



Do Adult Drug Courts Work?

Drugs, Crime and Other Psychosocial Outcomes



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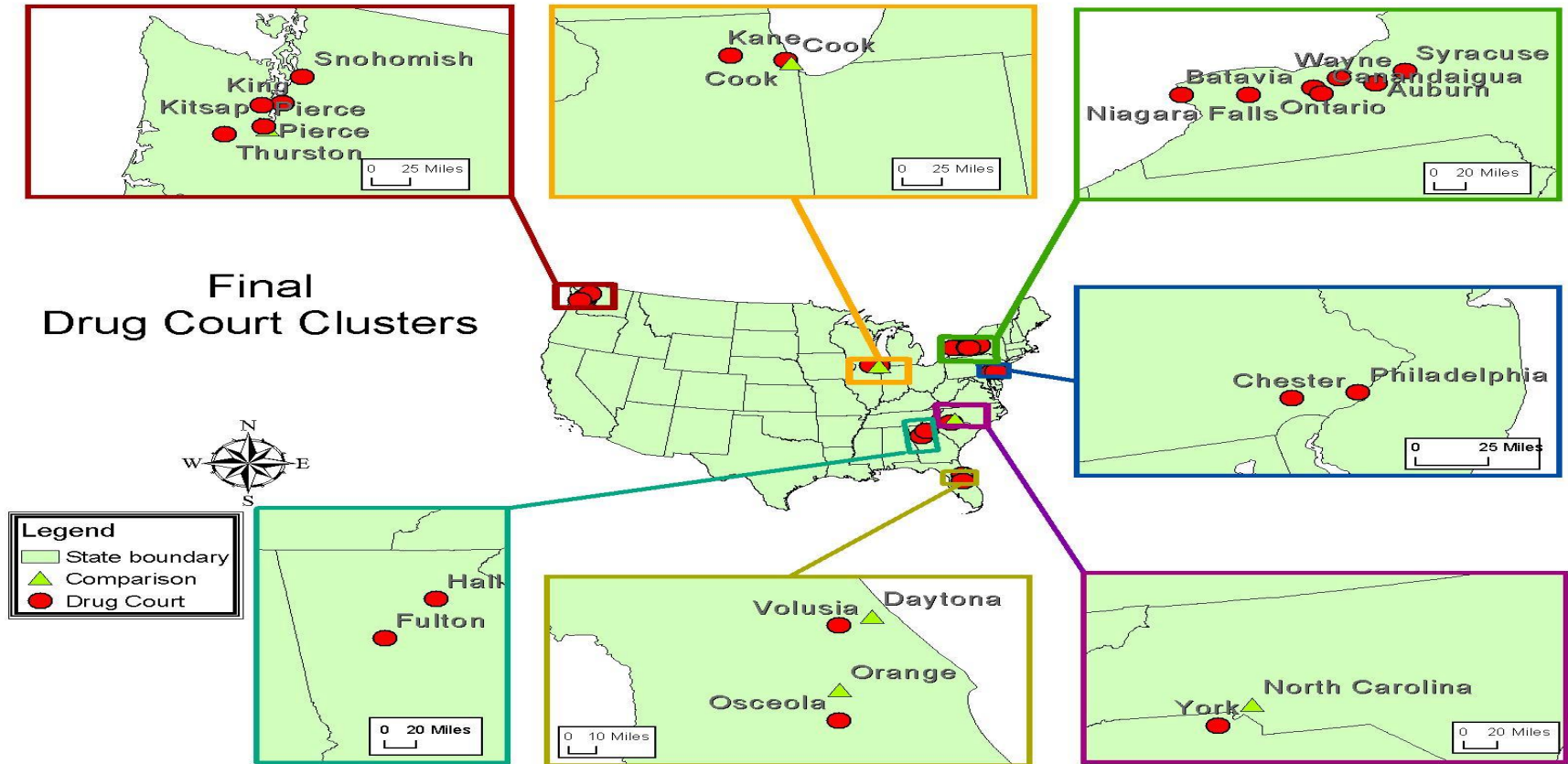
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About the Study

- **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





Attrition and Selection

- **Attrition:** Follow-Up Contact Rates at 18 Months:
 - Drug Court: 82% (follow-up N = 951)
 - Comparison Offenders: 84% (follow-up N = 523)
- **Potential Selection Bias Problem:** Significant differences on 37 of 61 baseline characteristics (spanning demographics, community ties, mental and physical health, drug use history, treatment history, and criminal history) at baseline for drug court vs. comparison group
- **Statistical Adjustment:** All results are statistically adjusted to compensate for differences at baseline



“Superweighting” Strategy

- Weight cases based on propensity to be in drug court vs. comparison sample and propensity for survey retention at follow-up (See Rempel, 2009).
- Compensates for initial differences – higher weights to under-represented and lower weights to over-represented categories of offenders.



Additional Threat to Validity: Site Level Bias?

- **Answer = Yes.**

- **Procedure:** For Major Outcomes:

- Partition the variance into the portions resulting from site-level differences (inter-site) and individual differences (intra-site)
- Examine whether inter-site variance is statistically significant:
 - *Yes at $p < .001$ for nearly all outcomes*

- **Solution:** Multi-Level Modeling

- Incorporate site-level variance (n=29 sites) not merely individual-level variance (n=1,781 individuals)
- Participation status = site-level (Level 2) variable



Core Research Questions

1. Do drug courts reduce drug use, criminal behavior, and other associated problems?
2. Which policies and practices make drug courts more or less effective in achieving their desired outcomes?
3. Do drug courts generate cost savings for the criminal justice system or other public institutions?



Research Question 1: Do Drug Courts Work?

- **Drug Use**
- **Criminal Behavior**
- **Incarceration**
- **Other Psychosocial Outcomes:**
 - Socioeconomic Status (education, employment, income)
 - Mental Health
 - Family Support (conflict, instrumental support, emotional support)
 - Homelessness

