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## *Managing At-Risk Juvenile Offenders in the Community*

Putting Evidence-Based Principles Into Practice

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More than a half-million juveniles are under community supervision as a result of violent or delinquent behavior. Research has shown that treatment can reduce their risk of reoffending. This article reviews and distills the key lessons from hundreds of empirical studies and meta-analyses and applies them to practice. The author argues for conducting systematic and developmentally informed risk assessments, selectively assigning intensive intervention to the highest risk offenders, focusing on criminogenic treatment targets, using proven interventions and treatment strategies, and applying rigor in implementation and follow-up.

**Keywords:** *youth violence; risk assessment; juvenile delinquency; juvenile offenders; treatment; rehabilitation*

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**T**he justice system has long recognized that developmental differences between youth and adults affect offender needs, behavior, culpability, and amenability to treatment (McCord, Widom, & Crowell, 2001). Since at least the European period of enlightenment, young offenders have been regarded as a vulnerable population (Scott, 2000). Contemporary descriptions of juvenile offenders suggest that they continue to have special needs and vulnerabilities that may affect their treatment in and by the legal system (Kazdin, 2000). The rate of behavioral health—mental health and substance abuse—problems in this population is so high that they are regarded as the rule rather than the exception (Kazdin, 2000; Marsteller et al., 1997; Otto, Greenstein, Johnson, & Friedman, 1992; Policy Design Team, 1994; Shelton, 1998; Ulzen & Hamilton, 1998). Many juvenile perpetrators have also been victims of crime and violence (Finkelhor, & Hashima, 2001). A

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majority have experienced severe physical abuse or neglect by parents or caregivers (Hamilton, Falshaw, & Browne, 2002; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001). Exposure to trauma is extraordinarily common (Cauffman, Feldman, Waterman, & Steiner, 1998; Steiner, Garcia, & Matthews, 1997). All of these adverse events also are occurring during the most formative years of development when their impact is likely to have the most profound and pervasive effect on lifelong adjustment and functioning.

In 1961, the President's Commission on Juvenile Delinquency and Youth Crime recognized that a large number of these vulnerable youth were routinely confined in detention facilities for relatively minor offenses (Gottfredson & Barton, 1993; Griffin & Torbet, 2002). They advocated for moving more delinquent youth into the community through legislation that ultimately became known as the Juvenile Justice and Delinquency Prevention Act of 1974. In the mid-1980s, however, there was a surge of youth violence and widespread prognostications about an emerging breed of juvenile superpredators that fueled public fear of juveniles and steered juvenile justice policy toward a more punitive, rather than rehabilitative, approach (Grisso, 1996; Grisso & Schwartz, 2000). Youths are regarded as more dangerous than ever before. According to results of a 1994 Gallup poll, Americans believe that juveniles are responsible for nearly half (43%) of all violent crime. Most reliable crime statistics, however, suggest the proportion actually is closer to 13%. Juveniles are believed to be responsible for much more violent crime than they actually commit; nevertheless, while young offenders are in the community, their risk must be managed. Adolescence is a peak risk period for initiating or participating in an act of serious violence (U.S. Department of Health and Human Services, 2001).

Although the absolute number of youth placed in detention is increasing, most—before and after adjudication—are still managed in the community. Indeed, the number of juveniles placed on community probation—including those charged with person offenses—has risen sharply (Gottfredson & Barton, 1993). Despite increased construction of juvenile prisons and detention facilities, probation remains the most common disposition, accounting for nearly two thirds of all adjudications (Puzzanchera, Stahl, Finnegan, Tierney, & Snyder, 2002). At any given time, even more juveniles are under supervision in the community while awaiting trial. Still others are monitored in community-based diversion programs. The result is that every year, professionals in juvenile justice and behavioral health are responsible for supervising and managing nearly a half a million youths who may be at risk for delinquency or violent offenses.

The good news is that treatment—particularly community-based treatment—is effective in reducing recidivism among juvenile offenders (Lipsey, 1999a, 1999b; Lipsey & Wilson, 1998). The challenge, though, is the fact that

all interventions do not work equally well, and they tend to work best when they respond to the specific needs of the juvenile (Dowden & Andrews, 1999; Hoge, 2001; Lipsey & Wilson, 1998). Based on analyses of literally hundreds of research studies and program evaluations, several key discernible principles can be applied—individually and programmatically—to enhance the effectiveness of community supervision and treatment for juvenile offenders (Andrews et al., 1990; Dowden & Andrews, 1999; Griffin & Torbet, 2002; Hoge, 2001; Hoge & Andrews, 1996; Lipsey, 1995, 1999b). This article elucidates those evidence-based principles and provides guidance about how they can be applied to reduce recidivism among juvenile offenders in the community.

