

Reducing Juvenile Justice Recidivism in a Cost-Effective Manner

“Residential Care that Reduces Recidivism” Symposium
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Presentation Overview

- Establishing a context
- What works and doesn't work for reducing recidivism
- Principles of effective rehabilitation / treatment: elements of Integrated Treatment Model (ITM)

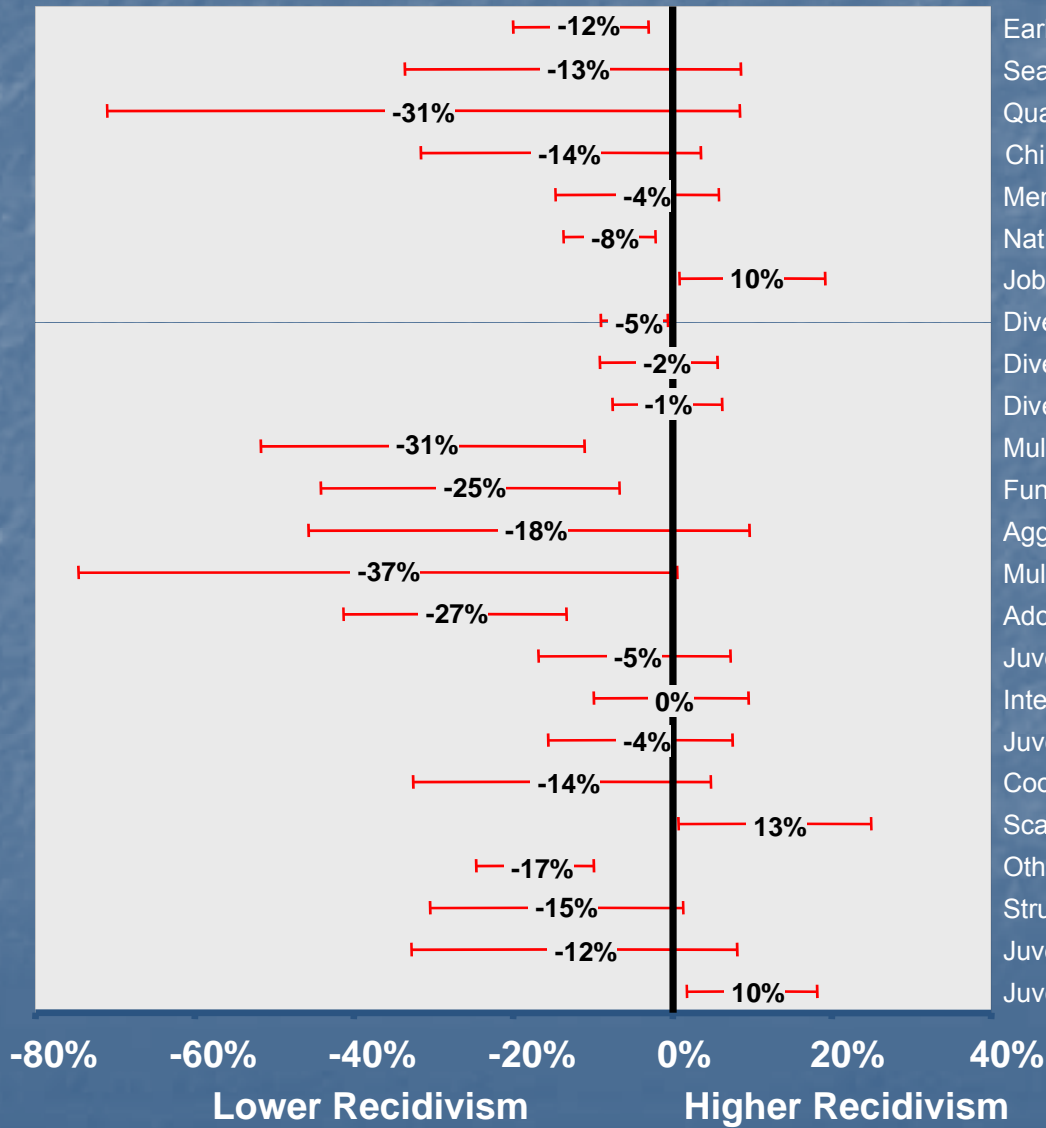
Presentation Overview

- History and context of transitional services for youth exiting secure residential placements
- FIT intervention specifics
- Outcome data
 - Recidivism
 - Cost-Benefit

The Estimated Effect on Criminal Recidivism for Different Types of Programs for Youth and Juvenile Offenders

The number in each bar is the "effect size" for each program, which approximates a percentage change in recidivism rates. The length of each bar are 95% confidence intervals.

