

What Works in Reducing Recidivism and How Does it Relate to Drug Courts?

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ABSTRACT

Reducing recidivism has always been a goal of the criminal justice system, even when “nothing works” was the predominant belief. The purpose of this article is to provide an overview of what works in reducing recidivism and how it relates to drug courts. That recidivism can be reduced through various correctional interventions is evidenced by abundant empirical research. Over twenty years of primary evaluations, meta-analyses, and cost-benefit studies of drug courts have been conducted. On average, drug courts produce a modest but statistically significant recidivism reduction for adult drug court participants with overall cost savings. Reductions in recidivism for juvenile drug court participants are less substantial. If drug court programs are designed and implemented to adhere to the principles of effective intervention—risk, need, treatment, and fidelity—then drug courts can be made an even more effective mechanism for reducing recidivism.

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I. EVIDENCE-BASED PRACTICES: PRINCIPLES OF EFFECTIVE INTERVENTION

Over the past twenty-five years there has been a great deal of research conducted on correctional rehabilitation.¹ This large body of knowledge has generally concluded that correctional services and programs can be effective in reducing recidivism; however, not all programs are equally effective. Indeed, the most effective programs are based on several principles: the risk principle (*i.e.*, “who” to target); the need principle (*i.e.*, “what” to target); the treatment principle, also referred to as responsivity (*i.e.*, “how” to target); and the fidelity principle (*i.e.*, “how well”).² These principles constitute the RNR (*i.e.*, risk-need-responsivity) model, and they have been widely adopted in corrections.

A. *The Risk Principle*

The essence of the risk principle is that, if one wants to reduce recidivism, then one must target offenders with a higher probability of failing.³ In this context, risk refers to the probability of recidivating, not the seriousness of the offense.⁴ There are three elements to the risk principle: (1) targeting offenders with the higher probability of failure; (2) providing the most intensive services and treatment to higher risk offenders; and (3) providing intensive treatment and interventions to low risk offenders can increase recidivism rates.⁵

To understand the first element, one must understand the theory behind the risk principle.⁶ An example demonstrates the theory. On the one hand,

1. See generally D.A. ANDREWS & JAMES BONTA, *THE PSYCHOLOGY OF CRIMINAL CONDUCT* 1 (5th ed. 2010); see also Francis T. Cullen, *Rehabilitation: Beyond Nothing Works*, in 42 CRIME & JUST.: A REVIEW OF RESEARCH 299 (Michael Tonry ed., 2013). For earlier research reviews, see D.A. Andrews, Ivan Zinger, Robert Hoge, James Bonta, Paul Gendreau & Francis T. Cullen, *Does Correctional Treatment Work? A Psychologically Informed Meta-Analysis*, 28 CRIMINOLOGY 369 (1990); Paul Gendreau & Robert R. Ross, *Revivification of Rehabilitation: Evidence from the 1980s*, 4 JUST. Q. 349 (1987); Paul Gendreau & Bob Ross, *Effective Correctional Treatment: Bibliotherapy for Cynics*, 25 CRIME & DELINQ. 463 (1979).

2. See Paul Gendreau, *The Principles of Effective Intervention with Offenders*, in CHOOSING CORRECTIONAL OPTIONS THAT WORK: DEFINING THE DEMAND AND EVALUATING THE SUPPLY 117, 118 (Alan T. Harland ed., 1996).

3. Christopher T. Lowenkamp & Edward J. Latessa, *Understanding the Risk Principle: How and Why Correctional Interventions Can Harm Low-Risk Offenders*, in TOPICS IN COMMUNITY CORRECTIONS 3, 3-8 (Nat'l Inst. Corr. 2004).

4. Edward J. Latessa & Brian Lovins, *The Role of Offender Risk Assessment: A Policy Maker Guide*, 5 VICTIMS & OFFENDERS 203, 206 (2010). While the seriousness of the offense is often used to determine the sentence, risk of reoffending is usually determined by a set of risk factors that allows for the distinction of risk levels, such as low risk, moderate risk, high risk, each with an escalating probability of recidivism. See *id.*

5. See Christopher T. Lowenkamp, Edward J. Latessa & Alexander M. Holsinger, *The Risk Principle in Action: What Have We Learned from 13,676 Offenders and 97 Correctional Programs?*, 52 CRIME & DELINQ. 77 (2006).

6. See Lowenkamp & Latessa, *supra* note 3, at 3-8.

if there are 100 higher risk offenders, actuarial assessments tell us that about 60 will fail. If we provide services and well-designed programming to these offenders, we might reduce the number of offenders who recidivate to 40, which would be a 30% decrease. On the other hand, if there are 100 lower risk offenders, only about 10 would fail. If we put them in the same program with higher risk offenders, we would increase the number of failures to 20, which would be a 100 % increase in recidivism. Of course, in the end, lower risk offenders would still have a lower recidivism rate compared to higher risk offenders (*i.e.*, 20% vs. 40%), but harm has been done to the lower risk group, and a significant treatment effect would have been achieved with the higher risk offenders.

The second element of the risk principle involves providing intensive services to higher risk offenders.⁷ The essential question is, “What does ‘intensive’ mean in practice?” While most research shows that the longer someone is in treatment the greater the effects, we also see results diminish if treatment goes on too long.⁸ This diminishing return is probably due to people giving up. Recent studies have shown that higher risk offenders will require a significantly higher dosage of treatment to achieve significant reductions in recidivism.⁹ This promising line of research further supports the risk principle and indicates that we cannot have “one size fits all” programs.

The final element of the risk principle is that intensive treatment and services for lower risk offenders can often increase recidivism rates.¹⁰ There are three explanations for these findings. First, lower risk offenders can learn anti-social behavior from higher risk offenders.¹¹ Second, requiring lower risk offenders to participate in intensive or multiple programs can disrupt their pro-social networks and actually give them some new risk factors.¹² Finally, increased reporting and surveillance often leads to more technical violations.¹³ In a study of community correctional facilities (*i.e.*, halfway houses and community-based correctional facilities)

7. See Kimberly Gentry Sperber, Edward J. Latessa & Matthew D. Makarios, *Examining the Interaction Between Level of Risk and Dosage of Treatment*, 40 CRIM. JUST. & BEHAV. 338 (2013).

8. See, *e.g.*, Thomas A. Loughran, Edward P. Mulvey, Carol A. Schubert, Jeffrey Fagan, Alex R. Piquero & Sandra H. Losoya, *Estimating a Dose-Response Relationship Between Length of Stay and Future Recidivism in Serious Juvenile Offenders*, 47 CRIMINOLOGY 699 (2009).

9. See Matthew D. Makarios, Kimberly Gentry Sperber & Edward J. Latessa, *Treatment Dosage and the Risk Principle: A Refinement and Extension*, 53 J. OFFENDER REHAB. 334 (2014); Sperber, Latessa & Makarios, *supra* note 7; Guy Bourgon & Barbara Armstrong, *Transferring the Principles of Effective Treatment into a “Real World” Prison Setting*, 32 CRIM. JUST. & BEHAV. 3 (2005).

10. Lowenkamp & Latessa, *supra* note 3, at 3-8.

11. *Id.* at 7.

12. *Id.*

13. See CHRISTOPHER T. LOWENKAMP & EDWARD J. LATESSA, EVALUATION OF OHIO’S COMMUNITY BASED CORRECTIONAL FACILITIES AND HALFWAY HOUSE PROGRAMS (Ctr. Crim. Just. Res., Univ. Cincinnati 2002).

in Ohio, Lowenkamp and Latessa examined 51 programs and over 13,000 offenders, and found that over two-thirds of the programs increased recidivism rates for lower risk offenders, while about the same number of programs reduced recidivism rates for higher risk offenders.¹⁴ In a follow-up study conducted in 2010 involving 64 programs and over 20,000 offenders, similar results were found.¹⁵ When examined in totality, the average reduction in recidivism for higher risk offenders was 14%, while lower risk offenders saw an average increase of 3%.¹⁶ Other studies have shown similar results.¹⁷

B. *The Need Principle*

The need principle requires an understanding of the major factors correlated with criminal conduct. Through the work of Andrews, Bonta, and Gendreau, the major set of risk factors have been identified.¹⁸ They are listed in Table 1. Both static and dynamic factors are included in this set.

**Table 1. Major Set of Risk and Need Factors
as Identified by Andrews and Bonta[†]**

-
1. Antisocial/pro-criminal attitudes, values, beliefs & cognitive emotional states
 2. Pro-criminal associates & isolation from anti-criminal others
 3. Temperamental & antisocial personality patterns conducive to criminal activity including:
 - Weak socialization
 - Impulsivity
 - Adventurous
 - Restless/aggressive
 - Egocentrism
 - Taste for risk
 - Weak problem-solving/self-regulation & coping skills
 4. A history of antisocial behavior
-

14. *Id.* at 87.

15. EDWARD J. LATESSA, LORI BRUSMAN LOVINS & PAULA SMITH, FOLLOW-UP EVALUATION OF OHIO'S COMMUNITY BASED CORRECTIONAL FACILITY AND HALFWAY HOUSE PROGRAMS—OUTCOME STUDY 10-11 (Ctr. Crim. Just. Res., Univ. Cincinnati 2010).

16. *Id.*

17. See, e.g., Christopher T. Lowenkamp, Jennifer Pealer, Paula Smith & Edward J. Latessa, *Adhering to the Risk and Need Principles: Does it Matter for Supervision-Based Programs?*, 70 FED. PROBATION 3 (2006); James Bonta, Suzanne Wallace-Capretta & Jennifer Rooney, *A Quasi-Experimental Evaluation of an Intensive Rehabilitation Supervision Program*, 27 CRIM. JUST. & BEHAV. 312 (2000).

18. See ANDREWS & BONTA, *supra* note 1; Paul Gendreau, Tracy Little & Claire Goggin, *A Meta-Analysis of the Predictors of Adult Offender Recidivism: What Works!*, 34 CRIMINOLOGY 575 (1996).

5. Familial factors that include criminality & a variety of psychological problems in family of origin including:
 - Low levels of affection, caring & cohesiveness
 - Poor supervision & discipline
 - Outright neglect & abuse
6. Low levels of personal, educational, vocational, or financial achievement
7. Low levels of involvement in pro-social leisure activities
8. Substance abuse

[†]See ANDREWS & BONTA, *supra* note 1.

