The Antisocial Behavior of the Adolescent Children of Incarcerated Parents: A Developmental Perspective

J. Mark Eddy and John B. Reid,
Oregon Social Learning Center

This paper was produced for a conference funded by the U.S. Department of Health and Human Services on January 30-31, 2002. The views expressed herein are those of the authors, and should not be attributed to the U.S. Department of Health and Human Services, or the Urban Institute, its trustees, or its funders.
The Antisocial Behavior of the Adolescent Children of Incarcerated Parents: A Developmental Perspective

For the past several decades, the most popular societal response to crime in the U.S. has been incarceration (Tolan & Gorman-Smith, 1997). Accordingly, the number of prison inmates has increased dramatically in recent years, from 292 per 100,000 adults in 1990 to over 475 per 100,000 adults in 1999 (U.S. Department of Justice [DOJ], 2000). In some states, the costs associated with this level of institutionalization now rival the cost of public education (e.g., Greenwood, Modell, Rydell, & Chiesa, 1996).

Of the 1,366,721 inmates held in state or Federal prison in 1999, over half (i.e., 721,500) were parents. These parents had an estimated 1,498,800 children under the age of 18 years (U.S. DOJ, 2000). This count represents an increase in the number of children affected by parental incarceration by over 500,000 children since 1990. The majority of these children live in situations where it is highly likely that their parent's incarceration has a direct impact on family functioning: almost 50% of incarcerated parents lived with their children prior to their prison admission, and over 80% report that their children currently live with the other parent or with a relative (U.S. DOJ, 2000).

The children of incarcerated parents have been a relatively invisible population. Corrections systems have tended to view male and female inmates as neither deserving of nor desiring contact with their children (Jeffries, Menghraj, & Hairston, 2001). Further, while a proportion of the children of inmates are in foster care (from 5 to 10%; U.S. DOJ, 2000), the children of incarcerated parents per se have not been considered the responsibility of any traditional governmental entity, such as child welfare, mental health, or the juvenile court.

The one aspect of childhood that has been attended to in prison has been the beginning. Throughout the history of women's institutions, the parenting role of incarcerated women simply could not be ignored because of inmate pregnancy (Jeffries et al., 2001). Some studies have reported up to as many as 25% of female inmates being either pregnant at intake or haven given birth during the year before incarceration (Church, 1990; Holt, 1982). In contrast, ignored altogether has been the other side of childhood, adolescence. At any given time, an estimated 15 to 40% of the children of incarcerated parents are teenagers (e.g., Sharp & Marcus-Mendoza, 2001; Hairston, 1989; Henriques, 1982; Fritsch & Burkhead, 1981; Zalba, Tandy, & Nesbit, 1964). Those who are not yet teens, soon will be.

By virtue of their developmental stage, it is these forgotten adolescents who have the potential to have the greatest impact on society at large, and in this chapter, we focus on the most powerful problem that they can exhibit, antisocial behavior. We overview the relationship between parental criminality and incarceration and adolescent antisocial behavior, discuss how these factors might be linked through parenting, place this link within the context of the life course development of antisocial behavior, and then discuss interventions that might make a difference in improving outcomes for the children of incarcerated parents.

The Significance of Antisocial Behavior during Adolescence

We define “antisocial behavior” as a cluster of related behaviors, including disobedience, aggression, temper tantrums, lying, stealing, and
violence (see Patterson, 1982). While some of these behaviors are normative at certain ages of child development, it is these behaviors, in concert and during adolescence, that serve as the strongest predictors of adjustment problems, including criminal behavior, during adulthood (Kohlberg, Ricks, & Snarey, 1984). From 40% to 75% of youths who are arrested for delinquent acts and/or who meet psychiatric criteria for a “conduct” disorder are arrested in adulthood (Harrington, Fudge, Rutter, Pickles, & Hill, 1991; McCord, 1991). Further, as many as 40% of such youth meet formal psychiatric criteria for antisocial personality disorder during adulthood (Harrington et al., 1991; Robins, 1966; Zoccolillo, Pickles, Quinton, & Rutter, 1992).

Youth who become involved in criminal behavior at young ages (i.e., late childhood or early adolescence) appear to be at an especially high risk for continuing such behaviors during adulthood (Gendreau, Little, & Goggin, 1996; Loeber, Stouthamer-Loeber, & Green, 1991; Moffitt, 1993; Patterson, Capaldi, & Bank, 1991). These same youth are also at high risk for other problems, such as academic difficulties, substance abuse and early sexual behavior, each of which may have serious long term consequences (Dryfoos, 1990; Hawkins, 1995; Howell, 1995). Accordingly, during young adulthood, individuals who displayed more serious antisocial behaviors in childhood tend to have greater difficulties than their peers in work; tend to abuse substances; and tend to have problems in interpersonal relationships such as marriage or parenting (Casp, Elder, & Herbener, 1990; Farrington, 1991; Magnusson, 1992; Quinton & Rutter, 1988; Robins, 1993; Rönkä & Pulkkinen, 1995).

The relationships between early starting youth antisocial behavior and problematic outcomes during adolescence and adulthood have led us and other researchers to view such behavior as a key marker of maladjustment (Reid & Eddy, 1997; Reid, Patterson, & Snyder, in press). Further, it is a marker that has significant societal significance. Youth antisocial behavior is considered one of the most costly child mental health problems in the U.S. today (Kazdin, 1994).