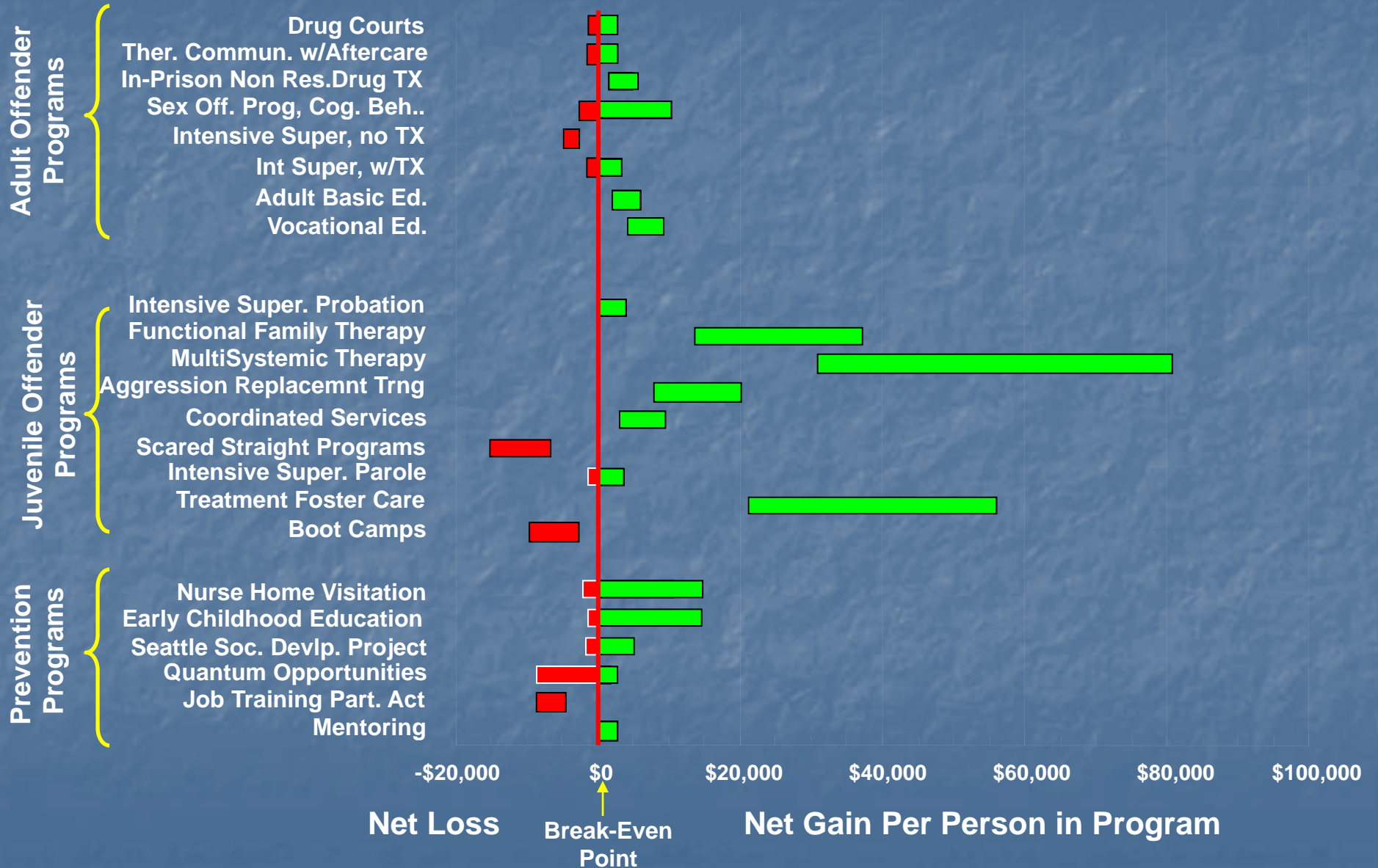
Type of Program, and the Number (N) of studies in the Summary



