

SUICIDAL AND SUBSTANCE-RELATED MST OUTCOMES

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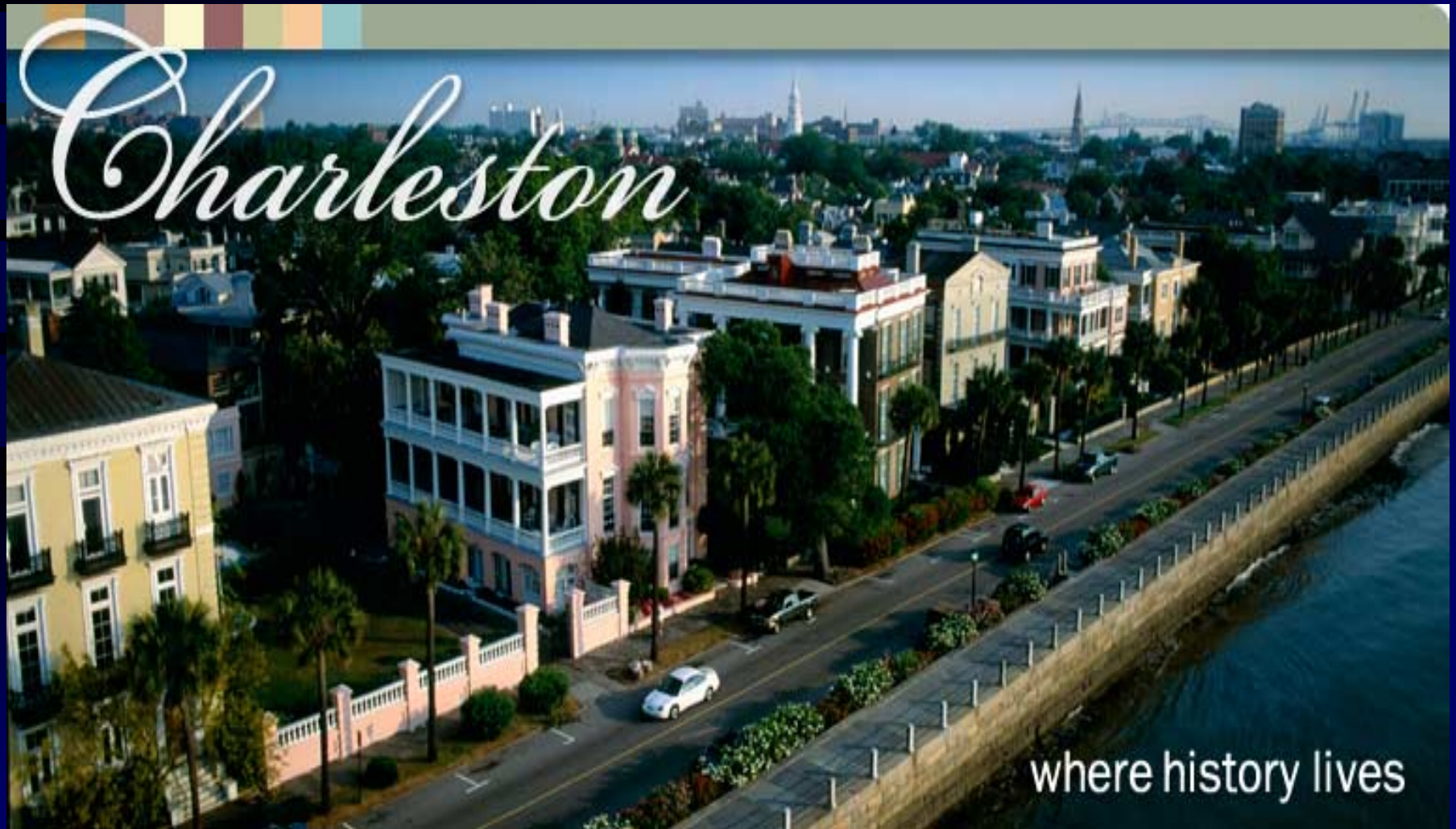
Family Services Research Center