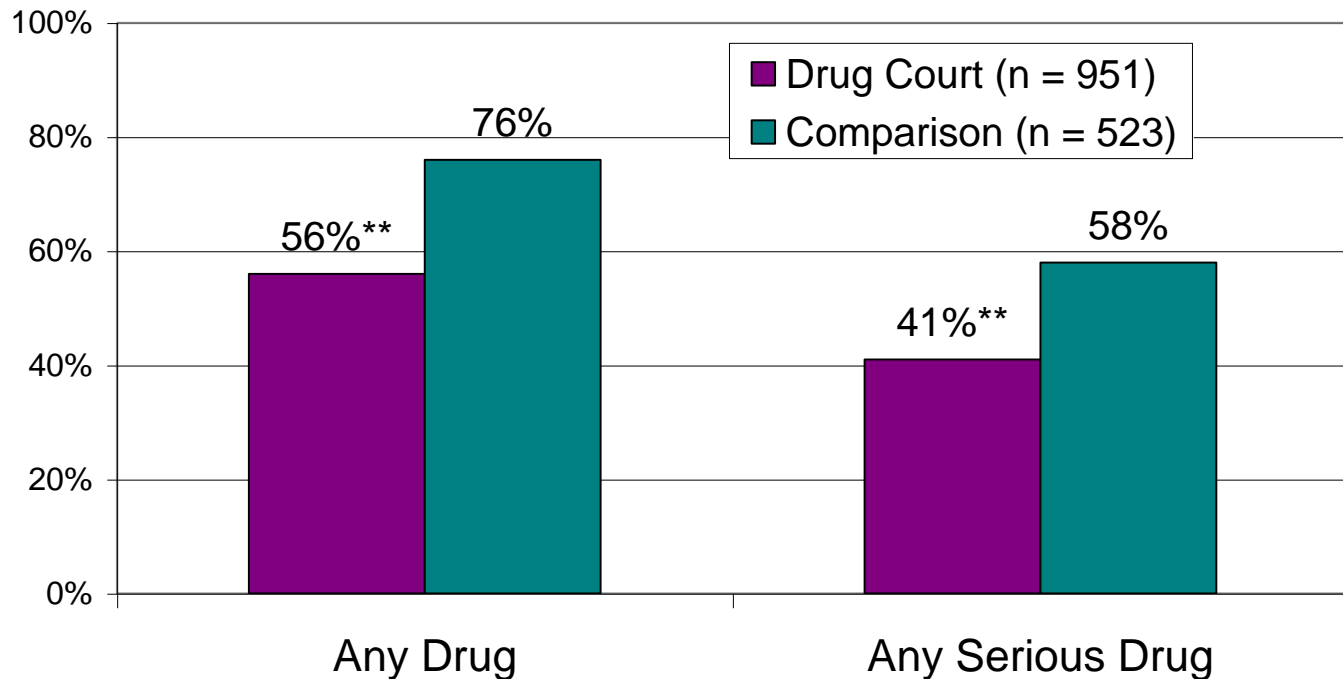


Drug Use: Literature to Date

- Barely any prior research, but findings imply drug courts can have an impact on reduced drug use of participants
- Low sample size or other design flaws in all prior studies

Drug Use: Year Prior to 18-Month Interview

**Percent Used Drugs:
One Year Prior to 18-Month Interview**

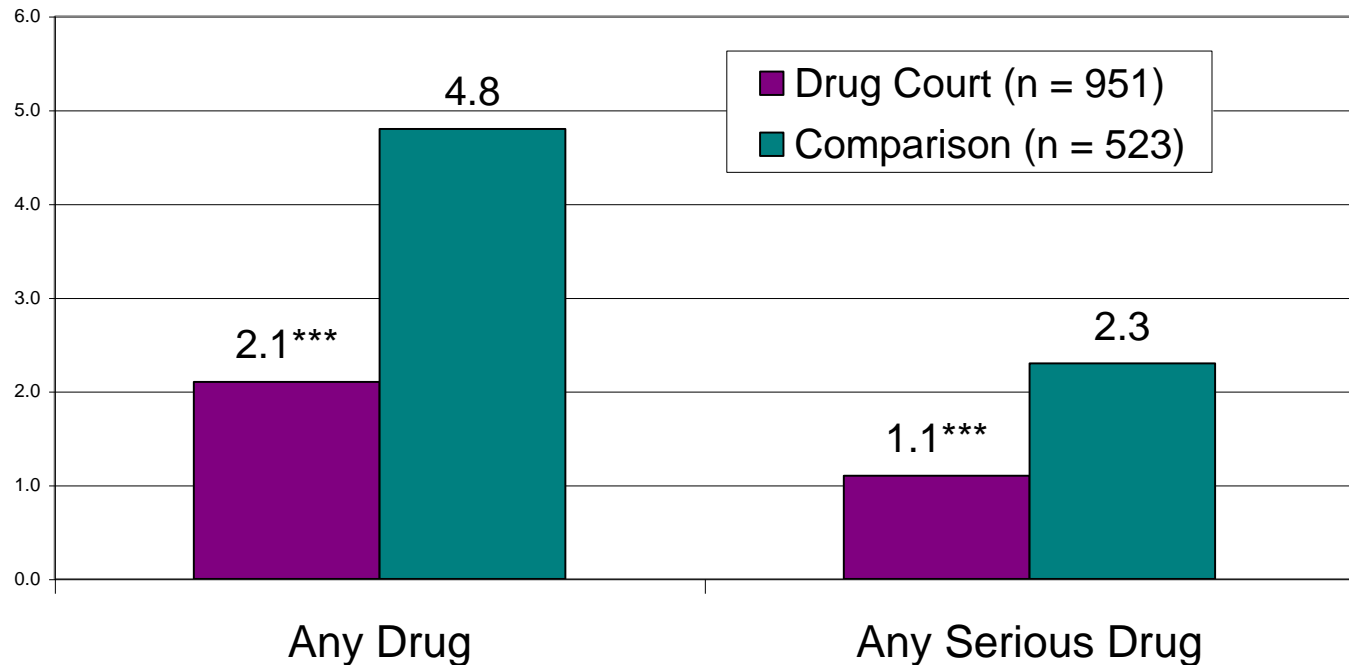


+ p < .10 * p < .05 ** p < .01 *** p < .001

Note: Measures are reported use of eight drugs: alcohol, marijuana, cocaine, heroin, amphetamines, hallucinogens, prescription drugs (illegal use), and methadone (illegal use). "Serious" drugs omit marijuana and light alcohol use (less than four drinks per day for women and less than five for men).