First, it is essential to identify the offender's risk and needs in developmental context. Second, the most intensive monitoring and supervision resources should be applied to the highest risk cases. Third, the community supervision professional must identify key criminogenic factors to target for intervention, then attempt to engage the offender in a collaborative treatment planning effort. Fourth, the planned interventions should be based on what has been proven to work and what will fit with the juvenile's existing capacities. Fifth, and finally, the plan should be implemented, monitored, and continually reassessed.

### **EVIDENCE-BASED PRINCIPLES FOR RISK MANAGEMENT WITH JUVENILE OFFENDERS**

#### *Conduct Systematic Assessment of Risk and Needs*

The fields of criminology, psychology, sociology, and other behavioral sciences have accumulated more than 50 years worth of research identifying factors associated with increased risk of violent and delinquent offending in juveniles (Borum, 2000; Borum & Verhaagen, in press; Howell, 1997; Lipsey & Derzon, 1998). This research has been repeatedly summarized and synthesized through critical scholarly review articles and statistical meta-analyses (combining the results from multiple studies) (Hann & Borek, 2001; Hawkins et al., 1998, 2000). Yet, until recently, there have been very few attempts to make that information user friendly for professionals in juvenile justice and behavioral health or to apply that information to provide structure for offender assessments. Systematic assessment of risk and needs, however, provides the foundation for effective intervention.

Risk of reoffending is the result of dynamic and reciprocal interplay between factors that increase and those that decrease the likelihood of offending in the developing juvenile over time (Borum & Verhaagen, in press). If

one's aim is to prevent recidivism, then it will be necessary to identify the historical, situational, and individual factors that increase (risk factors) and decrease (protective factors) reoffense risk.

Risk factors have been classified as broadly falling into two categories: static and dynamic. Static risk factors are those that are historical (e.g., early onset of violence) or dispositional (e.g., gender) in nature and that are unlikely to change over time. Dynamic factors are typically individual, social, or situational factors that often do change (e.g., attitudes, associates, high levels of stress) and, therefore, might be more amenable to modification through intervention (Borum, 2000). These have sometimes been referred to as "needs" factors (Hoge, 2001, 2002; Hoge & Andrews, 1996).

In contrast to the voluminous research on risk factors, there has been relatively little empirical study of protective factors for violence and antisocial behavior (McCord, Widom, & Crowell, 2001; U.S. Department of Health and Human Services, 2001). A protective factor is not simply the absence of a risk factor (e.g., no history of violence). Rather, it is the positive presence of some person, characteristic, or circumstance that can act to reduce the negative impact of one or more risk factors or otherwise directly buffer risk (Jessor, van den Bos, Vanderryn, Costa, & Turbin, 1995). Howell (1997) identified the following three classes of protective factors: (a) factors inherent in the individual, (b) factors related to the development of social bonding, and (c) healthy beliefs and clear standards for behavior.

Any risk assessment conducted with juvenile offenders carries the additional requirement of being developmentally informed (Borum & Verhaagen, in press; Hoge, 1999, 2001; Hoge & Andrews, 1996). Children and adolescents are different from adults in many ways, not just in age or size (Griffin & Torbet, 2002; McCord, Widom, & Crowell, 2001; Rosado, 2000). There are numerous reasons that assessing risk in juveniles is different than in adults: The base rates of violence are quite different; the risk factors are different; behavioral norms are different; individual factors are less stable; and psychosocial maturity is more central (Borum, 2000, 2002, in press; Borum & Verhaagen, in press). Even among youth, predictors of violent behavior also vary by developmental stages. For example, "during childhood, individual characteristics and family risk factors are most important. Later, during adolescence, peer group and school risk factors become important" (Howell, 1997, p. 164).

To develop an effective plan for managing a juvenile's risk for reoffending, it is critical to conduct a systematic assessment of risk, need, and protective factors (Borum, in press; Hoge, 2002; Hoge & Andrews, 1996). Unsystematic assessments often result in decisions that are inaccurate, inequitable, and lacking in accountability (Borum, in press; Hoge, 2002). One reason for

these problems is that, without proper structure, evaluators tend to rely on factors that do not have a demonstrated relationship to violence recidivism and overlook some of the factors that do (Borum, 1996; Borum, Otto, & Golding, 1993; Cooper & Werner, 1990; Werner, Rose, Murdach, & Yesavage, 1989; Werner, Rose, & Yesavage, 1983). Wiebush, Baird, Krisberg, and Onek (1995) noted, "Historically, risk assessments and classifications have been informal, highly discretionary procedures carried out by individuals who have varying philosophies and different levels of experience and knowledge, and who use dissimilar criteria in the assessment process" (p. 173).

