Responding to Juvenile Crime: Lessons Learned

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Abstract

Although the dispositional options for delinquent youths have diversified over the past 20 years, the debate about the most effective treatment of young offenders continues. This article reviews the existing evaluations of various juvenile corrections alternatives. In contrast to the conclusions of scholars in the late 1970s that "nothing worked" in juvenile corrections, Mark Lipsey's 1992 meta-analysis of more than 400 evaluations of juvenile programs reported an average 10% improvement in recidivism rates for all the programs evaluated. Lipsey's meta-analysis found a significant advantage in community-based programs run by private providers compared with large custodial institutions, such as traditional state training schools. The most effective privately run community programs have high levels of intensity and duration, multiple modes of intervention, and a great deal of structure. Nonresidential, dawn-to-dusk educational programs that work with both juveniles and their families are good examples of this type of programming. Boot camps for juvenile offenders have proliferated because of their political popularity. A recent evaluation of eight of these programs showed that four had no effect on recidivism, one resulted in higher recidivism rates, and three showed improvements in some recidivism measures. Probation and diversion, the most common of all juvenile court dispositions, are not effective options for youths with multiple risk factors. Juvenile courts need an array of dispositional options, the ability to monitor program effectiveness, and the flexibility to find the appropriate placement for each juvenile offender.

Until the early 1970s, the typical placement for serious or chronic delinquents in most states consisted of large congregate training schools. In 1971, Jerome Miller, then head of the Department of Youth Services (DYS) in Massachusetts, took a significant step when he abruptly removed most of the youths from that state's training schools and placed them in a variety of small community-based institutions and programs. Those youths requiring secure care were placed in a number of small (typically 20- to 30-bed) facilities. Miller’s Massachusetts reforms were motivated as much by concerns for the welfare of the youths as for the impact these reforms might have on recidivism rates.

To this day, the juvenile corrections system in Massachusetts continues to operate with only a fraction of the secure beds utilized in many other states, and the majority of its youths are still placed in a variety of small, privately
operated programs. Over the past two decades, a number of other states, including Maryland, Pennsylvania, and Utah, have adopted similar reforms in their systems.2

An evaluation of the Massachusetts reforms, which compared outcomes for samples of youths committed to DYS before and after the reforms occurred, found higher average recidivism rates3 for the postreform youths. These results were partly explained by a decrease in the number of less serious offenders being committed to DYS. However, in those parts of the state where the new reforms were most successfully implemented, as indicated by the character and diversity of their programs on an objective rating scale, postreform recidivism rates appeared to be lower.1 A more recent attempt to evaluate the Massachusetts model4 compared recidivism rates for all youths released by the Massachusetts DYS in 1985 with those reported for several other states (California, Florida, Pennsylvania, Utah, and Wisconsin) and found the Massachusetts rates to be among the lowest. The 1985 Massachusetts release cohort also had lower recidivism rates than the groups studied in the mid-1970s by Coates and colleagues. However, the significance of these comparisons is obscured by systematic differences in the characteristics of youths committed to these state programs and by variations in the reporting of juvenile police and court contacts.

**Trends in Juvenile Corrections Policy**

Twenty-five years after the Massachusetts experiment, the debate over the most effective method of dealing with chronic and serious juvenile offenders continues. Maryland recently attempted to copy some of the Massachusetts reforms by closing one of two state-run juvenile institutions, the Montrose Training School, which at that time had a population of approximately 320 youths. A postrelease sample of youths who probably would have been sent to Montrose had it not been closed had higher recidivism rates than groups who completed Montrose or were there when it closed.5 While proponents continue to urge other states to adopt Massachusetts-type reforms, a number of states, with California the most prominent example, continue to rely heavily on large custodial institutions for handling their most seriously delinquent youths.

The most popular recent reform in the handling of serious or chronically delinquent youths is the increasing use of waiver or transfer of juvenile cases to adult criminal court. Between 1988 and 1992, the number of juveniles waived to criminal courts increased by 68%, from 7,000 to 11,700.6 For less seriously delinquent youths, a number of jurisdictions are expanding their use of in-home tracking, day treatment, and family treatment programs first pioneered in Massachusetts.