Drug Use: Year Prior to 18-Month Interview

Days of Drug Use Per Month: One Year Prior to 18-Month Interview

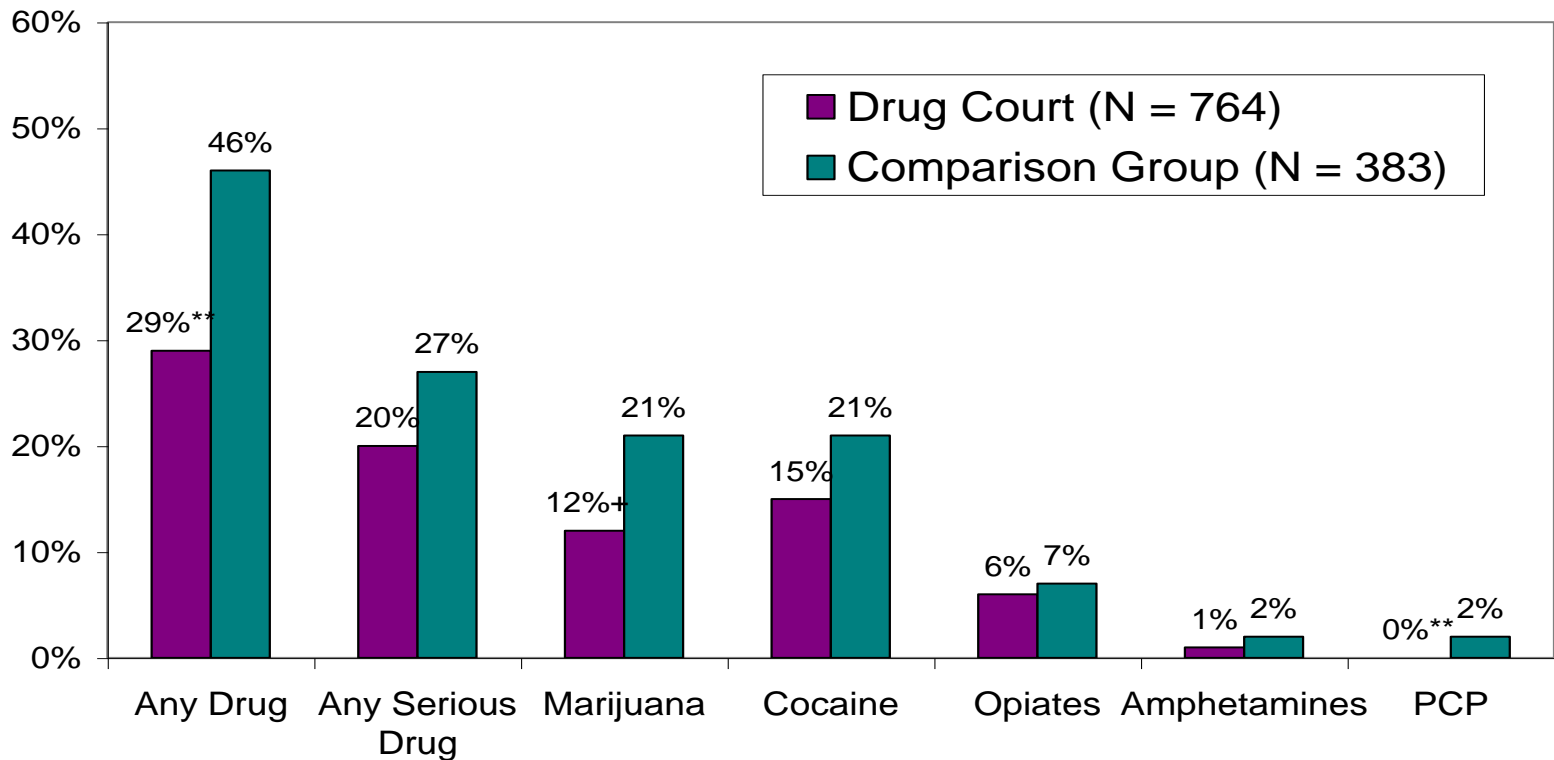


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Drug Use: Drug Test Results at 18 Months

Drug Test Results at 18 Months

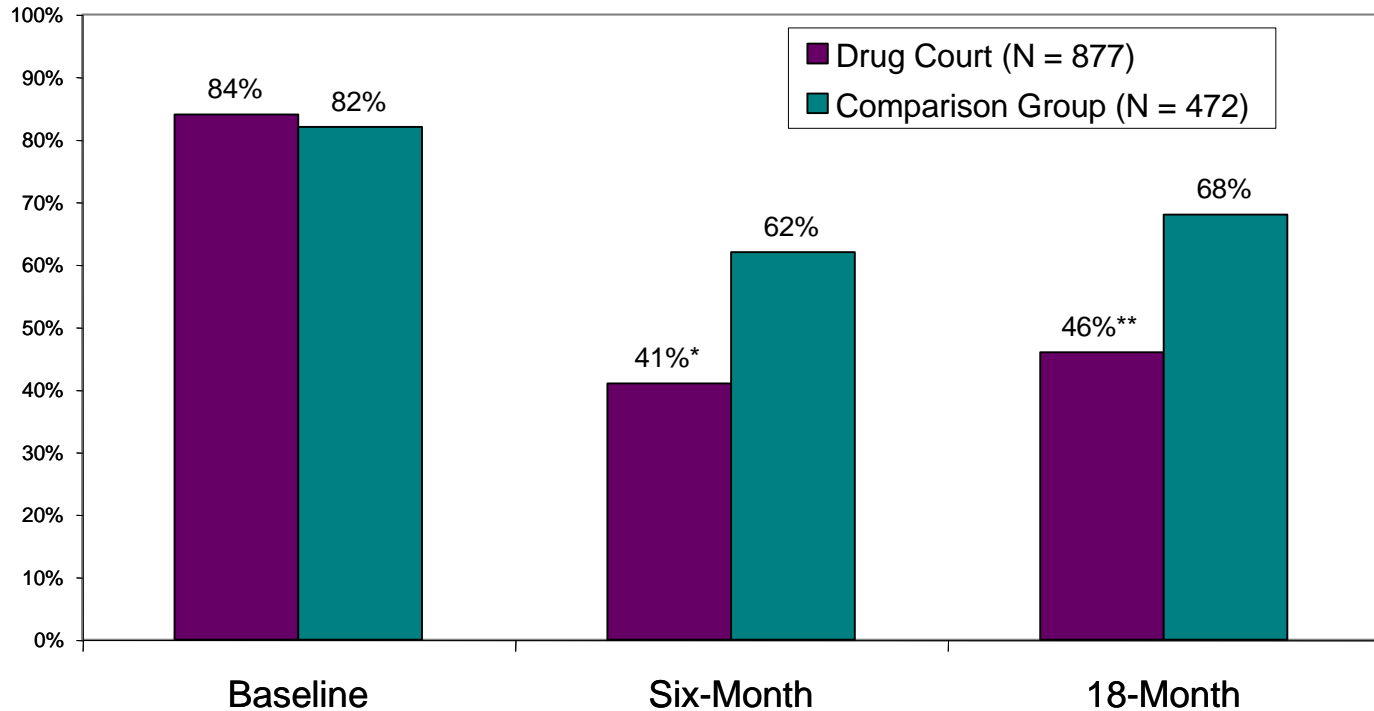


+ p < .10 * p < .05 ** p < .01 *** p < .001

Note: Serious drug use is defined to include any of the listed drugs except marijuana.

Drug Use: Trajectory of Change #1

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



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

Drug Use: Trajectory of Change #2

Timing of Relapse	Drug Court Participants N=877	Comparison Group N=472
No relapse	34%***	22%
First relapse in Months 1- 6	37%***	47%
First relapse in Months 7-12	15%	17%
First relapse in Months 13-18	13%	10%
Continued Use Since Baseline	0.01***	4%

