

# Never Too Early, Never Too Late: Risk Factors and Successful Interventions for Serious and Violent Juvenile Offenders

BY ROLF LOEBER AND DAVID P. FARRINGTON

## ABSTRACT

This paper summarizes the main conclusions of the U.S. Office of Juvenile Justice and Delinquency Prevention's (OJJDP) Study Group on Serious and Violent Juvenile (SVJ) Offenders. The two main aims were to review knowledge about SVJ offenders and about which types of interventions could reduce their level of offending. The work of the Study Group is based on five main topics concerning development of SVJ offending, predictors of offending, preventive measures, interventions for known offenders and research and policy implications. (*Studies on Crime and Crime Prevention, Vol. 7 No. 1 1998, National Council for Crime Prevention*).

*Keywords:* Serious and violent juvenile offenders, definition, predictors, protective factors, prevention, research, policy implications.

This paper summarizes the main conclusions of the U.S. Office of Juvenile Justice and Delinquency Prevention's (OJJDP) Study Group on Serious and Violent Juvenile Offenders, chaired by Rolf Loeber and David P. Farrington. Members of the Study Group were selected because of their expert knowledge of different aspects of serious and violent juvenile offenders. They were: David M. Altschuler, Alfred Blumstein, Richard F. Catalano, Julius Debro, Peter Greenwood, Nancy G. Guerra, Darnell F. Hawkins, J. David Hawkins, James C. Howell, David Huizinga, Barry Krisberg, John H. Laub, Marc Le Blanc, Mark W. Lipsey, Walter Miller, Mark H. Moore, Howard N. Snyder, Terence P. Thornberry, Patrick H. Tolan, and Gail A. Wasserman. The full report of the

Study Group is presented in our edited book (Loeber & Farrington, 1998).

We drew a number of key conclusions in the book about serious and/or violent juvenile (SVJ) offending. Serious violent offenses include homicide, rape, robbery, aggravated assault and kidnapping. Serious non-violent offenses include burglary, motor vehicle theft, theft over \$100, arson, and drug trafficking.

The two main aims were to review knowledge about SVJ offenders and about which types of interventions could reduce their level of offending. The work of the Study Group was inspired by OJJDP's Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders (Wilson & Howell, 1993). This is based on five general principles:

- (1) Strengthen the family in its primary responsibility to instill moral values and provide guidance and support to children.
- (2) Support core social institutions (schools, religious institutions, and community organizations) in their roles of developing capable, mature and responsible youth.
- (3) Promote delinquency prevention as the most cost-effective approach to dealing with juvenile delinquency. Communities must take the lead in designing and building comprehensive prevention approaches that address known risk factors and target youth at risk of delinquency.
- (4) Intervene immediately and effectively when delinquent behavior occurs, to prevent delinquent offenders from becoming chronic offenders or progressively committing more serious and violent crimes. Initial intervention attempts should be centered on the family and other core social institutions.
- (5) Identify and control the small group of serious, violent and chronic juvenile offenders who have failed to respond to intervention and non-secure community-based treatment and rehabilitation services offered by the juvenile justice system.

The Comprehensive Strategy aims to improve the juvenile justice system response to delinquents through a system of graduated sanctions and a continuum of treatment alternatives that include immediate intervention, intermediate sanctions, community-based correctional sanctions including restitution and community service, and secure corrections including community confinement and incarceration in training schools, camps and ranches.

The book takes the Comprehensive Strategy as its starting point and includes detailed quantitative analyses of

risk and protective factors and of the effectiveness of prevention and intervention programs for SVJ offenders. It also aims to integrate the risk/protective factor and prevention/intervention program literature, so that future programs can be based more on research on influential factors, and conclusions about causal effects of factors are drawn from knowledge about the effectiveness of programs.

One of the main reasons why the Study Group's conclusions were important is the recent increase in serious juvenile violence in the United States. Snyder et al. (1996) and Snyder and Sickmund (1995) have summarized recent trends in juvenile arrest rates for index offenses. Table 1 shows some key trends. Juvenile arrests for index violence offenses increased by a remarkable 70% between 1987 and 1994, but juvenile arrests for index property offenses stayed virtually constant, increasing by only 4% over the same time period. The juvenile arrest rate for homicide increased by 91%, while the robbery rate increased by 68%, and the aggravated assault rate increased by 79%. The forcible rape rate has stayed tolerably constant over this time period. Since 1994, there has been a slight decrease in juvenile violent crime, but overall levels in the U.S. remain among the highest in the Western world.

This paper is divided into the following topics: (I) Definition and development of SVJ offending, and its co-occurrence with other problem behaviors; (II) Predictors of SVJ offending; (III) Preventive interventions for SVJ offending; (IV) Interventions for known SVJ offenders; and (V) Gaps in knowledge, research and policy implications, and conclusions.

TABLE 1. *Changes in juvenile arrest rates in the United States, 1987-1994*

	1987	1994	% Change
Murder	6.9	13.2	+91
Forcible rape	20.9	20.3	-3
Robbery	118.9	199.4	+68
Aggravated assault	163.9	294.1	+79
Index violence	310.6	527.1	+70
Burglary	555.1	481.1	-13
Larceny-theft	1621.0	1721.0	+6
Motor vehicle theft	253.3	311.2	+23
Arson	22.0	34.2	+55
Index property	2451.4	2547.6	+4

Notes: Arrests per 100,000 persons aged 10-17. The figures were calculated by Howard Snyder of the National Center for Juvenile Justice using machine-readable data from the FBI's Uniform Crime Reporting Program and the Bureau of the Census.

*1) Definition and development of Serious and Violent Offending, and its co-occurrence with other problem behaviors.*

*Serious Violent Juvenile Offending and chronic offenders.*<sup>1</sup> Research studies show that there is considerable overlap between serious, violent, and chronic offenders, even when court or police records are used. About half of the violent juvenile offenders are also chronic offenders, while about a third of the chronic offenders are also violent offenders. Moreover, about a third of the serious offenders are also chronic offenders. Research by Snyder in the Appendix of the book, on youth referred to juvenile courts in a large southwestern county, showed a substantial in-

crease in the proportion of chronic juvenile offenders, especially in the period 1990-1995. The vast majority of chronic offenders committed at least one violent or serious non-violent crime. Snyder also found that the typical chronic career contained more violent offenses in the 1990s than in the 1980s. However, the vast majority of violent offenders committed only one officially-recorded violent crime. Two cohort studies in Philadelphia (Tracy, Wolfgang, & Figlio, 1990) have also shown an increase in the proportion of chronic offenders (i.e., those with 6 or more arrests) over time.

Because much knowledge about serious, violent, and chronic offending is based on official records (i.e., police or

1. Based on chapters by David P. Farrington and Rolf Loeber, and Rolf Loeber, David P. Farrington, and Daniel A. Waschbusch.

court records), it is important to know to what extent self-reports of offending overlap with information from official records, and in what respects self-reports contain unique information. For example, one study (Dunford & Elliott, 1984) concluded that 86% of the juvenile career offenders did not have a record of arrest. The peak period of officially-recorded offending for juveniles usually falls between the ages of 14 and 17 (Farrington, 1986). However, the majority of the self-reported male juvenile persisting serious offenders show an onset of serious offending between ages 8 and 14. Thus, given that most jurisdictions in the U.S. are reluctant to deal with offenders under age 12, this implies that the juvenile justice system is not likely to deal with many serious juvenile offenders at the beginning of their delinquency careers.

*Racial differences.*<sup>2</sup> Studies show considerable differences in the level of SVJ offending between different racial groups in the U.S. Data from the Uniform Crime Reports (UCR) and self-reports of offending and victimization reveal longstanding patterns of differential involvement by race, with black (African-American) youths having proportionately higher rates of SVJ offending. On the other hand, the extent of black-white differences and the degree of stability of the ratio varies over time according to the type of offense. While black-white arrest ratios for violent offending and robbery declined between 1983 and 1992, black and white juvenile arrest rates for homicide grew more disparate over these years. This increasing disparity was especially evident from the mid-1980s on. Data for several large U.S. cities also revealed

comparatively high homicide rates among Latino youths during the 1980s.

