

# The Impact on Criminal Behavior and Participant Attitudes: Results from NIJ's Multi-Site Adult Drug Court Evaluation, Part 2



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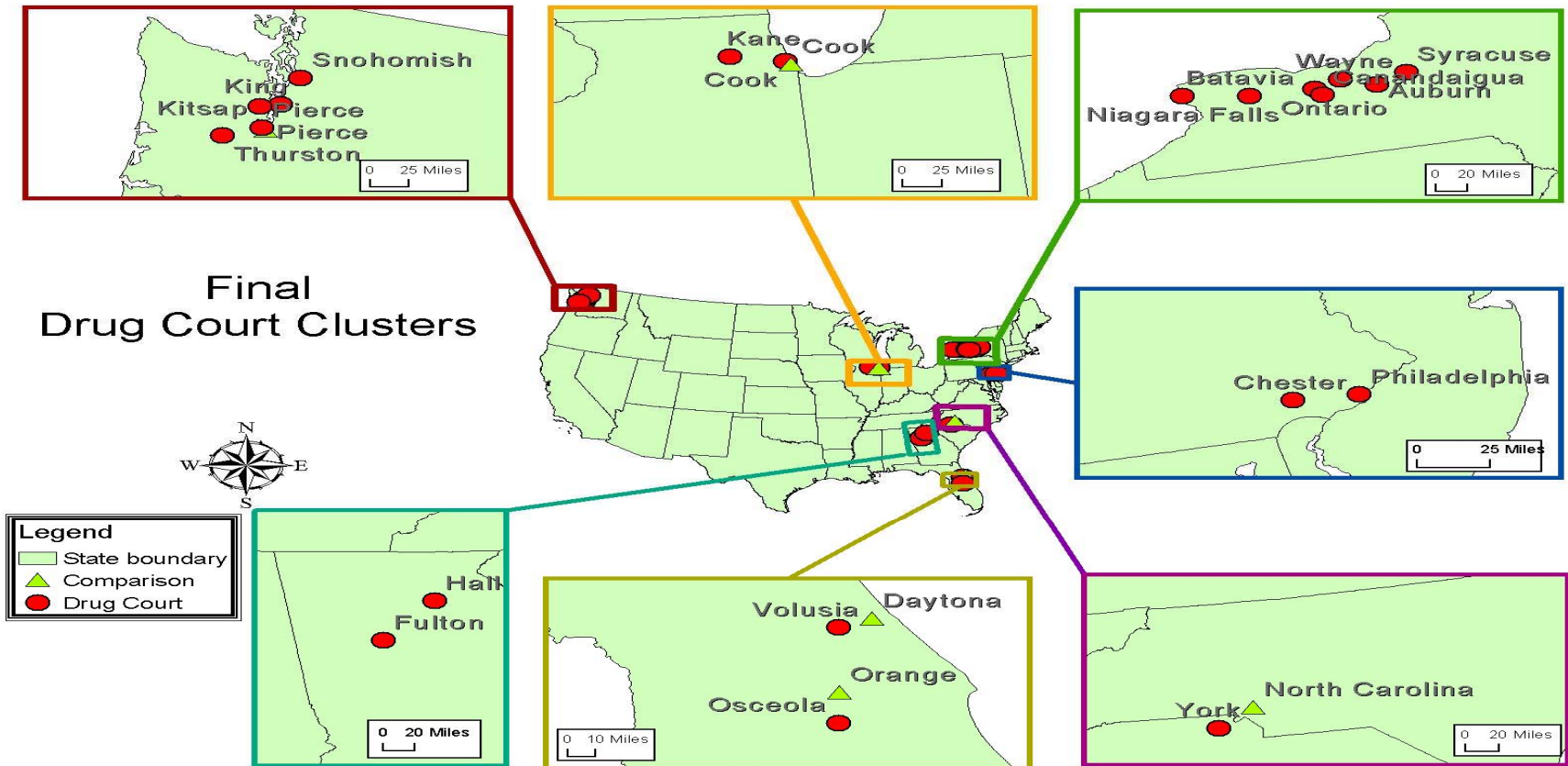
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# About the Study

- **Research Partnership:** The Urban Institute, Center for Court Innovation, & Research Triangle Institute, with funding from the National Institute of Justice (NIJ)
- **Drug Court vs. Comparison Sites:**
  - Drug Court: 23 sites in 7 geographic clusters (n = 1,156)
  - Comparison: 6 sites in 4 geographic clusters (n = 625)
- **Repeated Measures:** baseline and multiple follow-ups:
  - Interviews at baseline, 6 months, 18 months
  - Oral fluids drug test at 18 months
  - Official recidivism records up to 24 months

# Drug Court and Comparison Sites



# Nature of the Intervention: Drug Court vs. Comparison Sites

## Interventions Received in Six Months After Baseline

	Drug Court (n = 1,009)	Comparison (n = 524)
Percent of offenders with any treatment	83%***	36%
Average days in treatment	59***	23
Percent with any judicial status hearings	93%***	14%
Average number of status hearings	10.3***	1.2
Percent with supervision officer contact	96%**	71%
Average number of contacts	17.2***	6.4
Percent with any drug test	95%***	61%
Average number of drug tests	30.9***	4.3
Percent receiving any judicial sanction	50%***	15%
Percent receiving praise from the judge	76%***	10%

+p<.10, \* p<.05, \*\* p<.01, \*\*\*p<.001.

# Offender Background - #1

## Baseline Sample Characteristics (N = 1,781)

Age	33.8
Male	69%
Race/Ethnicity	
White	54%
Black/African-American	34%
HS degree/GED or higher	59%
Currently employed	36%
Days of drug use/month: six months pre-baseline	12.9
Primary drug of choice	
Alcohol	14%
Marijuana/hashish	22%
Cocaine	36%
Percent depressed (multi-item instrument)	39%
Anti-social personality (multi-item instrument)	43%
Narcissistic personality (multi-item instrument)	50%

# Offender Background - #2

## Baseline Criminal Behavior (N = 1,781)

### *Six Months Prior to Baseline Survey:*

Any criminal behavior	74%
Average # criminal acts	21.2
Any drug-related criminal behavior	68%
Average # drug-related criminal acts	13.1
Any driving while intoxicated (DWI)	33%
Average # times DWI	3.0
Any violent crimes	7%
Any carrying of weaon	13%
Any property crimes	11%



# Low Stress Methodology Review

- **Attrition:** Follow-Up Contact Rates at 18 Months:
  - Drug Court: 82% (follow-up N = 951)
  - Comparison Offenders: 84% (follow-up N = 523)
- **Baseline Drug Court vs. Comparison Group Differences:** Significant differences on 37 of 61 baseline characteristics (spanning demographics, community ties, mental and physical health, drug use history, treatment history, and criminal history)
- **Statistical Adjustment:** All results are statistically adjusted to compensate for differences at baseline (“propensity score adjustments” and “super weighting”)



# Core Research Questions

1. Do drug courts work? (Do they reduce drug use, criminal behavior, and other associated problems?)
2. Do drug courts influence offender attitudes and perceptions, and do those changes make drug courts more effective?
3. Which policies and practices make drug courts more or less effective in achieving their desired outcomes?
4. Do drug courts generate cost savings for the criminal justice system or other public institutions?





