An Introduction to Multisystemic Therapy for Youths With Problem Sexual Behaviors (MST-PSB)

Charles M. Borduin, Ph.D.
Missouri Delinquency Project
Department of Psychological Sciences
University of Missouri

Richard J. Munschy, Psy.D.
Director of Clinical Training
MST Associates

Missouri Delinquency Project Mission

◆ To develop, validate, and disseminate clinically effective and cost effective mental health services for youths presenting violent and other serious antisocial behaviors



Juvenile Sexual Offenders Need Treatments That Can Change the Course of Their Lives

- ◆ Males under age 18 account for 17% of all arrests for sexual crimes (not including prostitution) in the United States (Federal Bureau of Investigation, 2012)
- ◆The offense/arrest ratio for male juveniles is approximately 25:1 for sexual crimes (Elliott, 1995)
- ◆ Juveniles with histories of both sexual and nonsexual offenses are at high risk of becoming life-course-persistent offenders (Moffitt, 1993)
- ◆Total costs of a lifetime of crime range from \$1.3 to \$1.5 million (Foster et al., 2006)

Juvenile Sexual Offender Treatment: Focus on the Individual Youth

- ◆Safer Society (2009) identified 494 juvenile sexual offender programs that together treat 10,000+ youths/year in the US
- Most programs focus exclusively on altering youths' individual characteristics and are patterned after cognitivebehavioral interventions with adult sexual offenders
- Programs often use individual and group therapies and include sex-offender-specific modules (i.e., deviant arousal reduction, cognitive restructuring, empathy training, relapse prevention)
- ♦ These treatment programs usually last 12 to 24 months and are delivered in residential (44%) or outpatient settings (56%)

Juvenile Sexual Offender Treatment: Is it Clinically Effective?

- ◆ Studies (n = 3) examining sex-offender-specific cognitivebehavioral treatment for juveniles have failed to use randomized designs
- ◆ Even so, results from these studies are not encouraging & show only small between-groups differences in sexual recidivism & even worse outcomes for general recidivism (Hanson et al., 2002; Letourneau & Borduin, 2008)
- ◆ To date, individually oriented treatment approaches for juvenile sexual offenders have little empirical support

Juvenile Sexual Offender Treatment: Is it Cost Effective?

- Considerable financial resources are being devoted to individually oriented treatments (which have little evidence of clinical effectiveness) in both residential and outpatient settings
- ◆ For example, South Carolina Medicaid reimburses from \$91,250 (at \$250 per day per youth, minimum length of stay approximately 12 months) to \$219,000 (24 months at \$300 per day per youth) for residential treatment of juvenile sexual offenders

Juvenile Sexual Offender Treatment: Are There Other Reasons for Concern?

- Treatment seldom adheres to the principle of least restrictive setting and is delivered with minimal ecological validity
- ♦ Treatment seldom considers developmental differences between juvenile and adult sex offenders
- ♦ Usual treatment bears little resemblance to effective treatments for other serious antisocial behaviors
- ♦ Concerns about potential iatrogenic effects of usual treatment abound (Chaffin, 1998; Dodge et al., 2006)

Are Juvenile Sexual Offenders Different from Other Juvenile Offenders?



Correlates of Juvenile Sexual Offending

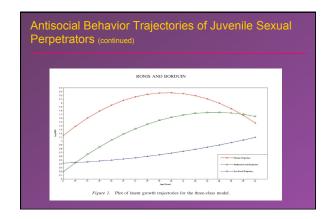
Most studies have methodological limitations, but findings suggest that multiple risk factors are linked with youth sexual offending:

- Individual youth characteristics (e.g., internalizing and externalizing problems, atypical sexual interests, sexual abuse history)
- ◆ Family relations (e.g., low warmth, high conflict, low monitoring)
- ◆ Caregiver functioning (e.g., spousal violence, substance abuse)
- ◆ Peer relations (e.g., immaturity, involvement with deviant peers)
- School performance (e.g., poor grades, school suspension, learning disabilities)
- Neighborhood characteristics (e.g., high environmental stress, criminal subculture)