Although many jurisdictions have developed some type of assessment form or list of factors for juvenile classification decisions, these often are not comprehensive, not based on proven predictors, and do not generalize well beyond the locale for which they were developed (Hoge, 2001, 2002; Wiebush et al., 1995). Three recently developed instruments show tremendous promise for helping to structure assessments of risk and protective factors in juvenile offenders. The first two—the SAVRY (Structured Assessment of Violence Risk in Youth) and EARL (Early Assessment Risk List)—focus specifically on violence risk, whereas the third—the YLS/CMI (Youth Level of Service/Case Management Inventory) focuses more generally on delinquency recidivism.

The SAVRY and the EARL instruments both are based on Structured Professional Judgment (SPJ) risk-assessment model. In the SPJ model, an evaluator conducts a systematic assessment of predetermined risk factors that have demonstrated significant empirical relationships with criterion violence in prior research. Each risk factor is considered and coded for severity, but the ultimate determination of risk level is made according to the examiner's professional judgment—not based on a particular cutting score derived from summing the items.

In this way, the SPJ model draws on the strengths of both the clinical and actuarial approaches to decision making. The assessment is structured, systematic, empirically based, and yet sensitive to case-specific facts and situational influences. The research conducted to date suggests strongly that clinical risk judgments made using an SPJ instrument are much more accurate than those based on unaided clinical judgment and are likely to be as accurate as, or more accurate than, actuarial formulas (Borum & Douglas, in press).

*SAVRY.*<sup>1</sup> The SAVRY (Bartel, Borum, & Forth, 2000; Borum, Bartel, & Forth, 2001) is designed to focus specifically on violence risk in adolescents. The SAVRY protocol is composed of 24 risk items, divided into three categories (historical, individual, and social/contextual), and six protective items (see Table 1). The risk items each have a three-level coding structure (high,

**TABLE 1**  
*Items from the Structured Assessment of Violence Risk in Youth (SAVRY)*

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Historical risk factors:
<ul style="list-style-type: none"> <li>● History of violence</li> <li>● History of nonviolent offending</li> <li>● Early initiation of violence</li> <li>● Past supervision/intervention failures</li> <li>● History of self-harm or suicide attempts</li> <li>● Exposure to violence in the home</li> <li>● Childhood history of maltreatment</li> <li>● Parental/caregiver criminality</li> <li>● Early caregiver disruption</li> <li>● Poor school achievement</li> </ul>
Social/contextual risk factors:
<ul style="list-style-type: none"> <li>● Peer delinquency</li> <li>● Peer rejection</li> <li>● Stress and poor coping</li> <li>● Poor parental management</li> <li>● Lack of personal/social support</li> <li>● Community disorganization</li> </ul>
Individual/clinical risk factors:
<ul style="list-style-type: none"> <li>● Negative attitudes</li> <li>● Risk taking/impulsivity</li> <li>● Substance-use difficulties</li> <li>● Anger management problems</li> <li>● Psychopathic traits</li> <li>● Attention deficit/hyperactivity difficulties</li> <li>● Poor compliance</li> <li>● Low interest/commitment to school</li> </ul>
Protective factors:
<ul style="list-style-type: none"> <li>● Prosocial involvement</li> <li>● Strong social support</li> <li>● Strong attachments and bonds</li> <li>● Positive attitude toward intervention and authority</li> <li>● Strong commitment to school</li> <li>● Resilient personality traits</li> </ul>

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moderate, and low) and the protective items have a two-level structure (present or absent). Specific coding guidelines are provided for each level. The identified risk factors all have been reviewed, analyzed, and well documented in the professional literature. The SAVRY has been translated into Dutch (by Henny Lodewijks) and Swedish (by Niklas Langstrom), and there are ongoing or completed projects in Canada, the Netherlands, Sweden, Singapore, Great Britain, Connecticut, and Nevada, with additional data being collected in at least a half dozen other jurisdictions.

Research conducted to date shows significant correlations between SAVRY scores and various measures of violence in juvenile justice and high-

risk community-dwelling populations (Bartel, Forth, & Borum, 2001; Fitch, 2002; Catchpole & Gretton, in press; Lodewijks, 2002; McEachran, 2001). Using receiver operating characteristic analysis, which measures predictive accuracy in terms of relative improvement over chance, areas under the curve (AUCs) for the total score average about .74 to .80 across studies. Validity coefficients are generally as strong for females as for males, although much less research has been conducted with adolescent females (Fitch, 2002). What is, perhaps, of greatest interest is that the examiner judgments (summary risk rating), not made on the basis of any cutting score, consistently perform as well as, and often better than, the linear combination of the scores themselves. This finding has been evident in research on structured professional judgment tools and provides some of the first empirical evidence that clinical judgments—properly structured and based on sound assessments—can achieve levels of accuracy that rival that of any other known predictors while maintaining latitude for case-specific analysis.

