

## Knowledge Brief

# Can Risk Assessment Improve Juvenile Justice Practices?

A growing number of juvenile justice experts are suggesting a new, potentially more effective approach to reducing recidivism: **first identify a youth's risk of re-offending; then match services to his or her specific risk factors and responsiveness to specific types of interventions.** This study examined the implementation of risk/needs assessment tools in six juvenile probation offices in two states, and what effects it had on the practices of the probation officers. The researchers found that probations officers using these tools did take risk factors into account in their recommendations for individual youths, leading them to seek the least restrictive but still appropriate disposition for each youth. In most of the sites, this led to lower levels of supervision for low-risk youths and more intensive services for high-risk youths. Thus far, the decreased use of resources has not resulted in increased re-offending.

### Background

There is an emerging consensus in the juvenile justice field that punishment and sanctions do not in fact deter juvenile re-offending. Studies have shown that for some youths, exposure to the juvenile justice system—even interventions like community service or probation—may actually increase their chances of later offending.

There is a better way to help young offenders make a successful transition to adulthood. Research suggests that instead of basing sanctions solely on the offense committed, a more effective approach is to assess each youth's risk for re-offending. Those who are at highest risk should receive the most intensive monitoring and interventions to reduce their risk; those at low risk are far less likely to re-offend, even in the absence of interventions. In addition, evidence suggests that matching services to youths' specific "dynamic risk factors" (sometimes referred to as criminogenic needs; see figure 1) and their responsiveness to specific types of

interventions is more effective in reducing re-offending than simply piling on services or providing services as usual.

### Dynamic Risk Factors for Delinquency



- Lack of social ties
- Negative peer associations
- Poor parental management/family problems
- Antisocial/pro-criminal attitudes
- Hyperactivity/impulsivity/attention problems
- Poor school performance/behavior problems at school
- Community disorganization/neighborhood criminality

figure 1

The first step in promoting these best practices is to identify a youth's risk of re-offending and dynamic risk factors using a validated risk/needs assessment tool. The use of these tools has been increasing since the mid-1990s, in part because of recommendations in the Juvenile Justice Delinquency Prevention Act and in part because there are now valid tools to use with youths. However, there has been little research to show whether an agency's adoption of a



valid assessment tool leads to decisions about disposition, placement, monitoring, and service delivery that match a youth's level of risk. This brief reports findings from a study that looked at those decisions.

### **The implementation study**

Risk/needs assessments were implemented in six juvenile probation offices in Louisiana and Pennsylvania. Louisiana used the Structured Assessment of Violence Risk for Youth (SAVRY) and Pennsylvania used the Youth Level of Service/Case Management Inventory (YLS/CMI). Both tools measure risk level and dynamic risk factors, and both have considerable evidence of reliability and validity for predicting re-offending among young offenders. Standard methods of implementation and training on an assessment system were used at each site.

The study examined two kinds of changes: changes in attitudes and decision-making by the juvenile probation officers, and changes in how cases are processed. Researchers interviewed probation officers at three time points: before implementation of the assessments, and at three and ten months after implementation. Their goals in these interviews were to understand how the officers used the tools, to see if they made any changes in their practice, and to determine whether there was sufficient implementation integrity to study other impacts of adopting the assessment. The researchers also wanted to see whether changes that resulted from the initial training (those seen at 3 months post-training) were sustained over time (at the 10-month point). To determine whether implementation of the assessment tools made a difference in the handling of young offenders, the researchers compared groups of youths adjudicated consecutively for six to 12 months before implementation to those adjudicated after full implementation of the assessment tool and procedures.

### **Can probation officers conduct risk/needs assessments reliably?**

An assessment tool is reliable if different interviewers (in this case, probation officers) using that tool to assess a given youth obtain the same results. Although many assessment tools have been shown to be reliable when used

by trained researchers, people have been skeptical as to whether juvenile probation officers can reliably conduct these assessments in the field. This study looked at the field assessments by two officers using the same instrument on 90 youths, and found good to excellent consistency between raters. Moreover, the consistency with the SAVRY assessment was actually better when officers were trained by a peer master trainer (another probation officer in their office) than by an expert on the SAVRY. This means the costs of training can be low.