Comparing Sex Offenders with Other Juvenile Offenders (Ronis & Borduin, 2007) ◆ 115 adolescents, divided into 5 demographically matched groups: sexual offenders with peer/adult victims (i.e., sexual assault, rape) sexual offenders with younger child victims (i.e., molestation) nonsexual offenders with violent crimes (i.e., aggravated assault) nonsexual offenders with nonviolent crimes only (i.e., burglary, auto theft) nondelinquent adolescents (i.e., no history of arrests) ♦ Offenders averaged 8.6 arrests; mean age was 14.0 years; 68% were White and 32% African American; 51% were lower SES ♦ A multiagent, multimethod assessment battery assessed: youth and parent individual adjustment (i.e., symptoms, behavior problems) sexual or physical abuse history self-reported and observed family relations Comparing Sex Offenders with Other Juvenile ◆ Results of between-groups comparisons: Neither sexual offenders with peer/adult victims nor sexual offenders with child victims evidenced unique problems in their individual adjustment, family relations, peer relations, or academic performance Both groups of sexual offenders shared many common problems with the two groups of nonsexual offenders (across all domains of functioning) relative to nondelinquent youths ♦ These and other results (e.g., Van Wijk et al., 2005) suggest that sexual offending and nonsexual offending are linked with multiple common risk factors Antisocial Behavior Trajectories of Juvenile Sexual Perpetrators (Ronis & Borduin, 2013) ♦ Examined development of antisocial behavior among youths with histories of sexual aggression ♦ 1,725 youths who participated in seven waves of the National Youth Survey (Elliott et al., 1983, 1989) Prospective longitudinal study, assessed antisocial behavior from adolescence through emerging adulthood (ages 11-17 to 18-27) ◆ 131 of the participants reported at least one sexually aggressive act (i.e., sexual perpetrators), 605 reported at least one serious nonsexual antisocial act (i.e., nonsexual perpetrators) Growth mixture modeling revealed: Three antisocial behavior trajectories (i.e., low, moderate, and chronic) Sexual perpetrators had same trajectories as nonsexual perpetrators Each trajectory had similar proportions of sexual and nonsexual perpetrators

Findings suggest problem sexual behaviors have similar development

to other serious antisocial behaviors



Implications of Research Findings for the Design of Effective Interventions

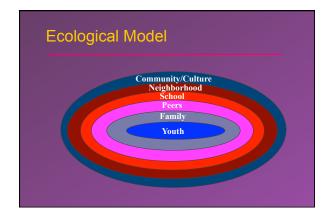
- ◆ Because the correlates and causes of juvenile sexual offending and those of other forms of juvenile offending may be more similar than dissimilar, effective treatments for delinquency (e.g., Multisystemic Therapy) hold promise in treating juvenile sexual offenders
- ♦ Prevailing treatment models (i.e., cognitive-behavioral approaches) address few of the correlates/causes of juvenile sexual offending and do little to promote youths' competencies in real world settings

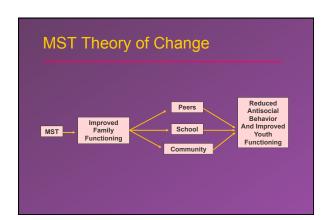
International Assn for the Treatment of Sexual Offenders: Principles of Care for Juvenile Sexual Offenders (2006)

- Youth are best understood within their <u>family and social contexts</u>
- Assessment and treatment should be <u>developmentally based</u>
 Assessment and treatment should focus on the youth's <u>strengths</u>
- The development of sexual interest and orientation is dynamic
- Youth sex offenders are a <u>diverse population</u> and should not be treated with a "one size fits all" approach
- Treatment should be <u>broad-based and comprehensive</u>
- The youth and family should be treated with respect and dignity
- Sexual offender registries and community notification should not be applied to youths
- Effective interventions result from research guided by specialized clinical experience

What is Multisystemic Therapy (MST)?

