



## **Research Update on Juvenile Drug Treatment Courts**

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Research on Juvenile Drug Treatment Courts (JDTCs) has lagged considerably behind that of its adult counterparts. Although evidence is mounting that JDTCs can be effective at reducing delinquency and substance abuse, the field is just beginning to identify the factors that distinguish effective from ineffective programs.

## Effectiveness

Prior to 2006, meta-analytic studies<sup>1</sup> concluded that JDTCs reduced delinquency by an average of only about 3 to 5 percent greater than comparison programs, such as juvenile probation (Aos et al., 2006; Shaffer, 2006; Wilson et al., 2006). Although marginally statistically significant, this difference is small in magnitude. Fortunately, newer findings are more encouraging, which suggests the programs may be getting better at their operations with increasing experience.

A recent large-scale study in Utah found that participants in four JDTCs (n = 622) recidivated at a

Programs may be getting better at their operations with increasing experience. significantly lower rate than a matched comparison sample of juvenile drug-involved probationers (n = 596) (Hickert et al., 2010). At 30 months post-entry, 34% of the JDTC participants had been

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re-arrested for a new juvenile or adult offense, as compared to 48% of the probationers (p < .05). In addition, the average time-delay before the first new arrest was approximately a full year later for the JDTC participants (p < .05). Similarly, a multi-site study in Ohio found that JDTC participants (n = 310) were significantly less likely than matched juvenile probationers (n = 134) to be arrested for a new offense at 28 months post-entry (56% v. 75%, p < .05) (Shaffer et al., 2008).

<sup>1</sup>Meta-analysis is an advanced statistical procedure that yields a conservative and rigorous estimate of the average effects of an intervention. It involves systematically reviewing the research literature, selecting out only those studies that are scientifically defensible according to standardized criteria, and then statistically averaging the effects of the intervention across the good-quality studies (e.g., Lipsey & Wilson, 2002).



The most reliable findings come from experimental studies, in which participants are randomly assigned to different treatment conditions (e.g., Heck, 2006; Marlowe, 2009). In a well-controlled experiment, Henggeler et al. (2006) randomly assigned juvenile drug-involved offenders (n =approximately 30 per group) to traditional family court services, JDTC, or JDTC enhanced with additional evidence-based treatments.<sup>2</sup> The results revealed significantly lower rates of substance use and delinquency for the JDTC participants as compared to the family court, and the effects were further increased through the addition of the evidence-based treatments. This study provides strong scientific support for the potential effectiveness of JDTCs in reducing substance use and delinquency.

## **Cost-Effectiveness**

Evaluators are just beginning to measure the cost-benefits and cost-effectiveness of JDTCs. A cost evaluation of the Clackamas County (Portland) JDTC (Carey et al., 2006) found that fewer JDTC participants were re-arrested at 2 years post-entry than a matched comparison sample of juvenile probationers (82% vs. 44%); yet, despite cutting recidivism rates nearly in half, the average cost-saving per participant was

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only about \$971 over the 2-year period. The reason for this was that terminated and sanctioned JDTC participants served significantly more juveniledetention time than comparison participants, thus sopping up much of the cost-savings that would have been realized from lower recidivism rates. In contrast, a cost evaluation of a JDTC in Maryland reported net savings exceeding \$5,000 per participant over 2 years (Pukstas, 2007). In this study, the JDTC participants not only recidivated at a significantly lower rate than the comparison probationers, but they also spent significantly less time in juvenile detention and residential facilities. Because the program did not over-apply detention as a sanction for termination, the net cost savings were more in line with the reduction in juvenile offending.

## **Best Practices**

Research reveals that the effect sizes (ESs) for JDTCs vary widely across programs, with some JDTCs having no effect on recidivism (e.g., Cook et al., 2009; Wright & Clymer, 2001; Anspach et al., 2003) and others reducing recidivism by as much as 8 to 15 percentage points (Rodriquez & Webb, 2004; Crumpton et al., 2006). In fact, when JDTCs have taken substantial efforts to

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incorporate evidence-based treatments into their curricula and reached out to caregivers in the youths' natural social environments, reductions in delinquency and substance abuse have been as high as 15 to 40 percent (Hickert et al., 2010; Henggeler et al., 2006; Shaffer et al., 2008).