# 1. Do Drug Courts Work?

- A. Criminal Behavior
- B. Incarceration
- C. Drug Use
- D. Socioeconomic Status (education, employment, income)
- E. Mental Health
- F. Family Support
- G. Homelessness
- H. Program Retention Rates



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# Criminal Behavior: Literature to Date

## ■ Official Recidivism:

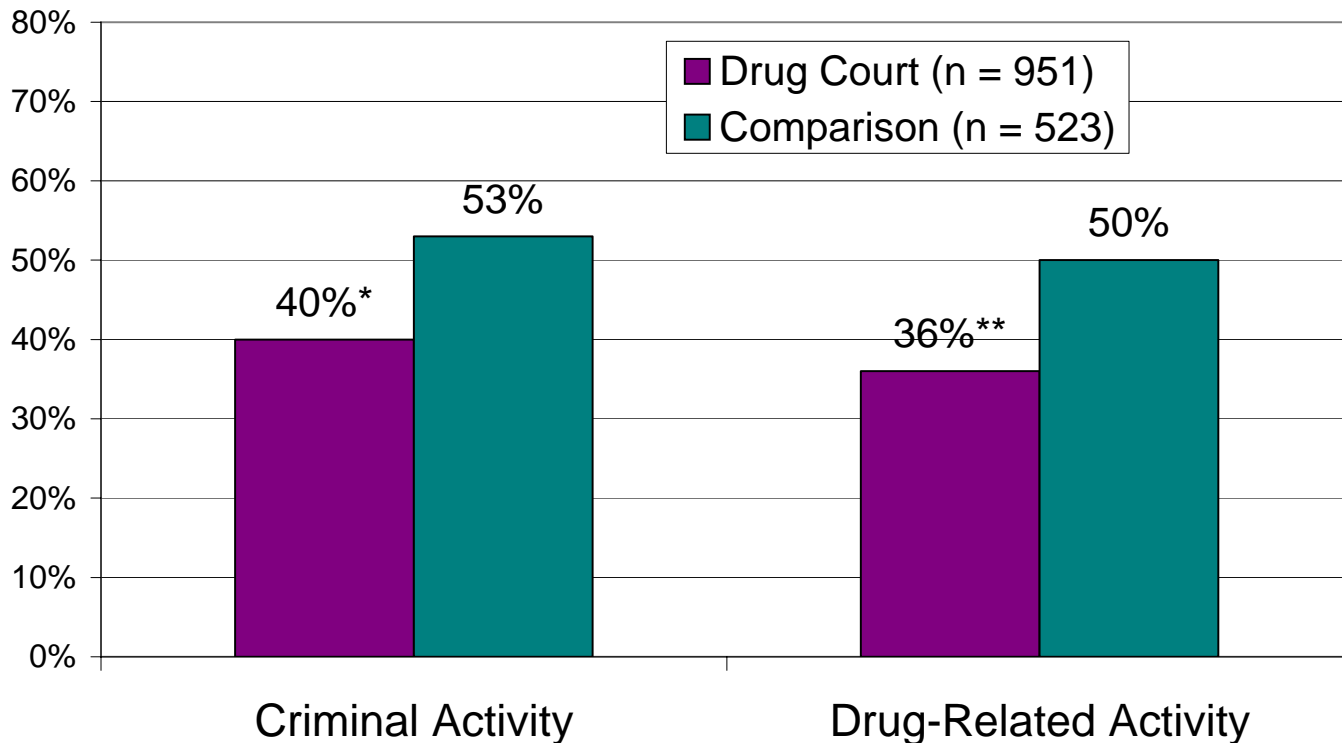
- Forty-eight (48) of 55 drug courts produced lower re-arrest or re-conviction rates than their comparison groups (Wilson et al. 2006)
- Average effect ~ 10-13 percentage points (Aos et al. 2001; Shaffer 2006; Wilson et al. 2006)
- Effects up to three years – i.e., at least spanning an early post-program period (e.g., Goldkamp et al. 2001; Gottfredson et al. 2006; Rempel et al. 2003)
- Longer-term (10+ year) effects uncertain (Finigan et al. 2007; Macklin et al. 2009)
- Exact magnitude of impact varies widely by site

## ■ Criminal Behavior (whether or not officially detected):

Little research, beyond Brooklyn (Harrell et al. 2001) & Baltimore (Gottfredson et al. 2005).