Department of Psychiatry and

Behavioral Sciences

Medical University of South Carolina

*Family Services Research Center
Medical University of South Carolina*



where history lives

FSRC MISSION:

To develop, validate, and study the dissemination of clinically effective and cost effective mental health and substance abuse services for youths presenting serious clinical problems and their families

Multisystemic Crisis Intervention

Using MST with Youth Presenting
with Suicidal Issues

Hospitalization Study

- Purpose: Can MST serve as an alternative to inpatient psych hospitalization
- 116 youth randomly assigned to 2 groups
- Assessed at Pre, Post Hosp, Post MST
- MST = to Hosp for Internalized Problems
- MST > Hosp on Externalized Problems, Family Functioning and School Attendance

Research

Adolescent Suicide is Multidetermined

Risk Factors for Adolescent Suicidal Behavior

- Firearms *
- Intoxication *
- Physical or sexual abuse
- Poor family or parent-child communication
- Loss of caregiver (separation/death)
- Psychopathology first degree relative

Factors Continued

Assessing suicidal behavior

- Suicidal ideation
- Lethality of suicide threat
- Suicide planning/preparation, prior attempt
- Access to weapons/lethal means
- Substance use disorder, Affective disorder
- Intoxicated, manic, psychotic, anx or dep

Goals of Crisis Intervention

- Client safety
- Ecologically valid emergency services
- Prevent unnecessary out-of-home placements
- Empower caregivers
- Reduce lengths of stay in out-of-home placements when they occur

MST Crisis Assessment

Assess Five Broad Domains of Functioning

- Individual
- Family & Immediate Social Ecology
- Home/Living Environment
- Peers
- Neighborhood & Community

Assessment of Individual Factors

- Individual youth
 - Suicidal state
 - Medical status
 - Degree of cooperation
 - History - past behavior predicts future behavior

Assessment of Contextual Factors

- Family and immediate social environment
 - caregiver role in crisis
 - caregiver emotional stability
 - caregiver understanding
 - caregiver affective investment
 - caregiver ability to implement
 - caregiver cognitive & physical capacity

Assessment of Contextual Factors

- Home and living environment

Assessment of Contextual Factors

- Peers

Assessment of Contextual Factors

- Neighborhood and Community

Take Home Message on Predicting Suicidal Behavior

You must understand the “fit” of the suicidal behavior for that individual as well as contextual factors that increase or decrease the risk.

Integrating Risk & Protective Factors:

Crisis Management

Assessment of

- Risk\Protective factors
- Systems & People Interface
- Decisions
 - Treatment Site
 - Crisis Treatment Modalities
- Community Supports

System Descriptions

- Highest risk adolescent
 - seek psychiatric evaluation
- Highest risk family context
 - seek another family context
- Most dangerous environment
 - seek another environment
- Lower risk adolescent
 - consider psychiatric evaluation
- Lower risk family context

Treatment Site Options

- Decision made based on relative strengths and weaknesses of each system
- Least restrictive site that is safe
- Remember social supports

Treatment Modalities

- Choosing a treatment
- Elements of Crisis Management Plans

Treatment Modalities

- Interventions
 - Individual crisis therapy (supportive)
 - Behavioral
 - Psychiatric consult for psychopharmacological

Treatment Modalities

- Interventions
 - Behavioral

Treatment Modalities

- Interventions
 - Psychiatric consult for psychopharmacological

Roles Played by Crisis Team Members I

- MST Supervisor
- MST Administrator

Roles Played by Crisis Team Members II

- MST Therapists
- MST Child Psychiatrist

Roles Played by Crisis Team Members III

- MST Crisis Caseworkers

Roles Played by Crisis Team Members IV

- Family Resource Specialists (Parent Partners) & Other MST Team Members
- Community Participants

Multisystemic Substance Abuse Studies

Using MST with Substance Abusing
Youth

Current Juvenile Justice and Substance Abuse Services

- Rarely Evidence-Based
- Often Very Costly
- Often Iatrogenic (e.g., institution-based services)