For example, a history of anti-social behavior as evidenced by a criminal record is a static factor, whereas the excessive use of illegal substances is a dynamic factor. Dynamic factors are also called criminogenic needs.¹⁹ By assessing offenders' criminogenic needs, and targeting them for change, we can reduce the probability of recidivism. Examples of criminogenic needs include anti-social attitudes, substance abuse, impulsive behavior, and anti-social friends. Offenders have additional needs, but many of them are considered non-criminogenic because they have not been found to be strongly associated with criminal conduct. Examples include physical needs, medical needs, housing, anxiety, and lack of creative abilities. Most high risk offenders are not high risk because they have a *single* risk factor; studies show that targeting *multiple* criminogenic needs produces the greatest reductions in recidivism.²⁰

1. Assessment

Using the latest generation of assessment tools is necessary to meet the risk and need principles, and over the years there have been a number of tools developed to serve this purpose. One recent example is the Ohio Risk Assessment System (ORAS),²¹ which now includes five major tools: (1) Pretrial (PAT); (2) Misdemeanor Assessment (MAT); (3) Community Supervision Tool (CST); (4) Prison Intake (PIT); and (5) Prison Reentry

19. Edward J. Latessa & Christopher Lowenkamp, *What Are Criminogenic Needs and Why Are They Important*, in FOR THE RECORD 15, 15-16 (4th Quarter 2005).

20. See Paul Gendreau, S.A. French & A. Taylor, *What Works (What Doesn't)* Revised 2002: The Principles of Effective Correctional Treatment (2002) (unpublished manuscript) (on file with author).

21. See Edward J. Latessa, Richard Lemke, Matthew Makarios, Paula Smith & Christopher T. Lowenkamp, *The Creation and Validation of the Ohio Risk Assessment System (ORAS)*, 74 FED. PROBATION 16 (2010).

(RT).²² Tools like the ORAS serve multiple purposes, including aiding in decision making, helping reduce bias (as they do not rely solely on experience, intuition, and judgment), improving the placement of an offender, and helping better utilize resources.²³ They can also be useful in reassessing an offender to determine if their risk and needs have changed over time.²⁴

C. *The Treatment Principle*

The treatment principle, also known as general responsivity, is based on research that has shown that the most effective interventions for offenders are behavioral in nature.²⁵ Behavioral interventions share certain attributes: they are focused on current factors that influence behavior, they are action oriented, and the staff utilizes core correctional practices.²⁶ These core correctional practices include effective reinforcement, effective disapproval, effective use of authority, quality interpersonal relationships, cognitive restructuring, anti-criminal modeling, structured learning/skill building, and problem solving techniques.²⁷

The most effective behavioral models used in corrections include structured social learning, where new skills and behaviors are taught, modeled, and practiced; family based approaches that train families on appropriate techniques; and cognitive behavioral approaches that target criminogenic risk factors.²⁸ Several meta-analyses have demonstrated the effectiveness of these approaches in reducing recidivism. For example, a review of family based interventions showed an average of 21% reduction in recidivism; however, the effects were stronger when the programs targeted higher risk families, focused on criminogenic needs, and used

22. *See id.* The ORAS further includes screening tools, as well as a Supplemental Assessment tool for reentry (SRT). *See* UNIV. CINCINNATI CORRECTIONS INST., OHIO RISK ASSESSMENT SYSTEM (ORAS): VERSION 2.0 FOR ADULTS 1, 1-9, 33 (Corrections Inst., Univ. Cincinnati 2014).

23. *See* Latessa, Lemke, Makarios, Smith & Lowenkamp, *supra* note 21, at 17; *see also* Latessa & Lovins, *supra* note 4, at 203-19.

24. *See* Latessa, Lemke, Makarios, Smith & Lowenkamp, *supra* note 21, at 17; *see also* Latessa & Lovins, *supra* note 4, at 203-19.

25. *See* Craig Dowden & D.A. Andrews, *The Importance of Staff Practice in Delivering Effective Correctional Treatment: A Meta-Analytic Review of Core Correctional Practice*, 48 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 203, 207 (2004).

26. *See generally id.*; D.A. Andrews & C. Carvell, *Core Correctional Training—Core Correctional Supervision and Counseling: Theory, Research, Assessment and Practice* (Carleton Univ., Aug. 1997) (unpublished training manual) (on file with author); D.A. Andrews & J. J. Kiessling, *Program Structure and Effective Correctional Practices: A Summary of the CaVic Research*, in EFFECTIVE CORRECTIONAL TREATMENT 441, 445-47 (R.R. Ross & P. Gendreau eds. 1980).

27. Ryan Labrecque, Myrinda Schweitzer & Paula Smith, *Probation and Parole Officer Adherence to the Core Correctional Practices: An Evaluation of 755 Offender-Officer Interactions*, 3 ADVANCING PRACTICE 20, 20-21 (April 2013).

28. ANDREWS & BONTA, *supra* note 1, at 49-50.

behavioral techniques.²⁹ Similarly, a study of cognitive behavioral therapy (CBT) found an average reduction in recidivism of 25%.³⁰ That percentage doubled, however, when the dosage was increased, training and fidelity were provided, barriers to completion were removed, higher risk offenders were served, and multiple needs were addressed.³¹

1. What Doesn't Work

The types of programs and approaches that have not been found to be effective in reducing recidivism include:

- Programs that cannot maintain fidelity
- Programs that target non-criminogenic needs
- Drug prevention classes focused on fear and other emotional appeals
- Shaming offenders
- Drug education programs
- Non-directive, client centered approaches
- Bibliotherapy
- Talking cures
- Self-Help programs
- Vague unstructured rehabilitation programs
- “Punishing smarter” (boot camps, scared straight, etc.)³²

Programs based on these approaches are not effective, and in some cases have actually shown to increase recidivism rates.³³

D. The Fidelity Principle

As with most things in life, doing it well makes a difference. The essence of fidelity is ensuring that an evidence-based program or intervention is delivered as designed and with integrity.³⁴ Programs that are delivered as designed and are well-run will not be effective at reducing

29. See Craig Dowden & D.A. Andrews, *Does Family Intervention Work for Delinquents? Results of a Meta-Analysis*, 45 CAN. J. CRIMINOLOGY & CRIM. JUST. 327 (2003).

30. Nana A. Landenberger & Mark W. Lipsey, *The Positive Effects of Cognitive-Behavioral Programs for Offenders: A Meta-Analysis of Factors Associated with Effective Treatment*, 1 J. EXPERIMENTAL CRIMINOLOGY 451, 460 (2005).

31. *Id.* at 470.

32. See EDWARD J. LATESSA, SHELLEY J. LISTWAN & DEBORAH KOETZLE, *WHAT WORKS (AND DOESN'T) IN REDUCING RECIDIVISM* 85-100 (2013).

33. *Id.*

34. See Edward J. Latessa & Alexander Holsinger, *The Importance of Evaluating Correctional Programs: Assessing Outcome and Quality*, 2 CORRECTIONS MGMT. Q. 22 (1998).

recidivism if they are not evidence-based. An example of this might be a boot camp or a drug education program.

Fidelity includes, but is not limited to, ensuring staff are qualified, well trained, well supervised, are modeling appropriate behavior, and have input into the program; making sure barriers are addressed, but not losing sight of targeting criminogenic needs; providing the appropriate dosage of treatment; monitoring the delivery of programs and activities; and reassessing offenders in meeting target behaviors.³⁵ The concept of fidelity also includes collecting and examining data to see if performance measures are being met and if outcomes, such as reductions in recidivism, are being achieved.

In summary, the principles of effective correctional intervention are risk, need, treatment, and fidelity. We will now turn our attention to the effectiveness of drug courts as a correctional intervention by examining what the research tells us.

II. DRUG COURT EFFECTIVENESS: WHAT DOES THE RESEARCH TELL US?

Drug courts are specialized dockets or court programs that provide treatment and judicial supervision during the criminal case process to criminal offenders with drug and alcohol problems, with the intent to reduce their future substance abuse and criminality.³⁶ Although there are variations in design and implementation, drug courts are characterized by ten “key components.”³⁷ In addition to providing appropriate treatment and close supervision to eligible offenders by a trained and educated, multi-disciplinary, and non-adversarial team, drug courts should have an evaluation plan in place to assess whether the program goals are achieved—that is, whether the drug court is effective at changing the behavior of offenders.³⁸ Irrespective of a drug court’s effectiveness or lack thereof, its evaluation contributes to the evidence base of what works and what does not work in reducing recidivism.³⁹ Drug courts have been in operation since

35. See generally Matthew Makarios, Lori Lovins, Edward Latessa & Paula Smith, *Staff Quality and Treatment Effectiveness: An examination of the Relationship between Staff Factors and the Effectiveness of Correctional Programs*, JUST. Q. (2014), available at <http://dx.doi.org/10.1080/07418825.2014.924546>.

36. U.S. DEP’T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, DRUG COURTS 1 (2015); see also Deborah Koetzle Shaffer, *Reconsidering Drug Court Effectiveness: A Meta-Analytic Review* (June 26, 2006) (unpublished Ph.D. dissertation) (on file with author).

37. See U.S. DEP’T OF JUSTICE, BUREAU OF JUSTICE ASSISTANCE, *DEFINING DRUG COURTS: THE KEY COMPONENTS 1-29* (reprint 2004) (1997).

38. See *id.* at 17-20.

39. See Lesli Blair, Carrie Coen Sullivan, Jennifer Lux, Angela J. Thielo & Lia Gormsen, *Measuring Drug Court Adherence to the What Works Literature: The Creation of the Evidence-Based Correctional Program Checklist-Drug Court*, INT’L J. OFFENDER THERAPY & COMP. CRIMINOLOGY (2014), available at DOI: 10.1177/0306624X14549950.

1989,⁴⁰ and over the years a considerable number of studies have been conducted.

This research includes primary studies, cost benefit analyses, and meta-analyses. Evaluation research generally involves assessing drug courts for their effectiveness in reducing recidivism. This assessment is done by comparing the frequency of re-arrest, or other measures of recidivism, between two groups—the group of drug court participants and one or more groups of similarly-situated offenders who did not participate in the drug court. Other drug court research involves cost-benefit analyses to determine if the additional costs associated with drug courts are justified by their reductions in recidivism, and meta-analyses, which are designed to compute the average effectiveness of all of the drug court evaluations combined. We will start by reviewing some of the primary studies related to adult drug courts.