*** p < .001

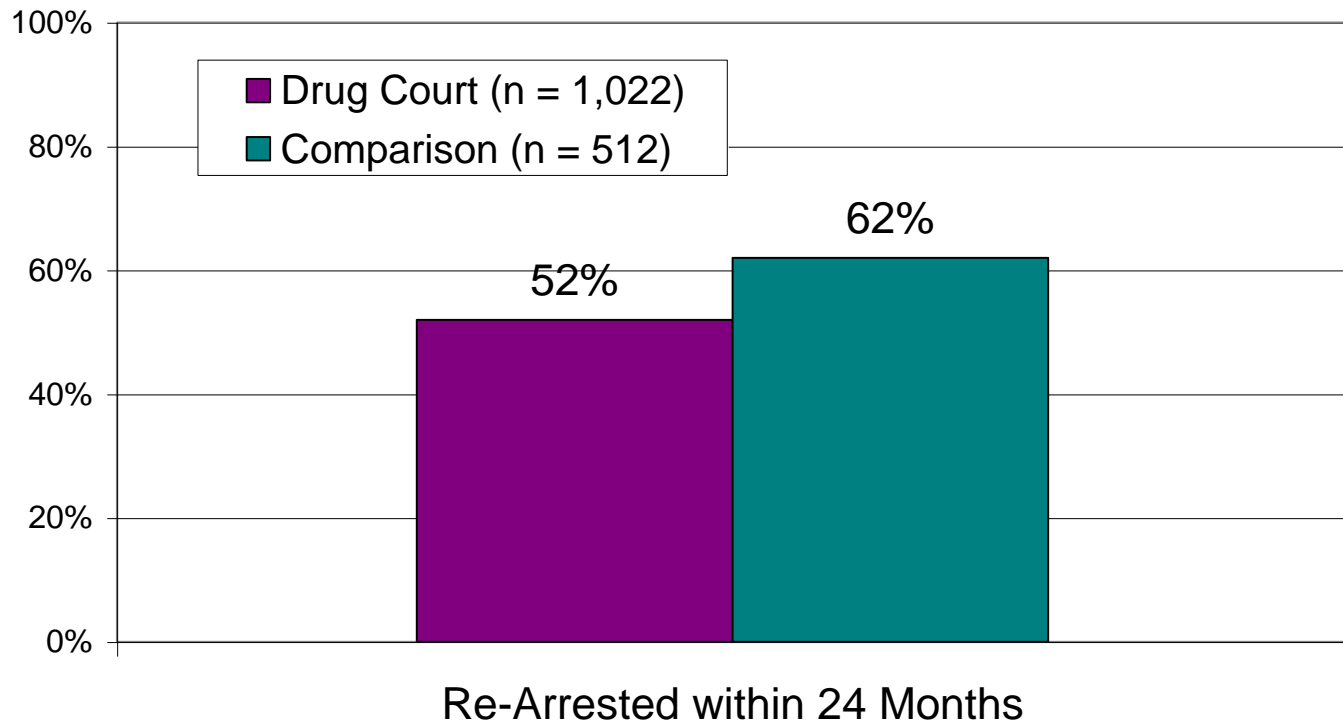


Criminal Behavior: Literature to Date

- **Growing body of literature on official recidivism – consensus is that drug courts reduce recidivism among participants**
 - Forty-eight (48) of 55 drug courts produced lower re-arrest or re-conviction rates than their comparison groups (Wilson et al. 2006)
 - Average recidivism reduction relative to comparison group = 26% (Aos et al. 2001; Shaffer 2006; Wilson et al. 2006)
 - Magnitude of impact varies widely by site
- **Little research about the incidence of criminal behavior (whether or not officially detected)**

Official Recidivism: Re-Arrests Over 24 Months

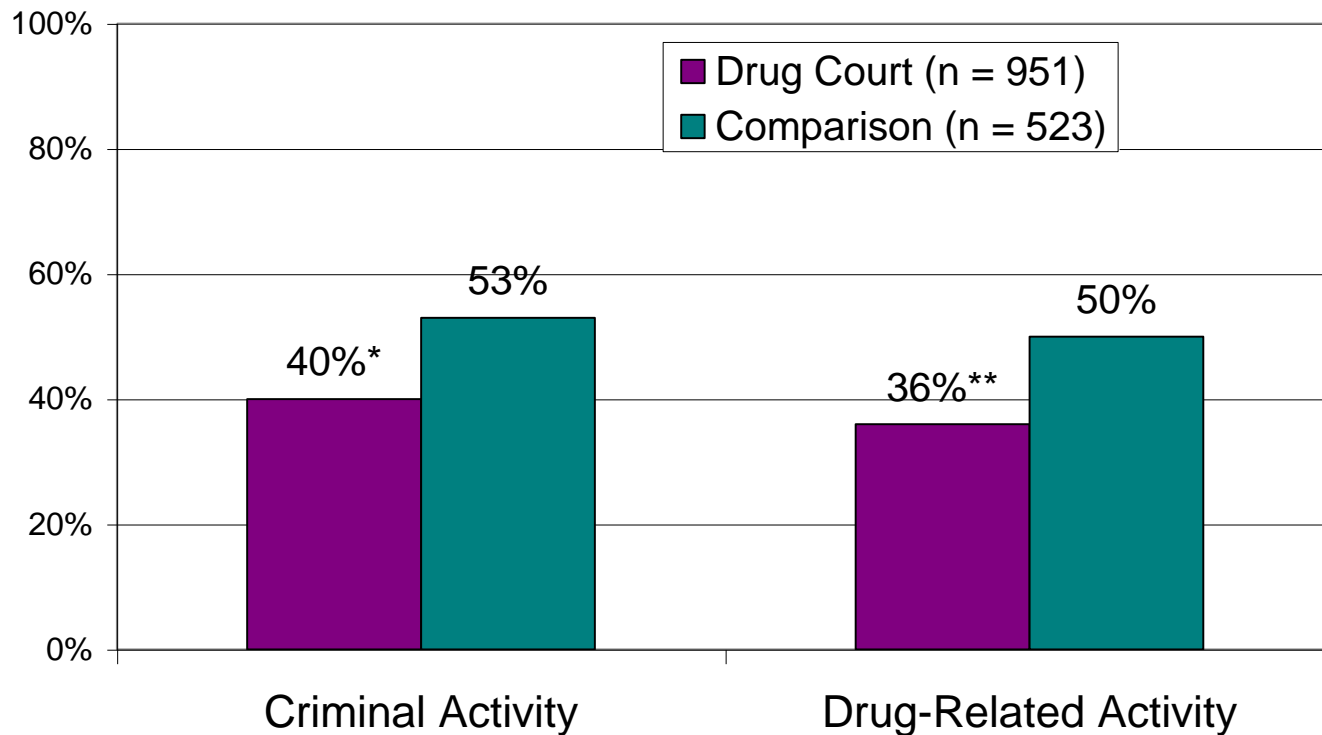
**Percent with Re-Arrest:
24 Months Post-Enrollment**