Determinants of Adolescent Drug Abuse

- ◆ Individual (favorable attitudes)
- ◆ Family difficulties (poor monitoring)
- ◆ Caregiver (substance abuse, depression)
- ◆ Association with deviant peers
- ◆ Poor school performance
- ◆ Neighborhood conducive to substance use

Multisystemic Therapy (MST)

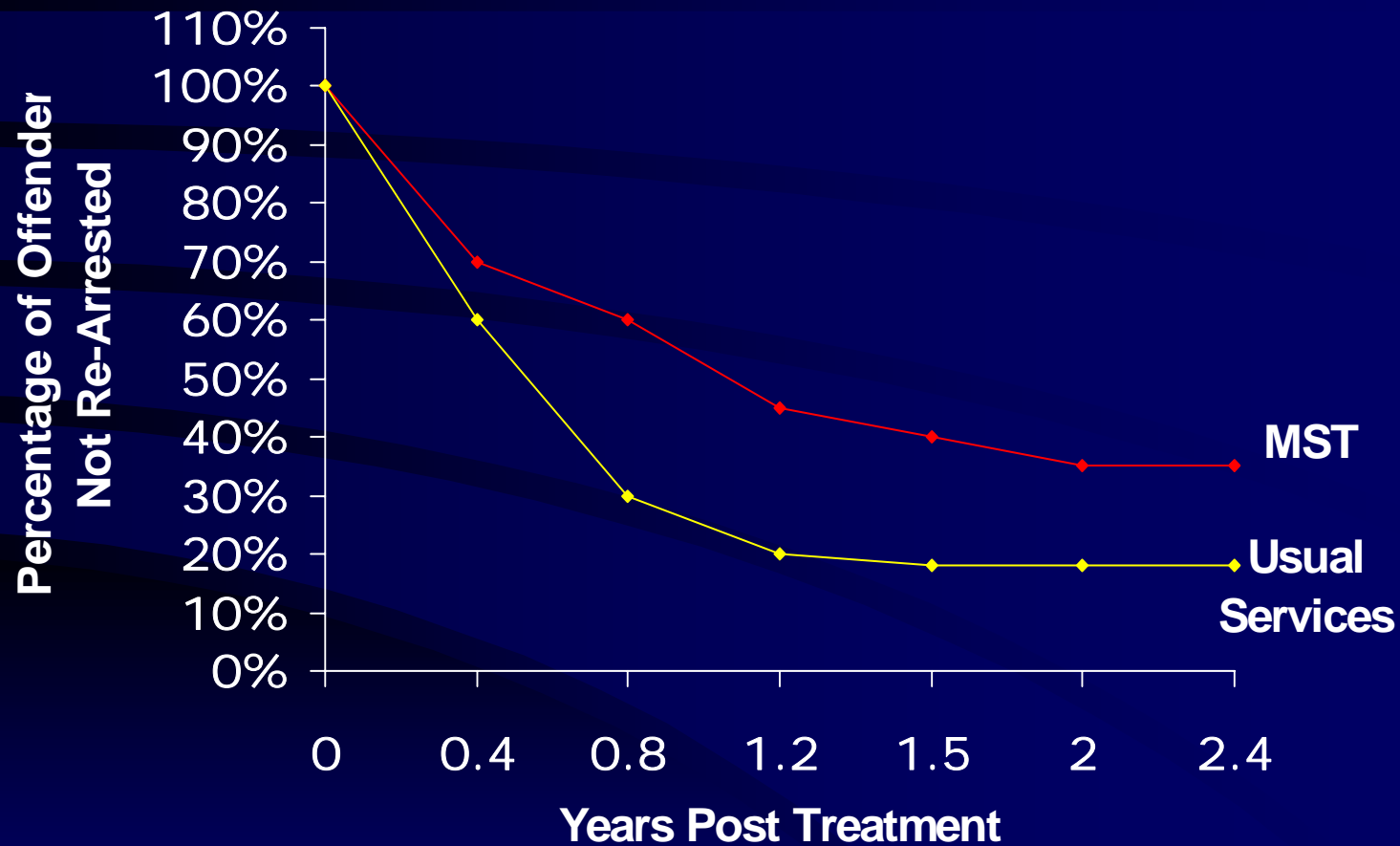
- Addresses multidetermined nature of substance abuse and co-occurring problems (e.g., individual, family, peer, school factors)
- Integrates evidence-based intervention models
- Caregiver viewed as key to long term outcomes
- Program accountability for family engagement and outcomes
- Home based services
- Therapists available 24/7, low caseloads

