HOW PRACTICES AND PROGRAMS BECOME EVIDENCE BASED: A REVIEW OF JUVENILE JUSTICE RESEARCH
Judicial Council of California

Administrative Office of the Courts

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INTRODUCTION

As the pursuit of funding dollars becomes increasingly competitive, it is important for judicial officers and judicial stakeholders who serve youth and families to know what works and what does not. In juvenile justice, what works generally refers to practices and programs that reduce recidivism (see the box on practices versus programs). The only way to determine whether a practice or program works is through a carefully designed evaluation to measure outcomes after an adequate period of time, usually several years. Many practices and programs have already been evaluated comprehensively using rigorous scientific methods and have been promoted as evidence based by several organizations, including the Office of Juvenile Justice and Delinquency Prevention (OJJDP), the Rand Corporation, and the Substance Abuse and Mental Health Services Administration (SAMHSA). In addition, the California Evidence-Based Clearinghouse for Child Welfare lists programs used in child welfare.

Many judicial officers and stakeholders in juvenile justice have indicated that they would like more information on evidence-based practices and programs in juvenile justice; this briefing is a response to that request. It is one of several AOC Briefings on topics of interest to judicial officers and court stakeholders, including a detailed overview of evaluating risks and needs of youth in the juvenile justice system and family-based treatment models.

The complex nature of juvenile justice necessitates system responses that are accountable to fiscal constraints, public safety, and the populations served. The responses to youth who commit crime must take into account factors such as...
school and family, as well as youths’ criminogenic risks and developmental and social needs. Given these complexities, there has been growing interest in evidence-based practices and programs—those that have been studied thoroughly and shown to reduce recidivism among youth.

**What Does “Evidence Based” Mean?**

In the past, policies and practices in juvenile justice regarding case planning, treatment, and disposition were based on hunch, beliefs, or simply tradition. Some practices or programs were politically popular but not effective while others were effective but overly expensive. Today, research methods are available in juvenile justice to objectively measure the impact, cost effectiveness, collateral consequences, and other effects of practices and programs and to confidently determine whether those practices are achieving their goals. Thus, evidence-based practice implies a definable outcome (e.g., lowered recidivism in juvenile justice) that is measurable. Judges, attorneys, and probation officers should look for practices and programs that have been measured using the methods discussed below.

The research methods used to measure practices and programs vary in scientific rigor and produce evidence that ranges in strength. Weakest is anecdotal evidence, which includes stories, opinions, focus groups, and other nonexperimental, qualitative (nonnumeric) data. The middle range includes evidence from studies that use experimental, quasi-experimental, and correlational designs with matched comparison groups. These middle-range studies do not use random assignment or control groups. The strongest evidence is from controlled research studies and evaluations. This gold standard of evidence is based on studies that use randomized, controlled experiments—the only method in which a researcher can make a claim of causation rather than mere correlation.

In juvenile justice, few practices and programs have undergone the research required to be considered a best practice, primarily because evidence-based practices require randomized and controlled experiments, as noted above. In juvenile justice, it is often unethical or even illegal to withhold treatment from a control group for the sake of an experiment. In addition, a thorough evaluation can begin only after a program has been in operation for several years, and many thorough evaluations of any given program are required to classify that program as evidence based. Thus, many agencies rely on practices and programs that are considered promising due to extensive research using quasi-experimental designs.
Several reputable agencies list practices and programs that have been designated as either evidence based or promising, including the Center for the Study and Prevention of Violence’s Blueprints for Violence Prevention,⁶ the OJJDP’s Model Programs Guide,⁷ the Rand Corporation’s Promising Practices Network,⁸ and SAMHSA’s National Registry of Evidence-based Programs and Practices.⁹ Each agency has its own stringent criteria for classification as evidence based or promising. The few programs that have been designated as evidence based include family-based treatment models such as multisystemic therapy and functional family therapy and practices such as using standardized screening and assessment instruments to guide detention and service decisionmaking. Earlier AOC Briefings address family-based models¹⁰ and mental health screening and assessments in juvenile justice.¹¹

The highest standards of evidence indicate what works in juvenile and criminal justice and how well it works. The principles behind what works are discussed in the next section.