*EARL.*<sup>2</sup> The EARL-20B (Early Assessment Risk List for Boys) (Augimeri, Kogel, Webster, & Levene, 2001) is an SPJ tool designed to aid evaluators in making judgments about future violence and antisocial behavior among boys under the age of 12—particularly those who exhibit behavioral problems and are considered to be at high risk. Like most of the adult instruments, the protocol contains 20 risk items, each of which is assigned a score of 0, 1, or 2, depending on the certainty and severity of the characteristic's presence in a given case. The 20 items are divided into three categories, including 6 family items (household circumstances, caregiver continuity, supports, stressors, parenting style, antisocial values and conduct), 12 child items (developmental problems; onset of behavioral difficulties; abuse/neglect/trauma; hyperactivity/impulsivity/attention deficits [HIA]; likeability; peer socialization; academic performance; neighborhood; authority contact; antisocial attitudes; antisocial behavior; and coping ability), and 2 responsivity items (family responsivity and child responsivity).

The authors have conducted a preliminary investigation with 378 boys and 69 girls in a court-based intervention program for young offenders. There was evidence of good interrater reliability (.80-.97) and validity with high scorers being much more likely than low scorers to have a subsequent criminal conviction after age 12 (Kogel, Augimeri, & Webster, 2000). The developers of this tool have created an analogous measure for assessing risk in young girls, called the EARL-21G. Although the domain names are the same, a few of the risk factors are different than on the version for boys. Results of a preliminary unpublished study also show promising psychometric characteristics (Levene et al., 2001).



*YLS/CMI*.<sup>3</sup> The YLS/CMI (Youth Level of Service/Case Management Inventory) is a tool for assessing risk, need, and protective factors that may relate to a juvenile's risk for general delinquent reoffending. This version represents an adaptation of the LSIR (Level of Service Inventory–Revised), an extensively researched commonly used risk assessment tool for adult offenders (Andrews & Bonta, 1995). Like its counterpart, the instrument is structured as a checklist of 42 items, grouped into eight domains (offense history, family circumstances/parenting, education, peer relations, substance abuse, leisure/recreation, personality/behavior, and attitudes). Items were selected based on their theoretical and empirical support in the literature. Importantly, the YLS/CMI also includes a comprehensive assessment of strengths.

The assessment model is similar in many ways to the SPJ model, but there are some distinctions. Each item is defined and assigned a risk level, but the item coding is somewhat less detailed than with most SPJ instruments. The other significant structural difference between the YLS/CMI and SPJ guides is that YLS/CMI scores are explicitly linked to decision making. In this way, it operates more like a formal actuarial tool (Grove & Meehl, 1996). Scores on the instrument are tallied, and the total score is matched to its corresponding percentile ranking based on norms from a juvenile sample. The manual suggests that certain score/percentile ranges should correspond to specified levels of relative risk and that those risk levels should guide the nature and intensity of supervision and intervention in the case. Existing research on the YLS/CMI is quite promising (Hoge & Andrews, 2002; Hoge, Andrews, & Leschied, 1996). With training, raters are able to score the items reliably and the scores themselves are significantly related to reoffending (Hoge & Andrews, 2002).

#### *Apply Intensive Resources Selectively in High-Risk Cases*

Historically, the development of probation or community supervision caseloads has carried the assumption that all juvenile offenders have an equal degree of risk and need. That is, a caseload of 50 kids is assumed to translate to 50 equal units of work. The reality is that juvenile offenders vary widely in the nature and degree of strengths, risks, and needs. Consequently, effective management requires different levels of contact and intervention (Hurst, 1999).

In nearly every system in which the issue has been studied, a relatively small proportion of juvenile offenders account for a majority of offenses. “For example, in Rochester, about 15% of high-risk youth accounted for 75% of all violent offenses committed by the entire sample from the time they

were age 13 to when they were 17" (Howell, 1997, p. 163). That small group of high-rate offenders has been referred to as chronic juvenile offenders. Those who commit violent offenses are serious, violent chronic juvenile offenders (Krisberg, Neuenfeldt, Wiebush, & Rodriguez, 1994). They typically begin offending during childhood and continue both violent and nonviolent offenses throughout adolescence and into adulthood. They share many characteristics of those whom Terrie Moffitt called "life course persistent" offenders (Moffitt, 1993, 1997) and who Gerald Patterson called "early starters." They also tend to carry a substantial number of risk and need factors.