Given the perennial debate regarding the potential for bias in the use of arrest data for examining ethnic and racial differences, recent findings are examined from studies of self-reported offending by juveniles and victim reports of the perceived age characteristics of their assailants in the national crime victimization survey (NCVS). These sources of data provided reasons to exercise caution in using arrest data alone as an estimate of the extent of racial differences in some serious types of delinquency, including violence. However, on the basis of findings reported from both self-report and victimization surveys it appears that race is an important correlate of SVJ offending.

Various explanations are reviewed of ethnic and racial differences in SVJ offending. The dominant research tradition in the study of juvenile offending has depended largely on individual-level analyses. This theoretical and analytic orientation has tended to see ethnic and racial differences in SVJ offending and their causes as largely indistinguishable from individual-level explanations. In contrast to this research orientation, the focus is on social ecological explanations which incorporate measures of broader social structural variation and community-specific contexts and cultures. To a large extent, social ecological factors appeared to be important influences on ethnic and racial differences, independently of individual-level factors. Black-white comparisons alone appear insufficient as a means of analyzing the extent of involvement in serious and violent offending by the nation's juveniles.

2. Based on chapter by Darnell F. Hawkins, John H. Laub and Janet L. Lauritsen.

*Co-occurring problem behaviors.*<sup>3</sup> There is substantial co-occurrence or overlap between serious-violent and serious non-violent juvenile offending and other problem behaviors. Included are drug use, problem drug use, mental health problems, school problems (poor academic achievement, truancy, suspension and dropout), victimization, and different combinations of these problems. Almost all of these problems overlap with serious delinquency. These points are amplified by an analysis of data collected in the Denver Youth Survey (Huizinga, Esbensen & Weiher, 1991).

With the exception of multiple school problems and combinations of school and other problems, only about half or less of the serious delinquents are also contemporaneously involved in specific problems. Also, although serious offenders are disproportionately represented among the group of youth who have a particular problem, they often make up less than half of all those experiencing each problem. Thus, although there is clear co-occurrence between serious offending and other problems, it would be incorrect to characterize serious delinquents as predominantly having a particular problem; and it would be incorrect to characterize the group having a given problem as being made up predominantly of serious delinquents.

The obvious exception to this rule is for those experiencing difficulties at school. School problems, especially when combined with other problems, characterize 80 % or more of serious offending youth. It should be carefully observed, however, that the converse is not true. The largest proportion of youth having school prob-

lems are not serious delinquents.

As this generalization and other findings indicate, serious offenders are likely to have multiple other problems. Over 90 % have at least one other problem and about three quarters have two or more of the problems examined. In this sense, serious offenders are truly multiple problem youth.

*The development of serious and violent juvenile offending careers.*<sup>4</sup> Several major parameters are relevant to serious and violent offending (frequency, variety, seriousness), which help to quantify behavioral precursors to such offending and improve our understanding of the behavioral development. These parameters and related concepts such as age of onset, desistance, and career length are important aspects of a career perspective on criminal behavior. In particular, there is repeated evidence that such parameters are useful in predicting the probability of sustained criminal and other antisocial behavior, including serious and violent acts.

The empirical evidence and related theory about the role of these parameters and important precursors (e.g. aggression, impulsive behavior, oppositional behavior) in distinguishing serious and violent offending from other delinquency and non-offending were reviewed. In addition, developmental theories about the criminal behavior of adolescents were reviewed and the current leading theory, the developmental pathways approach of Loeber and colleagues, was described (Loeber & Le Blanc, 1990). A test of the application of the theorized trajectories and sequences was undertaken with a sample drawn to be nationally representative of the U.S. (the National Youth

3. Based on the chapter by David Huizinga and Cynthia Jakob-Chien.

4. Based on the chapter by Patrick H. Tolan and Deborah Gorman-Smith.

Survey) and an inner-city high-risk sample (the Chicago Youth Development Study). Results indicated that the model was quite consistent with the patterns seen in both samples and was an even better fit to the development of serious and violent offending than offending in general.

The consistency of findings about patterns of involvement and career trajectories has to be qualified in several ways. First, most studies focused on relations between variables. Few attempted to determine the probability of behavior patterns within individuals. Second, because violent and serious offending are such low rate behaviors even among those who are most actively criminal, there is limited ability to translate these correlational findings into accurate prediction. Third, the bulk of the studies focused on white males, raising substantial concerns about generalizability to females and other ethnic groups.

### *II) Predictors of Serious and Violent Juvenile Offending*

*The results of a meta-analysis.*<sup>5</sup> Meta-analysis help to synthesize longitudinal research on predictive risk factors for adolescent and early adult serious criminal behavior. The goal was to identify those predictor variables measured on juveniles aged 6-11 and 12-14 that were correlated with the degree of their violent or serious delinquent behavior when they were 15-25 years old. Available longitudinal studies yielded sufficient information to permit examination of four broad categories of predictor variables in the meta-analysis: (1) early antisocial behavior, (2) personal

characteristics of the juveniles, (3) parent and family characteristics, and (4) social characteristics of the juveniles or their families.

In predicting from age 6-11 risk factors to serious delinquency at age 15-25, the best predictors were: (a) a prior delinquent offense; (b) substance use; (c) male gender; (d) low socio-economic status; and (e) an antisocial parent. In predicting from age 12-14 risk factors to serious delinquency at ages 15-25, the best predictors were: (a) lack of strong social ties; (b) antisocial peers; (c) prior delinquent offenses.

*Predictors of youth violence.*<sup>6</sup> Potentially malleable or changeable predictors of violence were reviewed in the realms of individual, contextual (family, school, peers), situational and community factors. Among the individual factors, the following predict violence: pregnancy and delivery complications; hyperactivity, concentration problems, restlessness, and risk taking; aggressiveness; early initiation of violent behavior; involvement in other forms of antisocial behavior; and beliefs and attitudes favorable to deviant or antisocial behavior including violence.

Within the family, living with a criminal parent or parents, harsh discipline, physical abuse and neglect, poor family management practices, low levels of parental involvement with the child, high levels of family conflict, parental attitudes favorable to violence, and separation from the family, are linked to later violence. As to school factors, academic failure, low commitment to schooling, truancy and early school leaving, and frequent school transitions predict violent behavior. Delinquent siblings, de-

5. Based on the chapter by Mark W. Lipsey and James H. Derzon.

6. Based on the chapter of J. David Hawkins, Todd Herrenkohl, David P. Farrington, Devon Brewer, and Richard F. Catalano.

linquent peers and gang membership also predict violence, though the effects of these factors appear to be greatest in adolescence. Finally, poverty, community disorganization, availability of drugs, neighborhood adults involved in crime, and exposure to violence and racial prejudice in the community are all associated with an increased risk for later violence.

Violent behavior is a result of the interactions of individual, contextual (family, school, peers), situational, and neighborhood factors. The risk of later violence increases the higher the number of earlier risk factors. Multivariate models that include these factors in theoretically linked causal sequences need to be tested in order to guide the development of multi-component violence preventive interventions that can significantly reduce the risk for violent behavior. In addition, more research is needed to identify those factors which function truly in a protective fashion against risk exposure, serving to mediate or moderate the effects of risk. Further, more studies need to focus specifically on the prediction of SVJ offenders as opposed to the prediction of delinquency in general.

*Gangs and Serious and Violent Juvenile Offenders.*<sup>7</sup> Adolescents who join juvenile street gangs are more frequently involved in serious and violent delinquency compared with adolescents who are not gang members. Indeed, gang membership is one of the strongest and most robust correlates of serious delinquency that researchers have uncovered. Moreover, in the past 10-15 years there has been a tremendous spread of gangs throughout American society. Gangs are now found in hundreds of cities, both large and small. Because of

this, it is essential that any comprehensive examination of serious and violent delinquency should understand the role that gang membership plays in generating criminal involvement.

