

At-A-Glance: Recent Research Findings

Connecting Crack Markets, Guns, and Youth Homicide

Journal article, Daniel Cork, "Examining Space-Time Interaction in City-Level Homicide Data: Crack Markets and the Diffusion of Guns Among Youth," Journal of Quantitative Criminology 15(4) (1999): 379-406 (NIJ 180974).

The mid-1980's marked an important change in juvenile homicide trends in the United States: Between 1984 and 1993, the juvenile homicide rate increased by over 150 percent. To help explain why this large increase occurred, Daniel Cork has used city-level data to study the dynamics between juvenile homicide and crack "epidemics," a phenomenon previously only explored using national-level data.

Testing Blumstein's Hypothesis

Cork's analysis tests a hypothesis suggested by Alfred Blumstein [see A. Blumstein, "Youth Violence, Guns, and the Illicit-Drug Industry," *Journal of Criminal Law and Criminology* 86 (1995): 10-36], who argued that the arrival of crack stimulated an increased availability of guns among juveniles. The greater availability of guns, he argued, was responsible for the sharp upswing in juvenile homicide experienced in the United States in the mid-1980's.

Cork's research involves fitting a formal diffusion model—including a change-point representing onset time—to homicide and crack arrest data for the years 1976 through 1996. Data series are compiled from the Federal Bureau of Investigation's

Supplemental Homicide Reports and Age, Sex, and Race arrest tables. Cities selected for study included all those with populations of 100,000 or greater, though model fits were not attainable for all cities due to low counts.

Homicide and Crack Connection

Cork shows that most of the studied cities registered a sudden increase in juvenile gun homicide within 2 years of a similar, sharp increase in crack arrests among juveniles. He determines that the movement of the two processes is similar, starting on the East and West coasts and working their way toward other regions of the Nation. The evidence also suggests some signs that the

spread of guns was a slower, more extended process than was the establishment of thriving crack markets in particular cities.

Most cities experienced a growth in young adult (ages 18-24) gun homicides at roughly the same time as the juvenile homicides. This did not necessarily represent an expansion of new-found gun availability, however, because the spread of guns among young adults moved at half the rate that they did among juveniles. This may be because juveniles have a higher degree of networking—through schools and social circles—than older age groups. Among older offenders, no growth was experienced at all.

Finally, little to no clear growth was discernible in juvenile nongun

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homicide, further reinforcing Blumstein's claim that the spike in homicide among juveniles owed to new-found guns in impulsive hands (1995). The explanation that seems best suited to account for these findings is that suggested by the Blumstein hypothesis: that the emergence of crack markets in individual cities stimulated an increase in the number of guns among juveniles, leading to dramatic growth in juvenile gun homicide.

For more information

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Turning Points That Lead Away From Delinquency

NIJ Research Seminar, John H. Laub, grant numbers 1987-IJ-CX-0022 and 1989-IJ-CX-0036. Based on the book by Robert J. Sampson and John H. Laub, Crime in the Making: Pathways and Turning Points Through Life, Cambridge: Harvard University Press, 1993. John H. Laub and Leana C. Allen, "Life Course Criminology and Community Corrections," Texas Probation XIV (3), July 1999, 11-21.

As a 69-year-old former delinquent recounted, "I'd say the turning point was, number one, the Army. You get into an outfit, you had a sense of belonging, you made your friends.... Then I met the wife. I'd probably say that would be [another] turning point. Got married, then naturally, kids come. So now you got to get a better job, you got to make more money. And that's how I got to the Navy Yard and tried to improve myself."

This former delinquent unknowingly states a major finding of a recent follow-up study of delinquents who

were part of a study, begun in 1940, conducted by Sheldon and Eleanor Glueck of the Harvard Law School. John H. Laub and Robert Sampson used the Gluecks' unique data archive—the *Unraveling Juvenile Delinquency* study—to understand factors that lead away from delinquency. See "Unraveling Juvenile Delinquency."

Based on life-history interviews with 52 men ranging in age from 62 to 70 from the original group of 500 juvenile delinquents who were studied, Laub and Sampson conclude that although there are multiple pathways to desistance, four significant factors are: (1) marriage and spouses, (2) military service, (3) work, and (4) neighborhood change.

Key Factors

What appears to be important about these processes is that they all involve, to varying degrees, the following items:

- A "knifing off" of the past from the present.
- New situations that provide both supervision and monitoring as well as new opportunities for social support and growth.