If it is true that 15% to 20% of juveniles commit 75% to 80% of juvenile offenses, does the equal-weighting model really make sense for caseload determination? Probably not. The American Probation and Parole Association suggested a different approach to load determination: one based on workload rather than caseload. This concept recognizes that cases of different intensity require a different amount of time to manage (Hurst, 1999). The serious, violent, and chronic—the high-rate offenders—require more contact and more intervention. Not only do they need more treatment, they also need different treatment. To be effective, interventions need to be individually targeted to the juvenile's particular risk/need factors (Krisberg et al., 1994). Altschuler and Armstrong (1991) concluded that "high rate offenders often exhibit a qualitatively different response to traditional treatment and are uniquely resistant to conventional intervention strategies" (p. 80). Trying to do one-size-fits-all supervision or giving equal units of attention to vastly different offenders results in very poor use of resources and is largely ineffective in reducing recidivism.

The logical- and evidence-based alternative is to assign more intensive resources to higher risk cases. This is one of the central "what works" principles in correctional treatment (Andrews et al., 1990; Dowden & Andrews, 1999). Of course, this requires that a reliable risk assessment/classification system exists to identify the true high risk/need cases. When this is accomplished and properly implemented, however, intensive supervision for high-risk offenders, combined with evidence-based interventions matched to their needs, can substantially reduce recidivism and enhance effective use of existing resources (Altschuler, Armstrong, & MacKenzie, 1999; Krisberg et al., 1994). Even without a focus on evidence-based treatments, intensive supervision programs that properly target high-risk cases produce recidivism rates that are at least as low as for institutional commitment/incarceration with traditional parole but carry only a third of the associated costs (Barton & Butts, 1990, 1991).

Matching intensity of service with risk and need is a core tenet of "state of the art" prevention programs (Griffin & Torbet, 2002; Wiebush, McNulty, & Le, 2000). The so-called Comprehensive Strategy for serious, violent,

chronic offenders developed and evaluated by the Office of Juvenile Justice and Delinquency Prevention (OJJDP) places a strong emphasis on appropriately identifying a high-risk population (Howell, Krisberg, Hawkins, & Wilson, 1995). The 8% Solution pioneered in Orange County, California, is built on the understanding that 8% of the juvenile offenders in that county are responsible for more than half of the juvenile crime—a pattern typical for many jurisdictions (Schumaker & Kurz, 1999). Administering intensive monitoring and intervention for low-level, infrequent (including many of the adolescent limited) offenders wastes resources. Conversely, mandating minimal contact and intervention for serious, violent, chronic offenders not only is wasteful and ineffective, but it also places the community at greater risk.

#### *Choose Criminogenic Targets for Intervention*

Traditional treatments for children and adolescents typically are designed to improve some aspect of their psychological adjustment, not to prevent violent and delinquent behavior. It should not be surprising that early evaluations of the effectiveness of juvenile offender rehabilitation showed very little impact in reducing recidivism (Romig, 1978). Even contemporary studies show that interventions for juvenile delinquents show their greatest success in improvements on measures of psychological functioning. As a result of treatment, more than one in four young offenders show improvements in psychological outcomes (28%)—more than twice as many as show improvements in interpersonal adjustment (12%), the next most amenable outcome (Lipsey, 1992, 1995). Improving psychological functioning in young people is a positive thing—but those changes, broadly defined, are statistically unrelated to reductions in recidivism (Lipsey, 1992, 1995).

This does not imply that specific psychological symptoms or conditions never are proper targets for intervention. Indeed, in some cases they may be. Psychotic symptoms such as paranoid delusions or command hallucinations, for example, may place some young people at risk for acting on them in a way that might be causally related to their offending. Cornell and Benedek (Cornell, Benedek, & Benedek, 1987) have posited that there is a small subgroup of juvenile homicide offenders whose psychotic symptoms are linked to the murder they committed. Similarly, hyperactivity may be viewed as a psychological condition, but it is also linked directly to risk for violence and delinquency. Current research shows that hyperactive children show high rates of antisocial behavior and conduct problems in adolescence (Barkley, Fischer, Edelbrock, & Smallish, 1990; Hechtman, Weiss, Perlman, & Amsel, 1984; Klein & Mannuzza, 1991; Loeber, Green, Keenen, & Lahey, 1995; Mannuzza, Klein, Konig, & Giampino, 1989; Satterfield, Hoppe, & Schell, 1982). Hyperactive boys have even been shown to be significantly more vio-

lent than their nonhyperactive male siblings (Loney, Whaley-Klahn, Kosier, & Conboy, 1983). The relationship between hyperactivity and violence holds even in controlled, prospective studies. For example, Satterfield and Schell (1997) found that hyperactive youth had a significantly higher rate of arrest (46% vs. 11%) and incarceration (22% vs. 1%) than controls. They also had a higher rate of arrest specifically for violent crimes (34% vs. 9%). In light of this type of evidence, it would be imprudent not to address such a robust psychological risk factor. The guiding principle in selecting a behavior or symptom as a target for intervention, however, should be the extent to which it may increase risk for violent and delinquent behavior.