**Parent Criminality and the Antisocial Behavior of Adolescents**

In their meta-analysis of 34 prospective longitudinal studies of the development of antisocial behavior, Lipsey and Derzon (1998) found that having an antisocial parent or parents was one of the strongest predictors of violent or serious delinquency in adolescence and young adulthood (see Table 1). The values listed in Table 1 are estimated correlations that range from 0 (no relationship between the predictor and outcome) to 1.0 (perfect relationship between the predictor and outcome). While the correlation between parent criminality and the violent or serious delinquency of their offspring are seemingly small (i.e., $r = .16$ to .23), they do indicate a meaningful increase in the odds, or likelihood, that a youth with an antisocial parent (defined as the top 25% most “antisocial” parents in the population) will himself display antisocial behavior. Assuming an overall base rate of violent or serious delinquency in the population at large as 8% (Rutter, Cox, Tupling, Berger, & Yule, 1975; McGee, Feehan, Williams, & Anderson, 1992), the youth with the most antisocial parent(s) are from 3 to 6 times more likely to exhibit violent or serious delinquency than the youth of the least antisocial parents.
Table 1
The Top 10 Middle Childhood and Early Adolescent Predictors of Violent or Serious Delinquent or Criminal Behavior at Age 15 to 25

<table>
<thead>
<tr>
<th>Age Predictor Measured</th>
<th>Middle Childhood (age 6 to 11 years)</th>
<th>Early Adolescence (age 12 to 14 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child general offenses</td>
<td>.38</td>
<td>Child social ties</td>
</tr>
<tr>
<td>Child substance use</td>
<td>.30</td>
<td>Peer antisocial behavior</td>
</tr>
<tr>
<td>Child gender</td>
<td>.26</td>
<td>Child general offenses</td>
</tr>
<tr>
<td>Family socioeconomic status</td>
<td>.24</td>
<td>Child aggression</td>
</tr>
<tr>
<td>Parent antisocial behavior</td>
<td>.23</td>
<td>Child school attitude/performance</td>
</tr>
<tr>
<td>Child aggression</td>
<td>.21</td>
<td>Child psychological condition</td>
</tr>
<tr>
<td>Child ethnicity</td>
<td>.20</td>
<td>Parent-child relations</td>
</tr>
<tr>
<td>Child psychological condition</td>
<td>.15</td>
<td>Child gender</td>
</tr>
<tr>
<td>Child social ties</td>
<td>.15</td>
<td>Child physical violence</td>
</tr>
<tr>
<td>Parent-child relations</td>
<td>.15</td>
<td>Parent antisocial behavior</td>
</tr>
</tbody>
</table>

Note. Adapted from Lipsey & Derzon (1998). Total sample size contributing to the parent antisocial behavior mean effect size for age 6 to 11 years \( n = 1048 \), and for age 12 to 14 years \( n = 442 \).

Of importance in prediction, however, is not only how often a predictor variable is right (e.g., the child of a criminal parent becomes a delinquent) but also how often the predictor is wrong (e.g., the child of a criminal parent does not become a delinquent). In this regard, based on Lipsey and Derzon’s estimates, from 15 to 20% of the youth of the most antisocial parent(s) will become delinquent, and from 47 to 62% of all of those who will become delinquent will have at least one antisocial parent. In contrast, from 94 to 96% of those without an antisocial parent or parents will indeed not become delinquent, and from 77 to 78% of those who will not become delinquent will not have antisocial parents. Thus, from 22 to 23% of those who will not become delinquent will have antisocial parents, and from 39 to 53% of those who will become delinquent will not have antisocial parents. Taken together, these percentages simply indicate that parent criminality is an important “risk” factor for adolescent antisocial behavior. Clearly, risk implies a level of probability rather than a sense of certainty.

Which parent is antisocial does appear to be of some importance. For example, data from the Oregon Youth Study (OYS), a longitudinal study of 206 fourth grade boys who were recruited during the early 1980’s from randomly selected public elementary schools in neighborhoods “at risk” for delinquency, are presented in Table 2. At the beginning of the study, 22% of the boys had a father in the home (whether biological or step) who had been arrested as an adult, 9% had a mother who had been arrested, and 2% had a mother and a father who had been arrested. As can be seen in Table 2, it is clear that youth with parents who have been arrested as adults are at much greater risk to be arrested two or more times during adolescence, particularly if the parent arrested was the mother. While the OYS sample is predominately white, Robins and associates found similar relationships between mother, father, and youth arrests in an African American sample (e.g., Robins, West, & Herjanic, 1975).
Table 2
The Relationship Between Parental Arrests and the Police Detainment of Their Children through Adolescence (n = 206)

<table>
<thead>
<tr>
<th>Number of Police Detections of Child to Age 18 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Both parents arrested</td>
</tr>
<tr>
<td>Mother arrested</td>
</tr>
<tr>
<td>Father arrested</td>
</tr>
<tr>
<td>Neither arrested</td>
</tr>
</tbody>
</table>

Antisocial Outcomes for the Adolescent Children of Incarcerated Parents

While parent criminality appears to be related to adolescent child antisocial behavior, it is less clear whether one outcome of parent criminality, incarceration, is also related. To date, there appear to be no longitudinal studies of the children of incarcerated parents (see Gabel, 1992). The few cross-sectional studies conducted indicate that from 10% to 30% of the youth of incarcerated parents had been detained by police for delinquent behavior (e.g., Myers, Smarsh, Amlund-Hagen, & Kennon, 1999; Johnston, 1995a). Such values are difficult to interpret given that in some communities, it is normative for youth to be detained by the police at some point during adolescence. In the aforementioned OYS, 55% of the boys had been arrested at least once by the age of 18 years. Similarly, Wolfgang, Figalio, and Sellen (1972) reported that 33% of the boys in their Philadelphia study had at least one police contact before adulthood.