**Principles of Effective Interventions**

The National Institute of Corrections has identified eight basic principles that must be adhered to in order for practices and programs to be effective:¹²

1. Assess actuarial risk and needs.
2. Enhance intrinsic motivation.
3. Target interventions in corrections (risk, need, treatment/responsivity, dosage).
5. Increase positive reinforcement.
7. Measure relevant processes and practices.
8. Provide measurement feedback.
Assess Actuarial Risk and Needs

Evidence-based practice is not only about what tools you have but also about how you use them. To determine the level of supervision and treatment a youth may need, the youth must be assessed using validated, standardized instruments that focus on dynamic and static risk factors and criminogenic needs. Those administering the assessments must be trained to do so, and the instruments must be administered in accordance with the developer's instructions. The results of these assessments should be used to make decisions regarding case planning, including appropriately and effectively matching youth to supervision, security, treatment, and services.

Enhance Intrinsic Motivation

Offenders are unlikely to want to change their behaviors simply because someone tells them to. This is especially true for youth. Rather than persuasion, motivational interviewing techniques have been shown to be effective at initiating and maintaining behavior changes. Motivational interviewing is based on the philosophy of cognitive-behavioral therapy and includes techniques such as open-ended questions, affirmations, reflective listening, summaries, and role-playing. These techniques convey respect for the youth and encourage internal reasons for behavior change in youth. Motivational interviewing has five principles: (1) express empathy, (2) avoid argument, (3) support self-efficacy, (4) roll with resistance, and (5) develop discrepancy. To accomplish these principles, the interviewer must establish rapport, set an agenda, assess the youth's readiness to change, sharpen the focus of what behaviors to change, identify and address ambivalence, elicit self-motivating statements, handle resistance, and shift the focus from external barriers to underlying causes of behavior.

Target Interventions in Corrections

Within the juvenile justice system are many practices and programs. Not all programs are created equal, however. The principle of targeting interventions has four components focusing on who to target, what to target, and how to target the intervention. Each of these four components—the risk principle, the need principle, the treatment/responsivity principle, and the program integrity/fidelity principle—is discussed below:

* For more information on assessing and evaluating risks and needs of youth in the juvenile justice system, see the AOC Briefing Screenings and Assessments Used in the Juvenile Justice System: Evaluating Risks and Needs of Youth in the Juvenile Justice System at www.courts.ca.gov/documents/AOCBrief_AssessOnline.pdf.
The risk principle. The risk principle refers to the importance of using valid and reliable instruments to determine an offender's risk of reoffense and suitability for treatment or for a specific program. These two elements of the risk principle—targeting appropriate youth and providing appropriate-level treatment—illustrate how youth with the highest probability of reoffending should be targeted for treatment. This probability should be based on valid assessments of risk.\(^18\)

There are two types of risk factors for reoffending: static and dynamic. Static risk factors are those that cannot be changed, such as biological factors and criminal history. Dynamic risk factors are those that can be changed, such as antisocial attitudes and substance use.\(^19\) Certain dynamic risk factors have also been shown to contribute to crime and recidivism and should be the focus of any treatment or programming.\(^20\) These specific dynamic risk factors are also known as criminogenic factors and are discussed further under the need principle.

It is important to use assessment instruments to ascertain the appropriate level of risk because any treatment or programming must match the risk level of the offender. For example, high-risk offenders should receive more intensive programming and for longer periods of time than low-risk offenders.\(^21\) Providing intensive treatment to low-risk offenders or not providing appropriate treatment to high-risk offenders has been shown to increase recidivism rather than lower it.\(^22\) The programming should target specific needs, discussed below as the need principle.

It should be noted that the risk principle does not refer to the seriousness of the offense that has been committed; rather, it simply refers to the offender’s risk of committing another offense and the placement or program that the offender should have.\(^23\) Adhering to the risk principle has been shown to decrease recidivism, whereas violating the risk principle has been shown to increase recidivism.

The need principle. The need principle refers to addressing the appropriate treatment needs of the youth in order to decrease recidivism. An offender may have many needs, but not all of those needs may be associated with their offending. As noted above, research has shown that certain dynamic risk factors, or criminogenic factors, are strongly correlated to criminal behavior. These criminogenic factors include antisocial attitudes, antisocial peers, antisocial personality, poor familial relationships, and low educational or vocational achievement.\(^24\) One of these factors alone may not cause offending; however, programs that target a minimum of four to six criminogen-
genic needs have been shown to reduce recidivism by 30 percent. Other risk factors—including low self-esteem, anxiety, and lack of physical conditioning—have not been linked with offending. Programs targeting these needs—such as boot camps, yoga, or meditation—show no evidence of reducing recidivism. As with risks, it is important to use valid assessment instruments to determine a youth’s needs.