A. Primary Studies of Adult Drug Courts

Evaluations involve the use of social science research methods to systematically investigate the effectiveness of a program or intervention.⁴¹ A program's sponsor may be interested in different aspects of its effectiveness—such as its need, design, efficiency, or cost-effectiveness.⁴² In examining the research on drug court effectiveness, however, we primarily are interested in outcome evaluations. In a typical outcome evaluation of a drug court program, the goal is to determine whether the program (i.e., drug court participation) influenced the outcome (i.e., recidivism) for offenders.⁴³ Recidivism may be measured as an offender's re-arrest during the program or other designated follow-up period in months or years.⁴⁴ Other measures of recidivism include substance use, court appearances, court filings, convictions, crime-specific arrests or convictions, numbers of arrests, self-reported criminal behavior, and time to arrest.⁴⁵ To

40. The first drug court was established in Dade County, Florida. See JOHN S. GOLDKAMP & DORIS WEILAND, NAT'L INST. OF JUSTICE RESEARCH BRIEF, ASSESSING THE IMPACT OF DADE COUNTY'S FELONY DRUG COURT 1 (1993).

41. PETER H. ROSSI, MARK W. LIPSEY & HOWARD E. FREEMAN, EVALUATION: A SYSTEMATIC APPROACH 16 (7th ed. 2004).

42. *Id.* at 18.

43. SHELLEY JOHNSON LISTWAN & EDWARD J. LATESSA, THE KOOTENAI AND ADA COUNTY DRUG COURTS: OUTCOME EVALUATION FINDINGS 12 (2003).

44. See, e.g., Andres F. Rengifo & Don Stemen, *The Impact of Drug Treatment on Recidivism: Do Mandatory Programs Make a Difference? Evidence from Kansas's Senate Bill 123*, 59 CRIME & DELINQ. 930 (2013) (using crime-specific re-arrest and conviction measures).

45. See, e.g., Randall Brown, *Drug Court Effectiveness: A Matched Cohort Study in the Dane County Drug Treatment Court*, 50 J. OFFENDER REHABILITATION 191 (2011) (using time to new crime as outcome measure); Terance D. Miethe, Hong Lu & Erin Reese, *Reintegrative Shaming and*

determine whether drug court participation had an influence on the outcome, a comparison of the recidivism measures between the drug court group and at least one other comparison group must be made.⁴⁶ The difference between the two groups is the impact or the effect of the drug court program. The magnitude of the program effect, or effect size, may be computed in various ways, although most researchers look for at least a statistically significant (i.e., not due to chance) difference in assessing effect size.⁴⁷

The more similar the two groups are (especially in terms of characteristics that are closely related to criminal behavior, such as sex, age, and criminal history), the stronger the inference can be drawn that the difference between the two groups is truly due to drug court participation and not some other confounding influence.⁴⁸ Research design determines the conditions under which two groups are compared, and some research designs are considered to be more methodologically rigorous than others. Thus, the results of experimental studies with random assignment into treatment and control groups tend to be more convincing than those of matched, historical, or other comparison groups found in quasi-experimental designs.⁴⁹

A sample of primary evaluations is presented in reverse chronological order in Table 2, and these evaluations are discussed in relation to their findings.⁵⁰ The findings are mixed. Some studies show that drug courts have no effect on recidivism, and at least one study found that participation in the drug court was associated with increased rates of recidivism.⁵¹ The majority of studies, however, show adult drug courts are effective in

Recidivism Risks in Drug Court: Explanations for Some Unexpected Findings, 46 CRIME & DELINQ. 522 (2000) (using court appearances as measure of recidivism).

46. ROSSI, LIPSEY & FREEMAN, *supra* note 41, at 236-59.

47. *Id.* at 301-08 (discussing raw differences, standardized mean differences, odds-ratio effect size, and statistical significance); see also PAUL D. ELLIS, THE ESSENTIAL GUIDE TO EFFECT SIZES: STATISTICAL POWER, META-ANALYSIS, AND THE INTERPRETATION OF RESEARCH RESULTS 3-42 (2010) (discussing wide range of effect sizes and noting the importance of sample size and statistical power).

48. See ROSSI, LIPSEY & FREEMAN, *supra* note 41, at 236-59; see also Christopher J. Sullivan, Lesli Blair, Edward Latessa & Carrie Coen Sullivan, *Juvenile Drug Courts and Recidivism: Results from a Multisite Outcome Study*, JUST. Q. (forthcoming 2014), available at <http://dx.doi.org/10.1080/0741882.5.2014.908937>; Ojmarrh Mitchell, David B. Wilson, Amy Eggers & Doris L. MacKenzie, *Assessing the Effectiveness of Drug Courts on Recidivism: A Meta-analytic Review of Traditional and Non-Traditional Drug Courts*, 40 J. CRIM. JUST. 60, 60-71 (2012).

49. See ROSSI, LIPSEY & FREEMAN, *supra* note 41, at 236-259; Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 63.

50. Table 2 does not present an exhaustive list of evaluation studies. Instead, evaluations were chosen to demonstrate a variety of jurisdictions, analytical techniques, recidivism measures, and follow-up periods, while also focusing on the important contributions of the studies as determined by their findings, recency, sample size, methodological rigor, and place of publication.

51. See *infra* Table 2.

reducing the recidivism rate of the group.⁵² Across these categories, there is a wide range of effect sizes.

Table 2. Evaluations of Drug Court Outcomes, Adult Drug Courts (DCs)

Study	Jurisdiction	Results
Gifford et al. (2014)	19 DCs across North Carolina	No significant difference in re-arrests of drug, violent, or any crimes in 2-year follow up period
Cissner et al. (2013)	86 DCs across New York	No significant difference in re-arrests and drug re-arrests in 3-year follow up period, but DC participants had fewer re-arrests at one year (22% vs. 25%) and at two years (32% vs. 36%)
Rempel et al. (2012)	23 DCs across 7 states	No significant difference in re-arrests in 18-month follow up period, but number of self-reported crimes decreased by half for DC participants
Somers et al. (2012)	Vancouver, Canada	DC participants had significantly greater reductions in re-arrests in 2-year period before and after drug court for all offenses (-0.95 vs. -0.46) and drug offenses (-0.42 and -0.05)
Brown (2011)	Dane County, Wisconsin	DC participants had significantly fewer re-arrests (30% vs. 46%) and longer time to re-arrest
Evans et al. (2010)	DCs across California	DC participants had a reduction in re-arrests compared to Prop 36 treatment participants' increase in re-arrests, 12 months before and after treatment (-32.1% vs. +25.8%)
Listwan et al. (2008)	11 DCs across Idaho	DC graduates had significantly fewer re-arrests compared to non-graduates and non-graduates (19% vs. 51% and 37%) during follow up
Ferguson et al. (2006)	5 DCs across Maine	DC participants had significantly fewer re-arrests during 12-month follow up period (17.5% vs. 33.1%)

52. See *infra* Table 2.

Carey & Marchand (2005)	Marion County, Oregon	No significant difference in re-arrests during follow up
Gottfredson et al. (2005)	Baltimore, Maryland	DC participants had significantly fewer re-arrests (43% vs. 64.8%) and self-report crime (5% vs. 13%) after three years post-randomization
Listwan et al. (2003)	Hamilton County, Ohio	No significant difference in re-arrests of drug, violent, or any crimes in 12-month follow up, but the odds of drug re-arrest are significantly lower for DC participants (10% vs. 20%)
Harrell et al. (2002)	Birmingham, Alabama	DC participants had significantly fewer re-arrests during 6-12-month follow up period (21% vs. 39%)
USAAVCC (2001)	Salt Lake County, Utah	DC participants had significantly fewer re-arrests during 18-month follow up period (39% vs. 78%)
Goldkamp et al. (2001)	Philadelphia, Pennsylvania	No significant different in re-arrests among DC participants, those who declined DC, and non-referrals after 12-month follow up period
Listwan et al. (2001)	Erie County, Ohio	DC participants had significantly fewer re-arrests during (12-40 months) follow up period (36% vs. 69%)
Listwan et al. (2001)	Akron, Ohio	DC participants had significantly fewer re-arrests during (6 to 36 months) follow up period (39% vs. 51.5%)
Bavon (2001)	Tarrant County, Texas	No significant difference in re-arrests or convictions in 12-month follow up period
Harrison et al. (2001)	Denver County, Colorado	No significant difference in new filings between drug court graduates and probationers in follow up period
Wright & Clymer (2000)	7 DCs across Oklahoma	No difference in re-arrests at 3 or 6 months, but DC participants had significantly fewer re-arrests (14% vs. 22%) at 24 months

Miethe, et al. (2000)	Clark County, Nevada	DC participants had significantly greater court appearances (26% vs. 16%) during follow up period (12 months and greater)
Ericson et al. (1999)	Hennepin County, Minnesota	No significant difference in charges and convictions in 9-month follow up period
Vito & Tewksbury (1998)	Jefferson County, Kentucky	DC graduates had significantly fewer felony convictions during follow up period (up to 12 months) compared to non-graduates and non-participants (13 % vs. 59.5% and 55%)
Granfield et al. (1998)	Denver County, Colorado	No significant difference in re-arrests and revocations during 12-month follow up period, but DC participants were less likely to be re-arrested on drug charge
Deschenes et al. (1994)	Maricopa County, Arizona	No significant difference in re-arrests (31.3% vs. 32.6%) during 6-month follow up period, but DC participants were less likely to have technical violations

1. No Statistically Significant Differences

A number of drug courts have failed to produce evidence of recidivism reductions. Actual differences between drug court participants and comparison groups may exist, but the differences may be the result of chance rather than the drug court programs. The first such study was conducted by RAND of the post-adjudication drug court program for probationers in Maricopa County, Arizona.⁵³ First-time felony drug offenders were randomly assigned into treatment and control groups.⁵⁴ In terms of re-arrest rates, there was no statistically significant difference between drug court participants (31.3%) and routine probationers (32.6%).⁵⁵ A more recent experiment of the Rio Hondo DUI court in Los Angeles

53. Elizabeth Piper Deschenes, Susan Turner & Peter W. Greenwood, *Drug Court or Probation? An Experimental Evaluation of Maricopa County's Drug Court*, 18 JUST. SYS. J. 55, 56 (1995).