Antisocial behavior is one of many problematic behaviors that the adolescent children of incarcerated parents are more likely to display than younger children of incarcerated parents. Sharp and Marcus-Mendoza (2001) surveyed a random sample of 144 female drug offenders in Oklahoma, the state with currently the highest percentage of females in their incarcerated population. Mothers were asked about child problems that began after the incarceration. While only 6% of adolescent children were reportedly arrested, a wide variety of other problem behaviors were reported with a higher frequency, including behaviors for which they could have been arrested. Across most of the various behaviors, adolescents were reported as displaying more problems than children in the other age groups (see Table 3).
Table 3
Percentage of Children of Incarcerated Mothers Displaying Problem Behavior
Since the Incarceration Began

<table>
<thead>
<tr>
<th>Problem</th>
<th>Preschool (n = 41)</th>
<th>Age 6 to 11 (n = 40)</th>
<th>Age 12 to 18 (n = 34)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child depression</td>
<td>24%</td>
<td>38%</td>
<td>41%</td>
</tr>
<tr>
<td>Trouble with guardian</td>
<td>0</td>
<td>18</td>
<td>27</td>
</tr>
<tr>
<td>Bad grades</td>
<td>--</td>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>Dropped out of school</td>
<td>--</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Problems with alcohol</td>
<td>0</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Running away</td>
<td>0</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Problems with drugs</td>
<td>0</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Child became pregnant or got somebody pregnant</td>
<td>--</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Child arrested</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

*Note. Adapted from Sharp and Marcus-Mendoza (2001).*

Linking Parent Criminality and Adolescent Antisocial Behavior

It is not surprising that there is not clear evidence of a link between parent incarceration per se and adolescent antisocial behavior. Numerous risk factors for child adjustment problems have been found to be present in a significant proportion of families with incarcerated parents, and it seems unlikely that any one factor, including one as powerful as incarceration, would dominate in the explanation of child problems within this population. Most notably, many families of incarcerated parents face poverty and frequent shifting of housing and school situations (e.g., Johnston, 1995a; Norman, 1995) before, during, and after a period of incarceration. These types of factors are to child adjustment problems (Reid, Patterson, & Snyder, in press).

However, they only provide a context for the functioning of a family. Some children within families living in difficult contexts flourish, some flounder, and some fail completely. While there are many hypotheses about factors that would explain such differences, research on resiliency in the face of such difficulties is still in its infancy (with some notable exceptions; e.g., Werner, 1996). To date, one candidate that has garnered some support as a mediator between difficult contexts and child outcomes is parenting. This is particularly in terms of youth antisocial behavior (see Reid et al., in press).

One transition that children undergo when a parent is incarcerated is a change in family structure. When a father goes to prison, the children's mother usually continues to care for his children, although stepfathers, boyfriends, and grandparents usually play a parenting role as well (U.S. DOJ, 2000). In contrast, when a mother goes to prison, the father cares for the child only 25% of the time; children most typically live with a grandmother (51%), although some live with another relative (20%), a family friend (4%), or in a foster home (11%; U.S. DOJ, 1993; U.S. DOJ, 2000). Further, the majority of children of incarcerated mothers experience at least one change in placement or caregiver during the incarceration (Johnston, 1995a). Thus, children of incarcerated parents...
adolescent children of incarcerated parents often experience a simultaneous loss of one caregiver and a gain of one or more new caregivers.

Evidence from four recent studies suggests that parental transitions influence child and adolescent noncompliance and delinquency via their direct effects on parenting. A study of 198 married and divorced lower- to middle-class families found that the effect of divorce on child adjustment was mediated by mother-child interaction (Pett, Wampold, Turner, & Vaughan-Cole, 1999). Similarly, Martinez and Forgatch (2001) measured family structure transitions, parenting practices, and child adjustment in a sample of 238 divorcing mother families with sons in the first through the third grade. Analyses revealed that the impact of the number of family transitions on their son’s academic functioning, acting-out behavior, and emotional adjustment was mediated by parenting practices.

Capaldi and Patterson (1991) measured child and maternal antisocial behavior, parenting practices, and the number of marital structure transitions in a sample of 206 families with boys during late childhood and early adolescence. Results suggested that the effect of transitions on child antisocial behavior was mediated through both maternal antisocial behavior and unskilled parenting practices. In an extension of Capaldi’s study, Eddy, Bridges Whaley, and Stoolmiller (2001) examined these relationships further into adolescence. Again, family structure transitions impacted youth delinquency via parenting behaviors such as supervision. However, neither family structure transitions nor maternal antisocial behavior were related to adolescent delinquency when in the presence of indicators of parenting variables such as supervision.

Taken together, this work suggests that effective parenting practices can dampen the effects of stressors that children of incarcerated parents’ experience, which in turn, should decrease their risk for negative outcomes. Unfortunately, many incarcerated men and women report risk-laden childhoods that provided them with less than adequate parenting and parental role models, and such increases the likelihood that they will have difficulty with parenting their own children. For example, in one study, relative to non-inmates, male and female inmates reported receiving more authoritarian parenting (i.e., harsh, controlling, punitive, with little warmth) during childhood (Chipman, Olsen, Klein, Hart, & Robinson, 2000). Female inmates reported receiving the highest levels of authoritarian parenting of all groups. Not surprisingly, then, childhood physical abuse is commonly reported by incarcerated parents, especially women (e.g., U.S. DOJ, 1993). The same is true of sexual abuse.