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

Criminal Behavior: Year Prior to 18-Month Interview

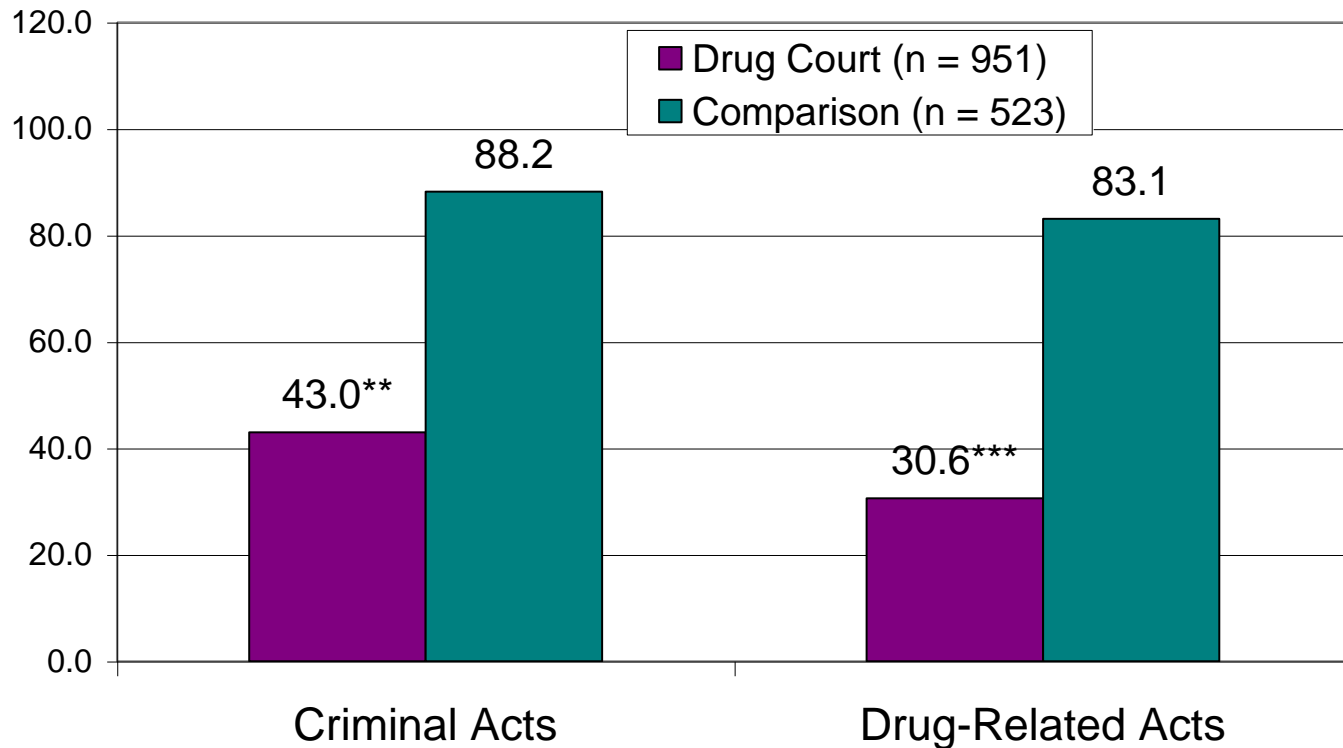
**Percent with Criminal Activity:
One Year Prior to 18-Month Interview**



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

Criminal Behavior: Year Prior to 18-Month Interview

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



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

Criminal Behavior: Year Prior to 18-Month Interview

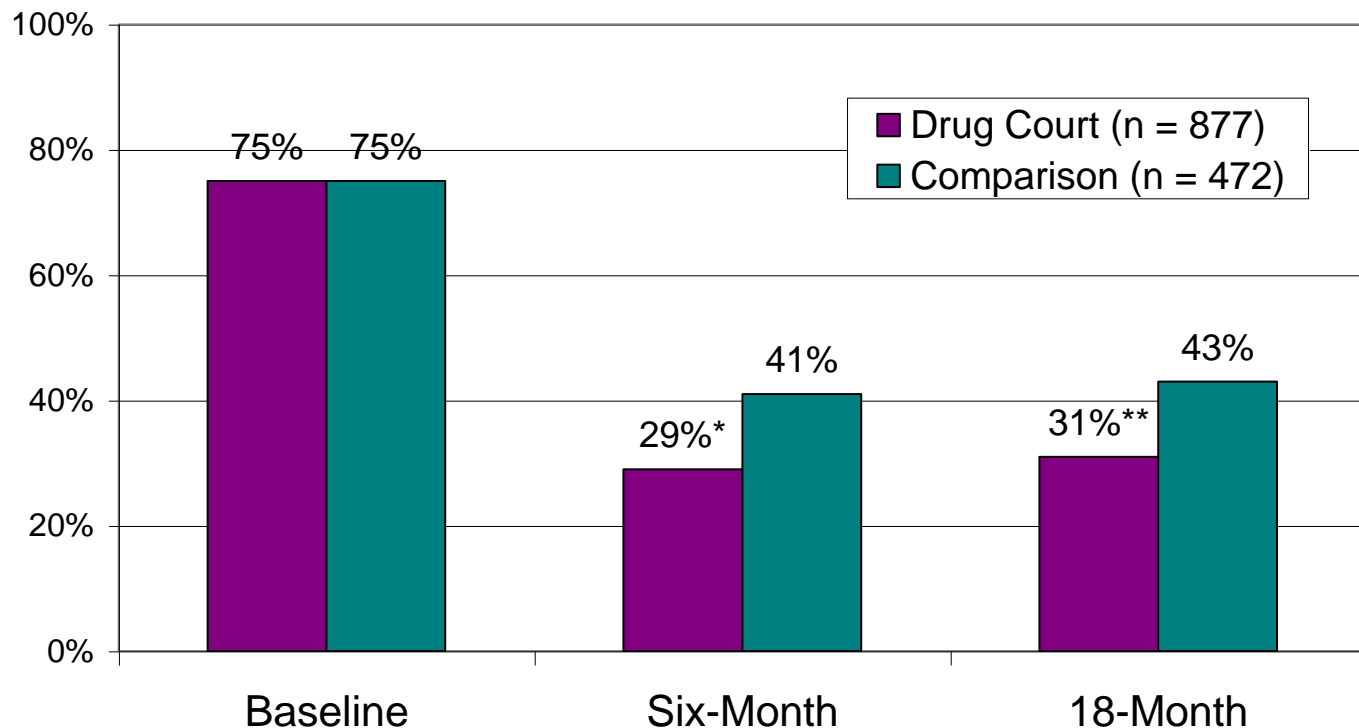
Criminal Behavior: Year Prior to 18-Month Survey

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.