54. *Id.* at 60.

55. *Id.* at 69-70. In terms of technical violations, however, drug court participants were less likely to have drug (10% vs. 26%), alcohol (1% vs. 4%), or nonappearance (21% vs. 30%) violations. *Id.* at 69.

County, California, also showed that DUI court participation was not significantly associated with subsequent DUIs.⁵⁶

The remaining studies showing no differences between drug court participants and non-participants relied on quasi-experimental research designs. These studies vary in their composition of comparison groups, recidivism measures, and follow-up periods. There was not a statistically significant difference in re-arrest between drug court participants (12.7%) and historical (*i.e.*, pre-drug court) comparison group of drug offenders (16.8%) in Tarrant County, Texas.⁵⁷ Similar results were found in an evaluation of the Hennepin County, Minnesota drug court.⁵⁸ Drug court participants were compared to a group of drug probationers and prisoners from the previous year.⁵⁹ After a nine-month follow up period, no statistically significant differences were observed with respect to new charges (13.9% vs. 13.3%), as well as other recidivism measures.⁶⁰ A comparison group of drug offenders who were eligible for drug court but did not receive drug treatment services was used in an evaluation of the Hamilton County, Ohio drug court.⁶¹ Drug court participants and the comparison group had similar proportions of re-arrests (32% vs. 37%) and average number of arrests (.47 vs. .56).⁶²

The Denver County, Colorado drug court was evaluated twice. Drug court participants were compared to two historical comparison groups drawn from the two years immediately preceding the drug court inception.⁶³ The three groups were statistically equivalent with respect to narcotics charge, sex, age, and criminal history; nevertheless, the rates of revocation and re-arrest in the twelve-month follow up period did not differ significantly.⁶⁴ In the second evaluation, the Denver drug court participants

56. John M. MacDonald, Andrew R. Morral, Barbara Raymond & Christine Eibner, *The Efficacy of the Rio Hondo DUI Court: A 2-Year Field Experiment*, 31 EVAL. REV. 4, 16 (2007).

57. A. Bavon, *The Effect of the Tarrant County Drug Court Project on Recidivism*, 24 EVAL. & PROGRAM PLAN. 13, 18 (2001). Additionally, no statistically significant differences were found on other measures of recidivism including time to arrest, number of days sentenced, and bookings. *Id.* at 18-19.

58. See REBECCA ERICSON, SARAH WELTER & THOMAS L. JOHNSON, MINN. CITIZENS COUNCIL ON CRIME & JUSTICE, EVALUATION OF THE HENNEPIN COUNTY DRUG COURT (1999).

59. *Id.* at 34.

60. *Id.* at 48-49.

61. Shelley Johnson Listwan, Jody L. Sundt, Alexander M. Holsinger & Edward J. Latessa, *The Effect of Drug Court Programming on Recidivism: The Cincinnati Experience*, 49 CRIME & DELINQ. 389, 396 (2003).

62. *Id.* at 400-401. After statistically controlling for relevant factors, the odds of re-arrest were calculated as 27% for drug court participants and 35% for non-participants. *Id.* at 403. The odds of drug re-arrest are statistically significantly different at 10% and 20%, respectively. *Id.* at 404.

63. Robert Granfield, Cynthia Eby & Thomas Brewster, *An Examination of the Denver Drug Court: The Impact of a Treatment-oriented Drug-offender System*, 20 LAW & POL'Y 183, 189 (1998).

64. *Id.* at 190, 195-96. Although not statistically significant, drug court participants had a more revocations (22% vs. 15% and 14%) and fewer arrests (53% vs. 58% and 58%) than the comparison groups. *Id.* at 195-96.

were compared to a historical group of drug offenders who were on probation or deferred judgment.⁶⁵ The drug court group had a comparatively larger proportion (43% vs. 36.2%) of re-arrests during a twenty-four-month follow up period, although the difference is not statistically significant.⁶⁶ Even when examining only graduates of the drug court and new court filings as a measure of recidivism, the groups were not different (18.4% vs. 22.4% at twenty-four months).⁶⁷

Some evaluation results are nonsignificant but still promising. Drug court participants from seven counties in Oklahoma were matched with a group of probationers based on their criminal history and felony charge.⁶⁸ Re-arrest rates were not different between the groups after six months, but statistically significant differences emerged with longer follow-up periods.⁶⁹ At twenty-four months, for example, 14% of drug court participants had been arrested compared to 22% of probationers.⁷⁰ Marion County, Oregon drug court participants were matched in the aggregate to a group of offenders on age, race, sex, and criminal history.⁷¹ The groups did not significantly differ on re-arrest during the follow up period (13% vs. 27%), but the low sample size contributes to the non-significance, and these results show a general trend of recidivism reduction for drug court participants.⁷² Philadelphia drug court participants had fewer re-arrests than offenders who refused to participate and those who were not referred; however, after statistically controlling for demographic factors, the differences were not statistically significant.⁷³ Finally, a recent rigorous analysis of New York's drug courts has shown that drug court participants and non-participants did not differ significantly on a few measures of recidivism after the three-year follow up period, such as any re-arrest (42% vs. 44%) or drug re-arrest (17% vs. 19%).⁷⁴ That said, drug court participants had a significantly

65. LINDA HARRISON, DIANE PATRICK & KIM ENGLISH, OFFICE OF RESEARCH AND STATISTICS, DIV. OF CRIMINAL JUSTICE, COLO. DEP'T OF PUB. SAFETY, AN EVALUATION OF THE DENVER DRUG COURT: THE EARLY YEARS, 1995-1996 24 (2001).

66. *Id.* at 32-33.

67. *Id.*

68. DAVID WRIGHT & BOB CLYMER, OKLA. STATISTICAL RESEARCH CTR., EVALUATION OF OKLAHOMA DRUG COURTS, 1997-2000 11 (2000).

69. *Id.*

70. *Id.* The statistically significant differences emerged at 12 months (10% vs. 14%); 15 months (10% vs. 19%), 18 months (11% vs. 22%), 21 months (12% vs. 22%), and 24 months (14% vs. 22%). *Id.*

71. SHANNON CAREY & GWEN MARCHAND, NPC RESEARCH, MARION COUNTY ADULT DRUG COURT OUTCOME EVALUATION FINAL REPORT 7 (2005).

72. *Id.* at 8-9.

73. JOHN S. GOLDKAMP, DORIS WEILAND & JAMES MOORE, THE PHILADELPHIA TREATMENT COURT, ITS DEVELOPMENT AND IMPACT: THE SECOND PHASE (1998-2000) 1 (2001). In a twelve-month follow up period, 32% of participants had been re-arrested compared to 43% of the refusers and 38% of the non-referrals. *Id.* at 109 n.45.

74. AMANDA B. CISSNER, MICHAEL REMPEL & ALLYSON WALKER FRANKLIN, CTR. FOR COURT INNOVATION, JOHN K. ROMAN & SAMUEL BIELER, THE URBAN INST., ROBYN COHEN & CAROLYN R.

lower proportion of re-arrests at both the one-year and two-year follow up periods.⁷⁵

2. Drug Courts Performed Worse

At least one study has found that participation in the drug court was associated with increased rates of recidivism. Compared to a random sample of non-participants of the same charges and drugs, Las Vegas (Clark County, Nevada) drug court participants had a significantly larger proportion of subsequent court appearances during the one-year follow up period (26% vs. 16%).⁷⁶ Although methodological limitations could explain this finding, the authors hypothesized that, *inter alia*, the observed degradation of participants by the drug court staff may be an important influence on the failure of the Las Vegas drug court.⁷⁷ Such programmatic characteristic is inconsistent not only with reintegrative shaming as suggested by the authors, but also with the key features of drug courts and the principles of effective intervention.

3. Drug Courts Performed Better

The vast majority of drug court evaluations show positive results. Although space constraints prohibit a discussion of all of these evaluations, we briefly discuss key studies conducted in a variety of settings over the past two decades.

Some evaluations report large reductions in re-arrest. Assessments of two drug courts in Ohio showed large reductions in recidivism for drug court participants.⁷⁸ Compared to a group of eligible drug offenders matched on sex and race, drug court participants had fewer re-arrests in Erie County (35.9% vs. 68.8%)⁷⁹ and in Akron (39.4% vs. 51.5%)⁸⁰ during the follow up periods. A multi-county evaluation of Maine's drug courts also

CADORET, N.Y. STATE UNIFIED COURT SYS., A STATEWIDE EVALUATION OF NEW YORK'S ADULT DRUG COURTS: IDENTIFYING WHICH POLICIES WORK BEST 43 (2013) [hereinafter NEW YORK EVALUATION].

75. *Id.* The differences are small, but still statistically significant due to the large sample size. At one year post-enrollment, participants and non-participants differed on any re-arrest (22% vs. 25%) and any drug re-arrest (8% vs. 11%); and at two years post-enrollment, the proportions increased, but they still differed on any re-arrest (32% vs. 36%) and any drug re-arrest (13% vs. 15%). *Id.*

76. Miethe, Lu & Reese, *supra* note 45, at 530-32.

77. *Id.* at 536-37.

78. See SHELLEY JOHNSON LISTWAN, DEBORAH KOETZLE SHAFFER & EDWARD J. LATESSA, UNIV. OF CINCINNATI, CTR. FOR CRIMINAL JUSTICE RESEARCH, THE ERIE COUNTY DRUG COURT: OUTCOME EVALUATION FINDINGS (2001) [hereinafter THE ERIE COUNTY DRUG COURT]; SHELLEY JOHNSON LISTWAN, DEBORAH KOETZLE SHAFFER & EDWARD J. LATESSA, UNIV. OF CINCINNATI, CTR. FOR CRIMINAL JUSTICE RESEARCH, THE AKRON MUNICIPAL DRUG COURT: OUTCOME EVALUATION FINDINGS (2001) [hereinafter THE AKRON MUNICIPAL DRUG COURT].