These findings should come as no surprise. Reviewers of substance abuse treatment interventions have long known that outcomes for adolescents tend to vary greatly between programs (e.g., Waldron & Turner, 2008). Lackluster results have commonly been reported for programs that failed to offer evidence-based treatments, neglected to include family members or other caregivers in the interventions, or made insufficient efforts to

<sup>2</sup>The enhanced evidence-based treatments were Multi-Systemic Therapy (MST) and contingency management (CM), alone and in combination. MST is a manualized intervention that trains parents, teachers and other caregivers to assist in managing the juvenile's behavior. CM involves providing gradually escalating payment vouchers for drug-negative urine specimens and other positive achievements.

## RESEARCH UPDATE ON JUVENILE DRUG TREATMENT COURTS

tailor their interventions to the cognitive and maturational levels of the juveniles (e.g., Fixsen et al., 2010; Rossman et al., 2004). It would seem that youthful substance-abusing offenders may be unusually intolerant of weak or ineffective efforts. With a relatively narrow margin for error, it is incumbent upon JDTC practitioners to "get it right" by honing their skills and targeting their interventions most effectively from the outset.

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Several risk factors have been reliably associated with juvenile delinquency and substance abuse in numerous research studies. These include ineffective supervision and inconsistent disciplinary practices on the part of the juveniles' guardians, as well as frequent associations with deviant peers and low engagement in prosocial activities on the part of the juveniles (e.g., Eddy & Chamberlain, 2000; Huey et al., 2000). Not surprisingly, JDTCs have been most successful when they targeted these specific risk factors.

# *If JDTCs do not focus their efforts on key risk factors, they may be unlikely to achieve significant improvements in outcomes.*

In the randomized study described earlier (Henggeler et al., 2006), the investigators found that the JDTC did a significantly better job than the traditional family court of improving parental supervision and discipline of the juveniles, and reducing the juveniles' associations with deviant peers (Schaeffer et al., 2010). These short-term improvements were found, in turn, to predict longer-term reductions in substance use and delinquency. These early findings suggest that JDTCs have the potential to out-perform conventional juvenile probation or family court services, but perhaps only to the extent that they use their leverage over the juveniles and their guardians

to enhance caregiver supervision, improve caregiver disciplinary practices, and reduce the juveniles' associations with delinquent peers. If JDTCs do not focus their efforts on these key risk factors, they may be unlikely to achieve significant improvements in outcomes.

Recent studies are providing guidance on how JDTCs can achieve these effects. One study examined the relationship between guardians' attendance at status hearings in a JDTC and youth outcomes (Salvatore et al., 2010). The results revealed that the more often caregivers attended status hearings, the less often the juveniles were late to or absent from treatment, were tardy or absent from school, provided positive drug tests, or received sanctions for behavioral infractions in the program. Research in adult

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drug courts has long demonstrated that court hearings are a central ingredient of the intervention (e.g., Carey et al., 2008; Festinger et al., 2002; Marlowe et al., 2006, 2007). It now appears the same may hold true for JDTCs, but with one important caveat: The courtroom interactions should serve, at least in part, to teach the caregivers how to interact effectively with their teens and apply consistent behavioral consequences.

A related finding comes from a multi-site study of three JDTCs in Iowa, in which two of the programs were supervised by volunteer community panels rather than by judges (Cook et al., 2009). No differences were found in

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rates of new arrests for juvenile or adult offenses over a follow-up period of 4½ years. Of perhaps greater concern, there were no differences in re-arrest rates between the JDTC graduates and terminated participants, thus indicating the programs were generally ineffective. These disappointing results might be attributable to the fact that judges did not supervise roughly two-thirds (62%)



of the participants. If, as in the case of adult drug courts, judicial status hearings are a key component of JDTCs, then it should not be surprising that dropping this key ingredient would hinder effectiveness.

## Recommendations to Drug Courts

Early studies on JDTCs yielded mixed results, but recent findings are giving cause for greater optimism as the programs have become more adept at their operations. Significant positive outcomes have been reported for JDTCs that adhered to best practices and evidence-based practices identified from the fields of adolescent treatment and delinquency prevention. These practices include requiring parents or guardians to attend status hearings; holding status hearings in court in front of a judge; avoiding over-reliance on costly detention sanctions; reducing youths' associations with drug-using and delinquent peers; enhancing parents' or guardians' supervision of their teens; and modeling consistent and effective disciplinary practices. More research is needed to replicate these findings and identify other practices that can further enhance outcomes in JDTC programs.