Criminal Behavior: Trajectory of Behavior Change

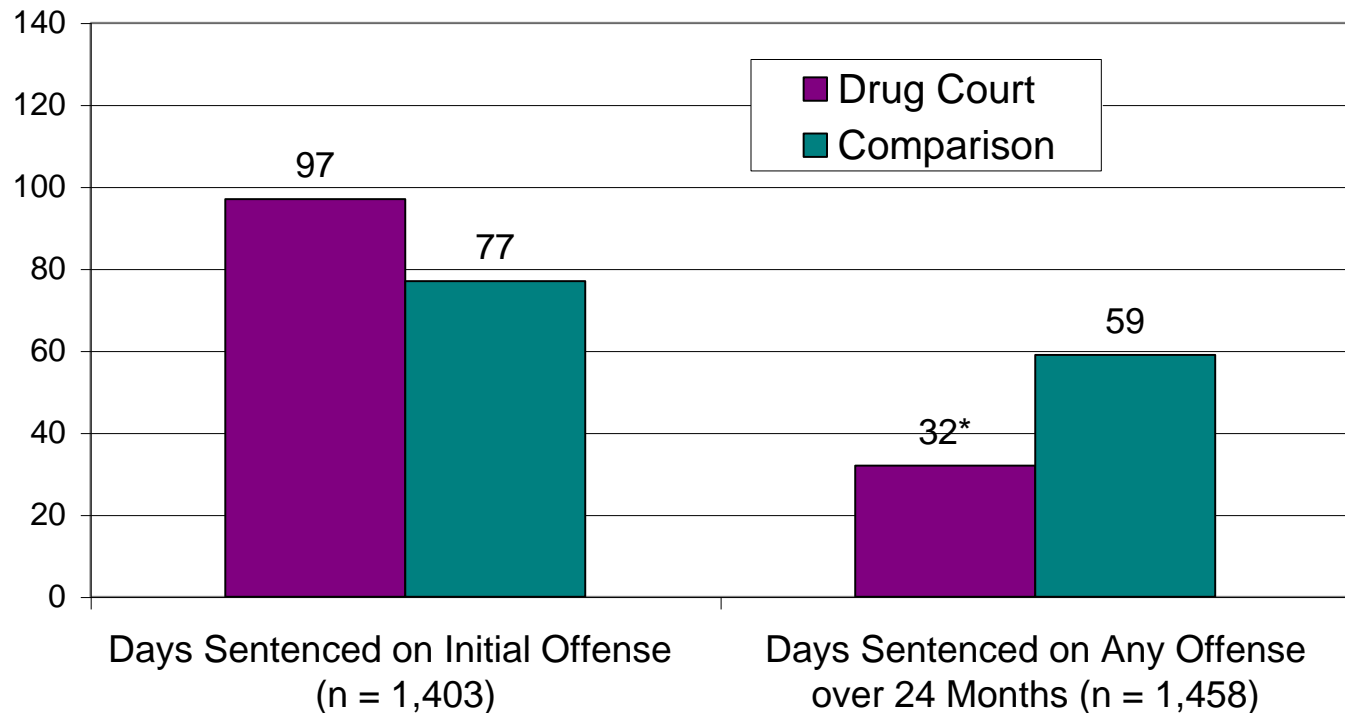
**Criminal Activity in Prior Six Months:
Baseline vs. Six-Month vs. 18-Month Interviews**



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

Incarceration: Official Sentence Length Measures

**Drug Court Impact on Sentence Length
(Based on Administrative Data Records)**



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

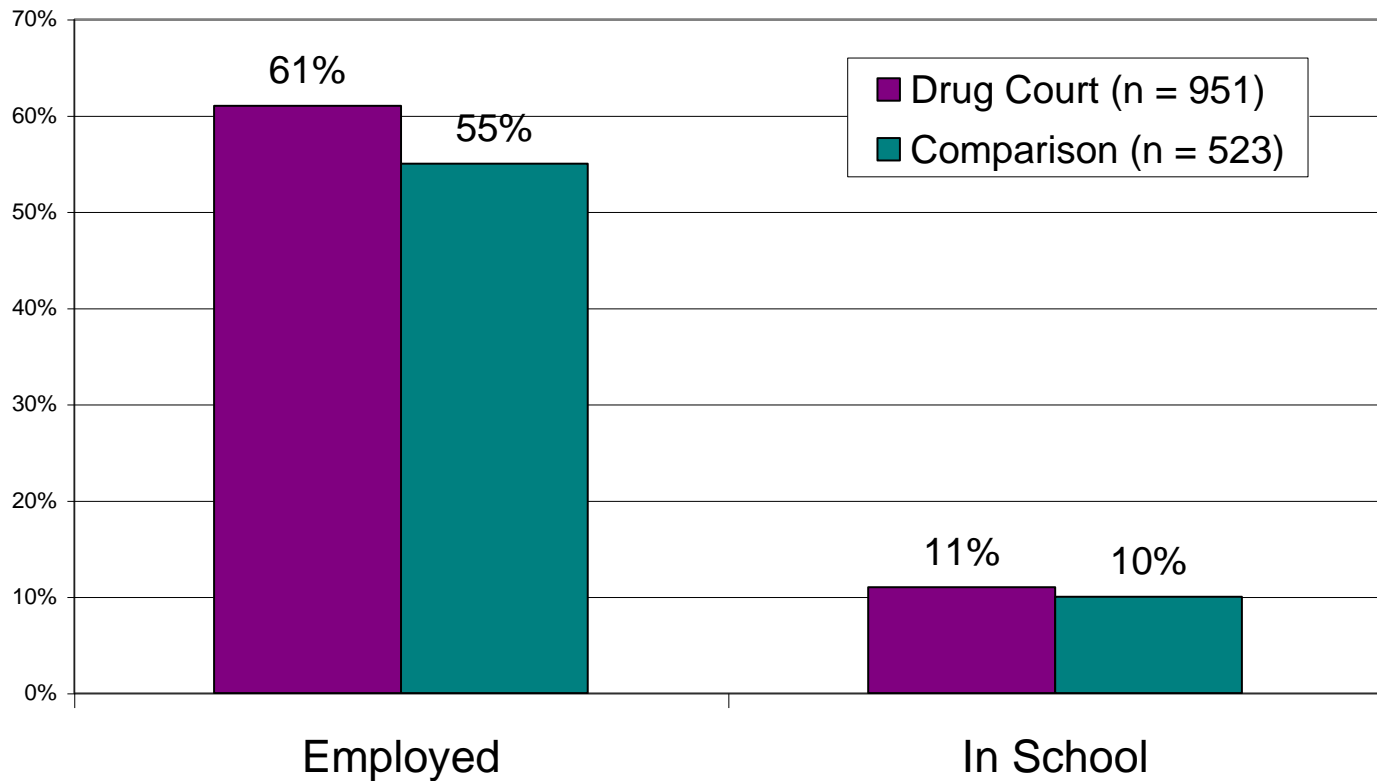


Other Psychosocial Outcomes: Literature to Date

- **Mixed Results – but with Barely Any Prior Research:**
 - Brooklyn (NY): fewer reported health or social relationship problems over one year – but effects not statistically significant (Harrell et al. 2001)
 - Baltimore (MD): no difference in employment, physical or mental health, and social relationships over three years (Gottfredson et al. 2003)
 - Santa Barbara (CA): fewer health or family-related problems over one year (Cosden et al. 2000)
- **Low sample size or other design flaws in all prior studies**