79. THE ERIE COUNTY DRUG COURT, *supra* note 78, at 38.

80. THE AKRON MUNICIPAL DRUG COURT, *supra* note 78, at 43.

showed a large reduction.⁸¹ Drug court participants were arrested less frequently than non-participants during the follow up period (17.5% vs. 33.1%).⁸² Drug court participants in Dane County, Wisconsin, had a significantly lower rate of re-arrest (30% vs. 46%), as well as a longer time to re-arrest, than the matched comparison group.⁸³

Graduates of drug courts tend to perform better on recidivism outcomes. In an evaluation of the Jefferson County, Kentucky drug court, felony reconviction rates after a one-year follow up period were significantly lower for drug court graduates (13%) compared to drug court non-graduates (59.5%) and eligible offenders who chose not to enter the drug court (55.4%).⁸⁴ Another assessment comparing Salt Lake County, Utah drug court graduates to non-graduates and eligible offenders found similar reductions in re-arrests in an eighteen-month follow up period.⁸⁵ In a multi-site study, drug court participants were compared to drug offenders on probation who were matched by county, risk, and need in eleven felony drug courts in Idaho.⁸⁶ Researchers found that graduates had fewer re-arrests (19%) compared to non-graduates (51%) and non-participants (37%).⁸⁷

Two experiments bolster the evidence that drug courts can reduce crime. In an evaluation of the drug court in Baltimore, Maryland, in which offenders were randomly assigned to treatment and control conditions, researchers determined that drug court participants were re-arrested (43% vs. 64.8%) and self reported criminal activity (5% vs. 13%) at significantly lower rates than non-participants, even three years postrandomization.⁸⁸ Birmingham, Alabama drug court participants also self reported significantly less criminal activity at six months post-entry (with selection

81. ANDREW FERGUSON, BIRCH MCCOLE & JODY RAIQ, UNIV. OF S. MAINE, A PROCESS AND SITE-SPECIFIC OUTCOME EVALUATION OF MAINE'S ADULT DRUG TREATMENT COURT PROGRAMS 26 (2006).

82. *Id.*

83. Brown, *supra* note 45, at 196.

84. Gennaro F. Vito & Richard A. Tewksbury, *The Impact of Treatment: The Jefferson County (Kentucky) Drug Court Program*, 62 FED. PROBATION 46, 49 (1998).

85. See UTAH SUBSTANCE ABUSE & ANTI-VIOLENCE COORDINATING COUNCIL, SALT LAKE COUNTY DRUG COURT OUTCOME EVALUATION 2 (2001). The proportion of re-arrests for drug court graduates was 39.2% compared to 55.4% for non-graduates and 78% for eligible non-participants. *Id.* at 5.

86. SHELLEY JOHNSON LISTWAN & JAMES BOROWIAK, KENT STATE UNIV., EDWARD J. LATESSA, UNIV. OF CINCINNATI, AN EXAMINATION OF IDAHO'S FELONY DRUG COURTS: FINDINGS AND RECOMMENDATIONS 14 (2008).

87. *Id.* at 63.

88. Denise C. Gottfredson, Brook W. Kearley, Stacy S. Najaka & Carols M. Rocha, *The Baltimore City Drug Treatment Court: 3-Year Self-Report Outcome Study*, 29 EVAL. REV. 42, 54 (2005).

bias correction) and were arrested less frequently at twelve months post-entry.⁸⁹

More recent evaluations tend to employ analytical techniques designed to improve causal inferences with non-experimental data. Using the rigorous technique of propensity score matching, re-arrests were compared between three groups in voluntary post-plea drug courts in North Carolina.⁹⁰ Researchers found a significant difference of 11% between those who completed the program and those who did not, and a significant difference of 9% for participants who did not complete the program and those who were referred but chose not to enroll.⁹¹ Drug court participation in Vancouver, Canada, also led to a large recidivism reduction.⁹² The difference in offending pre and post drug court for the drug court group was compared to that difference in the pre and post periods for the propensity score matched comparison group, and drug court participants experienced a significantly greater reduction than the matched group (-0.95 vs. -0.46).⁹³ Moreover, outcomes in 23 drug courts were compared to 6 comparison courts in seven states.⁹⁴ Researchers estimated that the drug courts prevented, on average, 1.7 criminal activities per offender per month.⁹⁵ Building on this evaluation, a large-scale evaluation of drug courts across all counties of New York was recently conducted.⁹⁶ Although not all measures of recidivism were statistically significantly different, drug court participants had lower arrest rates for felonies, drug sales, and convictions at the end of the three-year follow up.⁹⁷ Across a range of research designs, evaluation results support the conclusion that drug courts reduce recidivism.

89. Adele Harrell, Ojmarrh Mitchell, Alexa Hirst, Douglas Marlowe & Jeffrey Merrill, *Breaking the Cycle of Drugs and Crime: Findings from the Birmingham BTC Demonstration*, 1 CRIMINOLOGY & PUB. POL'Y 189, 206-07 (2002).

90. Elizabeth J. Gifford, Lindsey M. Eldred, Sabrina A. McCutchan & Frank A. Sloan, *The Effects of Participation Level on Recidivism: A Study of Drug Treatment Courts Using Propensity Score Matching*, 9:40 SUBSTANCE ABUSE TREATMENT, PREVENTION & POL'Y 3 (2014).

91. *Id.* at 6.

92. Julian M. Somers, Lauren Currie, Akm Moniruzzaman, Faith Eiboff & Michelle Patterson, *Drug Treatment Court of Vancouver: An Empirical Evaluation of Recidivism*, 23 INT'L J. DRUG POL'Y 393 (2012).

93. *Id.* at 397-98.

94. SHELLI B. ROSSMAN ET AL., URBAN INST. JUSTICE POL'Y CTR., THE MULTI-SITE ADULT DRUG COURT EVALUATION: THE IMPACT OF DRUG COURTS 2-3 (2011).

95. *Id.* at 126.

96. NEW YORK EVALUATION, *supra* note 74, at 5.

97. *Id.* at 43.

B. Cost-Benefit Studies: Are the Reductions in Recidivism Worth the Cost?

Although drug courts are generally more effective than traditional adjudication at reducing recidivism, they are believed to be more intensive and thus more costly.⁹⁸ Cost-benefit analyses and other economic evaluations can determine whether a program is worth the cost and which programs are most cost-effective.⁹⁹ There are a limited number of cost-benefit studies, many of which take different approaches. However, the majority of these studies show that drug courts are cost effective. Key studies are discussed below.

A cost-benefit study of Oregon's adult drug courts was conducted in 2011, in which a transactional and institutional cost analysis (TICA) approach was taken.¹⁰⁰ The difference between outcome costs (e.g., jail time served, treatment costs, victimization costs) for each type of offender and transaction (e.g., drug test, court appearance) and other program costs represents the cost savings of the drug courts.¹⁰¹ The average cost of traditional adjudication (\$9,389) was found to be lower than the average cost of the drug court program (\$16,411).¹⁰² However, because each of the 20 adult drug courts in Oregon was effective at reducing recidivism over a three-year period, drug courts are cost beneficial.¹⁰³ Due to fewer new crimes and reduced incarceration, the average cost savings per drug court participant was \$6,812; this figure increases to \$16,933 when victimization costs are included.¹⁰⁴

On a regular basis, the Washington State Institute for Public Policy systematically reviews the research literature to identify programs that reduce crime, including juvenile and adult drug courts.¹⁰⁵ After conducting

98. See generally Shannon M. Carey, Theresa Herrera Allen, Tamara Perkins & Mark S. Waller, *A Detailed Cost Evaluation of a Juvenile Drug Court that Follows the Juvenile Drug Court Model (16 Strategies)*, 64 JUV. & FAM. CT. J. 1 (2013).

99. ROSSI, LIPSEY & FREEMAN, *supra* note 41, at 60.

100. SHANNON M. CAREY & MARK S. WALLER, NPC RESEARCH, OREGON DRUG COURT COST STUDY: STATEWIDE COSTS AND PROMISING PRACTICES 6 (2011). The authors justify this approach in the drug court context: "TICA is an intuitively appropriate approach to conducting costs assessment in an environment such as a drug court, which involves complex interactions among multiple taxpayer-funded organizations." *Id.*

101. *Id.* at 12-15.

102. *Id.* at 24.

103. *Id.* at 25.

104. CAREY & WALLER, *supra* note 100, at 31-32.

105. See ELIZABETH K. DRAKE, WASH. STATE INST. FOR PUB. POL'Y, CHEMICAL DEPENDENCY TREATMENT FOR OFFENDERS: A REVIEW OF THE EVIDENCE AND BENEFIT-COST FINDINGS 48-55, app. C (2012) [hereinafter CHEMICAL DEPENDENCY]; see also Elizabeth K. Drake, Steve Aos, and Marna G. Miller, *Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State*, 4 VICTIMS & OFFENDERS 170 (2009)[hereinafter *Evidence-Based Public Policy*].

a meta-analysis, the Institute calculates a monetary value on the recidivism reduction and the costs of implementing the program to provide the State with an expected return on investment and the odds of breaking even.¹⁰⁶ As of 2012, the benefit to cost ratio of adult drug courts was estimated at \$1.77, which represents a 6% return on investment, with a 100% chance of a positive net present value.¹⁰⁷ That is, the State can expect \$1.77 return for every \$1.00 spent on adult drug court programming.

According to the Institute, juvenile drug courts would provide an even greater return on investment, due to increased benefits to both participants and taxpayers, although the probability of a positive net present value is lower.¹⁰⁸ The TICA approach was taken in a detailed cost analysis of one particular juvenile drug court as part of a larger evaluation.¹⁰⁹ The costs of juvenile drug court were estimated to be higher than those of adult drug courts, as juvenile drug courts are more resource intensive.¹¹⁰ Drug court graduates saved taxpayers \$10,958 per participant in the two-year follow up period, and even participants who did not graduate represented almost \$1,000 in savings.¹¹¹ Using a different cost savings formula, it was estimated that the North Dakota juvenile drug courts reduced recidivism and produced a savings of \$62,400 in court and victim costs.¹¹² Juvenile drug courts in Maryland produced savings of approximately \$3,000 to \$8,000 per participant during the relevant follow up periods.¹¹³

Another economic evaluation was conducted in which the costs of four interventions were compared to determine which intervention was the most cost-effective.¹¹⁴ Juvenile offenders were randomly assigned to four interventions: family court with community services, drug court with community services, drug court with multisystemic therapy (MST), and

106. See *Evidence-Based Public Policy*, *supra* note 105.

107. See CHEMICAL DEPENDENCY, *supra* note 105, at 35. Total benefits are estimated at \$7,391, and costs beyond the cost of traditional adjudication are estimated at \$4,183. *Id.*

108. *Id.* at 46. Total benefits are estimated at \$13,861, and total costs are estimated at \$3,088 for a benefit to cost ratio of \$4.50. However, these estimates are based on a fifteen-study meta-analysis that estimated an average effect size of 12%. More recent meta-analyses of juvenile drug court evaluation show a much lower average recidivism reduction. See *infra* Part IV.D.