Given this backdrop, from the moment of conception, the children of incarcerated parents are likely to be exposed to numerous risk factors for later problem behaviors, including child antisocial behavior. For example, the Children of Offenders study (Johnson & O’Leary, 1987) reported that 77% of the children of currently or previously incarcerated women had been prenatally exposed to drugs and/or alcohol, which is related to a host of problems during childhood and adolescence (e.g., Olds, Henderson, & Kitzman, 1994). Across childhood, longitudinal researchers have found that parents who have antisocial characteristics are more likely to use harsh and ineffective parenting practices, which from time to time may cross the threshold for abuse (e.g., Capaldi & Patterson, 1991; DeBaryshe, Patterson, & Capaldi, 1993; Patterson & Yoerger, 1999). One consequence of this is that 2% of male inmates and 10% of female inmates have children in foster care (U.S. DOJ, 2000).

A Life Course Model of Antisocial Behavior

Since parental incarceration may occur at any point in time during a child’s life, and aspects of the incarceration may reverberate throughout child development, a meaningful discussion about the impact of parental incarceration on adolescents and the role that parent-
ing might play seems most appropriate to us with the context of the overall life course. As a framework for such a discussion, Figure 1 presents our “coercion theory” conceptualization of a life-course trajectory toward antisocial behavior and serious delinquency (Patterson, 1982; Patterson, Reid, & Dishion, 1992; Reid, 1993, Reid & Eddy, 1997). Illustrated in the figure are our hypotheses on the most powerful and potentially malleable antecedents of antisocial behavior, delinquency and substance use during childhood and adolescence. In previous studies, each antecedent in the model has been shown to be a significant predictor either of a later antecedent of adolescent antisocial behavior or of long term maladaptation.

Within this model, the development of child antisocial behavior can gain momentum even before birth and then increase in velocity and intensity through successive, cascading antecedents during childhood and adolescence. Throughout such a developmental process, family factors play a powerful role. Longitudinal studies have provided strong evidence that use of clear and consistent discipline techniques, close monitoring and supervision of the child, high rates of positive reinforcement, and secure, responsive parent-child attachment relationships are related to prosocial outcomes in childhood, adolescence, and adulthood (Fagot & Pears, 1996; Fisher, Ellis, & Chamberlain, 1999; Patterson, 1982; Patterson, Reid, & Dishion, 1992). However, the exact nature, topography, and functions of family factors change markedly over development.

Before birth, direct parental antecedents have to do with nutrition, toxins and maternal stress. Although these risks are most directly occasioned by the mother, they are in turn significantly affected by contextual and social factors. Across infancy and toddlerhood, parenting behaviors become critical to set the stage for general psychological and social development. As the child matures, specific parenting factors involving direct socialization emerge as critical factors. With the transition to school in particular, the key parenting factors become more complex, involve different social domains and collaborations with other socialization agents. Finally, during adolescence, the parents must deal not only with mentoring and monitoring their youngsters’ activities, but also their transitions to other primary relationships, their increasing independence, and their increasing individual accountability.

Despite the importance of parenting behaviors, the display of antisocial behavior by youth is clearly an outcome of the interactive process between parent, child, and others. It is this process that drives the development of antisocial behavior forward. Research on the stability of conduct-related problems indicates that serious child problem behaviors commonly begin at an early age in the context of parent- and sibling-child relationships when some or all of effective parenting strategies and qualities are not present (e.g., Olweus, 1980; Patterson, Reid, & Dishion, 1992; Robins, 1978; Speltz, DeKlyen, & Greenberg, 1999). Early failures in discipline, continued child noncompliance, insecure parent-child attachment relationships, and low levels of prosocial skills appear to set the stage for reactions from teachers, peers, and parents that cause the child to be rejected and isolated (Fagot & Pears, 1996; Patterson, 1982; Reid & Eddy, 1997).

Such responses further compound compliance and discipline problems, causing a gradual escalation of coercive behaviors (i.e., aversion followed by withdrawal; Patterson, 1982) used by family members to control family interactions. There is compelling evidence that once these interactional patterns are learned and used by the child, he/she becomes at risk for problems across the span of child and adolescent development and into adulthood (Kazdin, 1987; Walker, Shinn, O'Neill, & Ramsey, 1987; Kern, Klepac, & Cole, 1996; Schneider, Atkinson, & Tardif, 2001).
Adolescent Children of Incarcerated Parents

M. Eddy and J. Reid
During adolescence, youngsters are beginning the transition from family to peer relationships and independence. As clearly documented in the recent U.S. Surgeon General’s report on youth violence (U.S. Department of Health and Human Services, 2001), the factors that place adolescents at highest risk for serious delinquency have to do with their peers. For the most part, delinquency is a social endeavor, with most youth crimes involving more than one youngster (Zimring, 1981). Children who associate with non-delinquent friends seldom become delinquent themselves (Dishion & McMahon, 1998). Low parent involvement in adolescent relationships with peers is strongly related to association with antisocial peers, and is occasioned by such factors as parental antisocial behavior, parental transitions, and poverty (e.g., Eddy et al., 2001). Over time, the effects of training in the home for coercive interaction styles and antisocial behaviors ultimately generalize to the school setting, to relationships with other adults, and to the peer group, and set up a context that is primed to produce criminality.

Prison, Parenting, and Change

Within our model, incarceration is one of many “risk” factors that place extreme stress on families and make parenting more difficult. Parental incarceration likely assists in the further cascade of problems for a child, but it seems unlikely that it initiates such a cascade, except in a small proportion of families (e.g., Sack, Seidler, & Thomas, 1976). If one considers the idea that parenting could mediate the relationship between parental incarceration and child outcomes, including adolescent antisocial behavior, what might help parents better mitigate such risk?