- ♦ An intensive family-based treatment aimed at decreasing youth problems and preventing costly out-of-home placements
- Addresses known causes of antisocial behavior comprehensively -at youth, family, peer, school, and community levels
- Provides treatment where problems occur -- in homes, schools, and neighborhoods
- ◆ Integrates evidence-based interventions
- Views caregivers as central to achieving favorable outcomes for their youth -- resources are devoted to empowering caregivers to be more effective with their adolescents
- Uses an intensive quality assurance system to support MST program fidelity and youth outcomes





Principles of MST	
 Finding the Fit Positive & Strength-Focused Increasing Responsibility Present-Focused, Action-Oriented, & Well-Defined Targeting Sequences of Behavior Developmentally Appropriate Continuous Effort Evaluation & Accountability Generalization Specified in Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009 – Guilford Press 	
Findings from Randomized Efficacy and Effectiveness Studies of MST With Problem Sexual Behavior Youths (MST-PSB)	
Study 1	
Borduin, Henggeler, Blaske, and Stein (1990)	

International Journal of Offender Therapy and Comparative Criminology, 34, 105-114.

Sample Characteristics

- ♦ 16 male sexual offenders and their families participated
- Most of the offenders had at least 2 arrests for sexual offenses (69% involving rape or sexual assault, 31% molestation) and all had been previously incarcerated
- ♦ Offenders averaged 4.1 arrests for sexual and other criminal offenses combined
- ♦ Mean age of youths was 14.2 years; 62.5% were White and 37.5% were African American; 69% lived with one parent

Design

Random assignment to:

- ◆ Multisystemic Therapy or
- ◆ Individual Counseling

Average treatment length:

- Multisystemic Therapy = 37 hours
- Individual Counseling = 45 hours

Results of 3-Year Follow-Up

Total Arrests

Sexual Offenses Other Offenses

Multisystemic Therapy 1 (12.5%) 5 (25%)

Individual Counseling 13 (75%) 18 (50%)

Incarceration at Time of 3-Year Follow-Up

- ♦ 0 of 8 of youths who received Multisystemic Therapy
- ♦ 3 of 8 (37.5%) of youths who received Individual Counseling

Study 2

Borduin, Schaeffer, and Heiblum (2009)

Journal of Consulting and Clinical Psychology, 77, 26-37.

Sample Characteristics

- ♦ 48 sexual offenders and their families participated
 - ◆24 had one or more arrests for sexual offenses against peer or adult victims (i.e., sexual assault, rape)
 - 24 had one or more arrests for sexual offenses against younger (by 3 or more years) child victims (i.e., molestation)
- ◆ Youths averaged 4.3 arrests (all offenses)
- ◆ Mean age of youths was 14.0 years; 66.7% were White and 33.3% were African American; 70.8% lived with one parent

Method

Design:

- ◆ Pretest--posttest control group design
- ◆ Eligible youths were randomly assigned to MST-PSB or usual services (sex-offender-specific, cognitivebehavioral group and individual therapy)
- ◆ Average length of MST-PSB = 30.8 weeks
- ◆ Follow-up into early adulthood (*M* age = 23.4 years)

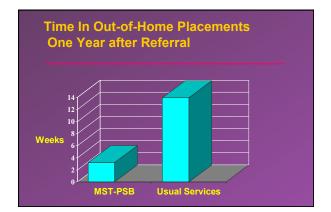
Multiagent, multimethod battery used to assess:

- ◆ Instrumental outcomes (youth, family, peer, school)
- ◆ Ultimate outcomes (criminal activity, incarceration)

Instrumental Outcomes at Posttreatment

MST-PSB was significantly more effective at:

- ♦ Decreasing behavior problems in youth
- ◆ Decreasing youth criminal offending (self-reported)
- ♦ Decreasing parent and youth symptoms
- ♦ Increasing family cohesion and adaptability
- ♦ Decreasing youth association with deviant peers
- ♦ Increasing youth emotional bonding and social maturity in relations with prosocial peers
- ♦ Decreasing youth aggression in relations with peers
- ♦ Improving youth grades in school



Short-Term Costs: Out-of-Home Placements One Year After Referral

- Based on the Missouri Division of Youth Services (DYS) Secure-Care Program
- Program cost per day is \$144.19

Placement Cost (Per Youth)

-MST-PSB

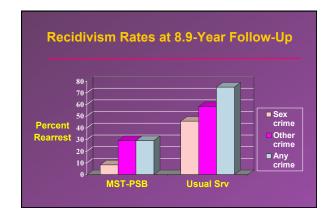
\$ 3,244.28

Usual Services \$ 14

Arrest and Incarceration Outcomes at 8.9-Year Follow-Up

MST-PSB was significantly more effective at:

- ◆Preventing sexual offending (recidivism was 8.3% for MST-PSB vs. 45.8% for usual services)
- ◆Preventing other criminal offending (29.2% vs. 58.3%)
- ◆Decreasing days incarcerated during adulthood (by 80%)



11



Does Clinically Effective = Cost Effective?