109. See Carey, Allen, Perkins & Waller, *supra* note 98, at 6.

110. *Id.* at 10.

111. *Id.* at 17-19. Offenders terminated from the drug court represented a loss of approximately \$6,000 due to the high cost of detention and jail. *Id.* at 16.

112. KEVIN M. THOMPSON, N.D. STATE UNIV., A COST-BENEFIT ESTIMATE OF NORTH DAKOTA'S JUVENILE DRUG COURT: RECIDIVISM COST SAVINGS 14 (2002).

113. See NPC RESEARCH, ST. MARY'S COUNTY JUVENILE DRUG COURT OUTCOME AND COST EVALUATION 36 (2010); NPC RESEARCH, BALTIMORE COUNTY JUVENILE DRUG COURT OUTCOME AND COST EVALUATION 34 (2010). *But see*, NPC RESEARCH, ANNE ARUNDEL COUNTY JUVENILE TREATMENT COURT OUTCOME AND EVALUATION 32 (2010).

114. Ashli J. Sheidow, Jayani Jayawardhana, W. David Bradford, Scott W. Henggeler & Steven B. Shapiro, *Money Matters: Cost-Effectiveness of Juvenile Drug Court With and Without Evidence-Based Treatments*, 21 J. CHILD & ADOLESCENT SUBSTANCE ABUSE 69, 73-74 (2012).

drug court with MST and contingency management.¹¹⁵ The average annual costs for the juvenile drug court and for the treatment components were calculated, with the total costs per person estimated at \$3,718, \$9,178, \$12,499, and \$12,994, respectively.¹¹⁶ An average cost-effectiveness ratio (*i.e.*, costs divided by the mean number of offenses reduced through treatment), was calculated for each recidivism outcome within each intervention. For all self-reported delinquency, the drug court interventions were more cost-effective than traditional family court, and they became more cost-effective with each additional treatment component.¹¹⁷ Moreover, for self-reported status offense and crimes against persons, the family court was inefficient in obtaining the recidivism reduction outcome.¹¹⁸ Overall, these cost studies suggest that, compared to traditional adjudication, drug courts reduce recidivism, which ultimately reduces costs.

C. *Meta-Analyses: Combined Results of Drug Court Evaluations*

Primary evaluations of adult and juvenile drug courts produced mixed findings of effectiveness, but the weight of the evidence suggests that drug courts reduce recidivism of its participants. In determining how much of a reduction can be expected, the primary evaluations discussed above suggest a considerable range of values. Meta-analysis has become the method of choice for reviewing studies; it involves a statistical technique of combining the results of all evaluations to produce a more precise estimate of an average effect size of the outcome of interest—here, recidivism reduction.¹¹⁹ There are limitations to this analytical technique, however.¹²⁰ Of particular concern is the difficulty in combining very different studies and the methodological rigor of those underlying studies.¹²¹ Notwithstanding these limitations, meta-analyses are useful in producing an overall estimate of how much recidivism reduction can be expected with drug courts.¹²² Moreover, meta-analyses produce insights as to which programmatic characteristics are most strongly related to successful drug courts.¹²³ From a policy perspective, meta-analysis can provide more definitive conclusions than typical narrative or subjective reviews of the primary evaluations.¹²⁴

115. *Id.* at 75.

116. *Id.* at 77-81.

117. *Id.* at 82.

118. *Id.*

119. ROSSI, LIPSEY & FREEMAN, *supra* note 41, at 324-25.

120. For strengths and limitations of meta-analytical methods, see MARK W. LIPSEY & DAVID B. WILSON, PRACTICAL META-ANALYSIS 5-10 (2000).

121. ROSSI, LIPSEY & FREEMAN, *supra* note 41, at 328.

122. *Id.* at 329.

123. *Id.*

124. *Id.*

As the number of primary studies on drug courts has grown, so has the number of meta-analytic studies. Virtually all of these studies have concluded that adult drug courts are effective in reducing recidivism; however, the overall effect is modest. Meta-analyses of adult drug court evaluations are presented in Table 3 and are discussed below.

**Table 3. Meta-Analyses of Drug Court Evaluations,
Adult and Juvenile Drug Courts (DCs)**

Study	Studies/Courts	Notable Findings
Stein et al. (2015)	31 juvenile DCs	<ul style="list-style-type: none"> • Average 8% reduction in recidivism
Mitchell et al. (2012)	92 adult DCs, 28 DWI courts, and 34 juvenile DCs	<ul style="list-style-type: none"> • Average 12.4% reduction for adult DCs • Similar reduction for DWI courts • No significant reduction for juvenile DCs per high quality studies
Shaffer (2011)	60 studies/76 DCs	<ul style="list-style-type: none"> • Average 9% reduction in recidivism • 8-16 month program length is more effective • DCs requiring AA/NA are less effective
Gutierrez & Bourgon (2009)	96 studies	<ul style="list-style-type: none"> • Average 8% reduction in recidivism
Wilson et al. (2006)	50 studies/55 DCs	<ul style="list-style-type: none"> • Average 12.3% reduction in recidivism • No significant reduction for 6 juvenile DCs
Latimer et al. (2006)	60 studies	<ul style="list-style-type: none"> • Average 14% reduction in recidivism • No significant reduction for juvenile DCs
Shaffer (2006)	60 studies/76 DCs	<ul style="list-style-type: none"> • Average 10% reduction for adults • Average 5% reduction for juveniles

Lowenkamp et al. (2005)	22 studies	<ul style="list-style-type: none"> • Average 7.5% reduction in recidivism • 10% reduction for higher risk offenders
Aos et al. (2001)	26 studies	<ul style="list-style-type: none"> • Average 13% reduction in recidivism

Meta-analyses of adult drug courts consistently show recidivism reductions. Considering 92 adult drug courts, and assessing the methodological rigor of their evaluations, researchers computed the average recidivism reduction as 12.4%.¹²⁵ Notably, even the most rigorous experimental designs show positive effects.¹²⁶ Another recent meta-analysis of 82 studies estimated an average effect size of 9%.¹²⁷ Average effect sizes from earlier meta-analyses range from about 8%¹²⁸ to 26%.¹²⁹

The most recent meta-analyses provide a clearer indication of which program characteristics are most important to effective drug courts. Deborah Shaffer identified four dimensions that best explain the variation in drug court outcomes—target population, leverage, staff characteristics, and intensity.¹³⁰ Specifically, within the target population dimension, the most successful drug courts exclude violent offenders and those with a history of non-compliance.¹³¹ In terms of leverage, pre-adjudication drug courts are more successful than post-adjudication models, especially if incarcerative sentences are deferred.¹³² Drug court staff characteristics, such as weekly team meetings and regular attendance at national conferences, are associated with increased effect sizes.¹³³ Intensity of the program, such as restitution, education and other requirements, is a significant predictor of

125. Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 64. Similarly, the average effect size for DWI courts is 12.3%. *Id.*

126. *Id.* at 66.

127. Deborah Koetzle Shaffer, *Looking Inside the Black Box of Drug Courts: A Meta-Analytic Review*, 28 JUST. Q. 493, 508 (2011) [hereinafter *Looking Inside the Black Box of Drug Courts*].

128. STEVE AOS, MARNA MILLER & ELIZABETH DRAKE, WASH. STATE INST. FOR PUB. POL'Y, EVIDENCE-BASED PUBLIC POLICY OPTIONS TO REDUCE FUTURE PRISON CONSTRUCTION, CRIMINAL JUSTICE COSTS, AND CRIME RATES 9 (2006); see Leticia Gutierrez & Guy Bourgon, *Drug Treatment Courts: A Quantitative Review of Study and Treatment Quality*, 14 JUST. RESEARCH & POL'Y 47, 61 (2012); Christopher T. Lowenkamp, Alexander M. Holsinger & Edward J. Latessa, *Are Drug Courts Effective: A Meta-Analytic Review*, 3 J. CMTY. CORR. 5, 8 (2005); STEVE AOS, POLLY PHIPPS, ROBERT BARNOSKI & ROXANNE LIEB, WASH. STATE INST. FOR PUBLIC POL'Y, THE COMPARATIVE COSTS AND BENEFITS OF PROGRAMS TO REDUCE CRIME 25 (2001).

129. David B. Wilson, Ojmarrh Mitchell & Doris L. MacKenzie, *A Systematic Review of Drug Court Effects on Recidivism*, 2 J. EXPERIMENTAL CRIMINOLOGY 459, 479 (2006). If the meta-analysis is limited to only experimental designs, the estimated average effect size is 14%. *Id.*

130. *Looking Inside the Black Box of Drug Courts*, *supra* note 127, at 508.

131. See *id.* But see Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 69.

132. See *Looking Inside the Black Box of Drug Courts*, *supra* note 127, at 509-10.

133. *Id.* at 510.

success, while requiring community service, fines, employment, and a minimum of contacts is negatively associated with recidivism reduction.¹³⁴ Other moderate predictors of success include having longer periods of drug treatment, a formal response to positive drug tests, an internal service provider, and adequate funding.¹³⁵ Notably, requiring a twelve-step program as substance abuse treatment is negatively associated with success.¹³⁶ In general, successful drug courts are aligned with the principles of effective intervention.¹³⁷ Additionally, programs with a high graduation percentage are more successful.¹³⁸

Overall, the research weighs in favor of adult drug court effectiveness, especially for those purposefully designed to address the risk, need, and responsivity principles, and the benefits of reduced recidivism outweigh the additional costs of drug courts. That said, however, adult drug courts are not a panacea for individual-level recidivism, crime control in general, or the costs of the criminal process.