Several recent longitudinal studies have found that gang members, while representing a minority of the overall population, are responsible for the vast majority of delinquent acts. In the Rochester Youth Development Study (Thornberry, Krohn, Lizotte, & Chard-Wierschem, 1993), about 30% of the sample were gang members, but they accounted for about 70% to 80% of serious and violent delinquencies.

The results of several longitudinal studies are reviewed that examined the processes that might bring about the increased delinquency that gang members exhibit. Gang members have somewhat higher rates of involvement in violence prior to joining the gang but there appears to be a general drop-off in violent delinquency following the period of gang membership. These studies indicate that rates of violent delinquency are particularly high only during periods of active gang membership. The consistency and strength of these results suggest that the gang environment facilitates involvement in delinquency, especially violent delinquency.

Longitudinal studies have recently compared gang members with non-members who associate with highly delinquent peer groups to see if gangs are simply another type of delinquent peer group. The results suggested that they are not, at least with respect to levels of offending. Uniformly, gang members report significantly higher rates of violent delinquency than do non-members, even those who associate with highly delinquent peers.

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7. Based on the chapter by Terence P. Thornberry.

These findings highlight the importance of focusing on juvenile gangs as important targets for prevention and treatment programs. If gang members are indeed responsible for the majority of serious and violent delinquent acts, as suggested by all studies that have examined this topic, it is unlikely that overall rate of serious delinquency can be reduced unless gangs are brought under control.

*Screening of Serious and Violent Juvenile Offenders.*<sup>8</sup> Screening has two purposes, the identification of potential SVJ offenders for prevention and the classification of offenders for decisions or programming in the juvenile justice system. Operational definitions of SVJ offending are regularly used in the juvenile justice system, while many researchers prefer scales. The screening strategy for prevention has to be multi-stage because potential offenders have to be distinguished from non-offenders and then SVJ offenders have to be distinguished from among offenders.

Criminology and criminal justice have a long experience with the design and implementation of screening methods. From these traditions, there are many lessons that must be kept in mind. Studies should use an appropriate criterion, an adequate follow-up period, and a cut-off point that does not excessively lower the base rate. The predictors should be based on multiple informants in multiple settings and should rest on solid empirical evidence, as well as on theoretical significance. The reliability of predictors and outcome should be maximized. Research wisdom would recommend additive methods over multiplicative methods for the combination of predictors. Measuring and reporting predictive accuracy should

be a common practice. Finally, the screening device should be validated on a different sample.

Whatever the age group studied for prevention, or the nature of the program envisaged, research indicates that multiple gating, multiple informants, multiple variable domains and multiple methods seem the best solution to the identification of potential SVJ offenders. A candidate screening instrument for chronic offending was identified, and meta-analysis results also suggested potential predictors. The Cambridge screening instrument (Blumstein, Farrington & Moitra, 1985) can be applied only from late childhood and relies on four characteristics that distinguish chronic offenders: convicted at 10-12, convicted sibling at 10, troublesome at 8-10, and poor junior attainment at 10. The meta-analysis results indicate predictor domains that vary by outcomes.

Recent risk and needs assessment instruments have been developed for detention, probation, parole and placement decisions. Such classification devices are potentially useful at different stages, including court referrals and transfers to adult court. Some existing instruments display a sound face validity, but their reliability and empirical validity have rarely been tested, neither for use in a particular jurisdiction nor for implementation in another juvenile justice system. No screening devices exist specifically for the identification of SVJ offenders. Risk and needs assessments consider multiple variable domains, but these classification instruments may be improved by testing the use of multiple informants, by increasing the variable domains considered, and by testing the usefulness of multiple methods of data gathering.

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8. Based on chapter by Marc Le Blanc.

*III) Preventive interventions for Serious and Violent Juvenile Offending*

*Early prevention programs.*" Programs that target risk factors for serious and violent offending are reviewed, as well as those that target risk factors for its precursors. Many programs targeting antisocial behavior are relevant to the prevention of SVJ offending because early antisocial behavior tends to be a precursor of SVJ offending. Since antisocial behavior is likely to be multi-determined, it is unlikely that interventions directed only toward a single system (i.e., child, family, school, peer group) will be successful. The component "building blocks" of successful interventions are described, including those oriented toward parent and family (e.g., parent management, family preservation), those oriented toward child social and academic skills, and classroom-based programs, as well as recently-developed Conflict Resolution and Peer Mediation programs.

Gaps in knowledge are different at each developmental period. For example, during infancy and pre-school, there are few programs testing behavioral parent management techniques, and there are few studies focusing specifically on child antisocial behavior, or that carry evaluation into adolescence or beyond, when serious and violent offending is likely to occur. Limitations of programs implemented during the school years include the lowered importance placed on family components in comparison to school directed components. This relative lack of attention to family-oriented treatments is greater when we examine programs for adolescents, which focus quite heavily on the

peer group to the exclusion of other risks. Programs oriented toward parenting in the school years and in adolescence are likely to show good results, especially when behavioral change is consistently promoted in both home and school settings. Furthermore, despite great overlap between antisocial behavior and psychiatric diagnosis (especially Attention Deficit Hyperactivity Disorder), most interventions fail to screen or refer for commonly treatable forms of psychopathology.

Successful, methodologically rigorous multi-systemic programs are considered that combine different components to prevent serious antisocial behavior. Also those programs that are oriented toward different developmental periods (before school entry, during school years, adolescence) are reviewed, and those that are offered at different levels of prevention - universal (for everyone), selected (for at risk youth), or indicated (for identified problem youth). A comprehensive table is presented, organized by developmental periods, that lists programs, the target risk factors, and the results of the intervention. Many multiple component programs are effective (e.g., Hawkins et al., 1992; Henggeler et al., 1993; Tremblay et al., 1995).

*Community interventions to Prevent Serious and Violent Juvenile Offending.*<sup>10</sup> Research emphasizes the effectiveness of interventions aimed at reducing risk factors while enhancing protective factors in family, school, peer and community environments. Multi-faceted interventions that support enduring community-level change are required to achieve sustained reductions in the

9. Based on the chapter Gail A. Wasserman and Laurie S. Miller.

10. Based on the chapter by Richard F. Catalano, Michael W. Arthur, J. David Hawkins, Lisa Berglund, and Jeffrey J. Olson.

prevalence of SVJ offending. The most promising current community prevention models have been adapted from the field of public health. Given the success of community interventions in reducing risk factors for heart disease, community interventions designed to reduce risk factors for SVJ offending and drug abuse are currently being implemented. However, intervention at the community level and measurement at the individual level pose key challenges in evaluation.

Experimental and quasi-experimental studies of schoolwide and community interventions indicate that the following interventions have shown positive effects on reducing risk and enhancing protection against adolescent antisocial behavior:

- behavioral consultation for schools;
- schoolwide monitoring and reinforcement of prosocial behavior, attendance, and academic performance;
- school organization interventions;
- situational crime prevention;
- comprehensive community intervention incorporating community mobilization, parent involvement and education, and classroom-based social behavioral skills curricula;
- intensive police patrolling, especially targeting "hot spots;"
- policy and law changes affecting the availability and use of guns, tobacco, and alcoholic beverages;
- mandatory sentencing laws for crimes involving firearms;
- media interventions to change public attitudes.

Generally, these interventions have targeted risk factors including easy availability of firearms and drugs, commu-

nity disorganization, laws and norms favorable to antisocial behavior, low commitment to school, academic failure, family management problems, early initiation of problem behavior, and favorable attitudes toward antisocial behavior. They have also targeted the protective factors of social bonding and clear norms against SVJ offending.

Work is highlighted on a comprehensive community prevention strategy called *Communities That Care* (CTC), consisting of three phases (Hawkins & Catalano, 1992). First, key community leaders are mobilized to become an oversight body and to appoint a prevention board of diverse members of their community. Second, the community prevention board is trained to assess risk and protective factors for adolescent health and behavior problems in the community and to assign priorities to specific factors to be addressed through preventive action. Third, the board selects and implements preventive interventions that address the priority factors from a menu of programs and strategies that have shown positive effects in adequately controlled research studies. After these strategic interventions have been implemented, communities monitor their impact by periodically reassessing levels and trends in the targeted risk and protective factors, and adjust the interventions as needed to achieve greater effects.