Other Psychosocial Outcomes: Socioeconomic Status #1

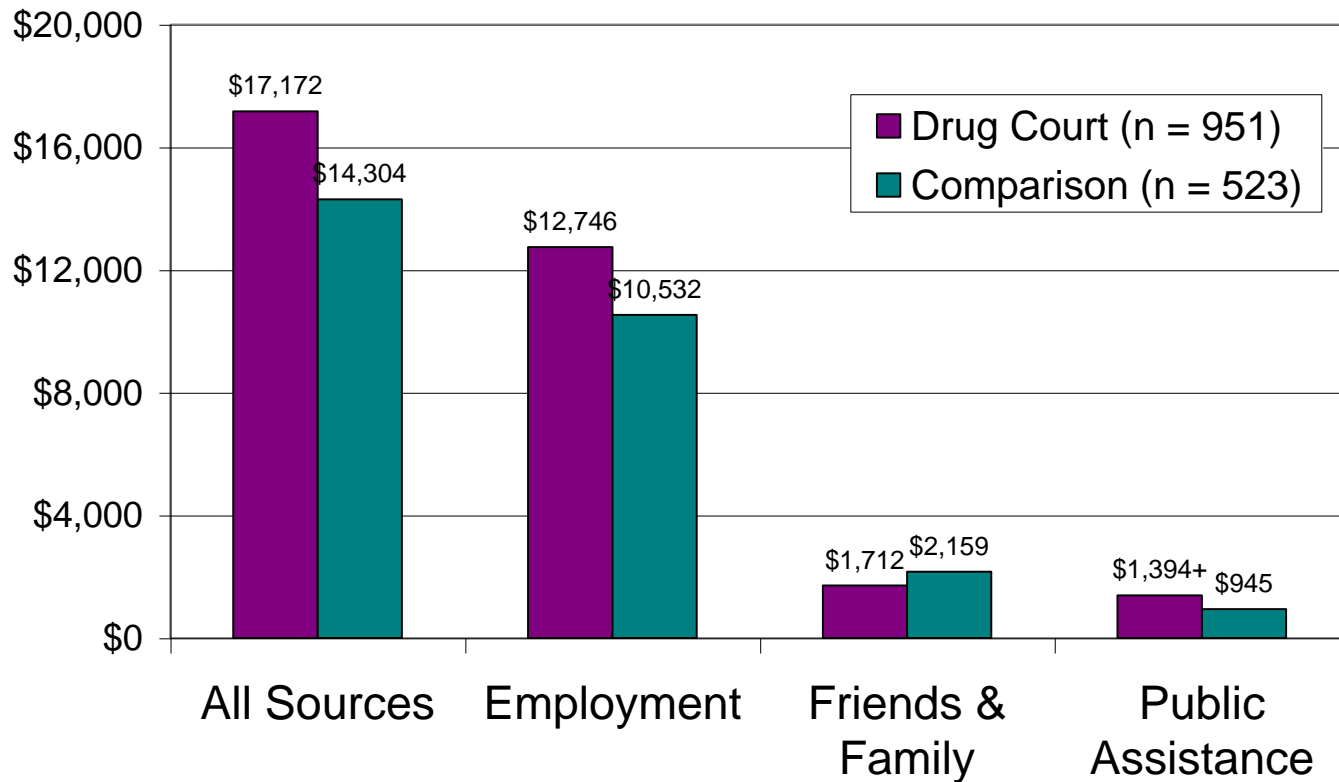
Employment and School Status at 18 Months