Early MST Outcomes

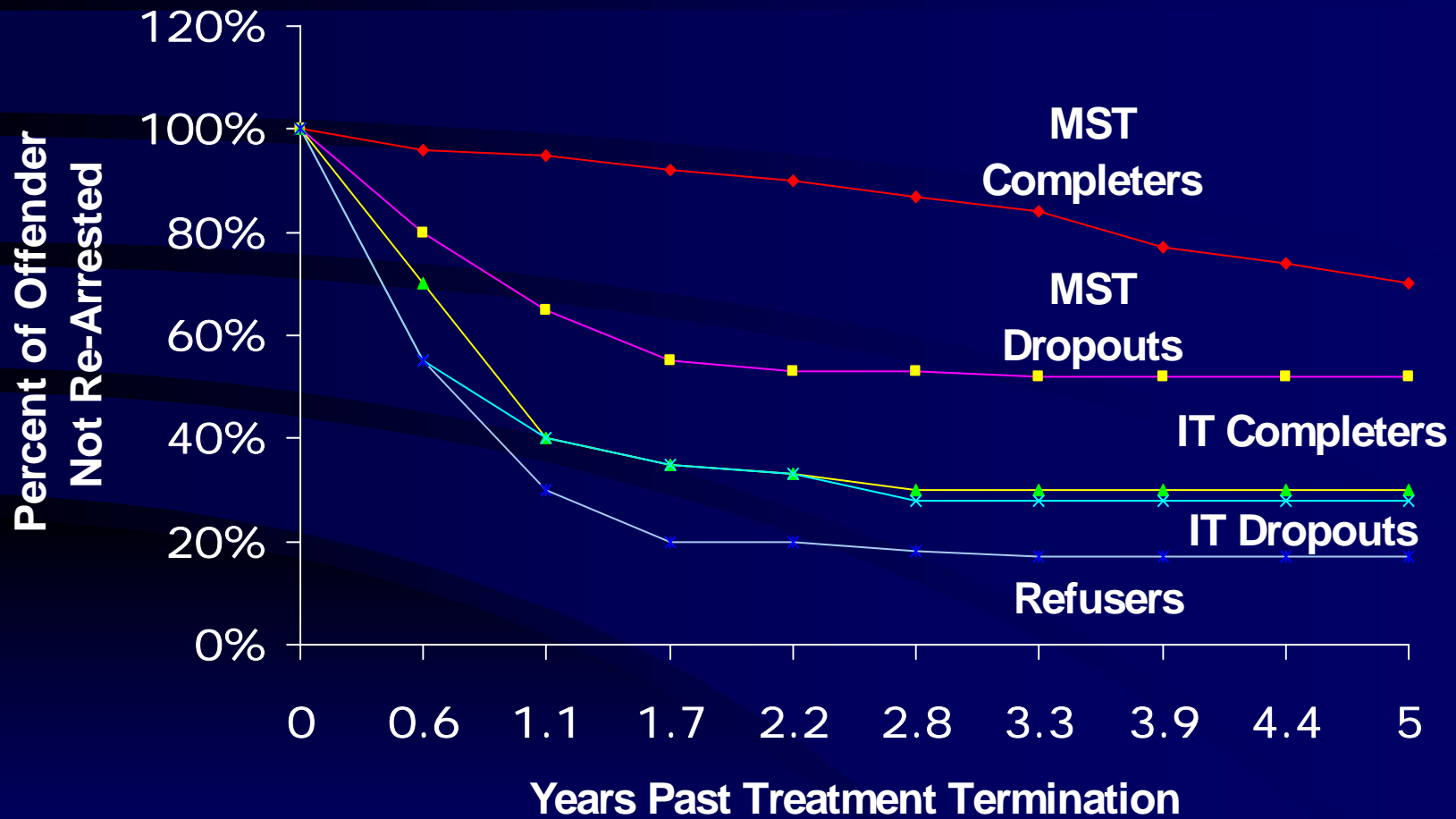
Two Randomized Trials with Serious Juvenile Offenders (treatment effects, not time effects)

