In this chapter, we present what is known about several modes of early intervention to prevent crime:

- Early-childhood interventions for children at risk of later antisocial behavior.
- Interventions for families with children who are “acting out.”
- School-based interventions, e.g., incentives to graduate.
- Interventions for troublesome youths early in delinquency.

All of these approaches depend on an ability to identify families with children at risk of future trouble with the law. Thus, before we proceed, let us review some of the factors permitting that identification.

There is a high degree of continuity from childhood conduct problems to delinquency and later criminal behavior (Loeber and LeBlanc, 1990). The best predictor of any individual’s future deviant or antisocial behavior is the amount and severity of similar behaviors in the past (Farrington, 1994). Age of onset and severity of juvenile record are two of the best predictors of adult criminality (Greenwood and Abrahamse, 1982; Blumstein et al., 1986).

Troublesome and delinquent children are more likely to come from troubled families and neighborhoods. Family factors associated with higher rates of delinquency include early childbearing, teenage pregnancy, and substance use during pregnancy (Farrington, 1994); low birth weight, other types of birth complications, and parent’s criminal record or mental health problems (Brennan, Mednick, and
Volvaka, 1995); and poor parental supervision, erratic child-rearing behavior, parental disharmony, and parental rejection of the child (Loeber and Stouthamer-Loeber, 1986). Being abused or neglected as a child increases the likelihood of arrest for a violent crime by 38 percent (Widom, 1992).

Delinquency is not a problem that appears alone. Delinquent youths are also at higher-than-average risk for drug use, problems in school, dropping out of school, and teenage pregnancy (Elliott, Huizinga, and Menard, 1989; Greenwood, 1993). Research attempting to explain the likely sequence or relationship among these various behaviors now supports an interactional model in which all are interconnected, with causality flowing both ways between any two (Thornberry, 1987). Given this perspective, any intervention that reduces the incidence of one of these problem behaviors is likely to reduce the others as well. Thus, beneficial secondary effects on crime might be anticipated from interventions that have been shown to reduce drug use or teen pregnancy or to increase educational achievement.

**EARLY-CHILDHOOD INTERVENTIONS FOR CHILDREN AT RISK**

Most of us have an intuitive sense that the basic patterns of character and personality are laid down very early in life. Longitudinal studies have demonstrated, as suggested above, that inappropriate or inadequate parenting are among the strongest predictors of later delinquency (Loeber and Stouthamer-Loeber, 1986). How can individuals who are at risk of being ineffective parents be identified and what can be done about it?

Longitudinal studies consistently identify the following three factors as associated with such risks: poverty, single parenthood, and youthfulness. Any woman in one or more of these situations is at significantly higher risk of being an ineffective or abusive parent than one not in these situations (Farrington, 1994). Additional factors associated with later antisocial behavior on the part of the child include parental substance abuse, mental health problems, or criminality; birth complications; and child abuse and neglect (Sampson, 1995).
Given these findings, it can be argued that the community has an interest in helping any woman in one of these situations overcome potential problems that are likely to interfere with the healthy development of her child. During the past two decades, a number of experimental programs have demonstrated the value of home visits and early childhood education in reducing a range of problem behaviors (Farrington, 1994; Yoshikawa, 1994).

The Syracuse University Family Development Research Program recruited 108 deprived families to participate in an experimental intervention, which began during the third trimester of pregnancy. All of the families, which were predominantly African-American, had annual incomes under $20,000 (in 1996 dollars). The average age of the mothers was 18, and 85 percent were single heads of households. The major thrust of the intervention was to support parenting strategies that enhanced the development of children. This was done through weekly home visits followed by day care through the first five years of the children's lives. The home visitors were trained to help families resolve problems in child rearing, family relations, and community functioning.