In coercion theory, socialization, including parenting, is viewed as a highly interactive process, comprising daily interactions between the child and the primary people in his or her world (i.e., parents, siblings, friends, teachers) and offering numerous opportunities for success or failure. During the incarceration of a parent, providing these individuals, particularly the primary caretaker(s), with the skills needed to positive socialize the affected children could go a long way towards mitigating risk.

However, given that (1) the majority of inmates do continue to have at least some contact with their children (90% of women, 80% of men; Morton & Williams, 1998) during their prison stay, (2) most inmates will be out of prison within a few years, and (3) many former inmates will resume at least some parenting duties (U.S. DOJ, 2000), the role of incarcerated parents in mitigating poor outcomes should not be ignored. Certainly, regular interaction between parent and child is limited for many parents while incarcerated: only 62% of male and 78% of female inmates report monthly contact with their children, with mail (50% of men, 66% of women) and phone (42% of men, 54% of women) being the most frequent media for contact (U.S. DOJ, 2000). In person monthly visits are reported by only 20% of men and women. The scant anecdotal evidence that exists on the impact of prison visitation on children suggests positive influences on children.

Yet the most important role that the majority of incarcerated parents will play in the lives of their children is on the outside of the prison walls, and once an individual who happens to be a parent is locked up, their prison stay may provide them with a chance that might not have existed previously to prepare for their role as parent. For some parents, the prison environment provides access to services that may neither be accessible nor utilized elsewhere. We have seen this phenomenon in our studies. For example, over the past decade, we have been conducting a longitudinal study of a sample of high rate juvenile offender males from our county (see Chamberlain & Reid, 1998; Eddy & Chamberlain, 2000). As these youth have entered young adulthood, we have been closely monitoring the happenings in their lives, and their feelings about those happenings, via monthly telephone calls. One question of interest has been how
prison and jail influences the lives of these young adults.

Table 4 presents data from the past two years on the impact of being in lock-up on participation in educational and therapeutic programs. During this time period, 16% of participants were locked up for the full period, 26% spent some time in lock-up, and 55% spent no time in lock-up. Clearly, when these individuals are in lock-up, they are more likely to participate in both self-help groups and to take classes. This increased participation in programs could be capitalized upon as an opportunity to provide programming to inmates that might prevent the development of antisocial behavior in their children. Further, having a parent in prison could serve as referral source for parenting skill training and support services for caregivers and for children on the outside. In this regard, being in prison could be considered a risk “screen” that does not require a new statewide testing campaign.

Table 4
Involvement in Programs In and Out of Prison

<table>
<thead>
<tr>
<th></th>
<th>Men with no prison calls</th>
<th>Men with calls when in and out of prison</th>
<th>Men with only prison calls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In prison calls</td>
<td>Out of prison calls</td>
<td></td>
</tr>
<tr>
<td>Average Percent of Phone Interviews in which Activity Reported</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending self help groups</td>
<td>0%</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>Taking classes or lessons</td>
<td>9</td>
<td>19</td>
<td>9</td>
</tr>
</tbody>
</table>

Percent Reporting Activity during at Least One Monthly Call

<table>
<thead>
<tr>
<th></th>
<th>Men with no prison calls</th>
<th>Men with calls when in and out of prison</th>
<th>Men with only prison calls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In prison calls</td>
<td>Out of prison calls</td>
<td></td>
</tr>
<tr>
<td>Attending self help groups</td>
<td>13%</td>
<td>53%</td>
<td>33%</td>
</tr>
<tr>
<td>Taking classes or lessons</td>
<td>33</td>
<td>53</td>
<td>20</td>
</tr>
</tbody>
</table>

The Current Status of Parenting Education in Prison

The majority of jurisdictions in the U.S. offer parenting programs in at least some of their institutions (Clement, 1993). A national survey indicated that the modal parenting program in women's institutions was taught over a 2- to 4-month period for 2 hours per week and included 25 inmates per class (Clement, 1993). Approximately 60% of jurisdictions with parenting programs reported having parent-child visitation opportunities that were separate from the regular visitation in the institution, and 80% of these reported the existence of agencies within their jurisdiction that coordinated transportation of children to prison. Only 28% of the jurisdictions with parenting programs for inmates also had some type of program for caregivers.

In another national survey, over 50 potential programs for incarcerated or ex-offender fathers were identified from various directories, but only 14 were confirmed to still be in existence and to be relevant to fathers or their families (Jeffries et al., 2001). Of these programs, 86% included a parent education component. The typical program included sessions on child development and discipline, with courses lasting from 1- to 4-months for 2 hours per week. Fifty percent of the programs included facilitated parent/child visits, 40% included some type of auxiliary program for caregivers, and most pro-
grams used a curriculum that was developed by the current or a previous instructor, rather than a published curriculum. In focus groups with inmates, common complaints included a lack of information on parenting from a distance and on how to negotiate the transition back into the community in terms of parenting.

Unfortunately, the number of institutions that actually operate parenting programs and the participation rates in these programs are unclear, and it appears that both numbers may be quite small. For example, in a survey of prison programming conducted by the U.S. Census Bureau, Morash, Haar, and Rucker (1994) found that only 4% of women and 1% of men reported participating in parenting counseling. Although opportunities for participating in parent education may be slim, there is evidence that incarcerated men and women are eager to participate in such programs. In one maximum-security prison, for example, despite the fact that the inmates were facing long sentences and had limited contact with their children, 80% indicated that they were willing to strengthen and improve their parenting skills (Hairston, 1989).