- New situations that provide the opportunity for transforming identity.

The Gluecks' Unraveling study sought to answer an enduring question: What factors differentiate boys reared in poor neighborhoods who become serious and persistent delinquents from boys reared in the same neighborhoods who do not become delinquent or antisocial?

If the trajectory of a delinquent's life is uninterrupted, Sampson and Laub's theory predicts a continuation of criminal involvement starting with childhood antisocial behavior leading to serious juvenile delinquency and finally to adult crime. This behavior often extends into other adult domains, including problems in marriage, employment, or with drugs or alcohol.

Change is Possible

Change, however, is possible through formal and informal interventions. For example, youths who enter the military and use the GI Bill can increase their socioeconomic status.

Community corrections programs may work in the same manner, by

Unraveling Juvenile Delinquency

A novel aspect of the Unraveling study was the matching design, in which 500 delinquents and 500 nondelinquents were matched case-by-case on age (average age 14), ethnicity (all white ethnics—mainly English, Irish, and Italian), intelligence (mean IQ 92), and neighborhood socioeconomic status (poor, disadvantaged neighborhoods).

The original sample of delinquents and nondelinquents was followed up at age 25 and again at age 32 from 1949 to 1965.

From 1988 to 1992, with support from the National Institute of Justice, among others, Laub and Sampson recoded, computerized, and reanalyzed the longitudinal data for the sample, up to age 32.

In 1994, with primary financial support from the Harry Frank Guggenheim Foundation, Laub and Sampson launched a new follow-up study of the original delinquents as they approached age 70. They collected criminal records, death records, and located and reinterviewed a subset of the original delinquent subjects.

providing offenders with a break from their harmful lifestyle while receiving treatment that may increase their chances for employment, education, and social capital while decreasing their criminal behavior.

Impact of Prison

Sampson and Laub find that lengthy prison terms damage the future job prospects of offenders and loosen their bonds to society, thereby increasing the likelihood of continued involvement in crime throughout their lives. This has implications for community corrections, to the extent that community-based sentences can satisfy the important principle of just desserts without the devastating impact on employability and interpersonal relationships that comes with a prison sentence. Community-based programs that combine effective surveillance and control of offenders and improve informal social controls and social support are likely to reduce future criminal behavior.

For more information

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Psychiatric Disorders of Youthful Offenders

NIJ Research in Progress Seminar, "Mental Health of Youthful Offenders," Linda A. Teplin, funded by the Office of Juvenile Justice and Delinquency Prevention and other Federal agencies, available on videotape from NCJRS (NCJ 182371).

Preliminary findings from the Northwestern Juvenile Project, a longitudinal study examining how psychiatric disorders and comorbidity develop over time, show that two-thirds of juveniles in a sample of more than 1,800 youths held in

Chicago's Cook County Juvenile Temporary Detention Center tested positive for at least one drug, and two-thirds were diagnosed with at least one psychiatric disorder. Linda A. Teplin, project director, discussed preliminary results of the study during a recent NIJ Research in Progress seminar.

The data presented here are subject to change as the research progresses and may not be cited without permission.

Research Design

The project grew from Teplin's earlier studies of psychiatric disorders among adult detainees. Teplin considered the focus on children to be a logical progression from the adult studies because most incarcerated adults first got into trouble and experienced mental health problems as children. Researchers also were interested in exploring whether a potential parallel exists between adult and juvenile experiences with the mental health and criminal justice systems, i.e., have juvenile detention centers become the "poor child's mental hospital," just as jails, in the wake of limited mental health options, serve as the hospital for mentally ill adults? The study aims to answer two specific questions:

- How many detained children have drug, alcohol, and mental disorders, particularly co-occurring disorders?
- Do detained children who need mental health treatment receive the services to which they are constitutionally entitled?

Chicago was chosen as the study site because of its racial and ethnic diversity, particularly among the Latino population, and because State and local agencies are providing a high level of cooperation. Over a period of 2½ years, Northwestern researchers interviewed 1,830 youths between the ages of 10 and 18 with-

in 1 to 3 days of their admission to the detention center. Subjects were paid for participating and received additional money for providing a urine sample. Researchers stratified the sample by race/ethnicity, gender, age, and severity of charge; they oversampled girls (because previous studies had neglected them), younger children (so researchers could study early patterns of behavior), whites, and juveniles processed as adults.