- Henggeler, Melton, & Smith (1992) (NIMH)
 - Pre-post reductions in self-reported alcohol and marijuana use
- Borduin et al. (1995)
 - Reduced substance-related arrests at 4-year follow-up (4% for MST vs. 16% for individual therapy)

Simpsonville, SC Project



Missouri Delinquency Project



Randomized Trial with Substance Abusing/Dependent Offenders (N=118): MST vs. Community Treatment (Henggeler et al., 1999, NIDA)

- Engagement and Retention in Treatment
 - 98% (57 of 58 MST families) treatment completion (4 months)
- Substance Use
 - Post-treatment reductions
- School Attendance
 - Significant increase in regular classrooms

continued

- Cost Savings
 - Incremental costs of MST offset by savings incurred from reductions in days of out-of-home placement at 12 months
- Treatment Effects at 4-Year Follow-Up
 - violent criminal behavior (.15 versus .57 arrests per year)
 - higher rates of marijuana abstinence (55% versus 28% [based on urine screens])

Contingency Management for Substance Abuse

- Based on Budney & Higgins
- Excellent outcomes with adult cocaine abusers
- Intensive tracking of substance use with monetary incentives for abstinence
- Functional analysis of substance use triggers
- Cognitive behavioral interventions aimed at substance use

Drug Court Positive Features

- Collaborating with family
- Collaborating with treatment professionals
- Frequent monitoring of substance use
- Consistent sanctions for substance use
- Consistent rewards for substance abstinence

Drug Court Limitations

- Does not address determinants of adolescent drug use comprehensively
- Does not use empirically-based treatments

**JUVENILE DRUG COURT:
ENHANCING OUTCOMES BY
INTEGRATING EVIDENCE-BASED
TREATMENTS**

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Funded by: NIAAA, NIDA, and CSAT

PURPOSES

1. Evaluate effectiveness of juvenile drug court versus family court
2. Determine whether the integration of evidence-based treatments (multisystemic therapy [MST] and contingency management [CM]) into juvenile drug court improves drug court outcomes.
3. Examine whether the integration of contingency management into MST protocols improves substance-related outcomes.

DESIGN

Treatment Conditions (random assignment)

- Family Court and TAU (group treatment) **FC**
- Drug Court and TAU (group treatment) **DC**
- Drug Court and Multisystemic Therapy – **MST**
- Drug Court, MST, and Contingency Management – **MST/CM**

Assessments

- Pretreatment (T1)
- 4-Months (T2)
- 12-Months (T3)

PARTICIPANTS

161 juvenile offenders meeting diagnostic criteria for substance abuse or dependence

- Mean = 15.2 year of age
- 67% African-American, 31% white
- 83% male
- 98% met criteria for cannabis abuse or dependence; 19% for alcohol abuse or dependence
- 15% lived with both biological or adoptive parents
- Median family income = \$10,000-15,000
- 57% co-morbid: 46% for externalizing disorder and 28% for internalizing disorder

MEASURES

Multimethod

- Substance Use: Form-90 (Miller) and urine screens
- Criminal Behavior: SRD (Elliott) and arrest records
- Out-of-Home Placement: Archival records and caregiver reports