### **Does the use of risk assessment change juvenile probation officers' practices and perceptions of risk?**

Training and use of either assessment tool led to a significant reduction in the number of youths the probation officers perceived as likely to re-offend. After taking into account the specific site and several characteristics of the officers (such as years of experience working in juvenile justice and authoritarian beliefs), the researchers found that officers changed from perceiving 45 to 50 percent of their youths as likely re-offenders to thinking that only 30 percent were likely to re-offend. A control sample of probation officers in an office that did not implement an assessment tool did not significantly change their estimates of recidivism.

Among officers using an assessment tool, there was a significant increase in the number who considered evidence-based risk factors when they made their disposition recommendations. They also were significantly more likely to consider a youth's dynamic risk factors when recommending services in the community. And supervision levels on probation were assigned according to an individual youth's level of risk, rather than using a "one size fits all" approach. All of these changes, illustrated in figure 2, were statistically large effects.

### **Does the use of risk assessment in juvenile probation lead to changes in the way youths are handled?**

Five of the six sites have completed this part of the study to date. The project's most important question concerned post-adjudication placement outside the home: in secure correctional or residential centers, group homes, detention

centers, or wilderness camps. The two sites in the study with historically high placement rates (roughly 50 percent of adjudicated youths were being removed from the home at least once) saw a substantial drop in the number of youths being placed out of the home up to 13 months after their adjudication. After conducting all of the appropriate statistical controls (propensity score adjustments to balance out the groups), the data showed that youths were about half as likely to be put in a placement after an assessment tool was in place (see figure 3 for an example from one parish). Conversely, for the two sites that historically placed very few youths (less than 20 percent of adjudicated youths were being removed from the home), youths were more than twice as likely to be placed after an assessment tool was used. Although this difference may appear dramatic, very few youths were removed from their homes. For example, in one site, 25 youths (10 percent of the pre-assessment sample) were put in some sort of placement during their first eight months of probation before the tool was used, compared to 22 youths (20 percent of the post-assessment sample) after the tool was implemented.

### Use of Assessments in Decision-Making by Juvenile Probation Officers

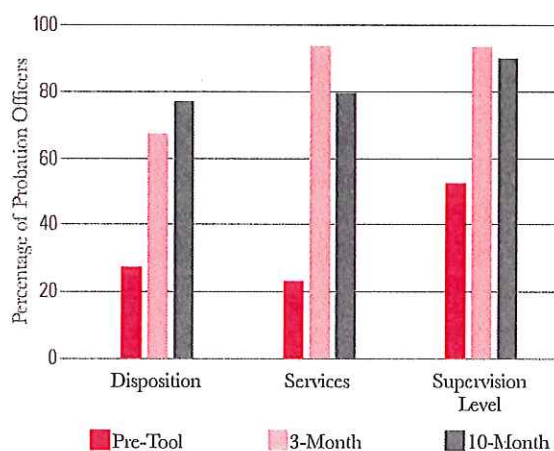


figure 2

In every site, after implementation of the assessment tool all placement decisions were significantly related to the youths' level of risk, and most high-risk youths were still kept on probation rather than locked up. It appears that a label of "high-risk" was not used to send youths to placement, but that probation officers sought the least restrictive but

appropriate disposition for each youth. In four of the five sites that have completed the study, the use of medium and maximum levels of supervision for low-risk youths decreased substantially after assessments were implemented. In most sites, there was also a shift to provide more services to high-risk youths and fewer to low-risk youths.

### Does the use of risk assessment change recidivism?

This ongoing study will examine changes in rates of both petitions and convictions for new offenses before and after the implementation of risk assessment tools. To date, the researchers have completed findings for only one juvenile probation office. In that office—which reallocated services, spent less staff time supervising youths, and cut placement rates nearly in half (figure 3)—there was no significant increase or decrease in the rates of violent or non-violent offenses petitioned (figure 4) or adjudicated up to 18 months following the initial adjudication. However, youths were about 1.5 times more likely to receive a violation after the tool was used.