*Promising programs for youth gang violence prevention and intervention.*<sup>11</sup> Three promising gang program models are recommended:

(1) The comprehensive community-wide approach to gang prevention, intervention and suppression program. This program model was designed spe-

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11. Based on the chapter by James C. Howell

cifically to target youth gang problems. It was developed as the product of a nationwide assessment of youth gang prevention, intervention, and suppression programs in the late 1980s. Twelve program components developed by Spergel et al. (1994) involve the design and mobilization of community efforts by police, prosecutors, judges, probation and parole officers, corrections officers, schools, employers, community-based agencies, and a range of grassroots organizations. Variations of these models are currently being implemented and tested in several cities.

(2) OJJDP's comprehensive strategy for SVJ Offenders. Targeting gang problems within a community's comprehensive strategy for dealing with serious, violent and chronic juvenile offenders is the second recommended approach. OJJDP's Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders provides a framework for strategic community planning and program development. A reduction in gun access and use is an essential component of the strategy. Numerous excellent proposals for firearms reduction have been made that merit testing, including police seizures of illegally carried guns in "hot spot" areas, which have been found to reduce homicides and drive-by shootings. Undercover purchases of firearms from adolescents, control of the supply channels, creation of ammunition scarcity, bilateral buy-back agreements, and non-use treaties with financial compliance incentives hold promise.

The "8% Early Intervention Program" in Orange County, California implements the graduated sanctions component of the Comprehensive Strategy. The gang component of the 8% Early Intervention Program targets gang leadership and the most chronic recidivists. The Gang Incident Tracking System (GITS) identifies and tracks gang members, providing the information base

for the TARGET program, which supports the apprehension and prosecution of gang members. TARGET uses intelligence gathering and information sharing to identify and select appropriate gang members and gangs for interventions (Capizzi, Cook, & Schumacher, 1995).

(3) A Strategy to Prevent and Reduce Youth Gang-Related Homicides. Because of recent increases in gang homicides, a third gang program strategy aims at reducing youth gang-related homicides. Studies in Chicago and Los Angeles indicate that these two cities disproportionately account for gang-related homicides in the U.S. (Klein, 1995). A strategy to prevent and reduce gang-related homicides is recommended. It should include the following program components:

- Chicago's "Gang Violence Reduction Program" appears to be a promising program model for targeting gang-motivated violence and homicides.
- Hospital emergency room intervention may help break the cycle of violence.
- Counseling for drive-by shooting victims should help reduce the traumatic effects of victimization.
- Access to firearms by violent street gangs can be reduced by legislation, regulation and community education, and removing illegal guns from the possession of gang members.
- A firearm injury and fatality reporting system should be established to determine the sources of weapons and assist interdiction efforts.
- Vertical prosecution of gang criminal activity has been proved to enhance the application of criminal justice sanctions, particularly when combined with multi-agency investigation, prosecution and sanctioning.

*Intervention for known Serious and Violent Juvenile Offenders*

*Meta-analysis.*<sup>12</sup> The results of a meta-analysis are reported of 200 experimental and quasi-experimental studies that investigated the effectiveness of various interventions for reducing the recidivism of serious juvenile offenders. Two broad categories of intervention were examined:

(1) *Interventions for non-institutionalized offenders.* Intervention effects were smaller for juvenile samples with only prior property offenses than those with mixed prior offenses (which included offenses against persons). Effects were larger where the duration of treatment was longer. Curiously, fewer contact hours per week were associated with larger effect sizes.

The different types of intervention programs were categorized into four groups on the basis of the magnitude of their mean positive effects on recidivism as follows:

- Largest effects: interpersonal skills training, behavioral approaches (mostly behavioral contracting), individual counseling and drug abstinence programs.
- Moderate effects: multiple services and restitution programs.
- Small or no effects: wilderness challenge programs, deterrence programs (e.g., shock incarceration), early release probation and parole, and vocational programs (not involving work *per se*).

The best types of treatment for serious, *non-institutionalized* offenders yield reductions in recidivism from around .50 to .30, a substantial 40% reduction.

(2) *Interventions for institutionalized offenders.* Intervention effects were greater

where there was a longer duration of treatment. Studies in which there was a high level of monitoring of treatment implementation yielded larger effects than those in which implementation integrity was low. Larger effects were found for programs that were relatively well established (2 years or older), and that used mental health rather than criminal justice personnel to administer the treatment.

The treatments, ordered from those producing the largest effects to those producing the smallest, were as follows:

- Largest effects: interpersonal skills training, cognitive-behavioral programs and teaching family homes.
- Moderate effects: group counseling, community residential programs, individual and multiple services, guided group therapy.
- Small or no effects: employment-related programs, drug abstinence programs, wilderness-challenge programs.

The best types of treatment for serious, *institutionalized* offenders yield reductions in recidivism from around .50 to .30, a substantial 40% reduction.

*The impact of the justice system on Serious and Violent Juvenile Offenders.*<sup>13</sup> The effectiveness of the juvenile justice system in handling SVJ offenders is reviewed. Juvenile correctional facilities generally provide poor conditions of confinement and are becoming more crowded. Post-release recidivism rates are often high, although the rate of offending is often lower after confinement than before. Most serious and high-rate offenders slow down their rate of offending after correctional interventions, although part of this decrease

12. Based on the chapter by Mark W. Lipsey and David B. Wilson.

13. Based on the chapter by Barry Krisberg and James C. Howell.

is attributable to maturation and regression to the mean.

Following OJJDP's Comprehensive Strategy, it is argued that a continuum of program options must be combined with a system of graduated sanctions, depending on risk and needs assessment. Juvenile Assessment Centers are useful in ensuring that the service needs of juvenile offenders are addressed in dispositional recommendations. Alternatives to secure confinement for serious and chronic juveniles are at least as effective as incarceration in suppressing recidivism, but considerably less costly.

Increasingly, serious juvenile offenders are being dealt with in the adult criminal justice system, where juveniles are more likely to be incarcerated but also more likely to reoffend (Howell, 1996). Further, juveniles in adult prisons are more likely to suffer violent victimization than those in juvenile correctional facilities. Unfortunately, the relative effectiveness of adult and juvenile court processing is unclear, because no project has studied comparable juveniles dealt with by the two systems.

Experimental studies are essential to develop knowledge of what works with juvenile offenders, especially research that determines the most cost-effective length of stay, that measures the utility of immediate intervention, and that determines the appropriate mix of residential and home-based services for different offenders.

*Intermediate sanctions and community treatment of Serious and Violent Juvenile Offenders.*<sup>14</sup> Various intermediate sanctions such as electronic monitoring, house arrest, home detention, drug and alcohol testing, community tracking, intensive supervision, boot camps, split

sentences, day treatment/reporting centers, community service and restitution are increasingly being used across the country with juvenile offenders as alternatives to 1) institutionalization, 2) routine probation, and 3) routine parole or aftercare. Used as an alternative to institutionalization, intermediate sanctions are typically (though not exclusively) intended for non-violent, as well as chronic but still relatively less serious, delinquents who are considered "incarceration-bound." For the institution-bound class of offenders, the intent is generally to reserve limited and expensive bed space for those who most require it, and thus the strategy is one largely designed to address institutional crowding and save money. This is the classic use of intermediate sanctions as an institutional population control mechanism.

Juvenile offenders who have committed serious, chronic and even violent offenses, as well as those at risk of committing such offenses, are represented to various degrees in all three populations receiving intermediate-type sanctions. Intermediate sanctions can be applied to serious, chronic and violent offenders in each of the three populations in determining, who should be included and what are some of the major issues that must be addressed from the standpoint of program design, management, cost, implementation and evaluation.