While there are a variety of programs around the country, and there does appear to be interest amongst inmates in these programs, very little is known about the impact of these programs on the children of incarcerated parents. Recent reviewers found only six evaluation studies of programs for incarcerated mothers (Young & Smith, 2000). Only three of these studies included a comparison group (Moore & Clement, 1998; Showers, 1993; Snyder-Joy & Carlo, 1998). In our own review of the literature, we found only four other comparison studies of a parenting program for inmates (Bayse, Allgood, & Van Wyk, 1991; Block & Potthast, 1998; Harrison, 1997; Landreth & Lobaugh, 1998). The interventions in these 7 studies varied from parenting discussion groups to modifications of the sparsely studied Systematic Training for Effective Parenting program (STEP; Dinkmeyer & McKay, 1989). All studies included the pre- and post-intervention measurement of parental attitudes and/or knowledge, and most studies found at least one significant and positive effect on such. Only one study measured the perceptions of children, and only one study asked parents to report on child behavior. Neither of these studies found effects on children. Unfortunately, none of the studies included a follow-up measurement to examine long term effects. Further, none of the studies attempted to monitor the fidelity of the delivery of the intervention.

What is most disconcerting about the programs that have been investigated is their disconnection from the emerging body of scientific literature on the development, prevention and treatment of child antisocial behavior (see Stoff, Breiling, & Maser, 1997). Traditionally, researchers in corrections have been isolated from researchers in complimentary fields such as developmental and clinical psychology and vice versa. Thus, the work that has gone on in either set of fields has not been informed by progress in the other field. One result is that none of the parenting programs that have been studied within a prison context appeared to utilize the core elements of parenting interventions that do have some scientific support (see Eddy, 2001).

Interventions that May Make a Difference in the Lives of the Adolescent Children of Incarcerated Parents

It is definitely the case that children of incarcerated parents, young and old, carry heavy burdens of risk; that many of these parents continue to influence their children (or fetuses, in the case of pregnant inmates) both while in prison and after release; and that many inmates will become parents for the first time after release. The fact that the valuable and relevant research literature on the development of youth problem behavior and on the many effective parenting interventions based on that literature has not been mined systematically to help children of incarcerated parents creates tremendous
opportunities for the development of effective interventions for this high risk but neglected group. It is our position that the interventions already shown to improve parenting, and those shown to provide strong parenting for children placed out of the home, can be readily adapted to fit the particular needs and circumstances of incarcerated parents and their children.

Parenting interventions have been tailored and scientifically evaluated at several points along the developmental life course, from nurse visitation before and after birth; to skills training programs for parents of preschool, elementary and middle school aged children; to outpatient and residential interventions for at risk and high risk adolescents that include a family focus. Key to each of these interventions is the development of specific parenting skills and the provision of the mentoring and support necessary to develop a sense of mastery and confidence in the parents. In many interventions, the work is of two sorts: didactic instruction and practice of skills, often done in groups; and individual follow-up to tailor the skills to the specific situation of a given family, including the supervised practice of the skills with children.

Over the past few years, a variety of task forces around the country have attempted to evaluate this growing database on the outcomes of family-based interventions, and identify which interventions are “best practices” for the prevention and treatment of child problems. Two outcomes of particular interest for these task forces have been antisocial behavior (e.g., aggression, violence, rule breaking) and substance use. Many of these task forces have been sponsored by federally funded entities, such as the Department of Education, the Center for Substance Abuse Prevention, and the Office of Juvenile Justice and Delinquency Prevention.

We recently compared the various lists produced by these task forces (Taylor, Eddy, & Metzler, 2001) and found four programs that were consistently rated as a “best practice” across multiple lists: nurse home visitation during pregnancy and infancy (Olds, Hill, Mihalic, & O’Brien, 1998a); parent management training (e.g., Patterson, 1976; Webster-Stratton, 1997); Multidimensional Treatment Foster Care (Chamberlain & Reid, 1998); and Multisystemic Treatment (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998a). Each of these address key needs of certain incarcerated parents and their families and children.

**Nurse Home Visitation**

David Olds and colleagues developed a comprehensive prevention strategy for economically disadvantaged mothers (Olds et al., 1998a). Delivered by nurses in the homes of participants, the intervention is targeted at improving prenatal care and maternal health as well as providing other support and educational services for single mothers living in high risk circumstances. Specifically, the intervention includes procedures designed to get the pregnant mothers to reduce or quit smoking, to reduce the use of other substances, to provide basic training and support in parenting, to increase the spacing in time between subsequent pregnancies, and to provide mentoring to improve educational and job skills. The program begins in the third trimester of pregnancy and continues through the second year of a child’s life.

In a randomized study of nurse home visitation, Olds, Henderson, Cole, Eckenrode, Kitzman, Luckey, Pettit, Sidora, Morris, and Powers (1998b) demonstrated substantial preventive effects not only on several early antecedents of conduct problems (e.g. child abuse, coercive parenting, parental rejection), but also on delinquent behavior by the target children 15 years following program termination. The impressive and long-term success of his intervention strategy constitutes heavy support for the notion that decreasing parental substance use, increasing the skill and support of parents, reducing physical abuse and harsh discipline, and creating a stable, predictable and safe early environment are key
ingredients to any early prevention strategy for conduct and related problems.