- Study examined cost-benefits to taxpayers and crime victims at 8.9-year follow-up of juvenile sexual offenders treated in Borduin et al. (2009) clinical trial
- ◆ Based on the Washington State Institute for Public Policy (Aos et al., 2001; Lee et al., 2012) Cost-Benefit Model
- This model was developed to identify ways to lower crime and lower total costs to taxpayers and crime victims
- Our estimates reflect Missouri costs to taxpayers and average national costs to crime victims

Estimating the Cost of One Criminal Offense

Taxpayer Costs:

- Police and sheriffs' offices
 Superior courts and county prosecutors
- ◆ Local adult jails and community supervision
- ◆ Local juvenile detention and supervision
- State juvenile rehabilitation administration
 State Department of Corrections

Crime Victim Costs:

- MonetaryQuality of Life

Estimating the Cost of Treatment Programs

- ◆ Personnel

 - Therapists' salariesSupervisor's salarySupport staff salaries
- ◆ Operating expenses

 - RentUtilities

 - Phone Supplies
 - Therapist travel to homes, schools, etc.
- ◆ Converted to base year 2013 dollars

MST-PSB Cost Savings Per Offender at 8.9-Year Follow-Up

	Offender with Younger Child Victim	Offender with Peer or Adult Victim	Total Sample
Taxpayers	\$83,452	\$165,970	\$124,560
Crime Victims	\$135,260	\$480,158	\$305,440
Total	\$225,896	\$653,312	\$437,184

MST-PSB Benefit-to-Cost Ratio at 8.9-Year Follow-Up

◆The estimated benefit-to-cost ratio for MST-PSB ranges from:

to

\$18.34 Taxpayer Benefits
Only \$61.86

Taxpayer & Crime Victim
Benefits

That is, **\$1.00** spent on MST-PSB today can be expected to return \$18.34 to \$61.86 to taxpayers and crime victims in the years ahead

Study 3: MST-PSB Effectiveness Study with Juvenile Sexual Offenders (Letourneau, Henggeler, Borduin et al., 2009 ◆Chicago-based study that examined 127 juvenile sexual offenders ♦NIMH Funded Random assignment to MST-PSB or usual services MST-PSB Effectiveness Study (continued) ◆Usual Services involved sex-offender-specific outpatient group treatment provided by the Probation Department. Youth returning from detention and from residential treatment were also eligible. ◆MST-PSB involved standard MST with additional training on adaptations specific to juvenile sexual offenders and their families. Results of 1-Year Follow-Up ♦ Outcomes: Relative to usual services participants, MST-PSB participants evidenced: Reduced delinquency Reduced sexually inappropriate behavior Reduced deviant sexual interests Reduced deviant sexual interests Reduced out-of-home placements

Mechanisms: MST-PSB effects on youth antisocial behavior and deviant sexual interests/risk behaviors were mediated by caregiver follow-through on discipline practices as well as caregiver disapproval of and concern about the youth's deviant friends

Outcomes article (2009): Journal of Family Psychology, 23, 89-102.

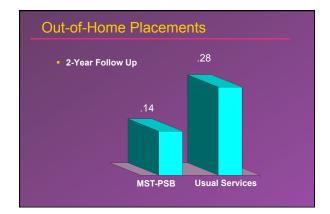
Mechanisms article (2009): Journal of Consulting and Clinical Psychology, 77, 451-462.

Results of 2-Year Follow-Up (2013)

- ♦ Outcomes: Relative to usual services participants, MST-PSB participants evidenced:

 - Reduced delinquency
 Reduced sexually inappropriate behavior
 Reduced deviant sexual interests

 - Reduced out-of-home placements



Some Likely Reasons for Positive Outcomes Across Three Studies

- MST-PSB targets known correlates of sexual offending in youths: individual factors, family relations, peer relations, school performance, community factors
- MST-PSB is family driven and occurs in the youth's natural environment
- MST-PSB providers are accountable for outcomes
- MST-PSB is manualized with substantial qualityassurance procedures

Transportability Pilots: First Steps in Dissemination



- ◆ To inform future efforts to transport MST adaptations for youths with problem sexual behaviors (including sexual offending) to community-based providers, we began pilot sites across the United States and Europe under close oversight by the adaptation developer.
- We also evaluated whether we could train 2nd generation experts in the adaptation.