There are strong suggestions in the existing research on intermediate sanctions that treatment availability and participation in treatment are associated with lower recidivism, but three problems in particular have compelled researchers to present a less than definitive response. First, the lack of existing treatment and appropriate services in

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14. Based on the chapter by David M. Altschuler.

the community, the frequency with which offenders did not receive the prescribed treatment and services, the paucity of resources allocated specifically for treatment, and the generally subordinate role treatment has played in intermediate sanctions have led to programs exhibiting much less treatment than surveillance. Second, the research on intermediate sanction programs has generally suffered from too few participants, so that it becomes exceedingly difficult to generate any statistically significant differences in the analysis.

Third, disentangling the effect of particular program components can be crucial to determining the relative importance of different aspects of intermediate sanctions. The research was mostly designed to evaluate the effect, for example, of intermediate sanctions *to the extent* that they combined surveillance and treatment, or boot camps *to the extent* that they may have included intensive aftercare. It would be useful for future efforts, for example, to test specifically and systematically the impact of differential levels of treatment and surveillance-oriented and treatment-oriented intermediate sanctions or very different kinds of boot camps. It would also be advisable to incorporate into future research and program efforts those offenders who are first screened on the basis of risk and then placed randomly into either an experimental intermediate sanction or a regular correctional program.

*V) Gaps in knowledge, research and policy implications, and conclusions.<sup>15</sup>*

Gaps in knowledge and research priorities are examined in the areas of: pat-

terns and trends; risk assessment and classification; causes and correlates; and prevention and intervention strategies. Three issues are detailed: (a) the need to focus specifically on SVJ offenders; (b) the need to understand the social ecology of SVJ offending in terms of the interaction between individual, situational, and contextual influences over time; and (c) the need to forge collaborations between researchers, practitioners, and individuals whose lives are affected by SVJ offending.

Several research gaps are identified in examining current data on patterns and trends of youth violence. Addressed are the relative lack of data for youth under age 12, as well as the over-reliance on official records for epidemiological data about SVJ offending for adolescents and young adults. Repeated, large-scale self-reported delinquency studies are needed in high-risk areas. The need to improve self-report measures and increase their developmental and cultural sensitivity is stressed. In addition, the need for assessments that also carefully measure co-occurring behavior problems is underscored.

The research on causes and correlates of SVJ offending mostly used a risk-focused approach. Its strengths and limitations are discussed to the extent that they can guide future research. In particular, there is a lack of research on protective factors vis-à-vis specific risk profiles and contexts. There is also a need to examine why most children do not engage in SVJ offending, and why many youth desist from offending during specific developmental periods. Risk factors need to be examined as they emerge and change in different socio-cultural contexts. Instead of general theories of delinquency, frameworks

15. Based on the chapters by Nancy G. Guerra, and by Rolf Loeber and David P. Farrington.

that are sensitive to life course developmental and socio-cultural issues are proposed.

*Policy implications.* Parents, schools, and neighborhoods are the primary socializing agents to bring up children into non-delinquent individuals. Thus, the actions of parents, schools, and neighborhoods constitute the prime method of preventing juveniles' escalation to serious or violent delinquency. In contrast, the primary function of the juvenile justice system is to deal with youth who does not benefit from this socialization.

By comparison with parents, schools, and neighborhoods, the juvenile justice system is in a worse position to prevent delinquency. There are several reasons for this. First, it usually deals with adolescent youth only, and not with younger children. Second, juveniles' malleability of behavior may be highest at an early compared to at a later age, although the meta-analysis by Lipsey and Wilson shows that interventions with institutionalized offenders can be almost as successful as those carried out earlier. Third, the onset of serious persisting offending for a large proportion of youth takes place between age 7 and 14. Given that the juvenile justice system largely focuses on adolescent populations, this provides too narrow a window for it to identify and respond effectively to many very young offenders.

Fourth, the juvenile justice system responds to delinquents arrested by the police for offenses thought to be sufficiently serious. Thus, it often does not deal with minor or status offenses that can constitute stepping stones toward more serious offenses, particularly for the pre-adolescent population of juveniles. Fifth, the juvenile justice system is hampered by an access restricted to detected delinquent youth and, therefore, has limited ability to influence

community levels of juvenile delinquency. Since about two-thirds of serious violent crime does not show up in juvenile justice records, "community-based prevention [rather than prevention through the juvenile justice system] holds the most prospects for reducing the bulk of juvenile crime" (Howell & Krisberg, 1995, p. 275). Lastly, the juvenile justice system's concerns about the causes of SVJ offending are usually limited to the intentions, motivations and characters of offenders. Otherwise, it is reactive to juvenile delinquent acts and is not geared to influence causes of serious delinquency in the juveniles' families, their schools or their neighborhoods. In fact, the justice system's ability to address known risk and causal factors for serious juvenile offending is often extremely limited, although the 8% Early Intervention Program in California has shown how such an ability might be achieved.

Having pointed out these limitations of the juvenile justice system, we must also acknowledge its strengths. For those youths who have not benefitted from the socializing functions of the family, school and neighborhood, the system acts as an arbiter and an administrator of justice and sanctions for serious transgressions. The usual functions of the juvenile justice system, such as diversion, adjudication, placement, and probation need not be elaborated here. There are several ways that the impact of these actions can be gauged, firstly on the probability of reoffending of the offender, and secondly on the reduction of SVJ offenders in the community.

The effectiveness of the juvenile justice system can be greatly enhanced by providing intake officers with effective tools to discriminate between less and more serious offenders, and between occasional and frequent offenders, at the time of their first referral. Since the first known offense does not necessarily

contain information about the true extent of the juvenile's delinquency career, the task is to identify other information that can facilitate intake officers' discrimination. Better screening devices need to be developed and routinely used.

Optimizing intake officers' discrimination between occasional and repeat offenders, and between minor offenders and serious offenders (given that serious offenders also commit minor offenses at a high rate), can then be more effectively linked to graduated sanctions, i.e., sanctions appropriate to the juveniles' risks, needs, offense frequency and seriousness. If such optimization is not in place, a substantial proportion of frequent juvenile offenders will be dealt with as either first or occasional offenders. The key question is whether it is feasible to apply graduated sanctions in such a way that predicted SVJ offenders are more intensively dealt with than predicted occasional offenders or predicted minor offenders.

Several options are reviewed for optimizing the impact of the juvenile justice system on juveniles' frequency and seriousness of offending after probation or release from incarceration. This recidivism-reducing function of the juvenile justice system may address risk factors known to maintain offending, or enhance protective factors associated with a reduction in the frequency and seriousness of offending. It should be noted, though, that typically actions from juvenile justice personnel are restricted to factors that may affect individual juvenile delinquents rather than neighborhood or peer influences.

The role of the police in dealing with SVJ offenders needs to be strengthened. Programs are needed to remove hand guns, especially among juveniles at risk, and various ways in which police actions can reduce gangs have been suggested. In addition, geographic infor-

mation systems can greatly aid police in identifying "hot spots" of criminal activities and, presumably, the concentration of SVJ offenders. Finally, policy makers often express the need to get "tough" with SVJ offenders, based on ideas about retribution for delinquent acts committed and deterring other "at risk" youth.

*Public health approaches.* There are major differences between public health and justice approaches to serious delinquency and violence (Shepherd & Farrington, 1993). Public health approaches aim to establish the prevalence and incidence of disease and psychopathology; in the present case, SVJ offending. This assessment is not necessarily restricted to those youths detected by the juvenile justice system, which is primarily focused on those youths whose behavior fits a legal classification of offenses.

Public health, unlike most juvenile justice approaches, also focuses on the identification and reduction of risk factors and the identification and promotion of protective factors. Examples of immediate, proximal risk factors for SVJ offending are situational influences such as alcohol or firearms that facilitate violence. Examples of long-term, distal risk factors are poor supervision by parents and chronic conflict among family members. Immediate and long-term causes are approximated in a public health approach by analysis of risk in terms of social, physical, and community factors. In contrast, the justice system focuses primarily on the control of offenders and on deterrence (Moore et al., 1994).