# MADCE Results at 18 Months: Criminal Behavior in Prior Year

**Percent with Criminal Activity:  
One Year Prior to 18-Month Interview**



+ p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001

# MADCE Results at 18 Months: Criminal Behavior in Prior Year?

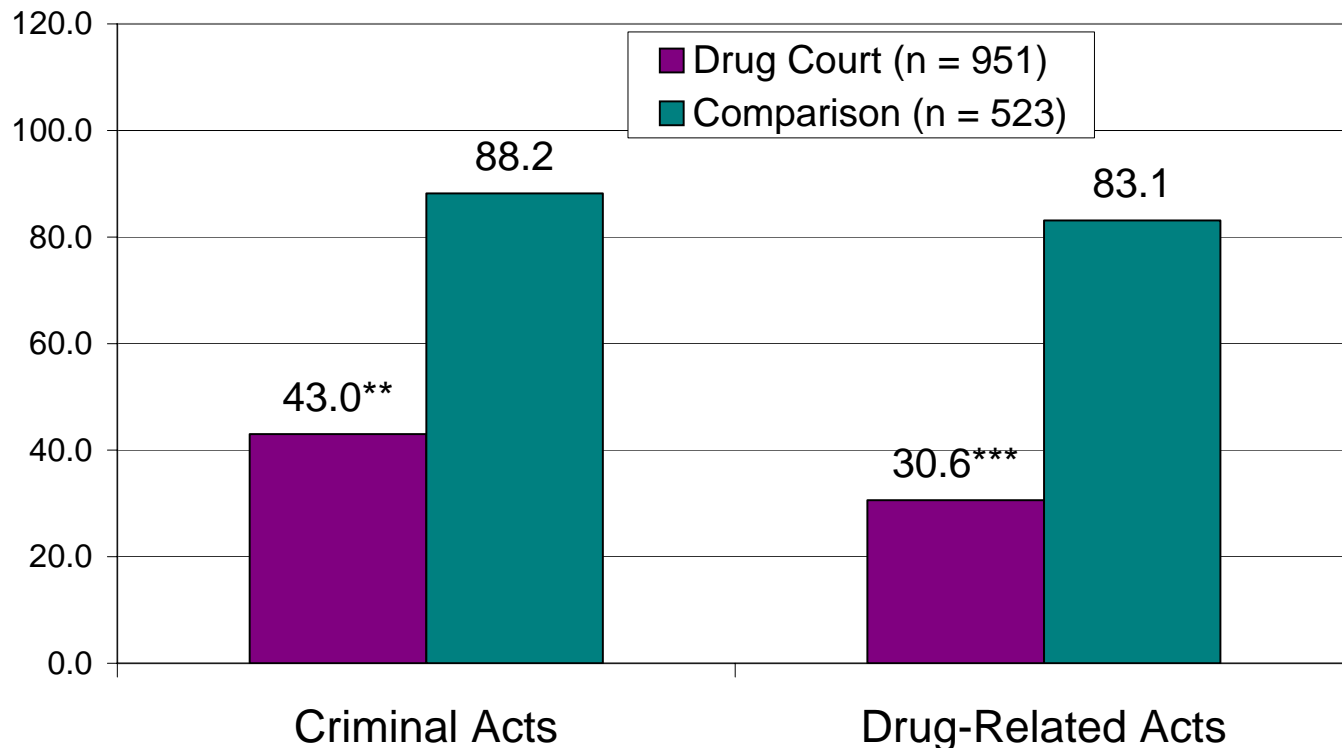
## Criminal Behavior: Year Prior to 18-Month Survey

Outcome Measure	Drug Court	Comparison Group
1) Any drug use or possession	34% **	50%
2) Any drug sales	9% *	16%
3) Any other drug crimes (manufacturing, trafficking, etc.)	2%	2%
4) Any DWI/DUI	13% *	20%
5) Any violent crime/crime against people	4%	3%
6) Any weapons possession	7%	8%
7) Any property crimes	3% *	6%
8) Any public order crimes (e.g., prostitution, vagrancy)	1%	1%

+p<.10, \* p<.05, \*\* p<.01, \*\*\*p<.001.

# MADCE Results at 18 Months: # Criminal Acts in Prior Year?

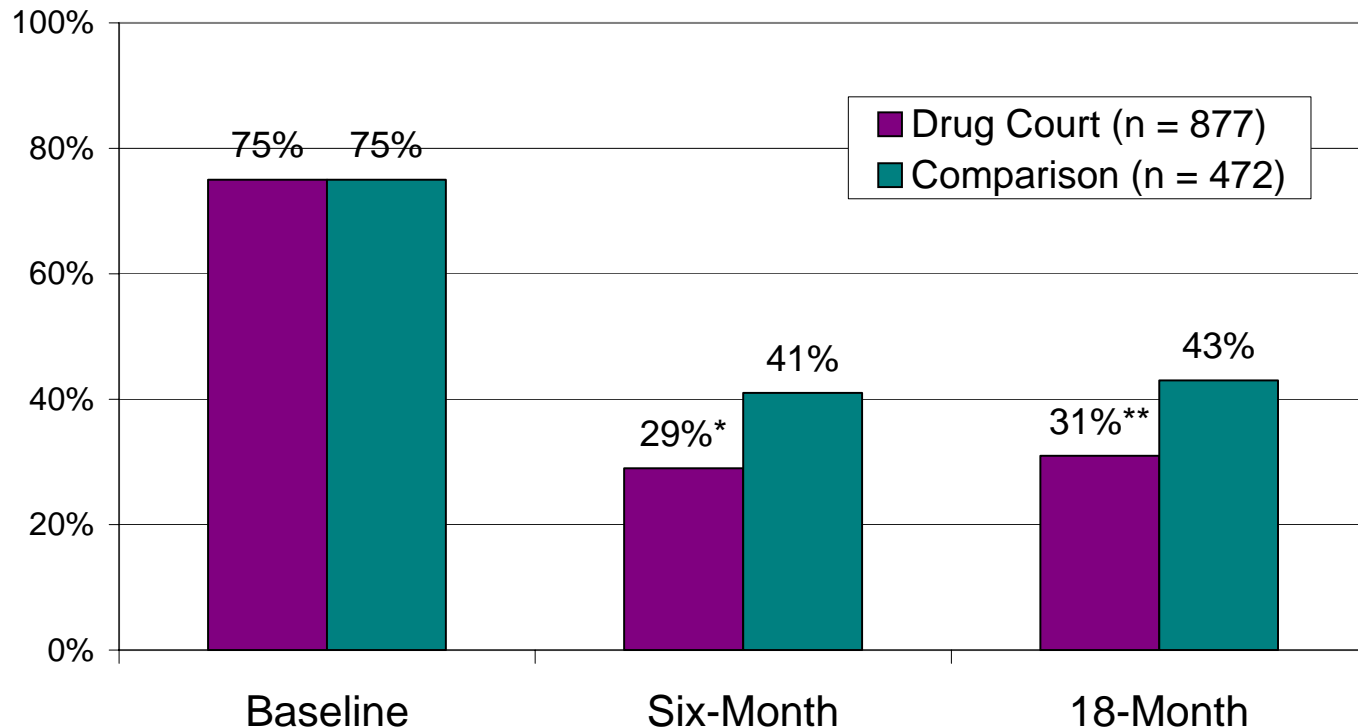
**Number of Criminal Acts:  
One Year Prior to 18-Month Interview**