FIDELITY RATINGS

Caregiver ratings support fidelity of the different treatment conditions

- MST Adherence Measure: $FC = DC < MST = MST/CM$
- CM Adherence Measure: $FC < DC < MST < MST/CM$

RESULTS

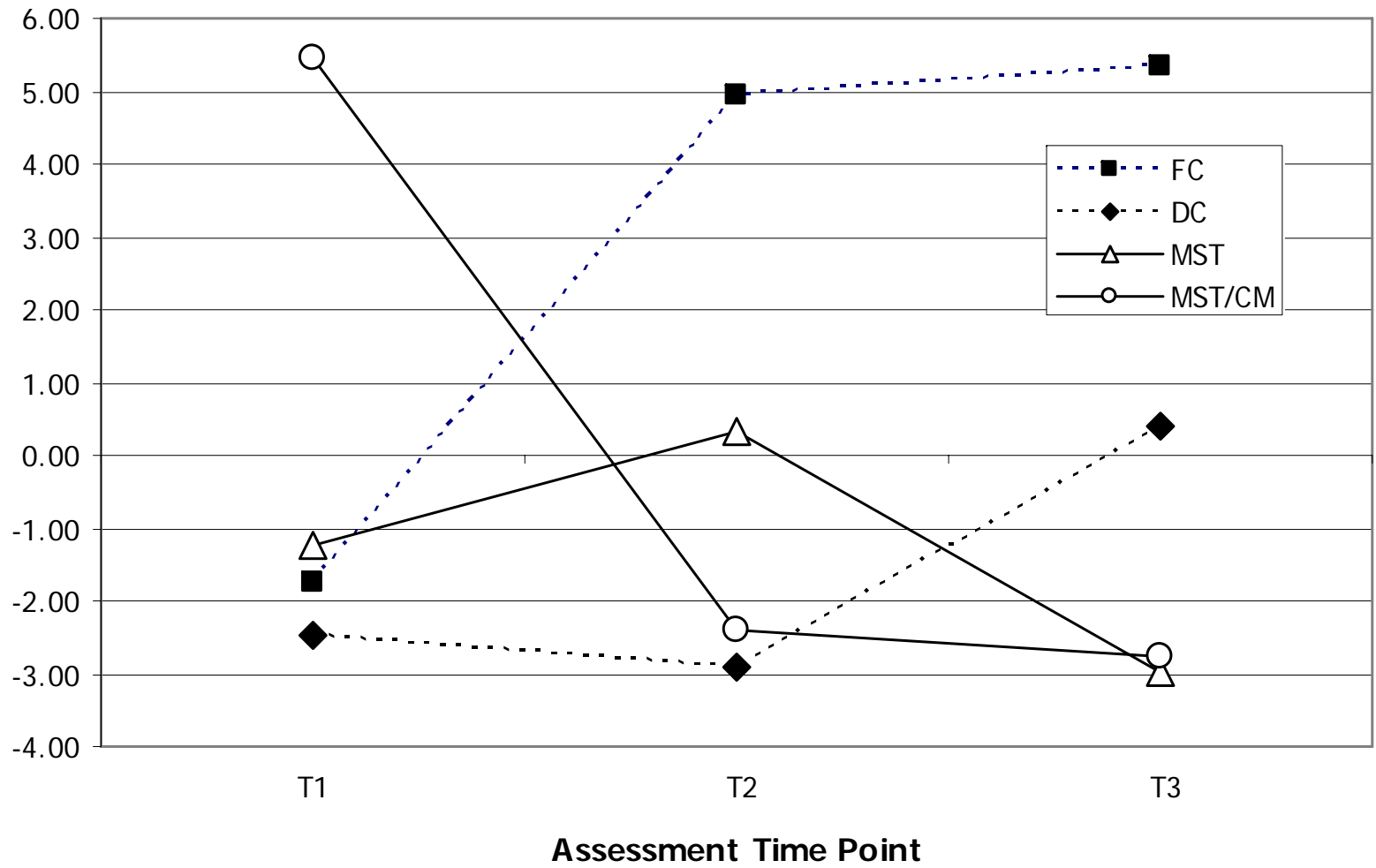
Form 90 Composite (next slide)