### References

Anspach, D. et al. (2003). Evaluation of Maine's Statewide Juvenile Drug Treatment Court Program. Univ. Southern Maine.

Aos, S., Miller, M., & Drake, E. (2006). Evidencebased public policy options to reduce future prison construction, criminal justice costs, and crime rates. Olympia: Washington State Institute for Public Policy.

Carey, S. M., et al. (2006). Clackamas County juvenile drug court enhancement: Process, outcome/impact and cost evaluation: Final report. Portland, OR: NPC Research. Available at www. npcresearch.com.

Carey, S. M., Finigan, M. W., & Pukstas, K. (2008). Exploring the key components of drug courts: A comparative study of 18 adult drug courts on practices, outcomes and costs. Portland, OR: NPC Research. Available at www.npcresearch.com.

Cook, M. D., et al. (2009). Statewide process and comparative outcomes study of 2003 lowa adult and juvenile drug courts. Iowa Dept. of Human Rights, Div. of Criminal and Juvenile Justice Planning.

Crumpton, D., et al. (2006). Maryland Drug Treatment Courts: Interim Report of the Effectiveness of Juvenile Drug Courts. Portland, OR: NPC Research, available at www.npcresearch.com.

Eddy, J. M., & Chamberlain, P. (2000). Family management and deviant peer association as mediators of the impact of treatment condition on youth antisocial behavior. *Journal of Consulting and Clinical Psychology*, 68, 857-863.

Festinger, D. S., Marlowe, D. B., Lee, P. A., Kirby, K. C., Bovasso, G., & McLellan, A. T. (2002). Status hearings in drug court: When more is less and less is more. *Drug & Alcohol Dependence*, *68*, 151-157.

Fixsen, D. L., Blasé, K. A., Duda, M. A., Naoom, S. F., & Van Dyke, M. (2010). Implementation of evidence-based treatments for children and adolescents: Research findings and their implications for the future. In J. R. Weisz & A. E. Kazdin (Eds.), *Evidence-based psychotherapies for children and adolescents, 2nd edition* (pp. 259-276). New York: Guilford Press.

Heck, C. (2006). Local drug court research: Navigating performance measures and process evaluations. Alexandria, VA: National Drug Court Institute. Available at www.ALLRISE.org.

## RESEARCH UPDATE ON JUVENILE DRUG TREATMENT COURTS

Henggeler, S. W., Halliday-Boykins, C. A., Cunningham, P. B., Randall, J., Shapiro, S. B., & Chapman, J. E. (2006). Juvenile drug court: Enhancing outcomes by integrating evidence-based treatments. *Journal of Consulting and Clinical Psychology*, *74*(1), 42-54.

Hickert AO et al. (2010). Evaluation of Utah juvenile drug courts: Final report. Utah Criminal Justice Center, University of Utah.

Hills, H., Shufelt, J. L., & Cocozza, J. J. (2009). Evidencebased practice recommendations for juvenile drug courts. Delmar, NY: National Center for Mental Health and Juvenile Justice.

Huey, S. J., Henggeler, S. W., Brondino, M. J., & Pickrel, S. G. (2000). Mechanisms of change in multisystemic therapy: Reducing delinquent behavior through therapist adherence and improved family and peer functioning. *Journal of Consulting and Clinical Psychology*, *68*, 451-467.

Lipsey, M. W., & Wilson, D. B. (2001). *Practical metaanalysis*. Thousand Oaks, CA: Sage.

Marlowe, D. B. (2009). Introductory handbook for DWI Court program evaluations. Alexandria, VA: National Drug Court Institute & National Center for DWI Courts, at www.ALLRISE.org.

Marlowe, D. B., Festinger, D. S., Dugosh, K. L., Lee, P. A., & Benasutti, K. M. (2007). Adapting judicial supervision to the risk level of drug offenders: Discharge and six-month outcomes from a prospective matching study. *Drug & Alcohol Dependence, 88S*, 4-13.

Marlowe, D. B., Festinger, D. S., Lee, P. A., Dugosh, K. L., & Benasutti, K. M. (2006). Matching judicial supervision to clients' risk status in drug court. *Crime & Delinquency*, *52*, **52**-76.

