpayers and society. Child delinquents tend to be expensive to society because of the numerous interventions they receive from different agencies, including special school services, child welfare and social services, mental health agencies, and family counseling services. Child delinquents are likely to receive services from the majority of agencies dealing with children. Although not all of these children are engaged by all of these services simultaneously, many of the young problematic children require the attention and intervention of a succession of several agencies.

Given the barriers that often exist between different agencies and their poor data sharing, it is highly likely that assessments are duplicated. Also, many practitioners complain about the lack of an integrated and coordinated approach among the agencies trying to deal with the multiple problems of child delinquents. Unintegrated services may be less effective than integrated services, especially when integrated services are well planned and evaluated.

Many child delinquents become chronic offenders (Blumstein, Farrington, and Moitra, 1985). As previously mentioned, the cost to society of a single criminal career ranges from $1.7 to $2.3 million in 1997 dollars (Cohen, 1998). Given that many of these high-rate offenders start their delinquent careers early in life, it is safe to assume that the cost to society of child delinquents is considerable.

Early intervention with child delinquents is essential. Currently, a whole array of effective interventions is available to reduce persistent disruptive child behavior and early-onset delinquency. Also, well-tested interventions exist to prevent delinquent juveniles from escalating to serious, violent, and chronic juvenile offending. However, for child delinquents known to the juvenile justice system, special programs, such as the previously mentioned ones in Toronto and Minneapolis (Howell, 2001), need to be further evaluated and tested in other jurisdictions.

Rather than intervening to prevent high-risk children from becoming tomorrow's incarcerated offenders, policymakers tend to fund the more plentiful programs for older adolescent delinquents and programs that confine serious adolescent offenders in costly institutions. This is not to suggest that all the attention and funds should be given to child delinquents and that adolescent delinquents should be ignored. However, a more effective balance of resources should be developed so that the roots of serious adolescent delinquency can be better addressed in childhood.

Unfortunately, many policymakers are unaware of the efficacy and cost-effectiveness of alternative interventions and often choose not to fund early prevention methods that can benefit juveniles in general and taxpayers and citizens in particular. Yet no policymaker would argue that the optimal public health strategy to deal with nicotine addiction is the removal of cancerous lungs in large numbers of affected smokers. Instead, risk-based smoking prevention strategies have been developed and are now widely endorsed and implemented. The same rationale used for public health risks should be applied to preventing serious and violent juvenile delinquency. The focus should be on targeting early risk factors associated with child delinquency and persistent disruptive child behavior. In more and more communities, system professionals and policymakers realize that the increase in the number of child delinquents (and disruptive youth) is too large a problem to be ignored and that special programs are needed.

Summary

Often, neither parents nor the various professionals who work with children know which problematic children will cease their disruptive or delinquent behaviors and which ones will continue or worsen their behavior over time. Nevertheless, because most of the necessary conditions for later serious and violent juvenile offending begin in childhood, the Study Group on Very Young Offenders strongly urges that efforts to reduce serious forms of delinquency should shift from a focus on adolescent delinquents and more serious chronic juvenile offenders to a focus on child delinquents. To help with this task, the Study Group has presented some important new information on child delinquency, including analyses of epidemiological data, risk and protective factors, early prediction, interventions for disruptive and delinquent children, and juvenile justice system issues. This information 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.

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