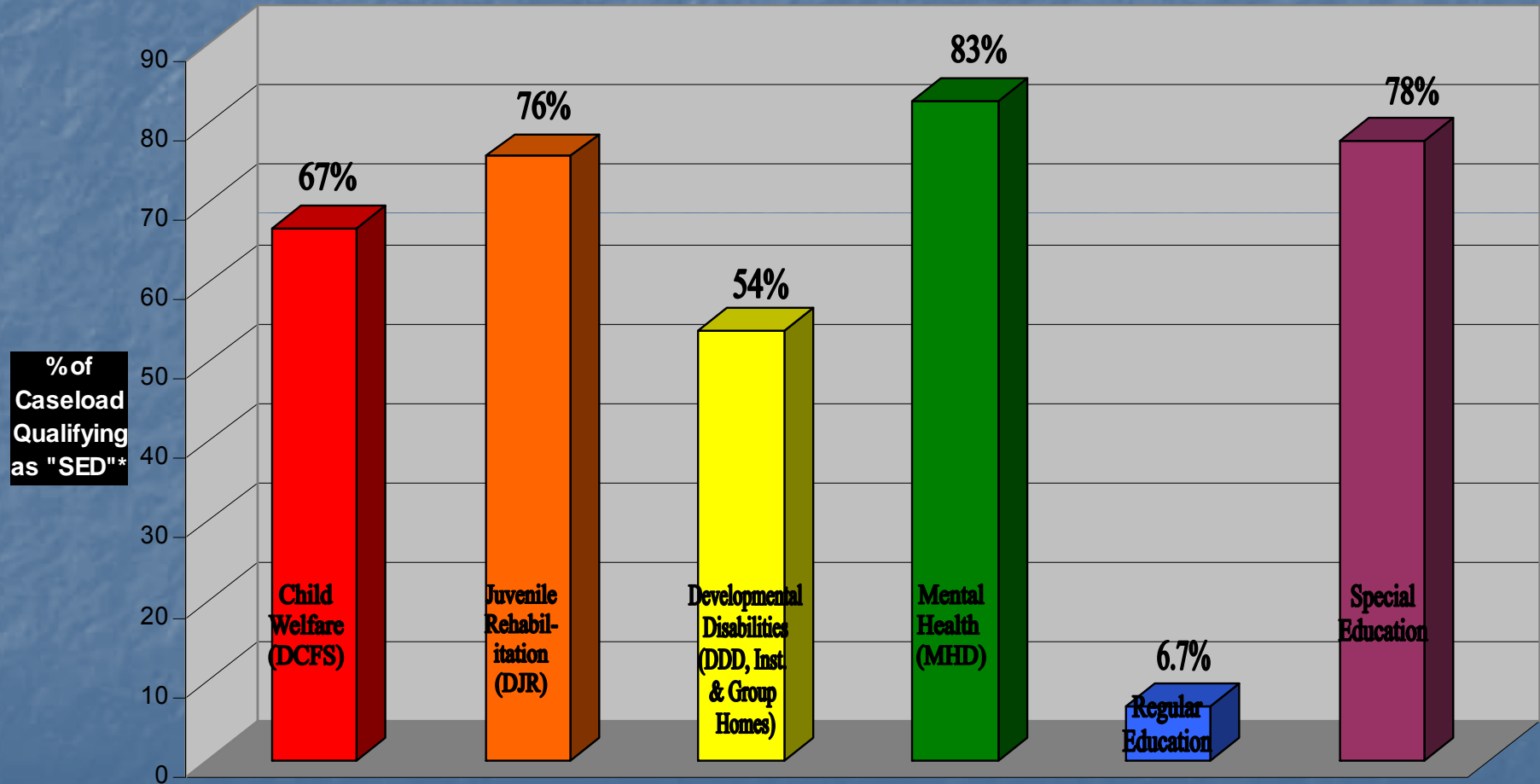
- Early Childhood Education for Disadvantaged Youth (N = 6)
- Seattle Social Development Project (N = 1)
- Quantum Opportunities Program (N = 1)
- Children At Risk Program (N = 1)
- Mentoring (N = 2)
- National Job Corps (N = 1)
- Job Training Partnership Act (N = 1)
- Diversion with Services (vs. Regular Court) (N = 13)
- Diversion-Release, no Services (vs. Regular Court) (N = 7)
- Diversion with Services (vs. Release without Services) (N = 9)
- Multi-Systemic Therapy (N = 3)
- Functional Family Therapy (N = 7)
- Aggression Replacement Training (N = 4)
- Multidimensional Treatment Foster Care (N = 2)
- Adolescent Diversion Project (N = 5)
- Juvenile Intensive Probation (N = 7)
- Intensive Probation (as alternative to incarceration) (N = 6)
- Juvenile Intensive Parole Supervision (N = 7)
- Coordinated Services (N = 4)
- Scared Straight Type Programs (N = 8)
- Other Family-Based Therapy Approaches (N = 6)
- Structured Restitution for Juvenile Offenders (N = 6)
- Juvenile Sex Offender Treatment (N = 5)
- Juvenile Boot Camps (N = 10)

Source: Meta-analysis conducted by the Washington State Institute for Public Policy

Economic Estimates From National Research For Adult & Juvenile Justice and Prevention Programs



Prevalence of Serious Emotional Disturbance (SED) in Washington State



* Percent of Cases "Not different from" the profile of an SED child, based upon five clinical and environmental indices; $\alpha = .01$

What works to reduce recidivism?