At 12 months:

DC more effective than FC

MST and MST/CM enhance DC outcomes

Form-90 Standardized Score Composites



URINE SCREEN RESULTS (N > 2000 SCREENS)

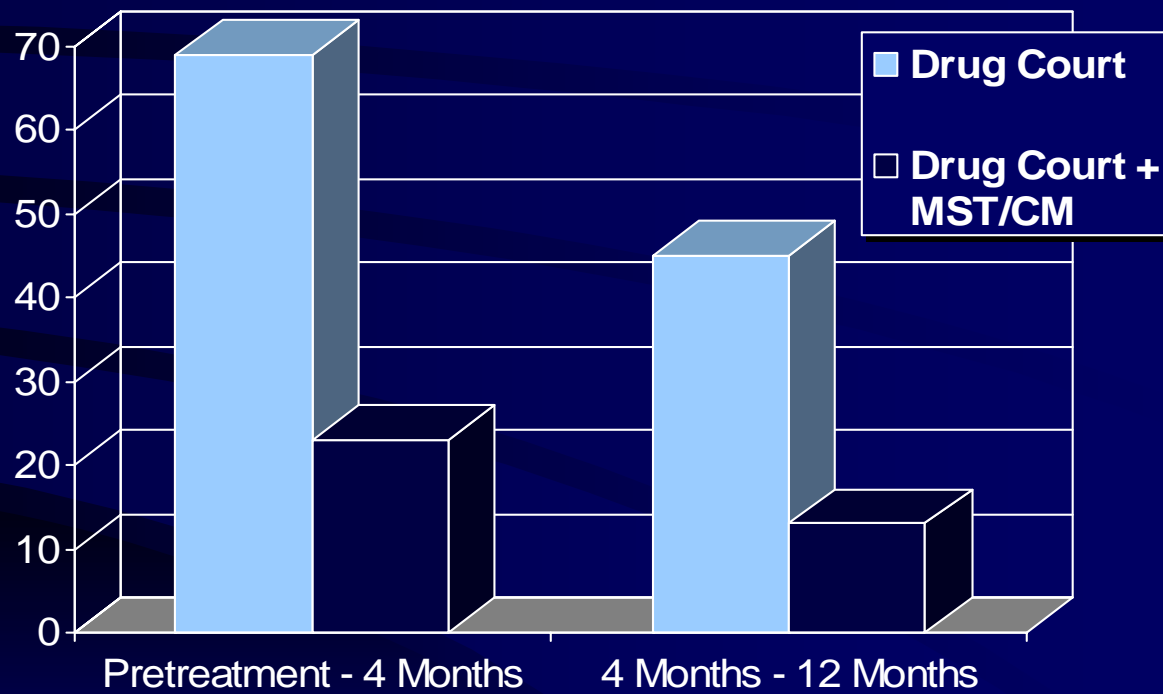
T1 to T3 – for cannabis (mean = 22.3 screens)