Ten years after the intervention ended, a follow-up study of the Syracuse sample found that 6 percent of the experimental-program children had been referred to probation, compared to 22 percent of a group of matched controls. Program youths also tended to express more positive feelings about themselves and to take a more active approach in dealing with personal problems. Girls who participated in the program showed greater school achievement and higher ratings by teachers. Parents of program youth placed more value on prosocial attitudes and behaviors than did the controls (Lally, Mangione, and Honig, 1988).1

Another study in upstate New York randomly assigned at-risk women (young, poor, or single) experiencing their first pregnancy to one of the following four conditions: (1) sensory and developmental screening for the children at ages 12 and 24 months only, (2) cond-

1Although the studies of early intervention yield mutually reinforcing results, few provide statistical tests of the significance of the differences found or furnish enough information to allow such tests to be performed by others. In most cases, sample sizes are quite small.
tion 1 plus free transportation to regular prenatal and well-child visits, (3) condition 2 plus nurse home-visitation during pregnancy, or (4) condition 3 plus nurse home-visitation during child’s first two years. Reports of child abuse or neglect during the first two years were substantially fewer among those receiving the postnatal home visits. Among women most at risk, 19 percent of those receiving no services (condition 1) were the subject of child abuse or neglect reports, versus 4 percent of those receiving the postnatal home visits (Olds et al., 1986a).

In another study, the Houston Parent-Child Development Center randomly assigned one-year-old Mexican-American children and their families, recruited from Houston barrios, to either a two-year program of biweekly home visits (first year) and four-times-a-week classes and day care (second year) or an “assessment only” condition. Ratings by teachers five to eight years after the program’s completion show significantly fewer acting-out and aggressive behavior problems with program participants compared with controls (Johnson and Walker, 1987).

Larson (1980) compared the effects of various levels and timing of home visits for working-class pregnant women in Montreal. He found that early visits (prenatal through 12 months) resulted in improved home environments and infant accident rates less than half those of the controls. Another research team tested the efficacy of a protocol consisting of home visits for three years, an educational child-care program (years two and three), and bimonthly parent-group meetings. When this protocol was applied to groups of low-birth-weight children and their parents, the intervention group had higher cognitive scores and significantly lower behavioral problem scores than the control group (Brooks-Gunn et al., 1993).

The national Head Start program also provides an enriched education for disadvantaged youth, as well as increased access to health and social services. Head Start has been shown to increase educational attainment and access to preventive health services—although, for African-Americans, the educational advantage decays quickly after program participation ends (Currie and Thomas, 1995).

Long-term follow-up of students at Perry Preschool (who were mostly African-Americans from disadvantaged homes) in Ypsilanti,
Michigan, found that those exposed to a two-year program of enriched preschool and weekly home visits had accumulated only half the arrests of a matched comparison group, up through age 27 (Schweinhart, Barnes, and Weikart, 1993). Earlier follow-up studies had found the Perry group to be more motivated in school, achieving better grades, and more likely to be employed at age 19.

Taken together these studies provide strong evidence that early home visits and supportive child care can bring about significant reductions in problem behaviors and increase cognitive functioning, especially for those youths most seriously at risk. The success of this “supportive child care” approach is in marked contrast to a number of early educational and cognitive-development interventions that did not produce the hoped-for gains in academic performance (Seitz, 1990).

**INTERVENTIONS FOR FAMILIES WITH CHILDREN ACTING OUT**

The interventions described in the previous section focus on families at risk of having problems with their children because of parental socioeconomic status, marital status, or age. We now turn to programs for families already having trouble with their children.

Gerald Patterson and his colleagues at the Oregon Social Learning Center (OSLC) have developed a program for training parents in how to monitor their child’s behavior and respond with appropriate rewards and punishments. A series of small-scale evaluations have shown that the training reduces stealing and antisocial behavior over short periods of time (Patterson, Chamberlain, and Reid, 1982; Patterson, Reid, and Dishion, 1992). OSLC is currently experimenting with “Parenting Through Change,” a training program for single parents and their children designed to reduce aggression, externalizing of problems, and school failure (Nancy Knutson, personal communication, December 1995).