Public health approaches to delinquency can potentially focus on universal populations, selected or at risk populations, or indicated populations, including youth referred to the juvenile court for delinquency. In contrast, the juvenile justice system is virtually

never concerned with primary prevention and, because of a lack of resources, is preoccupied mostly with the prevention of reoffending among those referred to the juvenile court. In recent years, the public health approach to universal prevention of delinquency has been increasingly studied and evaluated. In contrast, the prevention of SVJ offending in selected, at risk populations, or in indicated populations has been less the focus of systematic evaluations. We discuss briefly each of the three public health approaches in turn.

(1) *Universal approaches.* Extensive reviews of primary prevention methods can be found in the chapter by Wasserman and Miller. Promising targets for preventing future SVJ offenders are early education and parents' childrearing practices. Universal approaches can be aimed at reducing individuals' propensities to commit crime, and also at reducing the occurrence of criminogenic situations. Examples of the latter action are various community mobilization efforts. Another example concerns routine guarding of school playgrounds in order to prevent bullying and physical fighting among school children. However, it should be understood that universal approaches target large populations and cannot therefore be expected to be highly efficient in preventing future SVJ offenders. Nevertheless, primary prevention can be cost-effective not only in preventing SVJ offenders but also in preventing problems associated with delinquency.

(2) *Selected approaches.* These approaches are of great importance because only a minority of youth are at risk of becoming SVJ offenders. Therefore, selected approaches aim to identify risk factors that distinguish youth at risk for SVJ offending as distinct from those at risk for less serious forms of delinquency or non-delinquency. On that basis, populations at high risk for

SVJ offending can be identified and given interventions. Such interventions aim to reduce risk factors or enhance protective factors that are known to be associated with (a) a deceleration in the severity and frequency of offending, and/or (b) desistance in offending.

(3) *Indicated approaches.* Potential targets for prevention in referred populations are deviant or delinquent activities that are known to increase the risk of repeated SVJ offending. Prime examples are the prevention of repeated victimization, gang membership, and drug dealing.

Early intervention studies show that since SVJ offending is multi-determined, intervention approaches need to address its multiple causes. This implies that several modes of intervention need to be implemented concurrently, such as for example parent training and improving academic attainment. Second, interventions addressing multiple risk factors often need to be implemented simultaneously in several settings. For example, home visits to improve family functioning may have to be combined with classroom management programs for teachers so that the same high risk youth can be targeted in the two settings. One of the advantages of the multiple-setting approach to the reduction of future SVJ offending is a focus on the consistency across settings of child problem behaviors that often are characteristic of those youth most at risk for later serious offending (Loeber, 1982). Other examples of interventions in multiple settings are collaborative programs between schools and the juvenile justice system, between community groups and the police, and the routine resolution of serious domestic disputes by the police.

Finally, better routine data collection that can shed light on SVJ offending is needed. Geographic clustering analyses of victimization surveys can

probably help to identify communities in which SVJ offenders are concentrated, as can systematic data collection of injuries reported in hospital emergency rooms. Police and court records can be better automated and linked across different jurisdictions so that cumulative delinquency records of individual SVJ offenders can be compiled. This will have the great advantage of eliminating the treatment of SVJ repeat offenders as first offenders in one jurisdiction because of their unknown offending elsewhere.

*Who is accountable?* SVJ offending is similar to many other problem behaviors in juveniles in that it persists in communities because new recruits emerge within each generation of youth. Yesterday's ten-year olds who become SVJ offenders are soon joined by today's and tomorrow's ten-year olds, and so on from generation to generation. To what extent are traditional public institutions responsible for juveniles cope with these persisting cycles of SVJ offenders?

Traditionally, the juvenile justice system has been seen as the agency primarily responsible for dealing with SVJ offenders. Other agencies, such as child protection or child welfare services, have been assigned to deal with child offenders, and with those juveniles who repeatedly engage in status offenses. In addition, the mental health system deals with juvenile offenders of any age who have mental health problems.

We expressed major reservations about how well the juvenile justice system in its current form is suited to deal with SVJ offenders in general, and young SVJ offenders in particular, and hence to have an impact on levels of SVJ offending in the community. Even less is known about the effectiveness of child protection and welfare services in dealing with very young offenders. Mental health services are not known to affect

community levels of SVJ offending. We will briefly discuss the role of these three institutions in preventing the development of SVJ offenders.

A very large proportion of the eventual SVJ offenders start offending as children (under age 10). For that reason, the juvenile justice system typically does not intercept these offenders at the beginning of their criminal careers. In 1994, only 25,000 out of about 1.5 million referrals to juvenile courts were of children under age 10 (Snyder, Personal communication, March 1997). Child welfare services, because of their mandate to concentrate on status offenders, are in a poor position to distinguish between those status offenders who commit few other forms of delinquency and those who also engage in serious and violent offenses. Mental health services also have little impact on SVJ offending in communities, because of (a) a lack of any mandate to be responsible for SVJ offenders; (b) a focus on a medical individual-treatment model rather than on community needs and community-relevant interventions; (c) inconsistent evidence of effectiveness of dealing with known SVJ offenders or preventing SVJ offending in communities; (d) recent reversals in insurance coverage of juveniles diagnosed with known precursor disorders, including Oppositional Defiant Disorder, Conduct Disorder, and Attention-Deficit Hyperactivity Disorder; and (e) a widespread lack of mental health insurance among families in the most disadvantaged inner-cities who often are most at risk of producing SVJ offenders. In fact, a survey of help seeking by parents of seriously delinquent boys showed that three-quarters of the caretakers never sought or received help from a mental health professional, and this also applied to pre-adolescent, seriously delinquent boys (Stouthamer-Loeber, Loeber, & Thomas, 1992).

All three systems – the juvenile justice system, the child welfare system, and mental health services – tend to be reactive in their responses to multiple problem youth, rather than proactive in attempting to prevent their emergence. Thus, in each system, sanctions and treatment are more dominant than preventive efforts. Further, the three systems often operate independently rather than in an integrated fashion and are not held collectively accountable for community levels of SVJ offending. Thus, fragmentation of services and separation of responsibilities among these institutions often is the rule rather than the exception. This state of affairs represents traditional roles of institutions dealing with youth, and is largely based on "old" knowledge of developmental aspects of SVJ offending. Current knowledge about the background and developmental course of young SVJ offending will eventually force a change in the division of responsibilities among the different institutions.

The boundaries between the juvenile justice system, child welfare services, and mental health services in dealing with SVJ offenders are often poorly defined and are more characterized by gaps than by integrated services. As a consequence, there is a lack of accountability of agencies who are responsible for the early offending of this group of juvenile offenders. However, we do not discount the important efforts played by other organizations, such as school, churches and other community organizations. Often, schools have adopted programs to deal with high risk youth in elementary classrooms, but in general schools have neither the mandate, resources or specialist knowledge to undertake this task on a routine basis from year to year and from generation to generation of youth.

There is more promise in the *Commu-*

*nities That Care* (CTC) program, which mobilizes efforts within communities to address known risk factors with proven prevention programs (Hawkins & Catalano, 1992). The laudable efforts of CTC often include collaborating with the juvenile justice system, child welfare services, mental health services and other agencies to divide the work in such a manner that SVJ offending in the community can be dealt with in a comprehensive manner. However, even with CTC there is no guarantee that the accountability of institutions in dealing with SVJ offenders at the level of prevention and intervention is defined, facilitated, enforced and maintained from generation to generation of youth.

We recommend that juvenile justice, child welfare and mental health services should have clearly defined responsibilities for preventing the development of SVJ offenders, and that they should work in coordination rather than in isolation.

*Developing a research agenda.* There are many gaps in knowledge about the development of, and effective interventions for, SVJ offenders, that might be filled by new research projects, by re-analyses of existing studies, or by additional data collection in existing studies. First, there is a need to focus specifically on SVJ offenders and to compare them with other types of offenders. Most existing research on risk/protective factors and prevention/intervention strategies provides information about delinquents versus non-delinquents rather than about SVJ offenders versus other types (or serious versus non-serious, violent versus non-violent offenders).