**Difficulties in Evaluation**

Little is known about which correctional approaches are best suited to particular types of youths at least in part because there have been only a limited number of careful program evaluations. Although many judges and correctional practitioners appear to believe they can assess a program’s effectiveness by observing and talking with its participants, such anecdotal evaluation is often clearly wrong. A youth’s improved manners and respectful demeanor may quickly disappear when he returns to the influence of his old neighborhood. Moreover, the few youths who do come back to visit a program or the juvenile court are probably not representative of the typical participant.

The effectiveness of any one particular program is unknown unless it is evaluated. At a minimum, follow-up recidivism data (rearrest or self-reports) for an adequate sample of participants must be compared with those for an appropriate control group. Because the primary goal of juvenile corrections is community safety, recidivism is used as the minimal measure. Other measures,
such as subsequent attainment of a general educational development (GED) certificate or employment, are used less frequently.

To be useful to policymakers and practitioners outside the program, the results of any program evaluation must include a complete description and documentation of the program’s procedures and methods of treatment. Administrators tend to incorporate a variety of currently popular methods in any one program, rather than testing one single well-defined approach, creating an additional impediment to program evaluation.

To reach a definitive conclusion about the effectiveness of a particular approach, it is best if results from several individual evaluations are pooled. The positive effects observed in a particular study may be attributable to chance, an unusually effective program administrator, staff, or particularly ineffective programming applied to the comparison group. The preferred method for assessing results from a number of studies involves the statistical techniques of meta-analysis, which allow the reviewer to compare results across programs in a common framework while controlling for differences in sample characteristics and research methods. Results from several recent meta-analyses of juvenile corrections evaluations are discussed later in this article.

The Development of Delinquent Behavior

To think seriously about intervention programs for juvenile delinquents, it is necessary to understand how patterns of delinquency develop. Over the past half century, delinquency theorists have developed a number of increasingly complex causal models to explain the involvement of youths in delinquent activities. Strain theorists believe that delinquency occurs primarily among lower-income youths who are frustrated by their inability to satisfy needs and aspirations through legitimate means. Control theorists argue that the restraining influences exerted by a juvenile’s bonds with conventional community institutions such as family, school, and church prevent delinquent behavior. Social learning theorists view the decision whether or not to engage in delinquent behavior as the result of the net effect of all the perceived rewards and punishments associated with a particular pattern of behavior.

Many leading theorists now favor integrated or interactional models which combine the effects of strain, control, social learning, and other theories based on inherited physiological or psychological phenomena. Many also believe that the chain of causality between primary risk and protective factors (substance abuse, association with delinquent peers, attachment to school, and so on) is not unidirectional or consistent over time. For example, not only will the weakening of bonds increase delinquency, but participation in delinquent acts is also likely to reduce the strength of bonds to conventional institutions. As youths mature, the influence of parental bonding declines while that of peers is likely to increase.

A consistent finding across several recent epidemiological studies is that the best predictors of future delinquency are past involvement in delinquency, the presence of other related problem behaviors, and association with delinquent peers. Youths from impoverished homes, homes with only one parent or guardian, homes in which one or both parents exhibit some kind of problem behavior such as substance abuse, alcoholism, or mental illness, or homes in which the parents exhibit poor parenting practices are more likely to become delinquent.

Somewhere between 30% and 40% of all boys growing up in urban areas in the United States will be arrested before their 18th birthday. Most of those arrested will not be arrested again. For those that are, each successive arrest will place them at a higher level of risk until, after five or six arrests, they will have a greater-than-90% chance of being arrested again. Those who reach five arrests have been labeled by criminologist Marvin Wolfgang as chronic offenders: the 6% of all
boys who account for more than 50% of all arrests for their age group.13

**What Works in Changing Delinquent Behavior**

One of the primary goals of the juvenile justice system has always been the salvation of the minor from a self-destructive life of crime. While public protection has always been an implicit goal of the system, in recent years many state legislatures have also explicitly included it as one of the system’s primary goals. Both of these objectives require the juvenile justice system to pursue the difficult task of changing individual behavior patterns. Changes in delinquent behavior are pursued by the juvenile justice system through the competing mechanisms of deterrence and rehabilitation.