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

Other Psychosocial Outcomes: Socioeconomic Status #2

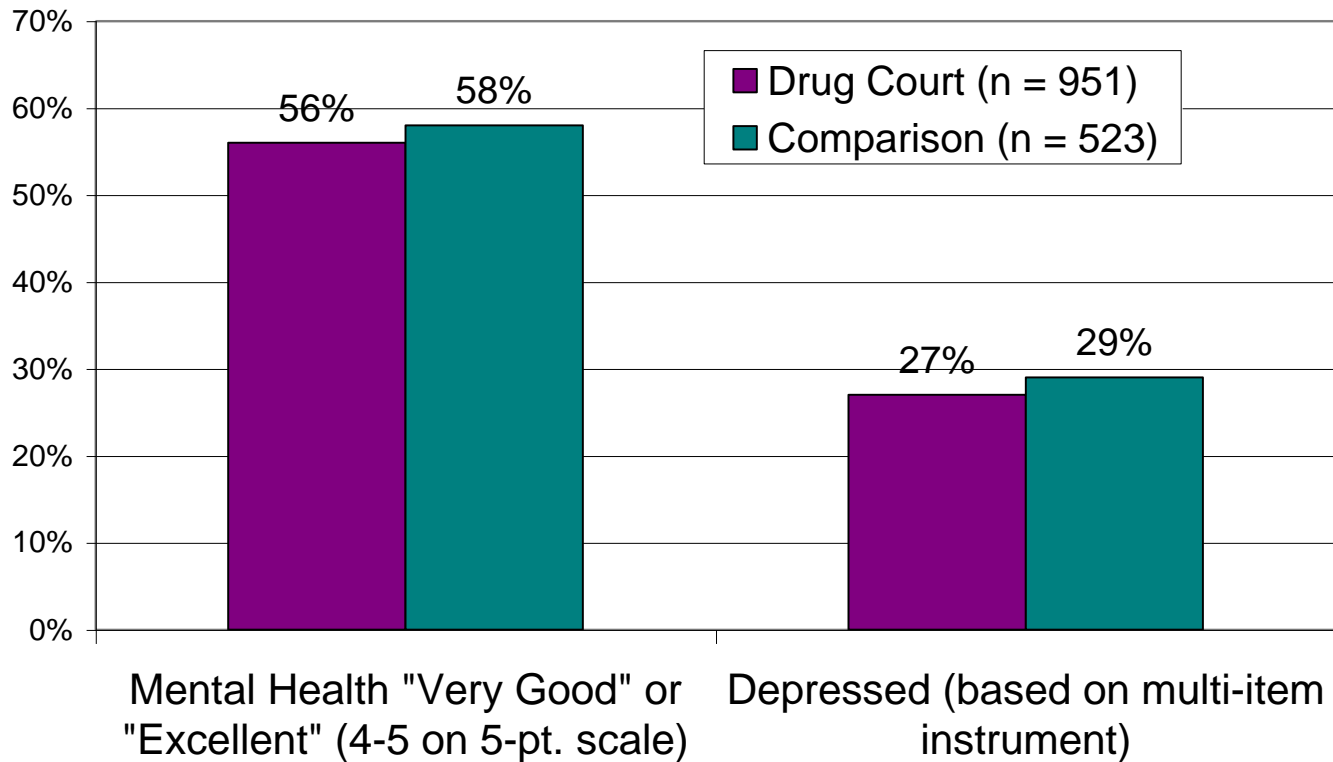
Annual Income at 18 Months



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

Other Psychosocial Outcomes: Mental Health

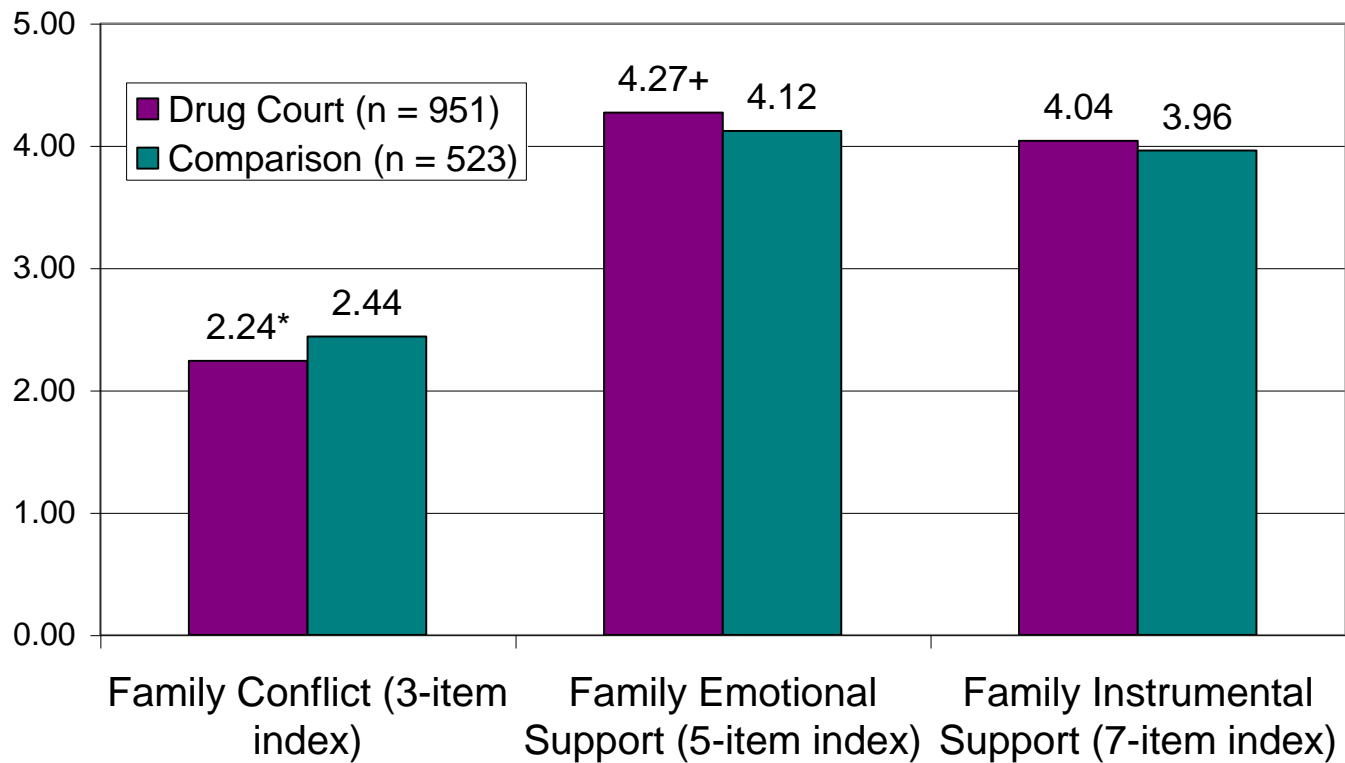
Mental Health at 18 Months



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

Other Psychosocial Outcomes: Family Support

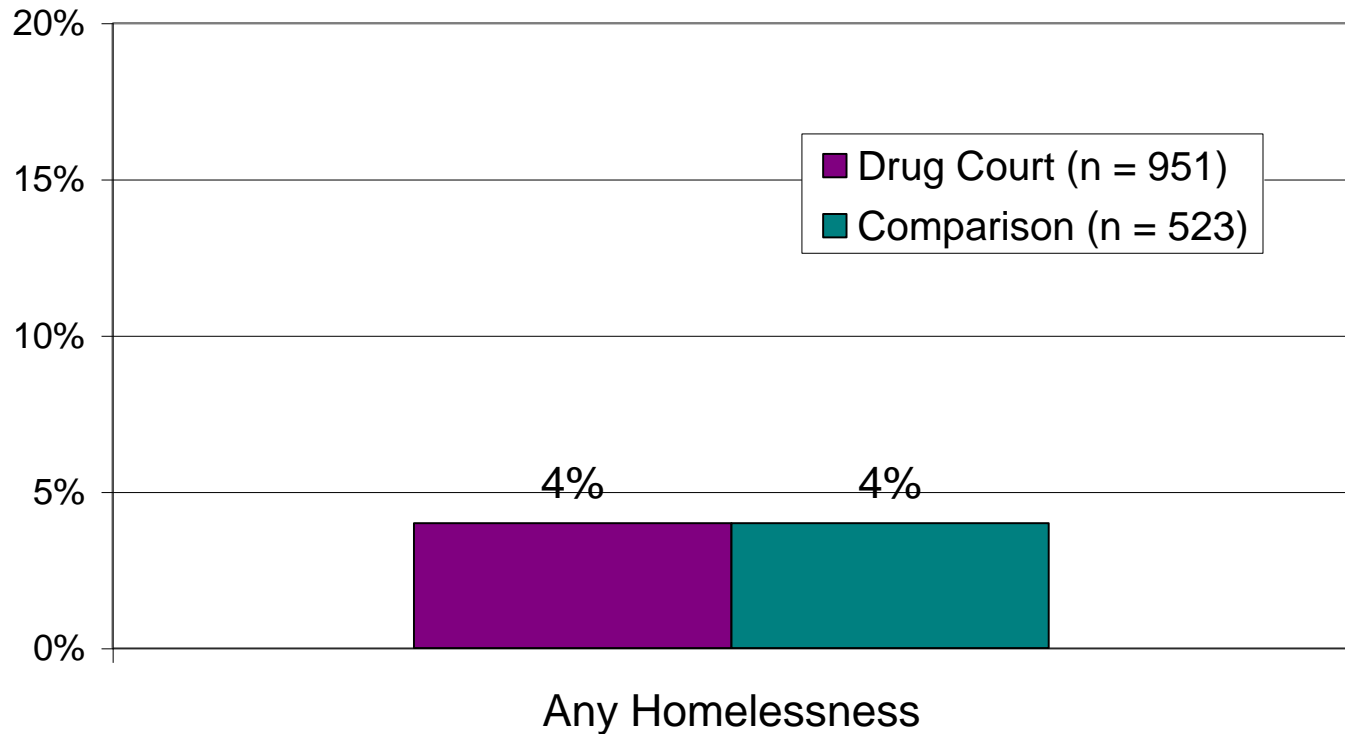
Family Relationships at 18 Months (1-5 Scales)



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

Other Psychosocial Outcomes: Homelessness

Homelessness: Homeless at Any Time in Prior Year



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



MADCE Review: Do Drug Courts Work?

- **Drug Use:** YES
- **Criminal Behavior:** YES (*partly by reducing drug use*)
- **Incarceration:** No on initial case; YES including recidivism cases
- **Other Psychosocial Outcomes:** MIXED
 - Socioeconomic Status: Modest effect (most measures non-significant)
 - Mental Health/Depression: NO
 - Family Ties: MIXED: Significant reduction in family conflict; little or no effect on family instrumental or emotional support
 - Homelessness: NO