Findings

Preliminary urinalysis results showed that 67 percent of detainees tested positive for any drug; only 6 percent tested positive for drugs other than cannabis. The researchers considered the high rate of substance abuse alarming because for this population of young, low-income, troubled children, cannabis use may lead to the use of other drugs.

Preliminary analysis showed that almost 66 percent of boys and 73 percent of girls were diagnosed with one or more psychiatric disorders. Twenty-two percent of girls were diagnosed with major depression, making them more likely to develop psychiatric disorders and other problems and have poor outcomes as they age. Also, nearly 50 percent of detainees were diagnosed with alcohol or drug dependence.

The early data showed high rates of comorbidity: 14 percent of the sample had both an affective disorder (e.g. major depression, manic episode) and a conduct disorder. Twenty-eight percent of the sample had both a conduct/behavior disorder and substance abuse/dependence.

In addition, in the preliminary analysis 69 percent of detainees with an affective disorder, 66 percent with an anxiety disorder, and 73 percent with a disruptive behavior disorder had either drug or alcohol abuse/dependence, compared with 30 per-

cent of those not diagnosed with a psychiatric disorder. Meanwhile, of those with either drug or alcohol dependence, 26 percent also had an affective disorder, 29 percent had an anxiety disorder, and 61 percent had a disruptive behavior disorder.

As this issue of the *NIJ Journal* goes to press, 32 youth (1.75 percent) have died, all but 7 of gunshot wounds.

Further Work

The Northwestern Juvenile Project is a large-scale longitudinal study of psychiatric disorders among youth in the juvenile justice system. As the 5-year study continues, all subjects are being interviewed at 3 years and then again at 4½ years. Approximately 1,000 detainees are interviewed every 6 months. Researchers are focusing on the prevalence and sequence of disorders; mental health services use; and patterns of violence, drug use, and HIV/AIDS risk behaviors over time.

For more information

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Testing, Treatment, and Sanctions to Reduce Drug Use

NIJ Research in Progress Seminar, "Controlling Drug-Involved Offenders With Sanctions and Treatment," Faye S. Taxman, grant number 1997-RT-VX-K005, available on videotape from NCJRS (NCJ 181900).

Providing drug testing, treatment, and sanctions to offenders during the first 3 months of supervision appears to reduce positive drug tests

and rearrest rates, according to preliminary findings from a recent evaluation of the first year of Maryland's Break the Cycle (BTC) project.

In a Research in Progress seminar held at NIJ, Faye S. Taxman, University of Maryland, discussed the development and implementation of the BTC project and findings from an evaluation of the project's first year. Maryland's BTC program focuses on supervised offenders with court-ordered or parole board-ordered conditions for treatment.

Focus on Systems and Process

The BTC strategy aims to increase safety by reducing recidivism among criminal offenders addicted to illicit drugs. BTC became operational in October 1998, though implementation dates vary by jurisdiction.

BTC takes a systematic approach to offender treatment: It integrates public safety and public health operations to create a seamless system for addicted offenders throughout the criminal justice system. Integration is achieved through:

- Increased information sharing across agencies regarding offender progress.
- Shared decision making at key points during the process, namely, drug testing, assessment, supervision plan, treatment plan, and noncompliance issues.
- Shared responsibility for offender and process outcomes among treatment agencies, supervision agencies, and the judiciary.

The systemic approach focuses on creating policies and procedures that span organizational boundaries (e.g., treatment agencies, supervision agencies, and so forth) to create consistent responses to the offender population.

Program Implementation and Evaluation Findings for Year 1

The BTC strategy involves three components: drug testing, a continuum of treatment services, and sanctions and rewards.

Testing. BTC uses a regressive testing schedule: Offenders are tested more frequently during the first 3 months and then twice per week for the next 3 months, during which they are under supervision. Drug testing then occurs randomly if the offender does not test positive for the remainder of the supervision period. Testing decreases only if test results remain negative. Offenders with positive tests are subjected to a system of graduated sanctions that are designed to increase compliance.

More than 19,000 offenders with drug testing and treatment conditions of release (including sentenced offenders and drug court participants) were tested with more than 320,000 drug tests. Offenders were selected to participate if they would be under supervision long enough (i.e., a minimum of 6 months) to warrant involvement in treatment to have a sustained effect. This targeting of offenders with 6 months or more of supervision is needed to effectively use the scarce treatment resources.

Evaluation findings suggest that differences can occur with a prescribed testing schedule; more frequent drug testing resulted in a more expeditious and significant drop in the rates of positive drug tests. For offenders who were tested at the twice per week schedule, the drug test positive rate declined by 44 percent within 60 days. Offenders drug tested at the once per week schedule had a 31-percent decline in 60 days, and those tested monthly had a negligible decrease of 3 percent in 60 days.