Deterrence refers to the discouraging effect that threatened punishments have on potential offenders. Research efforts to date have not supplied compelling evidence that increasing the severity of sanctions deters more crime, but available evidence suggests that the certainty with which sanctions are applied is much more important than their severity.14 This finding is often used to justify the imposition of more consistent sentencing and requiring some sanctions for all offenders, regardless of their prior record.

Rehabilitation refers to the process of attempting to change the propensity of individual offenders to commit crimes through training, education, and other services. The rehabilitative role of juvenile correctional programs was set back considerably by a series of scholarly reviews of the evaluative literature in the late 1970s which were interpreted as saying that “nothing worked” or, more precisely, that there was insufficient evidence to conclude that treatment worked or that any one particular method of treatment was more effective than any other.15–17

A number of critics responded to the generally defeatist tone of the “nothing works” reviews by pointing out that each of the reviews contained numerous references to programs that did work and that a more rigorous screening on therapeutic integrity and program quality could identify programs that were effective.18-20

When reviewers began using the new technique of meta-analysis, systematic reviews of the evaluation literature began turning up evidence of consistent positive effects for particular intervention strategies.21-24 The most thorough of these meta-analyses for juveniles was conducted by Mark Lipsey25 and covers more than 400 published and unpublished evaluations of juvenile programs conducted since 1945. Lipsey’s study also goes beyond most of the others in coding the characteristics of the interventions, the context in which they were administered, the population that received them, and the evaluation methodology. At this time, Lipsey’s findings serve as the baseline from which all observations about the treatment of juvenile offenders are made. The findings from that review which pertain to this article are summarized below.

**The Overall Effectiveness of Correctional Treatment**

Starting from a baseline recidivism rate of 50%, Lipsey reports an average 5-percentage-point reduction in recidivism or a 10% improvement for all the programs evaluated. Because effect sizes26 are attenuated by the unreliability of the outcome measures used (recorded arrests), it is likely that the actual effects of treatment are closer to 10 percentage points, or a 20% reduction in recidivism from the comparison groups. As might be expected, Lipsey found that evaluations in which control groups received some intervention showed less contrast (smaller effect size) than those in which the comparison group received no treatment at all.

The remainder of this section summarizes some of the other key variables that appear to be associated with effect size.

- **Institutional versus Community Placements.** Treatment in public facilities, custodial institutions, and the juvenile justice system were associated with smaller effect sizes than treatment in community-based programs.
■ **Treatment Modality.** Structured approaches that attempt to train subjects in new behaviors and skills were associated with larger effect sizes than less structured programs such as counseling and general supervision.

■ **Intensity and Exposure.** A “modest positive relationship” was found between effect size and treatment intensity and duration.

■ **Risk Level of Clients.** There was a slight tendency for studies of juveniles with higher risk levels, as indicated by their prior records or the recidivism rate of the control group, to show larger effects of treatment when compared with those whose risk levels were lower, but this difference was not statistically significant.

■ **Organization, Staffing, and Management.** Higher levels of involvement by the researcher in the treatment program were associated with higher effect sizes, suggesting that operating the program in a manner consistent with its original intent and design is important.

■ **Methodological Factors.** Greater attrition from treatment or control groups was associated with smaller effect sizes, as were larger samples and more outcome variables. Any significant attrition from either experimental or control groups within an evaluation study can affect the comparability of the two groups and make the interpretation of outcome results problematic. Some researchers question the appropriateness of including nonrandomized studies in meta-analyses.

### Assessing the Primary Juvenile Justice Dispositional Alternatives

Once a youth is adjudicated delinquent, the central task of the juvenile court is to order and oversee the appropriate disposition. The principal dispositional alternatives available in the juvenile justice system are discussed below.

#### Waiver or Transfer to Adult Court

The increased use of transfers of juveniles to adult court is usually justified on the grounds that the criminal courts can impose more severe sanctions than the juvenile court. Studies conducted in the late 1970s and early 1980s found that the majority of juveniles sentenced in adult courts received probation or some other alternative to incarceration. A study of juvenile and young adult robbery and burglary cases disposed of in three California cities found that juvenile court dispositions were more severe, after controlling for offense severity and prior record. A similar study in an East Coast jurisdiction found no significant differences in the minimum and maximum terms imposed on similar juvenile and young adult defendants in juvenile and adult court.