DC = 69% positive

MST = 28% positive

MST/CM = 18% positive

Percent Postive Cannabhis Urine Drug Screens



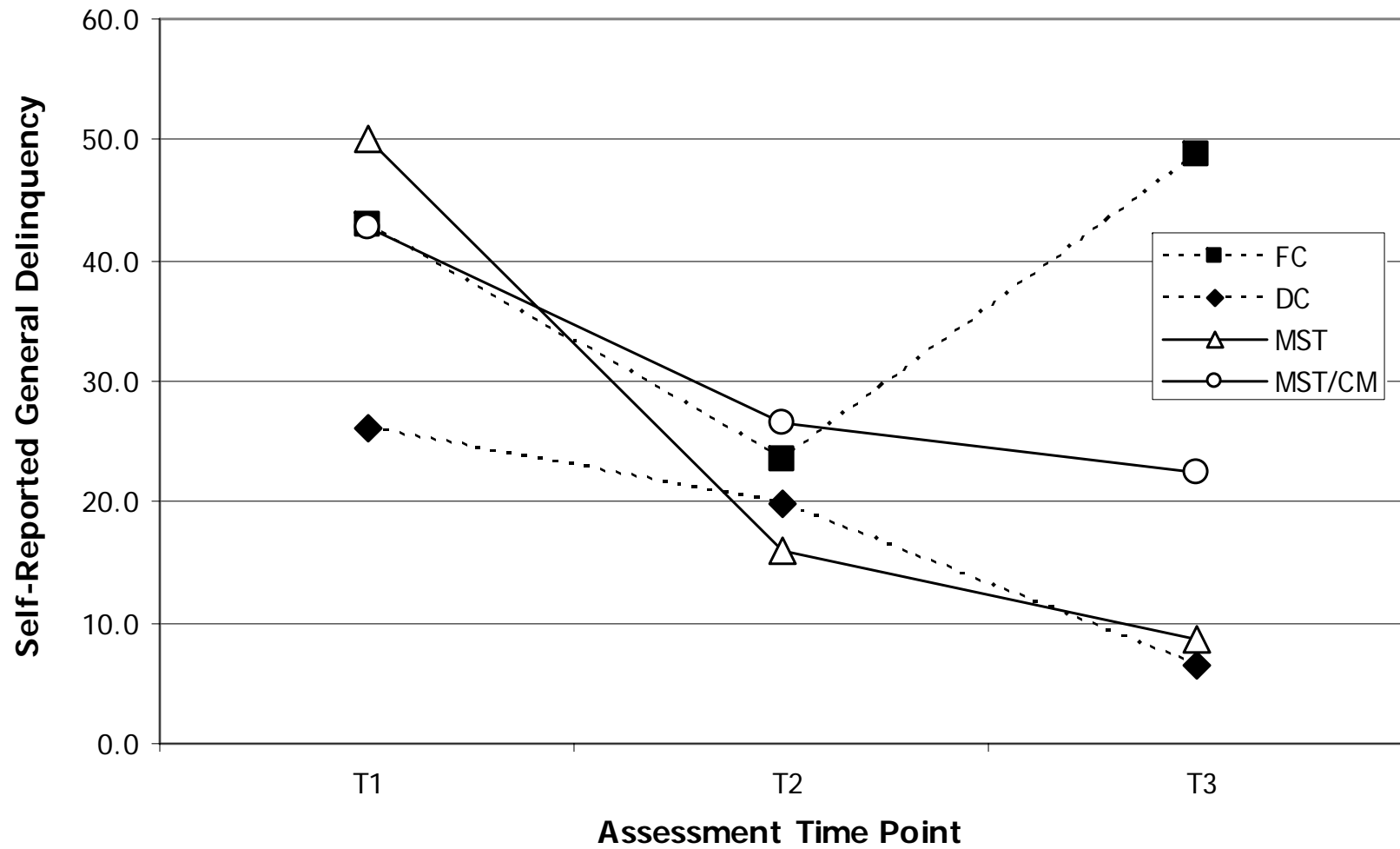
CRIMINAL BEHAVIOR OUTCOMES

SRD (self-report) at 12 months

(see next slide)

Drug court conditions resulted in decreased
criminal activity

DC, MST, MST/CM < FC



ARRESTS AND PLACEMENT

T1 to T3 (12 months)

- No treatment effects for arrest;
Grand mean = 1.3 arrests (62% rearrest rate)
- No treatment effects for placement days;
Grand mean = 74 days in placement (65% in correctional settings)

CONCLUSIONS

- Drug court is more effective than family court in decreasing substance use and criminal behavior.
- But, such decreases do not translate to fewer arrests or days in placement – mostly likely due to the increased surveillance of drug court youths.
- Integrating evidence-based practices enhances effectiveness of drug court for substance use outcomes.
- Integrating CM with MST enhances effectiveness of MST in treating youth substance abuse.

For More Information

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