+ p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001

# MADCE Results Over Time: Trajectory of Behavior Change #1

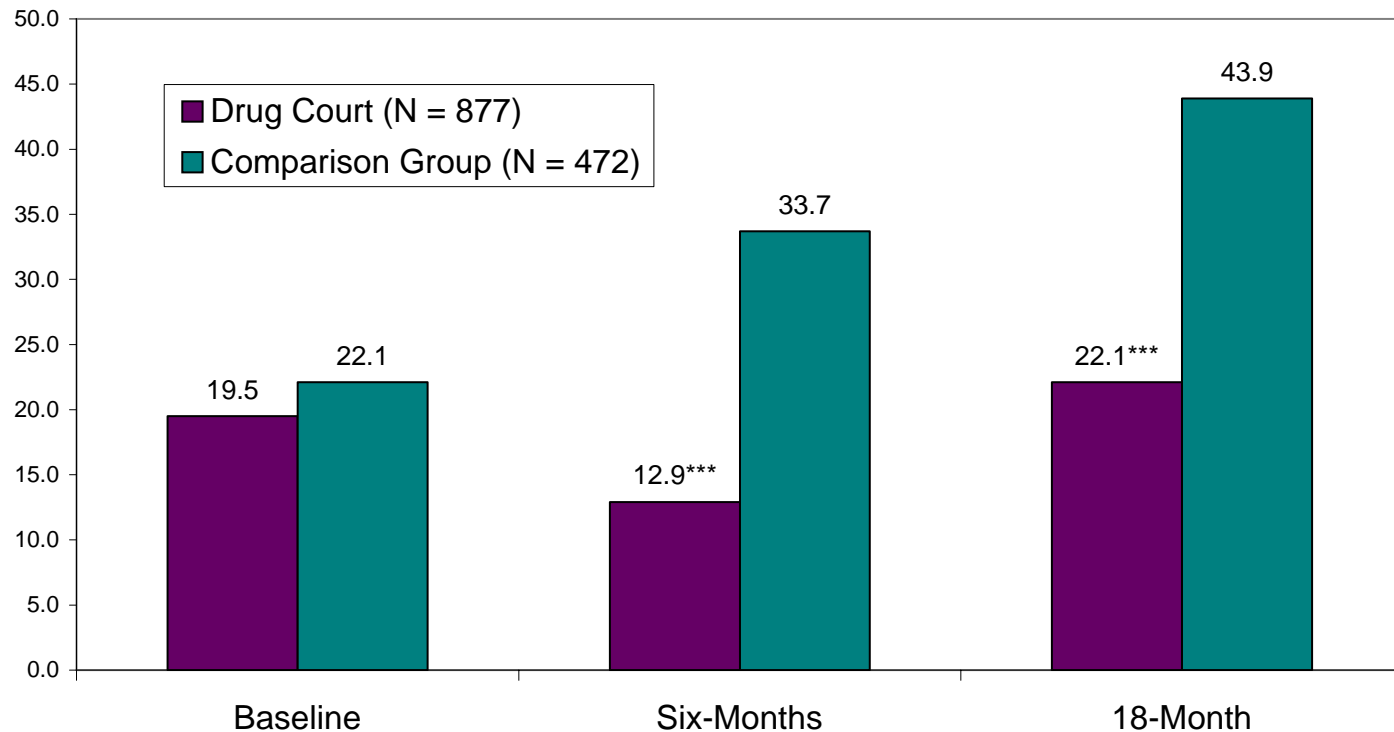
## Criminal Activity in Prior Six Months: Baseline vs. Six-Month vs. 18-Month Interviews



+ p < .10 \* p < .05 \*\* p < .01 \*\*\* p < .001

# MADCE Results Over Time: Trajectory of Behavior Change #2

**Number of Criminal Acts in Prior Six Months:  
Baseline vs. Six-Month vs. 18-Month Surveys**

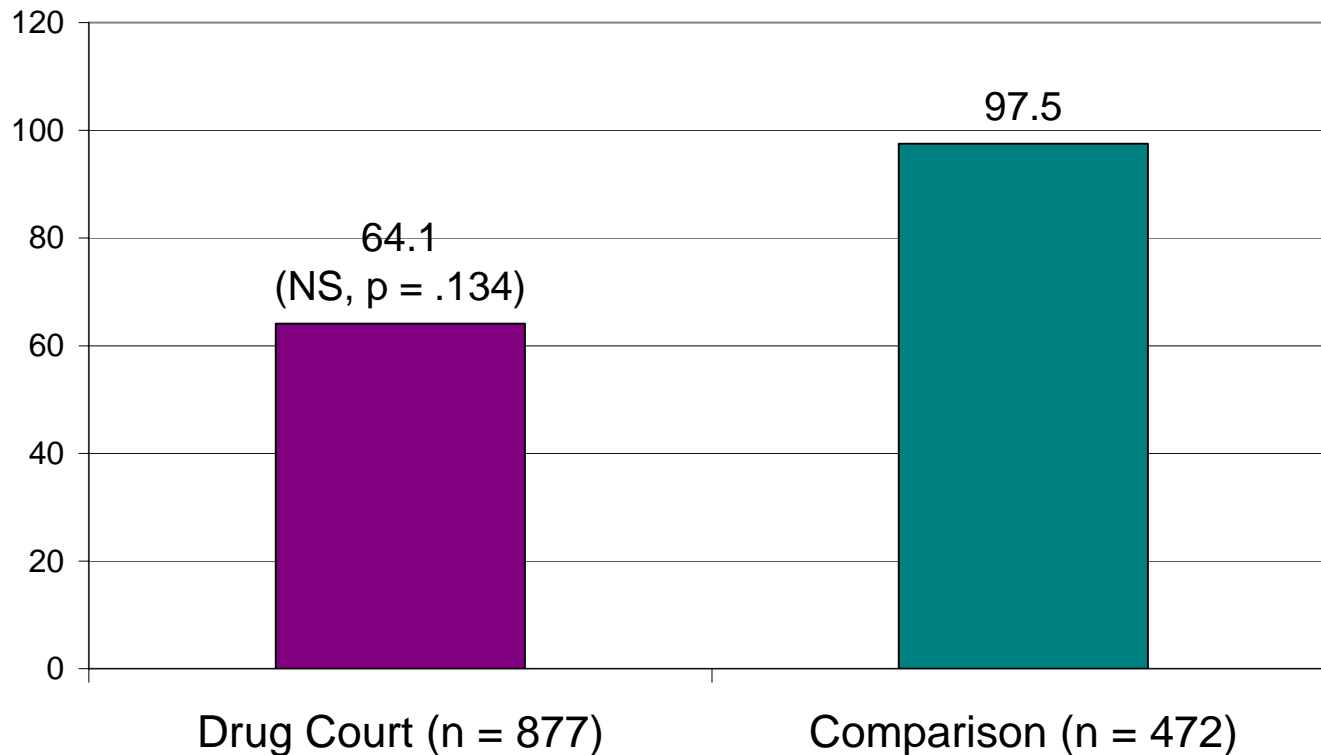


+ p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001.