The treatment/responsivity principle. The treatment, or responsivity, principle refers to how treatment is delivered once risk and need principles are met—that is, once the most appropriate offenders and their specific needs have been determined. Certain characteristics or circumstances affect offenders’ responsiveness to treatment. For example, mental illness, learning style, learning disability, and readiness to change must be taken into account when determining treatment.

Researchers have broken responsivity into two components: general responsivity and specific responsivity. General responsivity refers to evidence that interventions based on social learning theory and cognitive and behavioral principles are most effective. These interventions include using appropriate reinforcement, disapproval, and problem solving.

Specific responsivity refers to evidence that treatment that is tailored to offenders’ specific strengths and characteristics can facilitate progress and reduce recidivism. In addition, staff should be matched with offenders based on their personality characteristics. For example, a highly anxious offender should not be matched with a confrontational staff member.

Equally important as the type of treatment is the amount of that treatment. Different types of offenders require different doses of treatment. As with a dose of a medicine, if the amount taken is too small, it is unlikely to have the expected effect. However, a larger dose does not necessarily improve outcomes. A program’s duration and contact hours must reach the average time that is indicated in the research associated with programs of that type in order to have an effect on recidivism. Researchers have shown that inappropriate amounts of treatment or uncoordinated approaches to treatment can, in fact, have negative effects and can waste resources. For example, higher-risk offenders require more initial structure and services than lower-risk offenders. According to the National Institute of Corrections, initially after release, 40 to 70 percent of high-risk offenders’ free time should be occupied with delineated routine and appropriate services, such as treatment or employment or education assistance.
Appropriate continuity of care is also essential. *Continuity of care* refers to having appropriate treatment beginning early and continuing upon return to the community. *Strong continuity of care* is when a case manager, supervision officer, or service provider who is involved with a youth during the treatment or program continues to be involved after the youth reenters the community. The services delivered during any confinement period should maximize the chances of successful community integration.\(^{33}\)

**The program integrity/fidelity principle.** Program integrity, or fidelity, refers to how well a program works and whether a program is implemented as it was designed or intended. If a proven program’s principles or methods are materially altered, it is no longer a proven, effective treatment. When replicating a program, judges and policymakers should look for the following four components of that program to maintain program fidelity: \(^{34}\)

1. Adherence to the program’s design, with all core components being delivered to the appropriate population;
2. Exposure to the appropriate number of sessions of the appropriate length;
3. The manner in which staff deliver the program (e.g., skill in using techniques and methods); and
4. Participant responsiveness, or the extent to which the program encourages participants to be engaged and involved in the content of the program.

**Skill Train with Directed Practice**

To provide evidence-based programs effectively, those who are providing the programs must be properly trained on the specific program and the theories behind it. Providing cognitive-behavioral programs based on social learning theory has been shown to be the most effective way to teach people new behaviors, regardless of the type of behavior. \(^{35}\) Social learning theory states that all behavior is learned through rewards and punishments. Cognitive-behavioral programs train offenders to think and behave in prosocial and experiential ways, such as role-playing and practicing. These programs reinforce prosocial thoughts and behaviors, discourage antisocial thoughts and behaviors, and focus on offenders’ risks and needs. Cognitive-behavioral approaches also depend on a mutually respectful and collaborative working relationship between the offender and the treatment provider. Thus, the provider must understand social learning and effective communication techniques.
Increase Positive Reinforcement

When trying to change behaviors, people generally respond better to carrots than they do to sticks. Research has found that positive reinforcement, or encouraging the behaviors you want to be repeated, used at a four-to-one ratio to negative reinforcement, or discouraging the behaviors you do not want repeated, is most effective at changing behavior. This four-to-one theory should also be used consistently; research suggests that inconsistent negative reinforcement may actually increase the behavior you are trying to eliminate.

Engage Ongoing Support in Natural Communities

Support from families, friends, schools, and communities is essential for juvenile offenders to be successful upon reentering the community. Reentry programs and restorative justice programs—such as wraparound programs, multisystemic programs, conflict resolution and interpersonal skills training, and intensive supervision and support—are helpful in realigning prosocial supports for juvenile offenders. Reentry services must adhere to the principles above in that they match the needs and risks of the offender; the reentry or aftercare plan must be individualized and based on assessment.