Another type of parenting intervention, called functional family therapy (FFT), was developed and tested by Alexander and Parsons (1973) in Utah. Their approach focuses on modifying dysfunctional family communication, training family members to negotiate effectively, and setting clear rules about privileges and responsibilities. A
number of evaluations have found statistically significant evidence that FFT reduces recidivism rates for delinquents by 30 to 50 percent (Barton et al., 1984).

Tremblay et al. (1991) tested a similar program on a group of Montreal boys identified as disruptive by their kindergarten teachers. The experimental program provided assistance in family management to the parents and training in social skills to the boys, who were between 7 and 9 years of age during the program. In a follow-up evaluation conducted when the boys had reached age 12, the treated youths were doing better in school and reported less involvement in delinquency than those in the randomly assigned control group (McCord et al., 1994). Hawkins, Von Cleve, and Catalano (1991) found that the combined effects of both parent and teacher training for a sample of Seattle youths, identified as disruptive upon entry into first grade, reduced teacher-determined rates of aggressiveness among white boys and self-destructive behavior among white girls but had no observable effects on African-American youth.

**SCHOOL-BASED INTERVENTIONS**

The recognition that problems in school or early dropout are primary risk factors for juvenile delinquency and drug use have led to the development of a wide range of interventions. These are generally intended to increase youths’ attachment to school and provide them with skills for resisting invitations to participate in negative behavior from their delinquent peers. Unfortunately, many of these efforts have not been evaluated, and most of those evaluated have produced negligible impacts (Tolan and Guerra, 1994), particularly on later delinquency. One type of intervention that has shown highly favorable results, even on delinquency, is graduation incentives.

For the past four years, The Ford Foundation has sponsored a program aimed at helping disadvantaged youths graduate from high school and go on to college (Hahn, Leavitt, and Aaron, 1994; Taggart, 1995). The “Quantum Opportunity Program” offered learning, development, and service opportunities to at-risk youths during their

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2Minority youths from welfare-receiving families who lived within poverty neighborhoods.
Opportunities for Intervention in Development

four years of high school and provided modest cash and scholarship incentives to provide short run motivation. Graduation incentives were found to significantly increase high-school graduation and college-enrollment rates among participants. The program also had great success in reducing crime. Observed arrests for participating students were only three-tenths that of control students.3

INTERVENTIONS FOR TROUBLESOME YOUTHS EARLY IN DELINQUENCY

Between 30 and 40 percent of all boys growing up in urban areas in the United States will be arrested before their 18th birthday (Wolfgang and Tracy, 1982). Most of those arrested will not be arrested again. For those who are, each successive arrest will place them at a higher level of risk; after five or six arrests, they will have better than a 90 percent chance of being arrested again. Those who reach the five-arrest milestone have been labeled as chronic offenders—the 6 percent of all boys who account for more than 50 percent of all arrests (Blumstein et al., 1986; Wolfgang, Figlio and Sellin, 1972, among others). Most criminal careers begin in the juvenile years, and most chronic adult offenders have had multiple contacts with the juvenile-justice system (Blumstein et al., 1986).

Since the disposition of juvenile offenders is still supposed to be tailored to the individual needs and circumstances of each case, a wide variety of programs have been developed to meet these needs. A diverse array of programs serves those juveniles whose crimes or records are not very serious and whose family is sufficiently supportive that the youth can continue to reside in their home. These programs include probation, tracking and in-home supervision by private agencies, or programs in which a youth participates for part of the day and then returns home to sleep at night.

For those youths who must be placed out of their homes but do not represent such a risk that they must be removed from the commu-

3The results were 0.17 versus 0.58 arrest per person during his or her juvenile years (Taggart, 1995, p. 8). These are the total arrests accumulated through graduation from high school (or, for dropouts, through the time when graduation would normally have occurred).
nity, some jurisdictions provide or contract for a wide variety of group homes and other community living situations. Placements in such facilities are typically in the range of six months to two years, depending on the program and seriousness of the youth’s offense. For those youths who represent a more serious risk to the community, many states provide a continuum of increasingly restrictive settings ranging from isolated wilderness camps and ranches to very secure fenced and locked facilities. Individual placement decisions are made on the basis of community safety, treatment needs, and amenability to treatment.