Pukstas K (2007). Encouraging evidence of effectiveness and cost efficiency from a Maryland juvenile drug court. Presentation at American Society of Criminology. Portland, OR: NPC Research.

Rodriguez, D., & Webb, V. J. (2004). Multiple measures of juvenile drug court effectiveness: Results of a quasi-experimental design. *Crime & Delinquency, 50,* 292.

Rossman, S. B., Butts, J. A., Roman, J., DeStefano, C., & White, R. (2004). What juvenile drug courts do and how they do it. In J. A. Butts & J. Roman (Eds.), *Juvenile drug courts and teen substance abuse* (pp. 55-106). Washington DC: Urban Institute Press.

Salvatore S. et al. (2010). An observational study of team meetings and status hearings in a juvenile drug court. *Drug Court Review, 7,* 95-124.

Schaeffer CM et al. (2010). Mechanisms of effectiveness in juvenile drug court: Altering risk processes associated with delinquency and substance abuse. *Drug Court Review, 7,* 57-94. Shaffer, D. K. (2006). *Reconsidering drug court effectiveness: A meta-analytic review*. Dept. of Criminal Justice, Univ. of Cincinnati.

Shaffer, D. K., Listwan, S. J., Latessa, E. J. & Lowenkamp, C. T. (2008). Examining the differential impact of drug court services by court type: Findings from Ohio. *Drug Court Review, 6,* 33-66.

Waldron, H. B., & Turner, C. W. (2008). Evidence-based psychosocial treatments for adolescent substance abuse. *Journal of Clinical Child and Adolescent Psychology, 37*(1), 238-261.

Wilson, D. B., Mitchell, O., & MacKenzie, D. L. (2006). A systematic review of drug court effects on recidivism. *Journal of Experimental Criminology*, *2*, 459-487.

Wright, D., & Clymer, B. (2000). *Evaluation of Oklahoma Drug Courts, 1997-2000.* Criminal Justice Resource Center.



It takes innovation, teamwork and strong judicial leadership to achieve success when addressing drug-using offenders in a community. That's why since 1994 the National Association of Drug Court Professionals (NADCP) has worked tirelessly at the national, state and local level to create and enhance Drug Courts, which use a combination of accountability and treatment to compel and support drug-using offenders to change their lives.

Now an international movement, Drug Courts are the shining example of what works in the justice system. Today, there are over 2,500 Drug Courts operating in the U.S., and another thirteen countries have implemented the model. Drug Courts are widely applied to adult criminal cases, juvenile delinquency and truancy cases, and family court cases involving parents at risk of losing custody of their children due to substance abuse.

Drug Court improves communities by successfully getting offenders clean and sober and stopping drug-related crime, reuniting broken families, intervening with juveniles before they embark on a debilitating life of addiction and crime, and reducing impaired driving.

In the 20 years since the first Drug Court was founded in Miami/Dade County, Florida, more research has been published on the effects of Drug Courts than on virtually all other criminal justice programs combined. The scientific community has put Drug Courts under a microscope and concluded that Drug Courts significantly reduce drug abuse and crime and do so at far less expense than any other justice strategy. Such success has empowered NADCP to champion new generations of the Drug Court model. These include Veterans Treatment Courts, Reentry Courts, and Mental Health Courts, among others. Veterans Treatment Courts, for example, link critical services and provide the structure needed for veterans who are involved in the justice system due to substance abuse or mental illness to resume life after combat. Reentry Courts assist individuals leaving our nation's jails and prisons to succeed on probation or parole and avoid a recurrence of drug abuse and crime. And Mental Health Courts monitor those with mental illness who find their way into the justice system, many times only because of their illness.

Today, the award-winning NADCP is the premier national membership, training, and advocacy organization for the Drug Court model, representing over 27,000 multi-disciplinary justice professionals and community leaders. NADCP hosts the largest annual training conference on drugs and crime in the nation and provides 130 training and technical assistance events each year through its professional service branches, the National Drug Court Institute, the National Center for DWI Courts and Justice for Vets: The National Veterans Treatment Court Clearinghouse. NADCP publishes numerous scholastic and practitioner publications critical to the growth and fidelity of the Drug Court model and works tirelessly in the media, on Capitol Hill, and in state legislatures to improve the response of the American justice system to substanceabusing and mentally ill offenders through policy, legislation, and appropriations.

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