Measure Relevant Processes and Practices

In order to know whether a practice or program is actually reducing recidivism and achieving other goals, relevant data must be measured. Assessment and evaluation are the only ways to gather the empirical evidence necessary to say whether a practice or program works. Staff performance must also be continuously assessed and measured to ensure that staff practices and performance adhere to all of the above principles.

Provide Measurement Feedback

Once the data collection and measurement discussed in the previous principle are conducted, it is important to convey the results and information to the juvenile offenders and juvenile justice stakeholders whom those results affect. Providing this feedback helps to increase accountability and motivation for change, lowers treatment attrition, and improves outcomes such as substance use and treatment engagement. The same is true for programs. Providing feedback to program staff increases accountability and fidelity.
Implementation Considerations

It is essential that validated, standardized instruments are used to determine risk, need, and responsivity. Screening and assessment instruments should be evidence based, or shown to have strong validity and reliability, and standardized, or administered to all juveniles the same way (see the box on evidence-based instruments). The use of assessment tools that are not valid or reliable measures may result in the inaccurate evaluation of youth and lead to inappropriate decisions regarding level of response, treatment recommendations, dispositional outcomes, and use of resources.

There can be challenges to implementing evidence-based practices and programs. Some of these challenges include a lack of any ability to collect data or measure outcomes, resistance from staff or other juvenile justice stakeholders, a lack of adequate funding, and difficulties in reallocating existing resources. Agencies must take delinquency prevention seriously enough to establish sound data collection methods to measure performance and improve it and to educate staff to implement the practices and programs. Although funding can indeed be difficult, the costs saved over the long term by implementing evidence-based practices and programs can be a persuasive argument for government funding as well as for grants.

Researchers have noted three main problems with past implementation efforts. First, many agencies claimed simply not to have time to assess offenders and thus did not use assessments. Second, if agencies did use assessments, they did not use validated or standardized instruments. Finally, even if agencies did indeed assess offenders using validated and standardized instruments, they then ignored the results, giving low-risk offenders and high-risk offenders the same services or sanctions, for example.

**EVIDENCE-BASED INSTRUMENTS**

Both screening and assessment instruments should be evidence based—shown to have strong validity and reliability—and standardized—administered to all juveniles the same way. Validity refers to the degree to which an assessment measures what it is supposed to measure. For example, items on an instrument that assesses substance abuse are valid if they are related to issues dealing with substance abuse rather than issues dealing with, say, IQ. Reliability refers to how stable and consistent an instrument is in measuring the same thing every time it is measured. For example, an individual who scores a certain way on an instrument today should score the same way on that instrument tomorrow or next week for it to be a reliable prediction of what the instrument is measuring. The instrument should also have been developed specifically for the population for which the instrument is being used. For example, if an instrument was tested and validated on a group of adult men, that instrument is not appropriate to use with anyone but adult men.
The first step in implementing evidence-based practices and programs is to heed the research that describes what is known to work and not to work in juvenile justice. Following the principles of effective intervention as noted above is equally important. In addition, researchers have noted the importance of adhering to the principles of effective intervention due to the negative effects of using practices and programs that do not adhere to these principles. Research has shown that programs that do not adhere to the principles actually increase recidivism and are ineffective, thus wasting resources and diminishing public safety.\textsuperscript{43,44} For example, boot camps, punishment or “scared straight” programs, wilderness programs, and psychological programs that are nondirective or insight oriented (e.g., psychoanalytic) were all once thought to be helpful but are now known to be ineffective or have the opposite effect of increasing crime or recidivism.\textsuperscript{45,46} Using evidence-based practices and programs will ensure that funding dollars are being used in efficient and effective ways.
NOTES


7  Ibid.


10 Judicial Council of Cal., supra note 3.


13 Latessa, supra note 1.

14 Nat. Inst. of Corrections, supra note 12.


17 Latessa, supra note 1.

18 Judicial Council of Cal., supra note 2.


22 Ibid.

23 Warren, supra note 16.


25 Lowenkamp, Pealer, Smith & Latessa, supra note 21.

26 Warren, supra note 16.

27 Smith, Gendreau & Swartz, supra note 19.

28 Ibid.


32 Nat. Inst. of Corrections, supra note 12.


34 www.oregon.gov/OCCF/Documents/JCPIEFFECTIVE_PRACTICES.pdf?ga=t

35 Smith, Gendreau & Swartz, supra note 19.
36 Nat. Inst. of Corrections, supra note 12.


38 Nat. Inst. of Corrections, supra note 12.

39 Judicial Council of Cal., supra note 2.

40 Ibid.