However, a more recent study by the General Accounting Office found that the majority of juvenile offenders now being transferred to criminal courts and convicted of serious offenses are receiving prison terms. The study did not report any results on time served, conviction rates, or recidivism—all factors that need to be considered in assessing the impacts of waiver. (For further information on waivers, see the articles by Ainsworth and by Snyder in this journal issue.)

#### Custodial Institutions

Despite intensive lobbying efforts to close large juvenile training institutions, many states continue to operate these facilities, some of which were built before 1900.
their institutional programs offer more protection to the public.

In terms of postrelease arrest rates, the Lipsey analysis described in the previous section found a significant advantage in favor of community programs. Whether or not this advantage is sufficient to justify the somewhat greater risk created by letting youths reside in the community while participating in rehabilitative programs is a function of the specific risks represented by the population under consideration, the intensity of their supervision while in the community, and the community’s tolerance for the kind of risk they represent. The large growth in private community placements over the past 10 years demonstrates that many communities believe the risks are worth it.

Where large custodial institutions continue to operate, the Lipsey analysis provides guidance concerning effective programming within these settings. Some of the advantages of community programs can be obtained by breaking a large institution’s population and staff down into small self-contained units which more closely parallel the size of community programs. For example, in Massachusetts and Utah, secure institutions are built to accommodate client populations of no more than 20 or 30 youths. Other strategies include involving community members in the daily activities of the institution and simulating the social and economic systems that are found on the outside. The training schools run by the Michigan Department of Social Services represent an excellent model of this approach, and the privately run Glen Mills School in Pennsylvania is the premier example of what a dedicated management and staff can achieve in a closed-campus setting.

### Wilderness Programs

A number of private providers who are willing to take the kind of serious delinquents who are usually placed in state training schools have found that they can operate more open programs in isolated wilderness camps, where the remoteness of the location provides the necessary security and overcoming the challenges of the environment becomes an aspect of the program. An evaluation based on 90 youths committed to VisionQuest, a prominent provider of this type of program, found that a significantly smaller fraction were rearrested during the first 6 to 18 months after their release than a similar group who had participated in a probation department camp program (emphasizing primarily custody, classroom education, and recreation) the previous year.

### Group Homes

For youths who need to be placed out of their homes but do not represent such a risk that they need to be placed in a secure program, group homes are the placement of choice. They can be designed to provide as much structure as necessary, while allowing youths to attend school and/or participate in other community programs. Because group homes can take advantage of existing community resources such as education, job training, and medical services, they are less costly to the juvenile justice system.

### Aftercare and Parole

Assistance with community reintegration, relapse prevention, service advocacy, and
surveillance are just a few of the many justifications cited to support the provision of aftercare services to graduates of institutional programs. In spite of these arguments, very few jurisdictions provide aftercare for any significant fraction of their youth, and there is little in the way of evaluative research. A recent evaluation of intensive follow-up supervision in Pennsylvania found that this effort was effective in reducing postrelease arrests, primarily by reincarcerating failing youths sooner than would be likely without such supervision.39 Another evaluation of efforts to provide intensive postrelease supervision and assistance to both youths and their families in Detroit, Michigan, and Pittsburgh, Pennsylvania, found no effect of such efforts on recidivism or self-reported delinquency.40 The Lipsey25 meta-analysis found little or no effectiveness associated with traditional parole.

**Boot Camps**

Boot camps for either juveniles or adults have recently attracted wide political support. Both politicians and the public appear to be impressed by the strict discipline, physical labor, and military drill that such programs entail. Since their inception in 1983, more than 29 states, the Federal Bureau of Prisons, 9 juvenile systems, and 10 local jurisdictions have initiated such programs,41 without any evidence as to their effects on recidivism. In addition, these programs are supposed to cost only a fraction of a regular prison or training school commitment because they require just 90 days in a residential setting.42 Many boot camp programs also involve extensive aftercare components.

A recently completed evaluation of eight state boot camp programs for young adult offenders concluded that four of the programs had no effect on recidivism, one resulted in higher recidivism rates (possibly because it put little emphasis on treatment), and three showed improvements in some recidivism measures.43 Boot camp programs are difficult to evaluate because of the high washout or dropout rate of program participants. In the three programs found to be effective by MacKenzie and colleagues, the average dropout rate was 38%.