### Change in Post-Adjudication, Out-of-Home Placement Rates in One Parish

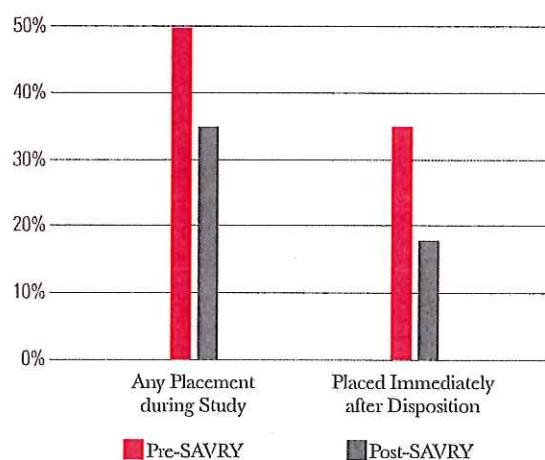


figure 3

### Why is sound implementation of risk assessment important?

In one site, juvenile probation officers who were trained on the assessment tool began to use the tool before they were trained in how to apply it in their decision-making—that is, before it was fully implemented. This allowed the



researchers to investigate the relation between risk level and decision-making before and after full implementation of the assessment system. Prior to full implementation of decision-making policies and additional staff training, this site was placing almost 40 percent of both their moderate- and high-risk youths outside the home. After full implementation, however, placements were related to risk level: 39 percent of high-risk youths received placement compared with 21 percent of moderate-risk and 15 percent of low-risk youths. Another site was unable to use the assessment tool in disposition recommendations and service referrals because of a lack of buy-in from their judges. This site saw no change in dispositions, placement rates, service referrals, or supervision levels.

### Change in Rates of New Petitions and Violations in One Parish

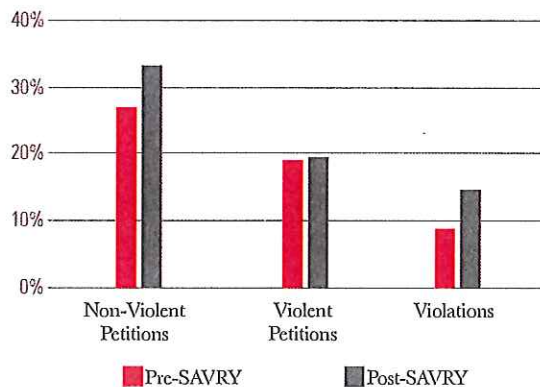


figure 4

### Implications for policy and practice

Implementation of the risk/needs assessment tools led to many positive changes in juvenile probation practices. It changed the way probation officers perceived a youth's chances of re-offending, how they thought about dynamic risk factors, and how they made case-level decisions. In all but one of the sites so far, implementation of the assessment tools has resulted in improved use of resources, with higher-risk youths receiving more supervision and services and low-risk youths getting minimal attention. In addition,

among sites that implemented the assessment tool properly, there was decreased use of correctional dispositions and placements at offices that had previously been placing a relatively large percentage of their youths. Thus far, these changes in use of resources have occurred without any increase in re-offending rates.

On the whole, the researchers conclude that the use of risk/needs assessment in probation will lead to better intervention practices and will conserve resources. Indeed, the potential for cost-savings is great. Every probation office that had sound implementation achieved significant decreases in the use of costly, intensive levels of supervision. This conserves staff time by focusing more time on youths in greater need and less on low-risk youths. Overall, there was a decline in unnecessary use of services in every site.

Importantly, these outcomes can be achieved without jeopardizing either public safety or the well-being of youths. However, two points should be kept in mind:

#### The impact of risk assessment will vary by site.

Jurisdictions that are over-servicing or over-placing youths will likely see a significant decline in service use and placement rates, while sites that under-place or under-service youths are likely to see some (but still relatively few) increases. The investigators understand this to mean that the implementation of risk assessment leads to sounder, more evidence-based decision-making.

#### Sound implementation and buy-in are key.

The benefits of risk assessment will not be realized without proper implementation of an integrated system that includes appropriate case planning and policies about how risk level should be used in decision-making. Without buy-in from key stakeholders, such as judges and attorneys, assessment tools are unlikely to make a difference.

The research described in this brief was supported by the MacArthur Foundation's Models for Change Research Initiative, and was carried out by Gina Vincent, Laura Guy, Nathan Cook, Bernice Gershenson, Melissa Paiva, and Rachael Perrault, University of Massachusetts Medical School.

This brief is one in a series describing new knowledge and innovations emerging from Models for Change, a multi-state juvenile justice initiative. Models for Change is accelerating movement toward a more effective, fair, and developmentally sound juvenile justice system by creating replicable models that protect community safety, use resources wisely, and improve outcomes for youths. The briefs are intended to inform professionals in juvenile justice and related fields, and to contribute to a new national wave of juvenile justice reform.