# MADCE Results: Days of Incarceration over 18 Months

**Days Incarcerated Over 18 Months**  
(Adds Incarceration Time on 6- and 18-Month Interviews)





# Research Questions


## 1. Do drug courts work?

- Do drug courts reduce criminal behavior? YES.
- Do drug courts reduce incarceration? MAYBE (NOT SIG.)
- For whom are the criminal behavior effects most pronounced?
- Is drug rehabilitation the driving mechanism?




# Baseline Risk Factors: Possibilities

1. **Drug Use History** (more days of drug use pre-baseline; serious primary drug: e.g., heroin or cocaine, but not marijuana)
2. **Prior Criminality** (more criminal activity pre-baseline)
3. **Mental Health** (depression; anti-social personality disorder; narcissistic personality disorder)
4. **Social Ties** (not employed or in school; not married; homeless; blood relatives involved with drugs or crime)
5. **Primary Demographics** (younger age; male sex; lack of high school degree/GED; lower income)



# MADCE Results: Risk Factors for Criminal Behavior at 18 Months

1. **Drug Use History:** more days of use/month prior to baseline
  2. **Prior Criminality:** more criminal activity prior to baseline
  3. **Mental Health:** anti-social personality or narcissistic personality
  4. **Social Ties:** not married
  5. **Primary Demographics:** younger age
- **Individual Factors that Were Not Significant:** primary drug, depression at baseline, employment/school status; homelessness, sex, race/ethnicity, H.S. degree/GED status




# MADCE Results: For Whom Do Drug Courts Work?

## An Important Clarification:

- Why is “for whom do drug courts work especially well” a different question from “what are the baseline risk factors”?

Put differently:

- Can drug courts work better for those who are at an inherently higher risk for future criminal behavior? **Yes, Yes, Yes.**  
(E.g., see Marlowe et al. 2003; NIC 2010)



# MADCE Results: For Whom Do Drug Courts Work?

- ☒ **Drug Use History**
- ✓ **Prior Criminality: only prior violent convictions (16% of sample)**
- ✓ **Mental Health: only not narcissistic personality**
- ☒ **Social Ties (employment, school, marriage, homelessness, etc.)**
- ✓ **Primary Demographics: only not black**

**Overall:** *Drug courts had a differential impact among 3 of 17 subgroups.*

**Conclusion:** *The drug court impact is not greatly limited to subgroups.*



# Research Questions

## 1. Do drug courts work?

- Do drug courts reduce criminal behavior? YES.
- Do drug courts reduce incarceration? MAYBE (NOT SIG.).
- For whom are the criminal behavior effects most pronounced? FEW SUBGROUP EFFECTS.
- Is drug rehabilitation the driving mechanism?



# The Drug Court Theory of Change

- Is drug rehabilitation the driving mechanism?

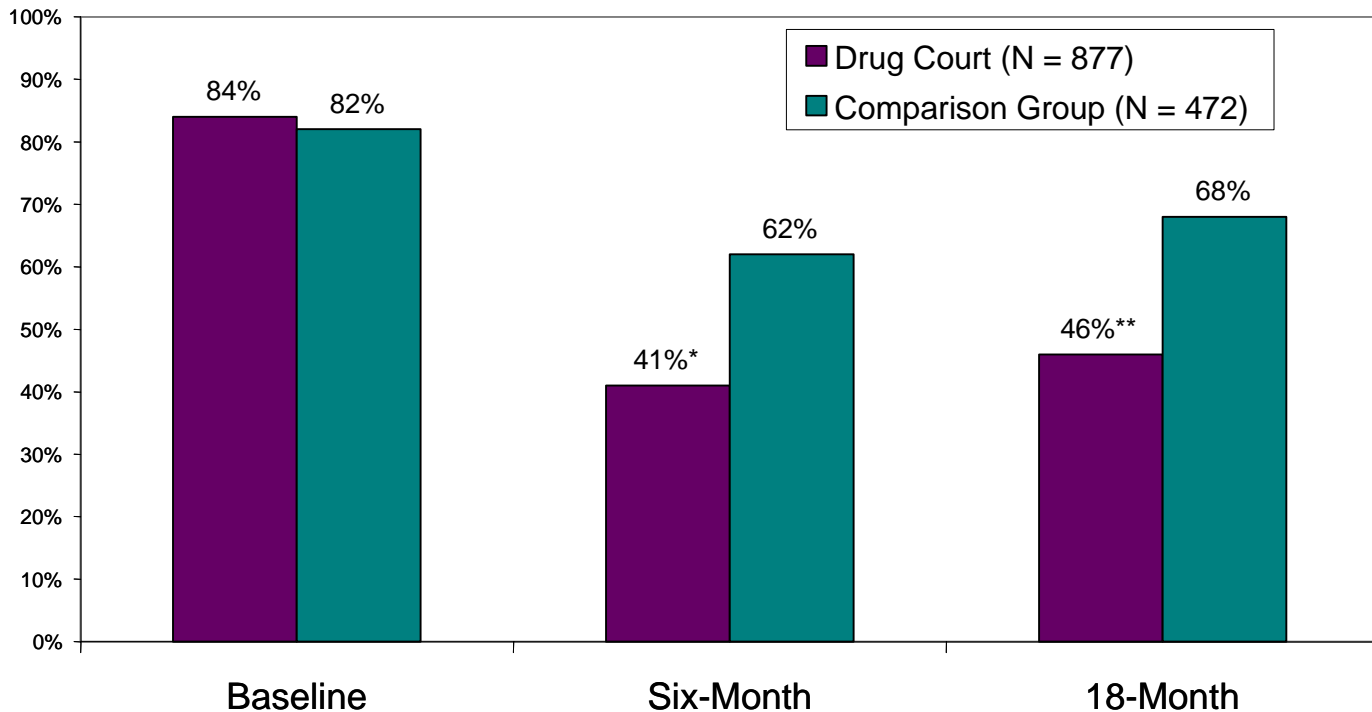
In other words:

- Does treating the underlying addiction in fact result in less criminal behavior?
  - ➔ *Does more treatment lead to less criminal behavior?*
  - ➔ *Does less drug use lead to less criminal behavior?*



# MADCE Results: Review of Drug Use Impacts #1

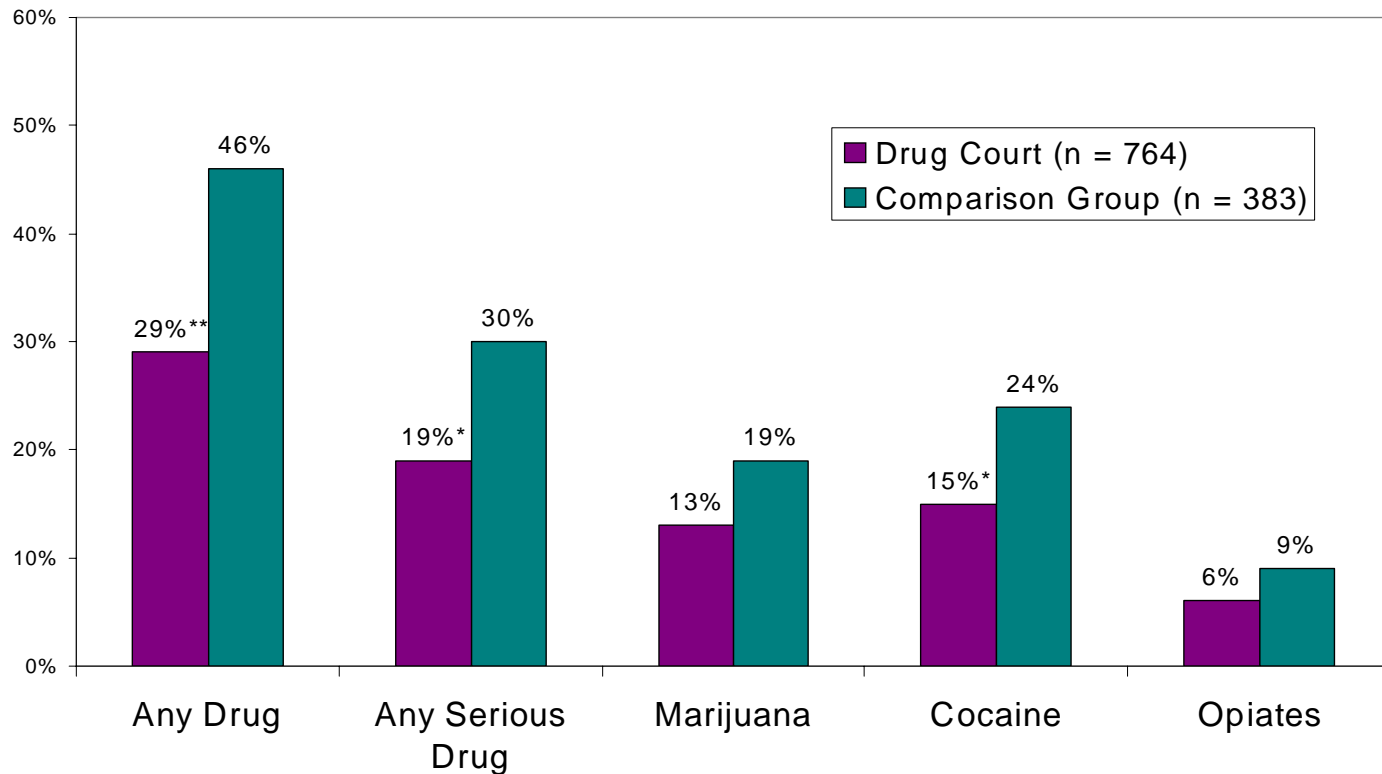
## The Trajectory of Recovery: Percent Used Drugs in Prior Six Months



+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .


# MADCE Results: Review of Drug Use Impacts #2

Drug Test Results at 18-Month Interview



+ p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001.

Note: Besides those listed, the drug test also included amphetamines and PCP (both at 1% in the full sample). Serious drugs do not include



# MADCE Results: The Drug Use-Crime Nexus

- ❌ **Treatment:** More days of treatment does NOT significantly predict less criminal behavior at follow-up ( $p < .10$ )
- ✓ **Drug Use:** Fewer days of drug use significantly and powerfully predicts less criminal behavior at follow-up

## Implications:

- Drug courts reduce crime largely BECAUSE they reduce drug use.
- Treatment is not the main reason why drug courts reduce drug use.
- Teaser (more in Part 3): Judicial status hearings and drug testing are more central policy mechanisms (Roman et al. 2009; Zweig et al. 2010)



## 2. Role of Offender Attitudes?

### 1. Do drug courts work?

- Do drug courts reduce criminal behavior? YES.
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- Is drug rehabilitation the driving mechanism? YES

### 2. Do drug courts influence offender attitudes and perceptions, and do those changes make drug courts more effective?



# Offender Attitudes and Perceptions

- **Procedural Justice (fairness of court procedures):**
  - Perceptions of judge
  - Perceptions of supervision officer/case manager
  - Perceptions of court procedural justice
- **Distributive Justice (fairness of court outcome: win/lose)**
- **Consequences of Noncompliance:**
  - Perceptions of legal consequence of failure (leverage)
  - Perceptions of noncompliance detection
  - Perceptions of response certainty and severity (e.g., jail)



# Procedural and Distributive Justice: Conceptual Overview

- **Procedural Justice Dimensions** (e.g., Tyler 1990):
  - Voice: Litigants' side is heard.
  - Respect: Justice actors treat litigants with dignity and respect.
  - Neutrality: Decision-making is unbiased and trustworthy.
  - Understanding: Litigants comprehend court language and decisions
  - Helpfulness: Justice actors interested in litigants' personal situation.
- **Distributive Justice**: fairness of the “bottom-line” case outcome (e.g., was it fair to have won or lost?)