A recent evaluation of a 90-day juvenile wilderness boot camp in Michigan, where challenging outdoor activities were used to support teamwork and increase self-confidence, found that youths assigned to the challenge camp had higher recidivism rates than similar youths assigned to regular training schools. The program included an ambitious nine-month aftercare component run by private providers.44 In the Michigan program, 22% of participating youths were escalated to regular training school placements during the residential phase, and another 47% were escalated or went absent without leave (AWOL) during the community aftercare phase. Instead of participating in a 90-day residential program with nine months of aftercare, youths assigned to the Michigan challenge program averaged 322 days in some form of custody during the first two years after placement in the program.

**Community Supervision and Programming**

Jurisdictions serious about working with youths have developed a wide array of programs offering varying degrees of supervision and services. At the low-intensity end of the spectrum are performance contracts and higher-than-usual frequencies of contact with volunteer case manager/trackers.45 At the high-intensity end are dawn-to-dusk education and training programs such as those run by Associated Marine Institutes (AMI) in more than a dozen (mostly southern) states. These programs provide meals, work with parents, arrange supplementary recreational or work experience activities on weekends, and can lead to certification as a scuba diver. It is primarily evaluations of the early forerunners of these rapidly spreading nonresidential programs, which were often developed or initiated by academic researchers, that provide the basis for Lipsey’s finding that noncustodial, nonjuvenile justice programs are more effective than other forms of treatment.

Lipsey25 argues that no one approach is clearly better than the others. In addition to...
private sponsorship and community setting, the more effective programs all appear to have multiple modes of intervention, higher levels of intensity and duration, and greater structure in common. They are more theoretically rigorous, ambitious, and tightly executed.

**Probation and Diversion**

Probation or diversion is the most frequent disposition for all juvenile arrests because it is inexpensive. Because the majority of juveniles who are arrested one or two times are never arrested again, as a practical matter, probation or diversion is the most reasonable option in most cases. However, for youths with multiple risk factors (several prior arrests, arrests at an early age, drug or gang involvement, or parental problems) probation and diversion are not effective options.

Probation and diversion cover a range of low-level services, monitoring, and performance obligations. Probation is supervised by the juvenile justice department once a youth is adjudicated delinquent while diversion is overseen by social services or a community agency in cases where prosecution was suspended. As a condition of probation or diversion, a youth may be required to refrain from certain activities and complete certain programming, community service, or restitution obligations. In both instances, there is an implied threat of a harsher sanction for any subsequent offense. In some jurisdictions, such as the state of Washington, the diversion process is highly formalized, with specific guidelines for sanctions to be imposed by a community board. In other jurisdictions, it is routine and informal with little effort at customizing or enforcing sanctions.

In reality, an overworked probation officer who sees a client once a month has little ability either to monitor the client’s behavior or to exert much of an influence over his life. In the Lipsey meta-analysis, “probation as usual” was the only regular juvenile justice intervention that, when applied to control groups, did not reduce the magnitude of the difference in effects between experimental and control groups. In other words, regular probation is effectively no treatment at all.

A large body of research on intensively supervised probation and reduced probation caseloads suggests that this is not an effective strategy for reducing recidivism rates or improving public safety. And, despite a few well-publicized studies that found restitution programs effective in reducing recidivism rates, restitution was found by Lipsey to make only a small improvement in the effectiveness of probation or diversion programs.

Augmented forms of probation can be effective. Probation combined with intensive supervision, restitution, or other types of enhancement was found by Lipsey to have had positive effects, albeit considerably fewer than the more ambitious and structured multimodal methods.

The Lipsey meta-analysis also suggests that more intensive behavioral and skill-oriented interventions might be more effective than routine probation or diversion with high-risk delinquents if these interventions focus on solving problems with both the youths and their families. This is the strategy represented by Eight Percent Solution, a program established by the probation department in Orange County, California, which targets the 8% of juvenile arrestees who account for 50% of their arrests.