The primary goal of correctional treatment is to reduce the likelihood of reoffending. Interventions, therefore, should be designed to remediate or ameliorate the effects of factors and conditions that might increase risk for violence and/or delinquency. If done correctly, this integrates the dual functions of risk assessment and risk management (Borum & Verhaagen, *in press*). The assessment identifies factors from research and the juvenile's history that may increase and decrease the likelihood of offending. The key dynamic risk (or needs) factors from the assessment then become targets for intervention.

For example, research consistently supports the proposition that substance abuse is a risk factor for violent behavior (Loeber & Dishion, 1983; Loeber & Stouthamer-Loeber, 1987, 1998) and recidivism (Dembo et al., 1995). Conversely, treatment may reduce risk for delinquency and violence. In a sample of 1,167 adolescents from four U.S. cities (Chicago, Minneapolis, Pittsburgh, and Portland) who were participating in a community-based substance-abuse intervention program, involvement in treatment was substantially related to lower risk of recidivism. The improvement was even more pronounced when combined with supervision. The proportion of youth reporting drug-related criminal activity fell from 68% to 27% among those under supervision of the criminal justice system and from 49% to 22% for those not under supervision (Farabee, Shen, Hser, Grella, & Anglin, 2001).

Arguing that treatment targets should be selected on the basis of their known association with recidivism may seem self-evident. It is quite common, however, for juvenile offender treatment programs to focus on issues that would seem to be helpful but that are actually unrelated to offense risk. Table 2 draws on a meta-analysis by Dowden and Andrews (1999) to show a listing of the most frequent criminogenic (or offense enhancing) and noncriminogenic factors targeted in juvenile offender programs, along with the correlation between that factor and the effect size of the intervention in reducing recidivism. They found that programs focusing primarily on criminogenic factors showed much larger effect sizes in reducing reoffending than those that did not (.22 vs. -.01). It is important to note that

**TABLE 2**  
*Treatment Targets and Their Effect on Reducing Recidivism*

<i>Description</i>	<i>Effect Size (<math>\tau</math>)</i>
Criminogenic	
Family supervision	.35
Family affection	.33
Barriers to treatment	.30
Self-control	.29
Anger/antisocial feelings	.28
Vocational skills and job	.26
Academic	.23
Prosocial model	.19
Antisocial attitudes	.13
Reduce antisocial peers	.11
Noncriminogenic	
Increase conventional ambition	.00
Physical activity	-.03
Respect antisocial thinking	-.05
Vague emotional/personal problems	-.06
Target self-esteem	-.09
Family, Other	-.11
Increase cohesive antisocial peers	-.12
Fear of official punishment	-.18

SOURCE: Adapted from Dowden and Andrews (1999).

some dynamic factors such as improving self-esteem or inducing fear of official punishment (as is often the focus of scared-straight or shock incarceration programs) actually have negative correlations with effect size. That is, targeting these factors tends to increase, rather than decrease, reoffending. Effective intervention with serious juvenile offenders requires reliance on this “need principle” (Andrews et al., 1990) in selecting known risk factors as targets for intervention.

#### *Do What Works*

It can no longer be said that “nothing works” in correctional treatment of juvenile offenders (Cullen & Gendreau, 1989; Lipsey, 1999a; Tate, Reppucci, & Mulvey, 1995; Whitehead & Lab, 1989). Based on a meta-analysis of approximately 400 studies on treatment of juvenile delinquency, Lipsey (1995) found a positive and significant effect for treatment in reducing general delinquent recidivism, by an average of approximately 10%. Treatment is even effective with the most serious young offenders. Lipsey and Wilson (1998) synthesized the results of approximately 200 experimental or quasi-experimental studies in a meta-analysis that included only serious and violent

juvenile offenders and found an average significant reduction of 6%, with somewhat larger effects for community-based programs than for institutional programs.

Although average reductions of 6% to 10% represent a substantial number of prevented crimes, those seemingly modest numbers mask the important fact that there is enormous variability in the effectiveness of different programs. In Dowden and Andrews's (1999) meta-analysis of what works in young offender treatment, the effect sizes among the 134 studies ranged from  $-.43$  to  $+.83$ ; in practical terms—from shockingly detrimental to remarkably effective. Some popular and widely implemented programs (e.g., D.A.R.E. and peer-led programs) have been evaluated and have been shown not to work. As with targeting noncriminogenic factors, some well-intended programs, such as waiver to adult court, even produce higher rates of recidivism (U.S. Department of Health and Human Services, 2001).