The focus on juvenile offenders follows the legal boundary between juvenile delinquency and adult crime, which is somewhat arbitrary in the context of behavioral development. More research is needed on what are the most useful

typologies of offenders for development, explanation, prevention and intervention purposes. SVJ offenders are important for policy and practice, but other typologies related to them (e.g., life-course persistent versus adolescence-limited offenders) might be more useful for these other purposes. More research is also needed specifically on persistent or chronic juvenile offenders, and on the linkages between violent offending, serious offending and frequent offending in the juvenile years. A key issue is how serious, violent, or chronic juvenile offenders differ in kind or in degree from other types of offenders.

Most existing typologies of offenders tend to be rather static and specific to a particular age. Dynamic typologies are needed, that take account of developmental transitions between different classes of offenders. Research is needed to describe the usual course of developmental transitions over time, to investigate how far they can be predicted, and to study how far they vary with such factors as gender, ethnicity, and community context. It is important to specify developmental pathways that begin with minor deviance in infancy or early childhood and that are likely to progress to SVJ offending. This will help to determine what SVJ offenders are like in childhood and how early and accurately they can be identified. In addition, it is important to specify the adult criminal careers and adult life experiences of SVJ offenders.

In the past, SVJ offenders have usually been measured using arrest or court data. More self-report research on serious or violent offenders is needed. Also, SVJ offenders have often been missing from school or community based samples. It is important to assess the concurrent and predictive validity of official and self-report measures of offending, and to derive accurate estimates of

the prevalence and incidence of serious and violent offenses in particular inner cities or areas, where SVJ offenders disproportionately reside and operate. A key issue centers on how much of the total crime problem is accounted for by SVJ offenders. Equally, it is important to study other social problems (e.g., mental health, educational, employment, welfare) of these individuals, in order to derive realistic estimates of their total burden on society. Such estimates are crucial in calculating the cost-effectiveness of prevention/intervention programs. A key question is how far all these problems are functionally related and how far they all have similar origins.

Another key research priority is to establish the most important risk factors for SVJ offenders, compared with other types of offenders and with nonoffenders. It is crucial to determine which of individual, family, peer, school, neighborhood, and community factors are the strongest predictors, and how these different factors have independent, additive, interactive or sequential effects on SVJ offending. It is also important to determine which factors have differential effects on the onset, persistence, escalation, de-escalation, or desistance of offending, and whether there are different effects at different ages. Results from these investigations should help in developing and improving theories of SVJ offending and screening devices to predict SVJ offenders. It is even more crucial to carry out research to identify protective factors, since these have been sorely neglected in the past and are likely to have important implications for prevention and intervention.

A key research priority is to assess the effects of interventions (from early prevention to aftercare) specifically on SVJ offenders (versus non-serious and non-violent offenders), and especially on

their re-offending. It is important to investigate the relative effectiveness of different types of interventions with different types of offenders at different ages. Different effects within different population subgroups (e.g., males versus females, African Americans versus Caucasians) and in different communities also need to be studied. Promising interventions need to be evaluated in controlled experiments as far as possible. It seems likely that interventions containing several different components (e.g., individual social skills training, parent management training, peer resistance training) will prove to be the most effective.

Generally, longitudinal studies are needed to investigate developmental pathways and risk/protective factors, while experimental studies are required to investigate prevention/intervention strategies. It would be ideal to combine these two approaches and include experimental interventions in longitudinal multiple cohort studies (Farrington, Ohlin, & Wilson, 1986; Tonry, Ohlin, & Farrington, 1991), but the longitudinal-experimental design seems very difficult to mount in practice. Also, the low prevalence of SVJ offenders poses problems for the investigation of risk protective factors and prevention intervention strategies.

Some of the key questions about development and risk protective factors could be addressed by carrying out re-analyses of existing longitudinal studies, as indeed contributors to our book have done. Some of the key questions about prevention/intervention techniques could be addressed by collecting additional data on SVJ offending in existing experimental studies. However, the designs of many existing studies would not permit urgent questions to be addressed. Existing studies may include too few SVJ offenders, too few females, too few ethnic minorities, a

too narrow age range, a too restricted range of risk protective factors measured, uni-component or too limited prevention intervention techniques, too infrequent data collection, and so on.

What types of new projects are needed? A key feature of new longitudinal studies is that they should include multiple cohorts in order to draw conclusions about the development of different age groups from birth to the teenage years. Also, they should include both males and females and the major racial/ethnic groups. Moreover, they should measure a wide range of risk and especially protective factors (individual, family, peer, school, community, etc.). Further, they should be based on large, high-risk samples, especially in inner-city areas, incorporating screening methods to maximize the yield of SVJ offenders while simultaneously making it possible to draw conclusions about the total population. Also, they should include long-term follow-ups to permit conclusions about developmental pathways.

A key feature of new experimental studies is that they should include multiple-component interventions and should be designed to evaluate the success of the components as well as the complete package. Ideally, the components should be targeted on different age ranges, and the interventions should be applied to high-risk youth or high-risk communities. It would be useful to evaluate a very flexible, wide-ranging prevention program such as *Communities That Care* (Hawkins & Catalano, 1992), although the evaluation of community programs raises special challenges for research (Farrington, 1997). In this program, major risk factors are first assessed in a community, and then prevention strategies are implemented to counteract specific risk factors. This type of program is promising. Evaluating it in high-risk communities or in-

ner-city areas might significantly advance knowledge about the prevention of SVJ offending. While it seems difficult to combine a multiple-cohort longitudinal study with multiple-component interventions, it would be possible to implement multiple-component interventions in a single-cohort longitudinal study. It would also be possible to follow up one or more cohorts of youth within a multiple-cohort intervention study as *Communities that Care*. Both of these types of longitudinal-experimental studies are worth implementing and evaluating.

#### CONCLUSIONS

Our main conclusions are as follows:

- SVJ offenders are a distinct group of offenders who tend to start early and continue late in their offending.
- From childhood to adolescence, SVJ offenders tend to develop behavior problems in several areas, including aggression, dishonesty/property offenses, and conflict with authority figures.
- Typically, juvenile courts do not routinely deal with delinquency by youth below the age of 12. However, very young offenders, and particularly serious or persisting young offenders, are the most likely group from which SVJ offenders will develop. Presently, no agency in society is held specifically accountable for the early-onset offenders and as a result there is a fragmentation of services and lack of resources to deal effectively with early-onset offenders.
- At first appearance before the juvenile court, SVJ offenders may not be readily identifiable, because many of them are arrested for less serious delinquent acts. Screening devices, based on legally permissible predictors, need to be improved to identify potential SVJ offenders at their first arrest or first referral to the juvenile court. There are many known predictors of SVJ offend-

ing that could be incorporated into screening devices for the early identification of SVJ offenders.

- The higher the number of risk factors, the greater the likelihood of a youth engaging in SVJ offending.
- *It is never too early*: Early intervention in childhood and adolescence can reduce the likelihood of young "at risk" juveniles becoming SVJ offenders.
- Preventive interventions should be based on public health approaches and should target known risk factors within a comprehensive community-based program in disadvantaged neighborhoods.
- The best preventive interventions are based on an integration of different services, including services provided by the juvenile justice system, schools, mental health, medical health and child protection agencies.
- Early prevention is important, including home visitation of pregnant women, teenage parents, parent training, preschool intellectual enrichment programs, and interpersonal skills training.
- Important targets for later prevention are reductions in gangs, victimization, gun availability and drug markets.
- *It is never too late*: The re-offending of SVJ offenders can be reduced by appropriate intervention, especially interpersonal skills training and cognitive-behavioral treatment.
- Programs to prevent youth gang violence can be successfully implemented.
- In selecting treatment and sanctions in the juvenile justice system, account should be taken of: (a) the severity of the presenting offense; (b) the risk of recidivism for serious offenses; and (c) the individual needs of the juvenile offender, such as academic needs and family support.
- Interventions for SVJ offenders often have to be multimodal in order to address multiple problems, including law breaking, substance use and abuse, and academic and family problems.