**Parent Management Training**

A variety of research teams around the country have developed and tested interventions that train parents in “family management” skills (see Patterson, Reid, & Eddy, in press). Known as parent management training (PMT), these behavioral interventions emphasize hands-on instruction and intensive practice in positive reinforcement, discipline, monitoring, and family problem solving (Eddy, 2001; Sanders & Dadds, 1993). Parents are the main focus of the intervention, but children are often included at various points as well. Intervention may last from four weeks to several months, with meetings usually held once a week.

PMT began as an intervention for use in outpatient mental health settings, but over the years has been adapted to inpatient, school, and community settings. Further, PMT interventions have been designed for children across the development continuum. Within experimental or quasi-experimental designs, participants in PMT interventions have demonstrated reductions in a wide variety of problems, including child antisocial behavior as rated by parents and teachers (e.g., Webster-Stratton & Hammond, 1997; Webster-Stratton, 1998; Webster-Stratton, Hollingworth, & Kolpackoff, 1989), police contacts (Eddy, Reid, & Fetrow, 2000), number of days institutionalized (Chamberlain & Reid, 1998), problem behaviors at school (Forgatch & DeGarmo, 1999), physical aggression on the playground (Reid, Eddy, Fetrow, & Stoolmiller, 1999), depression (Forgatch & DeGarmo, 1999), and substance use (Eddy et al., 2001). Longitudinal evaluations of PMT interventions have unveiled enduring benefits to child adjustment at least 2 (Martinez & Forgatch, in press) to 3 years (Eddy et al., 2001) after completion. Further, several studies have demonstrated that the effects of intervention on child adjustment were fully mediated by changes in parenting practices (Eddy & Chamberlain, 2000; Forgatch & DeGarmo, 1999).

**Multisystemic Treatment**

Developed by Scott Henggeler and colleagues, Multisystemic Treatment (MST) utilizes a variety of therapeutic techniques, including parent management training, to assist parents and children in gaining the skills and the resources they need to be address child and family problems (see Henggeler et al., 1998a). The key to treatment is a clinician that is available 24 hours a day, 7 days a week. Treatment sessions usually occur in the home, and may occur daily. At various times, sessions may involve a wide variety of pertinent individuals, including extended family members, peers.

Randomized studies of MST have found positive impacts on juvenile offender youth. For example, relative to youth on probation, youth who received MST were less likely to be arrested, less likely to be locked up, and less likely to self-report various crimes (see Henggeler et al., 1998a). In another study contrasting MST to individual therapy, only 22% of youth in the MST group had reoffended within five years following treatment termination versus 71% of those in individual therapy (Henggeler, Melton, & Smith, 1992). Outcomes from a variety of other studies are described in Henggeler, Mihalic, Rone, Thomas, & Timmons-Mitchell (1998b).

**Multidimensional Treatment Foster Care**

Designed by Patti Chamberlain and colleagues, Multidimensional Treatment Foster Care (MTFC) is a residential version of parent management training (Chamberlain, 1994). The program is designed to provide a minimally restrictive, alternative family situation for youngsters who are removed from their homes by the courts. In addition to providing the youth with structure, supervision and mentoring, the program works toward reunification and support of
the natural family. Therapists work with the youth and with the natural parents, foster parents receive training, supervision, and support (including access to a therapist 24 hours a day), and a case manager coordinates the efforts of the team. The intervention attempts to decrease affiliation with deviant peers, increase prosocial behaviors, decrease youth antisocial behavior, and increase parenting skills in the natural family.

In a number of randomized studies, Chamberlain and her colleagues (Chamberlain, Fisher, & Moore, in press; Chamberlain & Reid, 1998) have shown that it is both feasible and cost-effective to train and support carefully selected foster parents to provide multi-systemic treatment and care for extremely delinquent boys and girls. Significant impacts have been found on delinquent behavior following treatment. For example, only 59% of serious juvenile offender boys in the MTFC group were rearrested within one year following intervention versus 93% of boys in services-as-usual group homes (Chamberlain & Reid, 1998).

**An Integrated Preventive Intervention Model**

If delivered in concert and to the population of inmates and the caregivers of their children at large, modified versions of the four interventions presented above have great potential for significantly reducing problems in the population of the adolescent children of incarcerated parents. Nurses could deliver the nurse home visitation program to pregnant inmates, and children could stay with their mothers in prison during infancy while the mother continues to receive parenting and life skills advice and training. There is historical precedent for babies staying with their mothers in prison (Jeffries et al., 2001), and several states around the country do have residential programs for infants (e.g., New York; Washington). Since many female inmates will become pregnant when they leave prison, key content from the nurse home visitation program also could be delivered via groups to mothers of child bearing age in the prison setting in preparation for future pregnancies.

Parent management training, if tailored for delivery with inmates and with caregivers, could prove to be the “workhorse” of a larger prevention strategy. Through corrections departments or via contractors, group-based programs could be provided to the population of inmates early on in a sentence to improve their interactions with their children during the incarceration period (i.e., improve the quality of interaction via phone, letters, and in person visits). More positive interactions between parent and child during this period of time could start a cascade of positive outcomes for both parent and child. Additional parenting programs could be designed for inmates just prior to release to prepare for parenting on the outside.

Group-based programs that complemented the inmate program could be developed for the caregivers of the children of incarcerated parents and offered in community settings. While less financially feasible than group-based programs, parent management training could also be offered in the community on an individual basis for caregivers with children who are exhibiting serious antisocial behavior. The provision of services on the outside to caregivers would most logically be delivered by the non-profit sector, and a variety of programs could be available, including faith based programs.