# Procedural Justice: Major Empirical Findings

- **Overall Perceptions:** Perceptions of procedural justice outweigh distributive justice (e.g., Casper, Tyler, and Fisher 1988; Tyler and Huo 2002; Sunshine and Tyler 2003).
- **Impact on Compliance:** Perceptions of procedural justice increase compliance and law-abiding (e.g., Lind et al. 1993; Paternoster et al. 1997; Tyler and Huo 2002)
- **Research in “Problem-Solving Courts”:**
  - Judge has greatest influence on overall perceptions (Frazer 2006; Abuwala and Farole 2008)
  - More judicial status hearings creates more positive outcomes, especially among “high risk” participants (Gottfredson et al. 2009; Marlowe et al. 2003)



# MADCE: Perceptions of the Judge: Specific Measures

**The Judge** (each item asked separately; results averaged to create overall score):

- Is knowledgeable about your case
- Knows you by name
- Helps you to succeed
- Emphasizes the importance of drug and alcohol treatment
- Is intimidating or unapproachable
- Remembers your situations and needs from hearing to hearing
- Gives you a chance to tell your side of the story
- Can be trusted to treat you fairly
- Treats you with respect



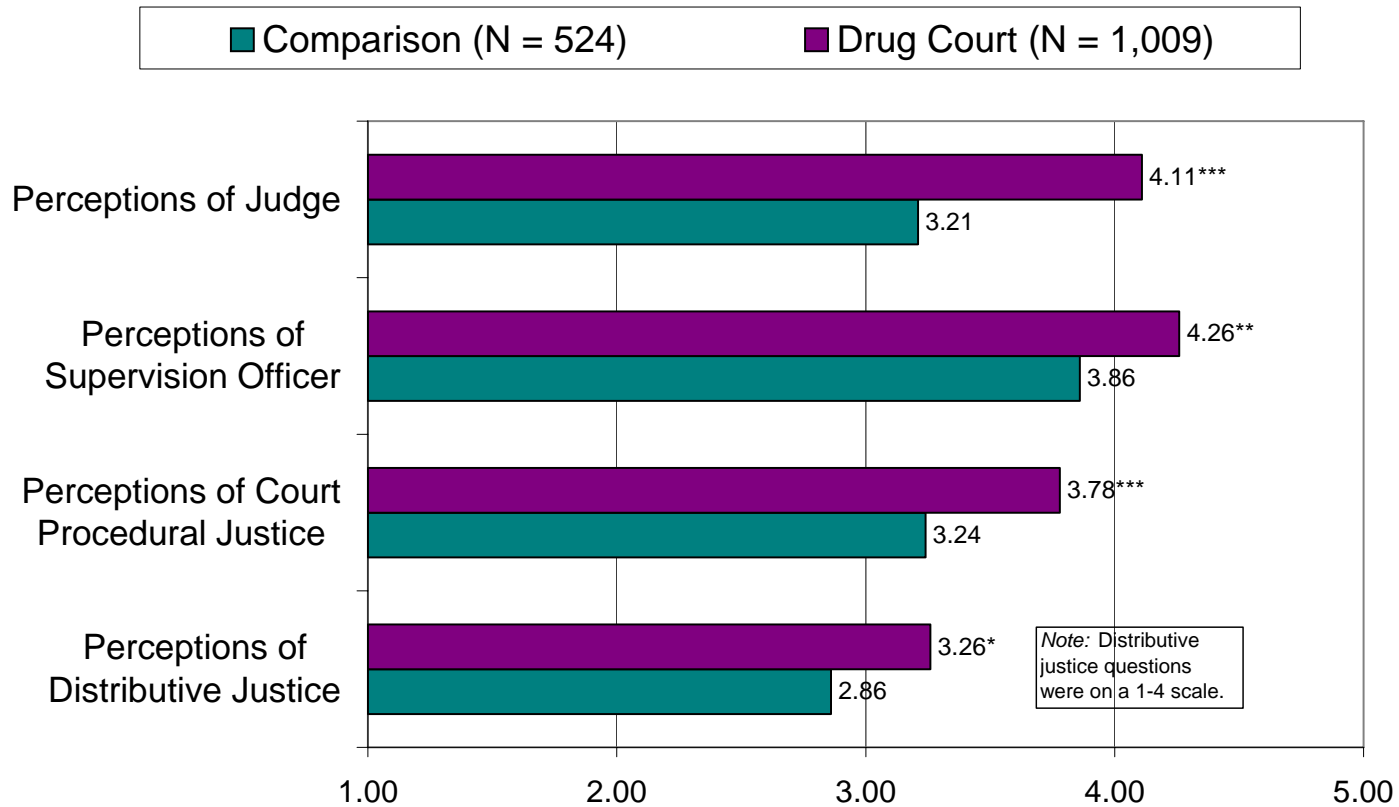


# MADCE: Court Procedural Justice: Specific Measures (Examples)

- **Voice:**
  - You felt you had the opportunity to express your views in the court.
  - People in the court spoke up on your behalf.
- **Respect:**
  - You felt pushed around in the court case by people with more power than you.
  - You feel that you were treated with respect in the court.
- **Neutrality:**
  - All sides had a fair chance to bring out the facts in court.
  - You were disadvantaged ... because of your age, income, sex, race...
- **Understanding** (highest rated area: drug court mean = 4.19, 1-5 scale):
  - You understood what was going on in the court.
  - You understood what your rights were during the processing of the case.

# MADCE Results: Perceptions of Justice (from six-month survey)

## Offender Perceptions of Fairness



\* p < .05    \*\* p < .01    \*\*\* p < .001



# Consequences of Noncompliance: Legal Coercion Findings

- Legal coercion (vs. voluntary treatment) improves drug use and criminal behavior outcomes (Anglin et al. 1989; DeLeon 1988; Hiller et al. 1998)
- Higher “jail/prison alternatives” improve drug court outcomes (e.g., see Gottfredson et al. 2003; Rempel and DeStefano 2001; Rempel et al. 2003)
- Perceptions of legal pressure are critical (Young and Belenko 2002)