One of the most surprising of these findings to many is that, in general, interventions that aggregate high-risk youth—even in therapeutic or treatment-oriented settings—tend to be ineffective. Moreover, there is good evidence to suggest that these programs may even increase a youth's risk for recidivism and that this effect may be particularly pronounced for youth with initially low levels of delinquency. That is, the least serious kids suffer the most (Dishion, Capaldi, Spracklen, & Li, 1995; Dishion, Eddy, Haas, Li, & Spracklen, 1997; Dishion, McCord, & Poulin, 1999; Elliott & Menard, 1996; Poulin, Dishion, & Burraston, 2001). With this kind of striking variability among programs, it is a wonder that when the effects of all forms of treatment are combined to calculate an average effect, the net result is even in the positive—much less significantly positive—direction.

The reason, of course, is that there are effective programs that offset the impact of those that do not work. Although treatments for juvenile delinquents, overall, reduce delinquency by about 10%, the most successful programs typically show reductions in the range of 20% to 30% (Lipsey, 1995, 1999a). Those programs (Howell, 1997),

typically focused on changing overt behavior through structured training or behavior modification interventions designed to improve interpersonal relations, self-control, school achievement, and specific job skills. . . . [They] were characterized by multimodal services, more intensive services (contact hours, duration, and intensity), and services more closely monitored by research teams, which resulted in better implementation. (p. 170)

These types of programs also tend to be effective for serious and violent juvenile offenders in noninstitutional settings. Individual counseling, an exception, does not appear to have a strong effect on delinquency generally,

but does appear to be effective with serious offenders—reducing recidivism by a little more than 40% (Lipsey, 1992, 1995). The other two treatment modalities showing consistently positive effects were interpersonal skills and behavioral programs—each of which reduced recidivism by about 40% (approximately a 20 percentage point decrease) (Lipsey, 1992, 1995).

What are the characteristics of the most effective programs? A review by Garrett (1985) found the greatest treatment effects for three general categories of intervention: (a) social learning approaches, (b) family therapy, and (c) cognitive approaches. Focusing only on recidivism as an outcome of interest, Izzo and Ross (1990) analyzed the results of 46 studies, focusing particularly on whether the intervention was based on some theory or conceptual model. What they found was that interventions based on some theoretical principle or model were, on average, 5 times more effective in reducing recidivism than those that did not, although no particular theory showed significantly better effects than any other. In addition, interventions that included a cognitive component were more than twice as effective as those that did not. In analyzing these studies, the authors defined cognitive component rather broadly to include problem solving, negotiation skills training, interpersonal skills training, rational emotive therapy, role playing and modeling, or cognitive behavior modification.

There is additional evidence that focusing on thinking and behavior is a critical combination. In an early review by Ross and Fabiano (1985), 94% (15/16) of programs that included a cognitive component were found to be effective, compared to 29% (10/34) of programs that did not include a cognitive component. More recently, results from an examination of 69 studies were reviewed as part of the Correctional Drug Abuse Treatment Effectiveness (CDATE) Project (Pearson, Lipton, Cleland, & Yee, 2002). The researchers found that cognitive-behavioral programs generally showed stronger effects in reducing recidivism than pure behavior modification strategies. The conclusion was that

cognitive behavioral treatment can reduce recidivism by significant amounts. This was found to be true for the overall collection of cognitive-behavioral studies and also for the subcategory of social skills development training and cognitive skills training. On the other hand, the CDATE meta-analyses, like that of Whitehead and Lab (1989), did not allow us to reject the null hypothesis for contingency contracting, token economies, and other standard behavior modification as effective in reducing recidivism. (pp. 490-491)

Similarly, but more specifically to young offenders, a meta-analytic review of cognitive-behavioral rehabilitation programs for offenders, con-

ducted by Lipsey, Chapman, and Landenberger (2001) found that “[cognitive behavioral] demonstration programs with juveniles both on probation/parole and in custodial institutions produced sizable reductions in recidivism, with treated offenders showing only one-third to two-thirds the recidivism rates of untreated controls” (p. 155). Regarding specific cognitive treatment targets, research by Kenneth Dodge and colleagues (Dodge, 1991; Dodge, Petit, McClaskey, & Brown, 1986) suggested that two very promising deficits for intervention are (a) social perceptions (social cognition)—particularly the tendency to misperceive hostility in others’ intentions—and (b) problem solving—enhancing the ability to generate nonaggressive solutions to interpersonal conflicts.

Given the variability in program effectiveness, it will pay significant dividends—in program costs and in offense reduction—to apply what is already known about what works and what does not in treatment and program planning (Borum & Verhaagen, in press). Although literally hundreds of offender treatment programs exist, very few have been systematically evaluated to determine whether they are effective. Even many of those that have been evaluated have not been evaluated very well. To address this gap in our knowledge of evidence-based programs for preventing youth violence, in 1996, Del Elliott and his colleagues from the Center for the Study and Prevention Violence embarked on a project to identify best-practice programs that been subjected to a solid experimental evaluation, that had been replicated, where significant effects were found in reducing violence and those effects were sustained for at least a year (Mihalic, Irwin, Elliott, Fagan, & Hansen, 2001). The product of this effort was the designation of 10 blueprint programs. These are all programs that have been proven to work and several of them—particularly Multisystemic Therapy, Functional Family Therapy, and Aggression Replacement Training—are beginning to be implemented in juvenile justice systems throughout the United States. Using what is known about what works will lead to better use of resources and greater reductions in recidivism.