Some youth advocates claim that all but a handful of youths are best served by placing them in small community-based programs. Indeed, a number of studies have demonstrated that appropriate community-based interventions work considerably better than regular probation or short-term detention (Davidson et al., 1990). Others argue that community-based placements are too expensive and dangerous to the community. They advocate treating youths who commit serious crimes more like adults and keeping them in large, less-expensive training schools. Unfortunately, there is little hard evidence to resolve this dispute.

The starting point for any discussion of this issue is the Lipton, Martinson, and Wilks (1975) study of correctional treatment and the National Academy of Sciences reanalysis of that and other relevant studies (Sechrest, White, and Brown, 1979). Both reviewed extensive literature on a wide variety of rehabilitative programs ranging from individual psychotherapy to institutional imprisonment and concluded that no one method of correctional intervention could be said to be more effective than any other, which was interpreted as saying that “nothing worked.” In fact, as many subsequent commentators (e.g., Palmer, 1978; Ross and Gendreau, 1980) have pointed out, Lipton Martinson, and Wilks (1975) and the other reviewers identified a number of programs that appeared to have reduced recidivism rates significantly. Again, no particular intervention strategy was found to be consistently more effective than any other.

Some challenged this conclusion, arguing that the reviewers did not adequately distinguish among various types of programs (Gendreau and Ross, 1987). Others held that reviewers paid insuf-
ficient attention to the quality with which the intervention models were implemented (Greenwood and Zimring, 1985).

Additional insight regarding these issues was provided by a series of meta-analyses that allowed reviewers to combine results across several studies while controlling for a variety of program characteristics. The first of these, like the earlier reviews, found that many different correctional strategies and methods produced similar results with respect to recidivism (Garrett, 1985; Davidson et al., 1990). Later ones, however, found significant differences. A meta-analysis of 80 program evaluations by Andrews et al. (1990) concluded that appropriate correctional services could reduce recidivism by as much as 50 percent. Appropriate services were defined as those that target high-risk individuals; address the causes of crime, such as substance abuse or anger; and use styles and modes of treatment (e.g., cognitive and behavioral) that are matched with client needs and learning styles.

A meta-analysis of more than 400 juvenile program evaluations by Mark Lipsey (1992) found that behavioral, skill-oriented, and multimodal methods produced the largest effects, while some methods actually produced negative effects, such as deterrence programs (this includes “shock incarceration” and “scared-straight” techniques, which received considerable media publicity). Positive effects were larger in community rather than institutional settings. The mean effect of treatment in this study, in comparison to untreated control groups, was to reduce recidivism rates by 5 percentage points (recidivism rates for delinquents are typically on the order of 50 percent).

There are several differences between these last two studies—differences that favor the Lipsey analysis as the basis for predicting the potential impacts that might result from improved juvenile correctional programming. First, the Lipsey study was restricted to juvenile programs, while the Andrews study included programs treating both juveniles and adults. Second, the Lipsey study attempted to be comprehensive in considering evaluations, while the Andrews study used a small sample. Finally, the Lipsey study compared programs across a number of objective categories, while the Andrews study applied a somewhat subjective theoretical classification scheme that could
have been biased by the coder’s knowledge of the outcomes for individual evaluations.

But the conservative Lipsey estimates may not be the last word on the issue. Currently, Orange County, California, is experimenting with an intensive supervision and counseling program for youths who accumulate five or more arrests prior to age 18. Early analysis of pilot-program data suggests that the program may reduce juvenile recidivism by up to 50 percent (Orange County Probation Department, 1994).

Unfortunately, many of the youngest delinquents do not appear to be exposed to whatever benefits juvenile corrections programs have to offer until they are well on their way to developing a pattern of serious criminal behavior. In most jurisdictions, the juvenile system has little in the way to offer an 11- or 12-year-old delinquent youth because they are not yet seen as dangerous (Greenwood et al., 1983), but these delinquents disproportionately include the future violent criminals of their cohort.