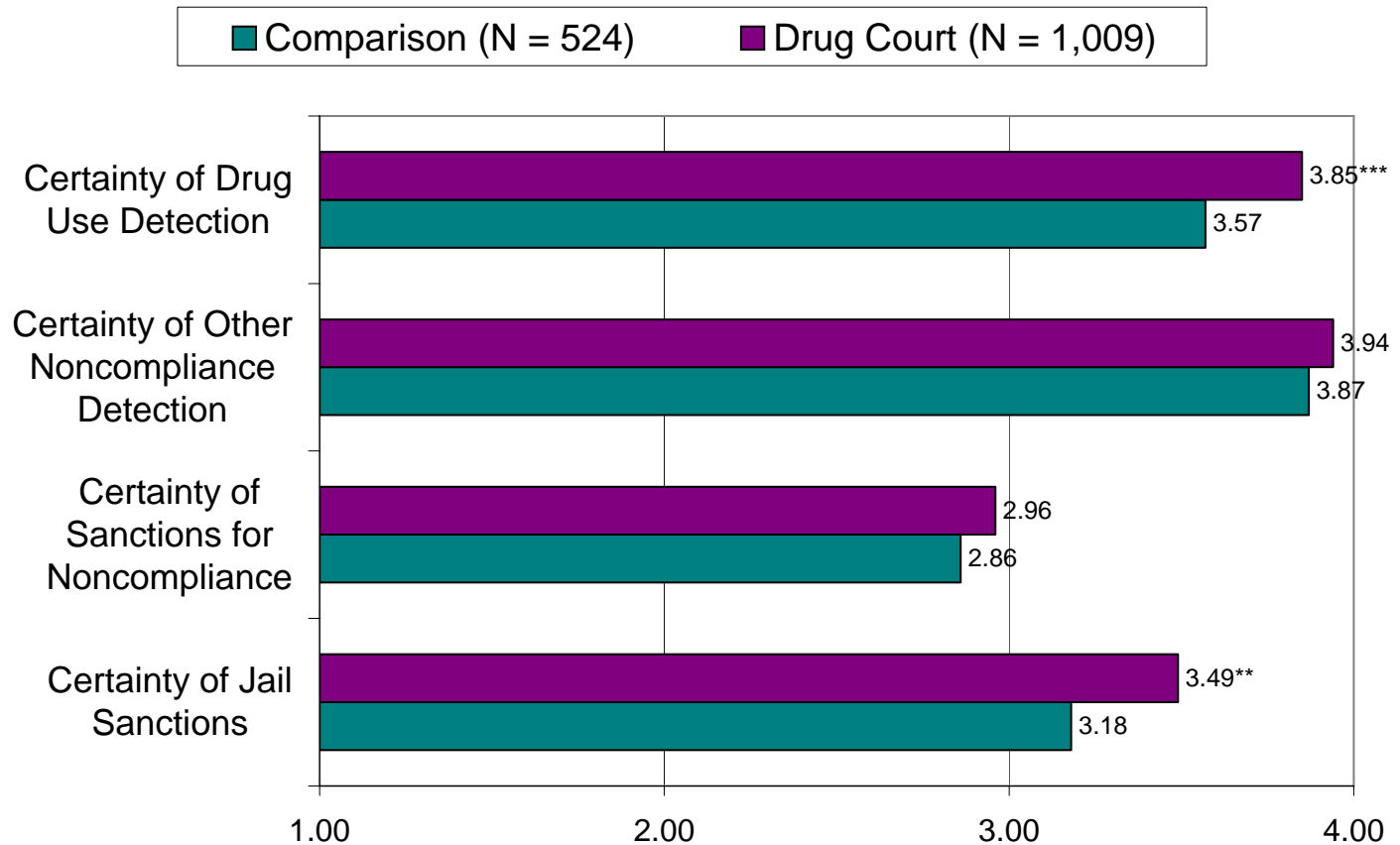


# Consequences of Noncompliance: Intermediate Sanctions Findings


- **Best Sanctioning Practices** (e.g., see Marlowe and Kirby 1999; Taxman et al. 1991):
  - Certainty: sanction for every infraction
  - Celerity: Impose soon after the infraction
  - Severity: sufficiently serious to deter future misconduct
  - Consistency: apply similar sanctions for similar misconduct
  
- **Drug Court Research**: Little evidence specific to drug courts  
(except for Harrell et al. 1998)

# MADCE Results: Consequences of Noncompliance (six-month survey)

## Perceptions of Response to Noncompliance




\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$



# MADCE Results: Strategy: Perceptions → Outcomes

- **Sample:** Drug Court Only (N = 843-877)
- **Outcomes:**
  - Compliance: # supervision violations in year prior to 18-month mark
  - Drug Use: # days of drug use/month in year prior to 18-month mark
  - Criminal Behavior: # criminal acts in year prior to 18-month mark
- **Analytic Strategy:** Determine which perceptions at the six-month mark predict 18-month outcomes (after controlling for participant background characteristics)




# MADCE Results: Findings #1: Perceptions → Outcomes

## ■ Procedural and Distributive Justice:

- ✓ Judge
- ☒ Supervision officer/case manager
- ✓ Court procedural justice
- ✓ Distributive Justice (fairness of court outcome: win/lose)

## ■ Consequences of Noncompliance:

- ✓ Failure consequence (“how bad is sentence upon failure”)
- ☒ Detection (“how likely judge or supervisn. officer would find out”)
- ☒ Response certainty/severity (“how likely would they respond”)
- ✓ Perceived fairness of court use of sanctions (“penalties”)



# MADCE Results: Findings #2: Perceptions → Outcomes

- **Entire Sample: Drug Court + Comparison Offenders**
  - ✓ Perceptions of the Judge emerges as single most critical perception in analyses in progress (see Roman et al. 2009)





# MADCE Review: Do Drug Courts Work?

- **Drug Use:** YES
- **Criminal Behavior:** YES (partly by reducing drug use)
- **Incarceration (on Initial Case):** Possible modest effect (NS)
- **Other Psychosocial Outcomes:** MIXED RESULTS
  - **Socioeconomic Status:** Possible modest effect (NS)
  - **Co-Occurring Depression:** NO
  - **Family Ties:** MIXED: Significant reduction in family conflict, little or no effect on family emotional or financial support
  - **Homelessness:** NO



# MADCE Review: Do Perceptions Matter

## ■ Do Drug Courts Influence Perceptions?

- Procedural and Distributive Justice: **YES**
- Likelihood of Noncompliance Detection: **DRUG USE ONLY**
- Likelihood of Sanctions: **NO overall/YES for jail sanctions**

## ■ Do Perceptions Influence Drug Court Participant Outcomes?

- Procedural and Distributive Justice: **YES (espec. perceptions of judge)**
- Severity of Failure Consequence (“extremely bad”): **YES**
- Likelihood of Noncompliance Detection: **NO**
- Likelihood of Sanctions: **NO**



# Stay Tuned for...

Results from NIJ's Multi-Site Adult Drug Court Evaluation,  
Part Three:

*The Impact of Drug Court Policies, Practices, and  
Offenders' Program Experiences*