**Treatment Methods That Do More Harm Than Good**

Some intervention methods appear to have negative effects—that is, to lead to worse outcomes than no treatment at all. Follow-up studies of the Cambridge-Somerville project, which provided trained volunteer mentors to at-risk youth, have clearly shown that even well-intended interventions can have harmful effects. In Lipsey’s analysis, nonjuvenile justice individual counseling, vocational programs, and deterrent schemes such as Scared Straight produced negative average effects. Another method, or possible side effect, often cautioned against by delinquency researchers, is bringing delinquents
together in any unsupervised or unstructured setting. Negative peer pressure appears to be particularly strong in supporting continued delinquency.\(^\text{11}\)

**Conclusion**

To achieve an optimal balance between effective treatment, accountability, and community protection, the available evidence suggests that juvenile courts require access to a broad array of dispositional options. These extend from formal diversion to local accountability boards or social services, through in-home supervision and day treatment, to a variety of out-of-home placements providing different levels of security and types of treatment. Methods that concentrate on changing individual behavior patterns which lead to delinquency and improving pro-social skills are likely to be 10% to 20% more effective in reducing subsequent delinquency than less structured programs that emphasize individual counseling or general education.

The evidence also suggests that a certain degree of skill and experience is required to develop and run both institutional and community-based correctional programs that are effective in changing behaviors. While effective programs can be run by either public or private agencies, meta-analyses and program surveys suggest that such programs are more likely to be developed by private providers, probably because they are usually held to higher standards of performance and accountability, and are more free to innovate.

To ensure that any program is being run effectively, a jurisdiction should monitor the recidivism rate and pro-social accomplishments (GED certificate, employment, and the like) of its graduates and compare them with the graduates of other programs handling similar youths. Such comparisons should be run for all programs receiving more than 5% of the placements from any given court and adjusted for the risk levels of the youths being placed.

For the juvenile courts, the challenge of finding an appropriate placement for any specific youths may require experimentation and adjustments. Programs should not be required to retain youths who will not abide by or cannot adjust to the program’s rules and conditions. Otherwise, the integrity of the program will be damaged for all of the youths involved.

As courts determine appropriate individual dispositions, considerations of public safety and appropriate treatment should not be confused. While a youth’s instant offense may be a useful indicator of his potential risk to the community, it is not a good indicator of what kind of programming is required to change his behavior. All things being equal, treatment programs run in community settings are likely to be more effective in reducing recidivism than similar programs provided in institutions. Whether or not the risk of additional crime posed by allowing particular categories of youths to remain in the community can be justified by the reduction in their recidivism rate can be determined only by assessing both of these parameters and weighing them carefully. This same calculation can be made for youths who are considered for transfer to adult criminal courts, although no state appears to be doing it explicitly. There is currently no direct evidence regarding whether increases in potential punishment and immediate community protection achieved through adult court are accomplished at the cost of higher recidivism rates.

One of the more promising areas for additional juvenile court intervention and activism appears to be with younger offenders whose characteristics place them at high risk for further delinquency. Appropriate interventions will usually involve the parents and provide a mix of activities, services, and community sanctions.

There are no simple solutions or magic cures for the juvenile court to apply to problems of juvenile delinquency. The most effective systems and processes will be flexible and continuously experimental in their approach, provide a wide range of treatment and placement options, and be accountable for their results.

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3. Unless otherwise noted, in this article the term *recidivism* refers to rearrest for any new crime during some specified time period, usually one year following release.


26. *Effect size* is a technical term used to interpret the value of a gain achieved through a new treatment or intervention. It is the ratio of the gain to the standard deviation. For a further description of effect size, see *The Future of Children* (Summer/Fall 1995) 5:2:120.


34. For further information about these programs, contact J. Otis Davis, Michigan Department of Social Services, (517) 335-3489; Glen Mills School, Glen Mills Road, Concordville, PA 19311, (610) 459-8100.


36. The Associated Marin Institute’s Last Chance Ranch is a prominent provider of these types of services and is cited as an exemplary program in Howell, J.C., ed. Guide for implementing the comprehensive strategy for serious, violent, and chronic juvenile offenders. Washington, DC: U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention, 1995.


47. Schneider, A. Restitution and recidivism rates of juvenile offenders: Results from four experimental studies. Criminology (1986) 24,3:142.