D. A Note on Juvenile Drug Court Evaluations

Although the primary focus of this article is on adult drug courts, given the application of this intervention to juveniles, we believe it is important to briefly review some of the research related to the effectiveness of this approach with youthful offenders. Three factors contributed to the juvenile drug court movement—an increase in the use of alcohol and other drugs by juveniles, the strong association between substance abuse and delinquency, and the promise of adult drug courts to reduce recidivism.¹³⁹ With just over 400 juvenile drug courts in operation, there is only a small extant evaluation literature.¹⁴⁰ In recent years, however, evaluations of juvenile drug courts have both increased in quantity, allowing for meta-analyses, and improved

134. *Id.*

135. *Id.* at 510-12.

136. *Id.* at 511.

137. See generally *Looking Inside the Black Box of Drug Courts*, *supra* note 127; Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 69; Gutierrez & Bourgon, *supra* note 128, at 66.

138. See Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 69.

139. U.S. DEP'T OF JUSTICE, OFFICE OF JUSTICE PROGRAMS, BUREAU OF JUSTICE ASSISTANCE, MONOGRAPH, JUVENILE DRUG COURTS: STRATEGIES IN PRACTICE 6 (2003).

140. Five juvenile courts focusing on substance-abusing juveniles first appeared in 1995. John J. Sloan, III & John Ortiz Smykla, *Juvenile Drug Courts: Understanding the Importance of Dimensional Variability*, 14 CRIM. JUST. POL'Y REV. 339, 341 (2003). As of December 15, 2014, there are 435 juvenile drug courts in 47 states and territories. BUREAU OF JUSTICE ASSISTANCE DRUG COURT TECHNICAL ASSISTANCE PROJECT, DRUG COURT ACTIVITY UPDATE: COMPOSITE SUMMARY INFORMATION 2 (2014). Over the years, several scholars have noted the small number of juvenile drug court evaluations. See, e.g., Sullivan, Blair, Latessa & Sullivan, *supra* note 48, at 2; Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 61-62; STEVEN BELENKO, THE NAT'L CTR. ON ADDICTION & SUBSTANCE ABUSE, COLUMBIA UNIV., RESEARCH ON DRUG COURTS: A CRITICAL REVIEW 2001 UPDATE 2 (2001); Sloan & Smykla, *supra* note 140, at 345.

in quality, allowing researchers to make stronger inferences about their effectiveness in reducing recidivism.¹⁴¹

In a meta-analysis of 31 juvenile drug court evaluations, it was estimated that juvenile drug court participants have an average 8% reduction in recidivism compared to non-participants.¹⁴² This is a larger effect than other meta-analyses have computed. A fifteen-study meta-analysis that averaged results from only the longest follow up periods in the studies found only a 3.5% reduction in recidivism.¹⁴³ These findings are not inconsistent with a more recent meta-analysis of 34 juvenile drug court studies, in which the researchers found an average recidivism reduction of 7.5%.¹⁴⁴ They cautioned, however, that this average effect size is driven by studies employing a less rigorous methodology.¹⁴⁵ The average effect size falls to 6.5% if only the most rigorous evaluations are considered.¹⁴⁶ It appears from these meta-analyses that the success of juvenile drug courts in reducing recidivism is modest at best. That said, earlier meta-analyses found that juvenile drug courts had no impact on recidivism.¹⁴⁷

Recent primary evaluations have also found juvenile drug courts to be ineffective. For example, Latessa and colleagues studied nine juvenile drug courts from across the United States in 2013.¹⁴⁸ The sites varied in location type, size, and drug court model, but all were funded by the Office of Juvenile Justice Delinquency and Prevention, part of the U.S. Department of Justice.¹⁴⁹ The study involved a quasi-experimental design with 1,372 juveniles in the treatment and comparison groups.¹⁵⁰ The overall outcome results are presented in Figure 1. This data indicates that the youths in the

141. Sullivan, Blair, Latessa & Sullivan, *supra* note 48, at 5-6; Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 62.

142. David M. Stein, Kendra J. Homan & Scott DeBerard, *The Effectiveness of Juvenile Treatment Drug Courts: A Meta-Analytic Review of Literature*, 24 J. CHILD & ADOLESCENT SUBSTANCE ABUSE 80, 90 (2015).

143. AOS, MILLER & DRAKE, *supra* note 128, at 9.

144. Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 64. The authors include a series of forest plots or graphical displays that helpfully show the range of effect sizes found by the underlying studies.

145. *Id.* at 66.

146. *Id.* at 66-67.

147. See Wilson, Mitchell & MacKenzie, *supra* note 129, at 475-76; JEFF LATIMER, KELLY MORTON-BOURGON & JO-ANNE CHRÉTIEN, DEP'T OF JUSTICE CAN., RESEARCH & STATISTICS DIV., A META-ANALYTIC EXAMINATION OF DRUG TREATMENT COURTS: DO THEY REDUCE RECIDIVISM? 12 (2006); see also Shaffer, *supra* note 36, at 149 (finding juvenile drug courts reduced recidivism an average of 5%).

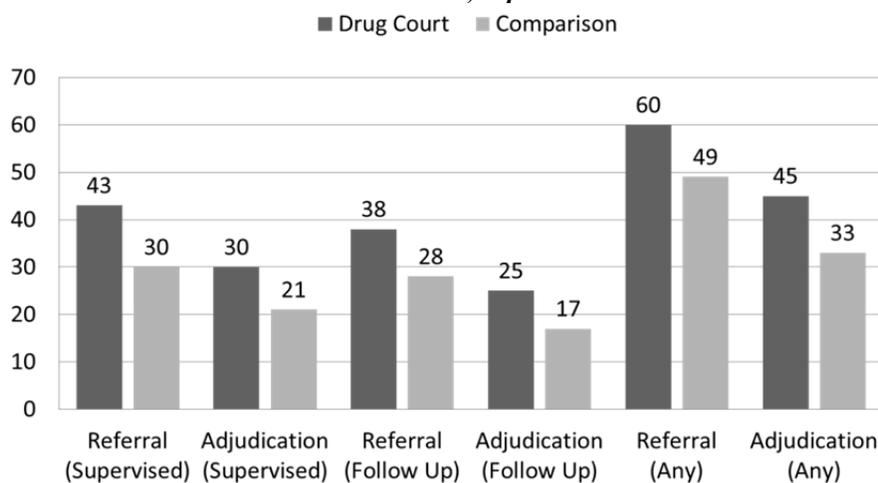
148. EDWARD J. LATESSA, CARRIE SULLIVAN, LESLI BLAIR, CHRISTOPHER J. SULLIVAN & PAULA SMITH, FINAL REPORT: OUTCOME AND PROCESS EVALUATION OF JUVENILE DRUG COURTS 6 (Ctr. Crim. Just. Res., Univ. Cincinnati, 2013) [hereinafter LATESSA REPORT]; see Sullivan, Blair, Latessa & Sullivan, *supra* note 48.

149. LATESSA REPORT, *supra* note 148, at 6.

150. *Id.* at 122.

juvenile drug courts had higher failure rates on all of the indicators, including new referrals to juvenile court and new adjudications, both while under supervision and during the follow-up period.¹⁵¹ Overall, the new referral rate for the juvenile drug court was 60% versus 49% for the comparison group.¹⁵² The new adjudication rate was even worse—45% for the drug court group and 33% for the comparison group.¹⁵³

Figure 1. Recidivism for Drug Court Youth vs. Comparison Group.
For more details, see LATESSA REPORT, *supra* note 148; Sullivan, Blair, Latessa & Sullivan, *supra* note 48.



In addition to examining the recidivism outcome, this study also examined the adherence of the drug courts and their referral agencies to the principles of effective intervention using the Correctional Program Checklist for Drug Courts (CPC-DC).¹⁵⁴ The CPC-DC consists of two instruments; one for the formal drug court, and the other for the major referral agencies involved in providing treatment and services to drug court clients.¹⁵⁵ The tools assess four basic areas: (1) Development, Coordination, Staff, and Support; (2) Quality Assurance; (3) Assessment Practices; and (4) Treatment. Each area, and all domains within each area, are scored and rated as to their effectiveness.¹⁵⁶ Results from the CPC-DC

151. *Id.*

152. *Id.* at 96.

153. *Id.*

154. See Blair, Sullivan, Lux, Thielo & Gormsen, *supra* note 39.

155. *Id.* at 8.

156. LATESSA REPORT, *supra* note 148, at 35. Ratings include “‘highly effective’ (65% to 100%); ‘effective’ (55% to 64%); ‘needs improvement’ (46% to 54%); or ‘ineffective’ (less than 45%).” *Id.*

assessments of the nine juvenile drug courts are summarized in Table 4.¹⁵⁷ These values indicate that in the areas of quality assurance and treatment, the juvenile drug courts score in the “ineffective” category, and, overall, the intervention “needs improvement.”¹⁵⁸ This data indicates that the juvenile drug courts in this study were not following the principles of effective intervention and that, by failing to ensure program integrity, the juvenile drug courts were producing negative results.¹⁵⁹

**Table 4. CPC-DC Results from Multi-Site
Juvenile Drug Court Evaluation**

Area Assessed	Average Score	Average Rating [†]
Development, coordination, staff & support	60.5	Effective
Quality assurance	28.6	Ineffective
Assessment practices	55.5	Effective
Treatment	40.7	Ineffective
Overall	46.0	Needs Improvement

[†] Ratings include ineffective (0% to 45%); needs improvement (46% to 54%); effective (55% to 64%); and highly effective (65% to 100%).

Why are the results from juvenile drug courts not as positive? First, the findings are not inconsistent with other studies that have questioned the use of drug courts for juveniles.¹⁶⁰ By placing youths in drug courts, especially lower risk youths, we are giving them more opportunities to fail due to the increase in reporting and drug testing. This is particularly so when so many youths in juvenile drug courts tend to use alcohol and marijuana. In the study by Latessa and colleagues, participants indicated their drug of choice was alcohol (23.5%) and marijuana (71%).¹⁶¹ Perhaps most importantly, it appears from the CPC-DC assessments that the juvenile drug courts and many of their referral agencies struggle to provide treatment that is designed to address the criminogenic needs of juveniles.¹⁶² Although this study examined only nine juvenile drug courts, there is no reason to believe that

157. *See id.* at 92. Values in Table 4 are averaged across the nine courts for each of the four areas.

158. *Id.*

159. *See id.* at 206.

160. *See, e.g.,* Stein, Homan & DeBerard, *supra* note 142, at 91; Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48, at 69.

161. LATESSA REPORT, *supra* note 148, at 43.

162. *Id.* at 178.

these courts were not representative of others, especially considering they all received federal funding and arguably had adequate resources.