The study found that at intake, across the seven jurisdictions, 34 percent of the offenders tested positive with a decline to 16 percent within 16 drug tests (60 days) or a total decline of 53 percent. No-shows at the first intake were reported to be 33 percent, which decreased to 14 percent at the sixteenth test.

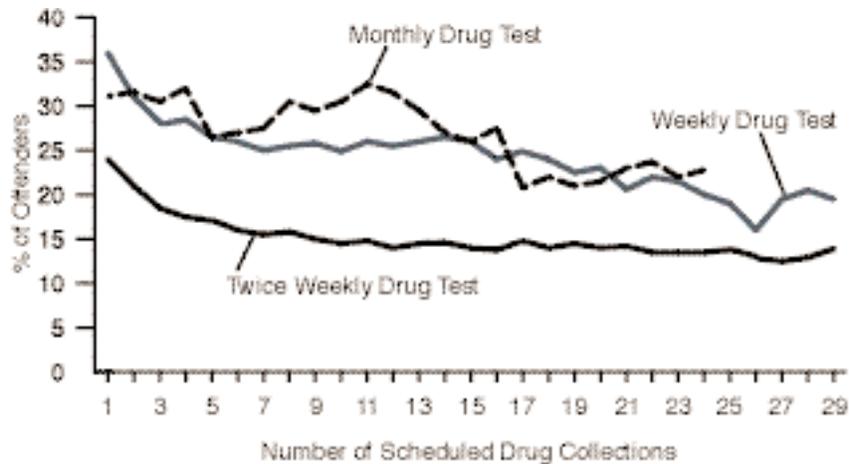
Drug testing provides an inexpensive mechanism of supervising offenders in the community; like day reporting centers, drug testing requires the offender to be present at set times, which increases accountability for his or her actions. The testing protocol had a dramatic impact on drug test positive rates for offenders, regardless of drug of choice, as shown in figure 1.

Even with a drug testing condition (judicial- or parole board-ordered), not all of the offenders tested positive. This suggests that the judiciary and/or parole board are in need of more information before assigning drug testing and/or treatment conditions.

However, testing alone did little to affect the positive test rate after 60 days of testing; the positive rate remained stable. Taxman suggested that more rigorous applications of testing, treatment, and sanctions are needed to influence this plateau. It is also this group, which continues to test positive or to be a no-show, that should be targeted for scarce treatment resources. A systemic approach with consistent drug testing provides a sound approach to identify drug-involved offenders who continue to test positive during supervision.

Treatment. Another first-year emphasis was developing and implementing treatment and criminal justice procedures consistent with best practices in the field. The BTC approach involves the use of treatment for those offenders who continue to test positive. Prior to BTC, most offenders were placed in outpatient services with one or two counseling sessions per week. Under

Figure 1: Positive Drug Test Rate by Number of Tests



BTC, more intensive services (e.g., more sessions, intensive outpatient services, and longer duration of services) were to be delivered to drug-involved offenders.

Site visits revealed that prior to BTC, a common problem in the treatment delivery system was that offenders were missing treatment assessments and/or appointments. Each site developed a strategic plan to address this problem, which involved the treatment agency informing the supervision agency within 24 hours of a no-show or, if available, the use of an automated management information system (HATS) to share information between the agencies. Both strategies are being evaluated to determine the impact on no-show rates.

Sanctions. Administrative and special court-ordered sanctions were developed for offenders who tested positive or who failed to show up for treatment or supervision appointments. The sanctions were swift (within 24 hours), certain (uniform for all offenders), and progressive (increasingly severe). Administrative sanctions redefined the normal supervision of offenders by overlaying a set schedule of responses to noncompliant behavior

and a set of rewards for compliant behavior. Administrative sanctions included verbal warnings, supervisory meetings, and increased reporting.

Taxman noted that the use of sanctions has been a major shift in the daily work of supervision agencies. The change from a discretionary response pattern to a set schedule has required additional training of staff in communication skills and sanction application.

Judicial-ordered sanctions are available in four jurisdictions and involve a set schedule of responses that progresses for each positive drug test result and no-show.

The first year results showed a low usage rate of the sanctions, as agents became more familiar with the technique and application. Taxman suggested that additional training about the sanctions process might improve implementation.

For more information

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