Dissemination of MST-PSB

MST Associates: Organization focused on helping public and private agencies to achieve positive outcomes through identifying and removing barriers to effective implementation of the MST treatment model with problem sexual behavior youths (MST-PSB)

- ◆ Program structure, specification, and goals
- ♦ Site assessment
- Outcome measurement systems including tracking of treatment fidelity and adherence

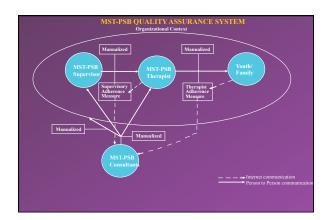
Dissemination of MST-PSB

Quality Assurance: Achieve positive clinical outcomes through the implementation of training and supervision protocols used in the clinical trials of MST-PSB

- ◆ Specified MST and MST-PSB treatment protocols
- ◆ Specified supervisory protocol
- ◆ Specified consultation protocol
- ♦ 5-day orientation training in MST model
- ♦ 2-day training in MST-PSB adaptations
- ◆ Quarterly booster training
- ♦ Clinicians work within MST-PSB teams for peer support

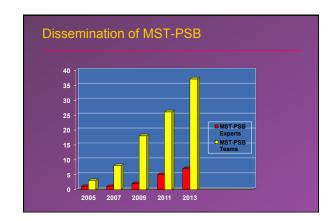
Dissemination - continued

- ♦ On site clinical supervision from MST-PSB trained supervisor
- ◆ Weekly consultation with MST-PSB expert (conference call)
- Ongoing consultation to address organizational barriers to program success
- ◆ Standardized adherence ratings from caregiver
- ♦ Expert coding of audiotaped treatment sessions for adherence



Community-Based Dissemination Efforts: MST-PSB

- * Arizona, 1 team
- * Colorado, 3 teams
- * Connecticut, 4 teams
- * Maine, 8 teams
- * Michigan, 3 teams
- * New Mexico, 2 teams
- * North Carolina, 1 team
- * Ohio, 4 teams
- * Pennsylvania, 5 teams
- * Washington DC, 1 team
- * England, 3 teams
- * Netherlands, 2 teams



MST-PSB Ultimate Outcomes for Community-Based Providers Over 3-Year Period (12/01/10 to 12/01/13)

Percent of PSB youths living at home: 92%

Percent of PSB youths in school/working: 93%

Percent of PSB youths with no new arrests: 93%

MST-PSB Recognition

- ◆SAMHSA Substance Abuse and Mental Health Services Administration's National Registry of Evidence-Based Programs and Practices
- ◆OJJDP Office of Juvenile Justice and Delinquency Prevention Model Program
- ◆ California Evidence-Based Clearinghouse for Child Welfare

Program Features

	MST	MST-PSB
Treatment Length	3-5 months	5-7 months
Case Loads	4-6 clients	3-5 clients
Stage of Development	Proactive Dissemination	Mature Transport 2nd Generation

Clinical Adaptations of MST for Treating Youths With Problem Sexual Behaviors

- ◆Ensuring Community Safety: Help family and team develop plan for risk reduction and relapse prevention
 - Are sufficient safety rules in place?
 - Plans must address safety of victims and potential victims who reside in the same home or the same neighborhood as the juvenile offender
 - If safety cannot be assured, temporary placement of the youth with kin or in another short-term care setting (e.g., foster care) may be necessary until caregivers can implement safety procedures and rules

Clinical Adaptations (continued)

- ◆Comprehensive Safety Planning
 - Caregivers hold ultimate responsibility for monitoring and managing the youth's behavior
 - Each plan is uniquely designed to fit the individual characteristics of the youth (including grooming behaviors if present), his/her offense, family characteristics, and physical environment
 - It is critical to ensure the utmost safety (psychological and physical) for all identified victims. Contact between victim and offender should occur <u>only after</u> comprehensive clarification work is done and <u>only</u> when the victim's clinical therapist/advocate deems it appropriate and safe