E. Implications of Drug Court Research

Most primary evaluations of drug courts and drug court meta-analyses show reductions in recidivism. Moreover, drug courts provide cost-savings to taxpayers; they reduce drug use thereby promoting public health; and they promote socioeconomic well-being and reduce conflict in families.¹⁶³ Of course, the methodological limitations of some evaluations caution against reliance on drug courts' ability to produce large reductions in crime. Methodological quality matters, and the more rigorous designs provide more valid estimates of the amount of recidivism reduction.¹⁶⁴ Moreover, causal inference in meta-analyses is only as good as that of the underlying studies. It is also important to emphasize that the results for juvenile drug courts are less favorable. Drug courts may not be an appropriate correctional intervention for youths.

Even with the limitations of the evaluation research, however, the empirical evidence weighs in favor of the effectiveness of drug courts. Still, drug courts are not a panacea for a myriad of reasons. First, some offenders do not have substance abuse problems and would not be appropriate targets for such interventions, while other drug-involved offenders are career criminals who will persist in offending despite receiving treatment, while still other offender sub-types will struggle more with addiction.¹⁶⁵ In short, some offenders cannot be fixed, or cannot be fixed in this way, or cannot be fixed easily.¹⁶⁶ Conversely, not all offenders in need of treatment are eligible for drug court programs.¹⁶⁷ Next, although drug courts may reduce recidivism for many individuals, increasing the drug court business will not necessarily translate into macro-level reductions of crime and incarceration, as growth is already hampered by net-widening, limited resources,

163. See Mia Green & Michael Rempel, *Beyond Crime and Drug Use: Do Adult Drug Courts Produce Other Psychosocial Benefits*, 42 J. DRUG ISSUES 156 (2012).

164. Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48; *Looking Inside the Black Box of Drug Courts*, *supra* note 127.

165. Elizabeth Evans, Libo Li, Darren Urada & M. Douglas Anglin, *Comparative Effectiveness of California's Proposition 36 and Drug Court Programs Before and After Propensity Score Matching*, 60 CRIME & DELINQ. 909, 909 (2014).

166. See *id.*; see also Lowenkamp, Holsinger & Latessa, *supra* note 128. But see Deborah Koetzle Shaffer, Jennifer L. Hartman, Shelley Johnson Listwan, Terra Howell & Edward J. Latessa, *Outcomes Among Drug Court Participants: Does Drug of Choice Matter?*, 55 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 155 (2011).

167. See Mitchell, Wilson, Eggers & MacKenzie, *supra* note 48.

implementation problems, and other organizational constraints.¹⁶⁸ Fourth, normative concerns abound, even if large crime and incarceration reductions could be had.¹⁶⁹ Traditional adjudication and sanctions are inherently coercive, but unnecessary intensive supervision and monitoring and public degradation of offenders may constrain defendants' due process protections or at least threaten the collective interest in procedural justice.¹⁷⁰ Furthermore, drug court participation exposes the drug-involved offender to practical risks. Those who fail to graduate from pre-adjudication drug courts may receive longer incarcerative sentences than those who complete or who choose not to participate in the drug court.¹⁷¹

These concerns have led states to develop other non-incarcerative ways to deal with drug-involved offenders. For example, Prop 36 in California and SB 123 in Kansas are legislatively mandated drug treatment programs for offenders.¹⁷² Comparing California drug court participants to a propensity-score-matched group of Prop 36 treatment participants on re-arrest rates during the twelve months before and after treatment, researchers found a statistically significant difference.¹⁷³ Drug court participants showed a greater reduction in arrests (-32.1% vs. -25.8%).¹⁷⁴ Other mandatory treatment programs had similar results. Researchers compared the recidivism rate of drug possessors sentenced to mandatory treatment per SB 123 to propensity-score-matched groups.¹⁷⁵ There was no statistically significant difference between the SB 123 group and a group sentenced to community corrections.¹⁷⁶ Recidivism was significantly higher for the SB 123 group (23.5%) compared to a group who received traditional court services (14.1%).¹⁷⁷

Other treatment programs may work, either in conjunction with or separate from the coercive nature of treatment in drug courts, and the effectiveness of these programs are certainly worthy of future research.

168. See Eric L. Sevigny, Harold A. Pollack & Peter Reuter, *Can Drug Courts Help to Reduce Prison and Jail Populations?*, 647 ANNALS AM. ACAD. POL. & SOC. SCI. 190 (2013); see also Rengifo & Stemen, *supra* note 44.

169. Sevigny, Pollack & Reuter, *supra* note 168, at 192.

170. See *id.*; see also Denis C. Gottfredson, Brook W. Kearley, Stacy S. Najaka & Carlos M. Rocha, *How Drug Treatment Courts Work: An Analysis of Mediators*, 44 J. RES. CRIME & DELINQ. 3 (2007); Eric J. Miller, *Embracing Addiction: Drug Courts and the False Promise of Judicial Interventionism*, 65 OHIO ST. L.J. 1479 (2004); Miethe, Lu & Reese, *supra* note 45.

171. See, e.g., Michael Rempel, Mia Green & Dana Kralstein, *The Impact of Adult Drug Courts on Crime and Incarceration: Findings from a Multi-Site Quasi-Experimental Design*, 8 J. EXPERIMENTAL CRIMINOLOGY 165, 181 (2012).

172. Evans, Li, Urada & Anglin, *supra* note 165, at 910; Rengifo & Stemen, *supra* note 44, at 931.

173. Evans, Li, Urada & Anglin, *supra* note 165, at 926.

174. *Id.*

175. Rengifo & Stemen, *supra* note 44.

176. *Id.* at 942.

177. *Id.* at 941-42.

Nevertheless, the extant research results are clear. Drug courts work for at least some proportion of the offender population. Drug courts reduce recidivism by about 10% on average.¹⁷⁸ Drug courts provide substantial savings to offenders, victims, and taxpayers, as well as other psychosocial benefits.¹⁷⁹ These results could be even greater if improvements are made to drug courts, especially with respect to faithful adherence to the principles of effective intervention. The following section discusses how to make drug courts more effective.

III. IMPROVING THE EFFECTIVENESS OF DRUG COURTS

While adult drug courts appear to reduce recidivism and save the taxpayers money, the effects are modest and fall below what we see with other correctional programs that adhere to the principles of effective intervention.¹⁸⁰ Results for juvenile drug courts are even less favorable, suggesting drug courts simply may not be an appropriate intervention for youth.¹⁸¹ There is clearly a need for a more systemic approach to program design and implementation that is based on the large body of research around effective interventions. Accordingly, several recommendations are suggested for drug courts and their referral agencies:

1. Duration. Drug courts should rethink program length. Most drug courts are too long, and, as a result, completion rates are often low. While there is no magic number, it is clear that when interventions and treatment continue for too long, people give up and results begin to diminish.

2. Assessment. Drug courts should do a better job of assessing needs by selecting instruments that cover *all* static and dynamic risk factors—not just substance abuse. It bears repeating that most high risk offenders are not high risk because they have a single risk factor, but because they have multiple risk factors.

3. Target Population. The research is clear that we can do harm when we target low risk offenders. Drug courts should focus on higher risk offenders. By doing so, they will achieve the greatest effect on recidivism, and, just as importantly, they will not have increased the failure rates for lower risk offenders.

178. LATESSA REPORT, *supra* note 148, at 22.

179. AOS, PHIPPS, BARNOSKI & LIEB, *supra* note 128, at 5.

180. *See generally* Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, *supra* note 1.

181. *See* Sullivan, Blair, Latessa & Sullivan, *supra* note 48.

4. Match Services. Drug courts should provide, or match to participants, services that meet their major criminogenic needs—not just substance abuse. Such matching will require multi-modality programs and a more diverse service provider network.

5. Dosage. Drug courts should increase intensity based on risk. Research indicates that moderate risk offenders will require 100-150 hours of evidence-based treatment, while higher risk offenders will require 200 or more hours.¹⁸²

6. Treatment. Drug courts should move away from self-help, drug education, and unstructured groups, and instead they should use a curriculum-driven treatment based on CBT and other behavioral approaches.

7. Family. Whenever possible, family should be trained on how to assist their loved ones. However, bringing in the family to talk about the program or providing support groups is not sufficient. The process for training family is similar to the training that should be provided to the offender—that is, identifying and targeting criminogenic risk factors by modeling, practicing, and reinforcement.

8. Aftercare. Most studies show that aftercare increases effectiveness of correctional programs.¹⁸³ Drug courts should include structured care after completing the drug court as a *formal* part of the program, and not just as a voluntary option. This suggestion will require a restructuring of many drug courts, such as through the creation of phases that might include an intensive phase, a standard phase, and an aftercare phase. While vague, unstructured aftercare produces weaker recidivism reductions; those aftercare programs that are detailed and provide opportunities for advanced practical skills and for continued rehearsal of risky situations have been shown to produce the strongest effects.¹⁸⁴

182. Makarios, Sperber & Latessa, *supra* note 9, at 345.

183. See Craig Dowden, Daniel Antonowicz & D.A. Andrews, *The Effectiveness of Relapse Prevention with Offenders: A Meta-Analysis*, 47 INT'L J. OFFENDER THERAPY & COMP. CRIMINOLOGY 516, 523 (2003).

184. *Id.* at 523-24.

IV. CONCLUSION

What works in drug courts is the very same thing that works in other correctional and rehabilitative programs—the principles of effective intervention. There is a large evidence base from which we draw this conclusion. Evaluation research has made great gains in methodological rigor in recent years; as such, we continue to learn more specifically the areas that need improvement in current drug court development and administration. To be effective at reducing recidivism, drug courts must be designed to appropriately identify and address the criminogenic needs of higher risk offenders. The length of the program, the amount of treatment received, and an aftercare component are important considerations. Family involvement should be encouraged. Barriers to proper implementation need to be addressed. More evaluation research is needed, not only to add data to the evidence base, but also to facilitate innovations in drug courts through flexible and immediate feedback to administrators. Because everyone benefits from effective drug courts, expanding the drug court model appears to be good policy. However, policymakers in and out of the courthouse would be well-advised to use caution, as ineffective drug courts are not only costly, but harmful. Nevertheless, policymakers can rely on one research finding—adherence to the principles of effective intervention is what works.