#### *Implement, Follow Up, and Modify*

At both a programmatic and at a case level, the implementation and follow-up of a proposed intervention is where many failures occur. Even the best evidence-based programs will not be effective if they are not properly implemented and monitored. Indeed, Lipsey’s meta-analyses (1995, 1999a) showed that program success was strongly related to whether the intervention was fully implemented and whether its fidelity was strictly monitored.



As one example, results from a four-site (Boston, Memphis, Newark, and Detroit) evaluation (Fagan, 1990) of intensive supervision for violent juvenile offenders found that

where the program design was well-implemented and its underlying theoretical principles were in strong evidence, *significantly lower recidivism rates* for violent, serious, and total crimes were observed. . . . In Boston, where implementation of the experimental program was strongest, youths consistently had lower recidivism scores than controls. Most percentage differences exceeded 25 percent and several were over 100 percent lower. (p. 260)

In addition to program-level implementation issues, with individual juvenile offenders it is critical to conduct regular reassessments of risk and need (Borum & Verhaagen, in press). As noted above, one of the developmental differences between juvenile and adult offenders is that juveniles are “moving targets” (Borum, 2000, in press; Grisso, 1998). Adolescence is a time when major life changes are occurring—cognitively, biologically, socially, and emotionally. Identity and, by inference, personality, is not fully formed and its behavioral manifestations are much less stable than in adults. Because juveniles are developing and changing, it is particularly important to ensure that mechanisms are in place to ensure that treatment needs and risk factors are reassessed and that intervention plans are modified accordingly (Borum, in press; Borum & Verhaagen, in press).

## CONCLUSION

Over the past 50 years, social scientists have amassed an enormous amount of evidence about predictors, patterns, and pathways of serious juvenile offending. During that same period, hundreds and perhaps thousands of programs have been developed and implemented with the goal of reducing violence risk in young offenders. Relatively few of those programs, however, are based on the existing research knowledge and even fewer have been rigorously evaluated to determine whether they are effective. One lesson we have learned, though, is that good intentions and good ideas are not sufficient to produce a successful intervention. Some factors assumed to predict violence, turned out, when examined, not even to be statistically related. Interventions assumed to reduce reoffending, did not, and in some cases they made kids worse.

With increasing economic and policy pressures to do more good with less money, our choices are perhaps more important than ever before. If we are to

make the best use of scarce resources, we should invest in what works. We know that treatment—even with serious, violent offenders—can work and can save money. But to do it right, we must apply existing research to policy and practice. The principles discussed in this article are evidence based in the truest sense. They are founded on the results of hundreds of research studies and they point consistently in the same direction.

Serious, chronic juvenile offenders, almost by definition, have very high rates of recidivism; typically about two thirds reoffend over the course of a year. It is possible, though, to manage most of these cases in the community with success rates that are at least as good—probably better—than with institutional confinement. The key is to adequately assess the offender's risks, needs, and strengths; to choose treatment targets that are related to offense risk; and apply proven interventions—especially those that are theoretically grounded and that use cognitive behavioral methods—to address those problems. And if we reserve intensive interventions—both monitoring and treatment—for the highest risk cases but apply it there with rigor and fidelity, we will prevent much more overall crime and violence. The verdict is in: Evidence-based intervention works.

### NOTES

1. More information on the SAVRY can be found on the Web at [www.fmhi.usf.edu/mhlp/savry/statement.htm](http://www.fmhi.usf.edu/mhlp/savry/statement.htm). Copies of the SAVRY can be ordered from Specialized Training Services, 9606 Tierra Grande, Suite 105, San Diego, CA. 92126; (800) 848-1226. Web: [www.specializedtraining.com](http://www.specializedtraining.com).

2. Copies of the EARL-20B and EARL-21G can be ordered from Earls Court Child and Family Centre, 46 St. Clair Gardens, Toronto, Ontario, Canada M6E 3V4; (416) 654-8981; e-mail: [mailus@earls court.on.ca](mailto:mailus@earls court.on.ca); Web: [www.earls court.on.ca](http://www.earls court.on.ca).

3. Copies of the YLSI/CMI can be ordered from Multi-health Systems, P.O. Box 950, North Tonawanda, NY 14120-0950; (800) 456-3003; e-mail: [customerservice@mhs.com](mailto:customerservice@mhs.com); Web: [www.mhs.com](http://www.mhs.com).

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