For incarcerated parents who have youth who are in foster care or are involved in the juvenile justice system, programs with the skill development and support characteristics of MTFC and MST could be earmarked treatments. Through these interventions, a variety of family needs could be addressed, and the programs could be integrated with programs on the inside, like parent management training, to improve outcomes for youth. This group of interventions would clearly require more open communication between service systems than exists in most
states. Information would need to be shared so that families could be identified and resources appropriately targeted.

Finally, support services could be established for eased transition home (see Travis, Solomon, & Waul, 2001) and helping parents assume positive roles in the lives of their children when they return home from prison. These services might include support groups, mentors, or hotlines available for guidance and referral. One idea that we have been considering in our state has been a mentor available via phone 24 hours a day, 7 days a week for a given period of time (e.g., 6 months) after an ex-inmate returns home. The ex-inmate could call for parenting advice as needed, and the mentor would check in on a weekly basis. The mentor could run weekly support groups for those who desire such. If needed for a particular family, more intensive mentoring could be delivered through a version of MST.

Discussion

Whether or not parenting that occurs from behind the prison walls significantly shapes the life of a child or an adolescent, and further, whether constructive parenting from prison can mediate deleterious impacts on youth, remain empirical questions. Even data about such fundamental questions as predictors of positive parenting by inmates or the impact of prison visits on youth adjustment are simply not to be found in the published literature. Regardless, because the vast majority of inmates have sentences lasting only a few years, the inability to interact regularly with children due to the physical constraints of imprisonment is time limited. Most incarcerated parents will be released, and a significant number will return to parenting roles with their children.

As noted in our developmental model, the parenting practices most proximal and relevant to reduction of risk and increases in protection depend heavily on the developmental level of the child. Of particular importance are parenting behaviors during four stages of development. Before birth, critical issues include mother’s level of social and economic support, her diet, her access to prenatal care, and her use of substances, including tobacco. During the preschool years, critical issues shift to parent’s ability to teach their children critical social skills, to regulate their emotions, and to prepare them for the social demands of teachers and peers. During the elementary school years, important issues become adapting to social demands while simultaneously developing academic skills. Finally, during adolescence, issues shift to monitoring child activities, friends, and whereabouts; mentoring independent relationships with positive peers; discouraging relationships with deviant peers; increasing responsibilities; and negotiating appropriate limits.

Each of these factors has been targeted for change in parenting intervention studies, and positive impacts have been found on numerous antecedents of problem behaviors during early and middle childhood as well as on adolescent antisocial behavior. We suggest that given the overwhelming number of risk factors in the lives of many inmate families, a broad scale effort to decrease the likelihood that the youth of incarcerated parents will themselves become involved in antisocial behavior is probably in order, and such an effort should be built around parenting interventions. This is not to discount the potential benefits of work with children that is not family based. However, the power of individual work (or group work, for that matter) with the issues discussed in this paper has yet to be demonstrated convincingly (e.g., Taylor, Eddy, & Biglan, 1999).

We envision a serious prevention effort as involving multiple systems of care engaging in duties that they already do. This would include corrections departments conducting scientifically-based parent education programs, but on a broader scale than exists today and with both mothers and fathers; child welfare departments
conducting foster care, but providing the support and skills training that are key to success in programs like MTFC and MST; youth authorities providing residential or community services, but infusing those services with MST and MTFC-like practices; and finally, community non-profits delivering a variety of services that are also grounded in scientific evidence. Each of these efforts should be informed by community members and groups who have the skills and expertise needed to adapt existing “proven” interventions so that they are culturally competent for members of the variety of minority groups that are over represented in the corrections population (see Eddy, Martinez, Lopez-Morgan, & Smith, in press; Hall, in press). Finally, the outcomes of each of these efforts could be studied in a systematic and ongoing way. The programs that do, in fact, help in a given locale could be retained. Those that do not could be changed until they do or discontinued.

While this type of integrated work would certainly have a cost, over the long run, and in concert with efforts in other sectors in the community, it could make a difference in decreasing the prevalence of adolescent delinquency and adult criminal behavior. In turn, this could have substantial benefits in decreasing the costs due to incarceration. In contrast, what is unlikely to make a difference over the long run is the piecemeal and limited approach to prevention that is taken now in regards to the children of incarcerated parents.

A vision of prevention such as this is all well and good. Making it happen is another thing, particularly in a time of shrinking state budgets. However, a long term vision is needed if the ballooning corrections budgets of today are to be contained. In terms of scientific questions, the amount of information that is lacking on the children of incarcerated parents is staggering. Epidemiological studies are needed to gather information about the development of these children across the lifespan. Vital questions such as what are the characteristics of families who succeed in the face of incarceration versus the characteristics of those who do not need to be answered. Such information is key to the construction of developmental model that is appropriate to this population (see Mrazek & Haggerty, 1994). Such models can then be used to guide the creation of programs, and research on those programs can help guide the creation of models of clinical change (see Eddy, Dishion, & Stoolmiller, 1998). These models, in turn, can be used to fine tune programs. Addressing the needs of the adolescents of incarcerated parents requires a developmental approach that can only be accomplished with concerted and long term collaborations among members of the public and private sectors, including the federal government, private foundations, state legislatures, corrections, child welfare, youth authorities, other service providers, researchers, professional organizations, and community members. The time to begin such collaborations is now.
References


**Author Note**

Inquiries about this chapter should be addressed to J. Mark Eddy, Oregon Social Learning Center, 160 E. Fourth Ave., Eugene, OR 97401, (541) 485-2711, (541) 485-7087 (fax), marke@oslc.org.