- The administration of multimodal programs requires integration of services of the juvenile justice system, mental health, schools, and child welfare agencies.
- Aftercare programs are essential in order to reduce the likelihood of re-offending by SVJ offenders.
- An integrated and coordinated program of research is needed on the development and the reduction of SVJ offending.
- More studies are needed focusing specifically on risk factors for SVJ offenders and aiming to identify protective factors in disadvantaged neighborhoods where SVJ offenders are especially found.

- A key research priority is to assess the effects of interventions specifically on SVJ offenders.
- Better designed evaluations of the effectiveness of programs are needed (e.g., randomized experiments), and studies of the cost-effectiveness of one program compared with others.

In order to advance knowledge and reduce crime in the future, an integrated and coordinated program of data collection, intervention, and research specifically on SVJ offenders should be developed by appropriate federal agencies, advised by scholars from the juvenile delinquency and juvenile justice communities.

#### REFERENCES

- Blumstein, A., Farrington, D. P. & Moitra, S. D.** (1985). Delinquency careers: Innocents, desisters, and persisters. In: Tonry, M. & Morris, N., eds. *Crime and justice* Vol. 6: 187-219. Chicago: University of Chicago Press.
- Capizzi, M., Cook, J. I. & Schumacher, M.** (1995). The TARGET model: A new approach to the prosecution of gang cases. *The Prosecutor, Fall*: 18-21.
- Dunford, F. W. & Elliott, D. S.** (1984). Identifying career offenders using self-reported data. *Journal of Research in Crime and Delinquency* 21: 33-56.
- Farrington, D. P.** (1986). Age and crime. In: Tonry, M. & Morris, N., eds. *Crime and justice* Vol. 7: 29-90. Chicago: University of Chicago Press.
- Farrington, D. P.** (1997). Evaluating a community-based prevention program. *Evaluation*, 3: 157-173.
- Farrington, D. P., Ohlin, L. E. & Wilson, J. Q.** (1986). *Understanding and controlling crime*. New York: Springer-Verlag.
- Hawkins, J. D. & Catalano, R. F.** (1992). *Communities that care*. San Francisco: Jossey-Bass.
- Hawkins, J. D., Catalano, R. F., Morrison, D. M., O'Donnell, J., Abbott, R. D. & Day, L. E.** (1992). The Seattle Social Development Project: Effects of the first four years on protective factors and problem behaviors. In: McCord, J. & Tremblay, R.E.) eds. *Preventing antisocial behavior: Interventions from birth through adolescence*: 139-161. New York: Guilford Press.
- Henggeler, S. W., Melton, G. B., Smith, L. A., Schoenwald, S. K. & Hanley, J. H.** (1993). Family preservation using multi-systemic treatment: Long-term follow-up to a clinical trial with serious juvenile offenders. *Journal of Child and Family Studies* 2: 283-293.
- Howell, J. C.** (1996). Juvenile transfer to the criminal justice system: State-of-the-art. *Law and Policy Review* 18: 17-60.
- Howell, J. C. & Krisberg, B.** (1995). Conclusion. In: Howell, J. C., Krisberg, B., Hawkins, J. D. & Wilson, J. J., eds. *Sourcebook of serious, violent, and chronic juvenile offenders*: 275-378. Thousand Oaks, CA: Sage.
- Huizinga, D., Esbensen, F. A. & Weiher, A. W.** (1991). Are there multiple paths to delinquency? *Journal of Criminal Law and Criminology* 82: 83-118.

- Klein, M. W.** (1995). *The American street gang*. New York: Oxford University Press.
- Loeber, R.** (1982). The stability of antisocial and delinquent child behavior: A review. *Child Development* 53: 1431-1446.
- Loeber, R. & Farrington, D.P.** (1998) *Serious and violent juvenile offenders: Risk factors and successful interventions*. Thousand Oaks, CA: Sage.
- Loeber, R. and Le Blanc, M.,** (1990). Toward a developmental criminology. In: Morris, N. & Tonry, M., eds. *Crime and justice* vol. 12. Chicago: University of Chicago Press.
- Moore, M. H., Prothrow-Smith, D., Guyer, B. & Spivak, H.** (1994). Violence and intentional injuries: Criminal justice and public health perspectives on an urgent national problem. In: Reiss, A. J. & Roth, J. A., eds. *Understanding and preventing violence* vol. 4: 167-216. Washington, DC: National Academy Press.
- Shepherd, J. P. & Farrington, D. P.** (1993). Assault as public health problem. *Journal of the Royal Society of Medicine* 86: 89-92.
- Snyder, H. & Sickmund, M.** (1995). *Juvenile offenders and victims: A national report*. Washington, D.C: Office of Juvenile Justice and Delinquency Prevention.
- Snyder, H., Sickmund, M. & Poe-Yamagata, E.** (1996). *Juvenile offenders and victims: 1996 update on violence*. Washington, D.C: Office of Juvenile Justice and Delinquency Prevention.
- Spergel, I. A., Chance, R., Ehrensaft, K., Regulus, T., Kane, C., Laseter, R., Alexander, A. & Oh, S.** (1994). *Gang suppression and intervention: Community models*. Washington, D.C. Office of Juvenile Justice and Delinquency Prevention.
- Stouthamer-Loeber, M., Loeber, R. & Thomas, C.** (1992). Caretakers seeking help for boys with disruptive and delinquent child behavior. *Comprehensive Mental Health Care* 2: 159-178.
- Thornberry, T. P., Krohn, M. D., Lizotte, A. J. & Chard-Wierschem, D.** (1993). The role of juvenile gangs in facilitating delinquent behavior. *Journal of Research in Crime and Delinquency* 30: 55-87.
- Tonry, M., Ohlin, L. E. & Farrington, D. P.** (1991) *Human development and criminal behavior*. New York: Springer-Verlag.
- Tracy, P. E., Wolfgang, M. E. & Figlio, R. M.** (1990). *Delinquency careers in two birth cohorts*. New York: Plenum.
- Tremblay, R. E., Pagani-Kurtz, L., Vitaro, F., Masse, L.C. & Pihl, R. O.** (1995). A bimodal preventive intervention for disruptive kindergarten boys: Its impact through mid-adolescence. *Journal of Consulting and Clinical Psychology* 63: 560-568.
- Wilson, J. J. & Howell, J. C.** (1993). *Comprehensive strategy for serious, violent and chronic juvenile offenders: Program summary*. Washington, D.C: Office of Juvenile Justice and Delinquency Prevention.

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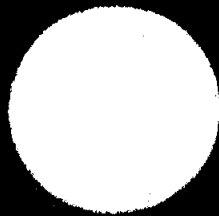
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# CONTENTS

- Editorial** Dr. ARTUR SOLARZ, *National Council for Crime Prevention, Sweden* 3
- Never Too Early, Never Too Late: Risk Factors and Successful Interventions for Serious and Violent Juvenile Offenders** Professor ROLF LOEBER, *University of Pittsburgh, USA* and Professor DAVID P. FARRINGTON, *University of Cambridge, United Kingdom* 7
- Environmental Criminology: From Theory to Urban Planning Practice** Professor PAUL J. BRANTINGHAM, *Simon Fraser University, Canada* and Professor PATRICIA L. BRANTINGHAM, *Simon Fraser University, Canada* 31
- On Testing Institutional Anomie with Varying Specifications** Assistant Professor ALEX PIQUEIRO, *Temple University, USA* and NICOLE LEEPER PIQUEIRO, *University of Maryland, USA* 61
- Criminal Careers of Two Generations of Family Members in the Cambridge Study in Delinquent Development** Professor DAVID P. FARRINGTON, *University of Cambridge, United Kingdom*, Research Assistant SANDRA LAMBERT, *University of Cambridge, United Kingdom* and Professor DONALD J. WEST, *University of Cambridge, United Kingdom* 85
- Delinquency Prevention Through Family and Neighborhood Empowerment** Assistant Professor SUMAN KAKAR, *Florida International University, USA* 107
- Does Heroin Prescription Reduce Crime?** Professor MARTIN KILLIAS, *University of Lausanne, Switzerland* and Criminologist JUAN RABASA, *University of Lausanne, Switzerland* 127

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