Clinical Adaptations (continued) ◆The Safety Plan Should be more than just a set of rules and should include clearly outlined monitoring mechanisms as well as contingencies and next steps if safety is compromised at all Should clearly identify who does what, under what circumstances, and in what fashion Should include a built-in review process to adjust components accordingly (levels of monitoring, changes in ecology, discovery of new information) Should extend across the youth's ecology (home, neighborhood, school, larger community) Clinical Adaptations (continued) ◆ Recognizing and Handling Denial: Therapist may need to devote considerable time and effort in helping family members to: Acknowledge the youth's sexual offense/problem behavior Place full responsibility for the offense/problem behavior with the youth, not with the victim or parents Reduce denial or minimization of the offense/problem behavior by the youth, parents, and sometimes even the Clinical Adaptations (continued) ◆Thorough Evaluation of the Grooming Process and Cognitive Variables that May Contribute to Offending • The youth's modus operandi must be identified early in the

assessment process

Caregivers must be made aware of grooming strategies and must develop rules to effectively circumvent the strategies

Attitudinal and cognitive factors linked with offending (e.g., attitudes toward women and children, lack of empathy, thinking errors, sexually inappropriate fantasies and patterns of masturbation) may need to be addressed

Clinical Adaptations (continued)

- Assessing the Impact of Sexual Abuse on the Intrafamilial Victim and Determining Related Treatment Needs
 - Preparing for disclosure of sexual abuse details
 - Evaluating the impact of sexual victimization
 - Interventions may be needed for behavior problems, PTSD, sexual abuse education, and the grieving process
 - When possible, the victim should be treated by a therapist independent of the MST-PSB team. This therapist can then ensure proper pacing for clarification work and, if indicated, reunification

Clinical Adaptations (continued)

- ◆ Comprehensive Clarification Work Using a Family Systems Approach
 - Typically initiated in sessions involving caregivers and youth
 - Includes a sequencing process in which the youth provides a detailed account of his/her offending behavior, including both internal and external events
 - Strong emphasis placed on creating a family environment that will provide ultimate support for the victim
 - Sessions involving the victim occur only after the PSB youth and caregivers have completed clarification work. Such sessions ideally include the victim's therapist as an advocate and additional source of support for the victim

Clinical Adaptations (continued)

- ◆Assessing the Youth's Own Victimization, the Impact of the Abuse, and Related Treatment Needs
 - Trauma sensitive interventions
 - Sequencing of interventions

Clinical Adaptations (continued) ◆Interventions that Focus on the Development of Friendships Are Often Required Understanding causes of peer estrangement and/or rejection (e.g., aggression, low self-esteem) Common problem areas include acquaintanceship skills, communication skills, sharing and cooperation skills, problem-solving and conflict resolution skills Skills-focused sessions with the youth may use modeling, coaching, behavioral rehearsal, and operant learning procedures Ecological support for newly acquired skills is essential Clinical Adaptations (continued) ◆Higher Frequency and Intensity of Contact ♦ Videotaping of Therapy Sessions as Training and **Supervision Tools**

Lessons Learned and Some Policy Directions

Effective treatment for this population differs significantly (i.e., home- and family-based; 24/7 availability of therapists) from the status quo

Funding for the provision of evidence-based treatments must be competitive (because treatments of no or unknown effectiveness can be more profitable to providers)

Significant funding must be provided for training in evidence-based treatments and for ongoing quality assurance (funding and training without continuous quality improvement do not guarantee clinical outcomes)

22

Lessons and Policy Directions -- continued

- 4. Performance contracts can be used to promote accountability, outcomes, and use of evidence-based practices (clinicians and programs need to be rewarded for their success in achieving desired clinical outcomes)
- 5. The widespread transport of evidence-based treatments for this population will likely require collaboration among multiple levels of government and practice



Questions or More Information

Research Related: Charles Borduin

573-882-4578

BorduinC@missouri.edu

Dissemination &

Site Development:

Richard Munschy, Training Director MST Associates

860-348-1938 munschy@mstpsb.com

Website:

www.mstpsb.com