- Targeting of delinquency risk factors
- Using types of rehabilitation that match client needs and learning styles
- Programs using a cognitive-behavioral orientation
- Programs incorporating life skills
- Community-based as opposed to institutional programs
- Reinforcement and modeling
- Cognitive-behavioral techniques: Thinking Process and Skills
- Educational Strategies: Learn new ways to behave
- Family Based Therapies: e.g., MST, FFT, now FIT

What works with high risk offenders?

- CBT Approaches
 - Modeling
 - Building on & increasing strengths (Skills-focus)
 - Graduated practice ("Shaping")
 - Role Play
 - Extinction
 - Concrete Verbal Suggestions ("Coaching")
 - Resource Provision
- Family-based community interventions

What doesn't work?

- Criminal Sanctions increase likelihood of recidivism
- Deterrence (punishment to reduce recidivism) programs increase recidivism.

Integrated Treatment Model

Principles of Effective Treatment

- Treatment must directly address dynamic characteristics that are directly associated with criminal behavior.
- Programs must be delivered as designed and intended.
- Programs must target offenders who are likely to recidivate.
- Treatment must be adapted to fit the style and ability of the offender.

Effective Treatment Guidelines

“Use Cognitive-Behavioral treatment methods based upon models such as applied behavioral analysis, social learning, and cognitive-behavioral theories of change that emphasize positive reinforcement contingencies for pro-social behavior and [are] individualized as much as possible.”

Five Functions of Treatment

5 Functions of CBT

- Motivation and Engagement of Clients
- Skill Acquisition
- Skill Generalization
- Motivation and Engagement of Treatment Providers
- Structuring the Environment

Functions of Treatment

- Engage and motivate youth and families to participate in treatment
 - Contingency management
 - Cognitive restructuring/pros and cons
 - Commitment to change and development of long-term goals
 - Targeting
 - Exposure treatment for avoidance
 - High standards of staff modeling
 - Shaping & reinforcement-rich environments
 - Cue removal (if necessary)

Functions of Treatment

- Skill Acquisition

- Strong assessment of problem behavior leads to treatment plan (current abilities, analyses)
- Learn and strengthen new behaviors
- Individualize treatment
- Milieu coaching
- Contingency management
- Cross-organization consistency of approach and information flow
- Psychopharmacology

Functions of Treatment

- Skill Generalization

- Over-learning skills
- Coaching on floor, at school-work-recreation
- Cue exposure as skills strengthen
- Instill problem solving skills
- Focus on Observing, Chain Analysis skills
- "Inoculation" for transition
- Identify knowledgeable supports in community
- When possible, take youth to placement

Functions of Treatment

- Structuring the Environment
 - Family is included in treatment planning and implementation (receives training, information)
 - Cue removal and exposure
 - Coordination of treatment among tx. providers (including parole services)
 - Campus rules and policies support treatment
 - Involvement of community services, schools and aftercare
 - Selection of CBT-based treatment providers

Functions of Treatment

- Motivation & Engagement of Treatment Providers
 - High quality training & consultation
 - Appropriate reinforcement and contingencies
 - Clear, behavioral expectations in supervision
 - Visible results for hard work
 - Excellent communication up and down hierarchy
 - Superior work ethic, morale

Target Hierarchy

- What's a target?
 - A behavior that will be addressed in treatment.

Target Hierarchy

- Target Examples:
 - Self-injurious behaviors
 - Non-compliance with staff directives
 - Assault
 - Low motivation to engage in treatment
 - Possession of contraband
 - Threatening youth or staff
 - Etc.

Targeting

Targeting: *The selection of behaviors or situations to change.*

- Effective Targeting

- Targets are clearly and behaviorally defined;
- Few targets worked on at a time, with full focus;
- Targets are selected carefully to reduce greatest current risk, recidivism;
- Targets include behavior to reduce (maladaptive), behavior to increase (skills).

Why target?

- Increases motivation of youth as behavior change is successful
- Increases motivation of youth as they can work on one thing at a time
- Increases effectiveness of treatment on targeted behavior
- Allows staff to structure environment to address contingencies for a given chain
- Increase staff feelings of effectiveness, motivation

What does it mean to Target?

1. Select one or two behaviors to work on.
2. Those behaviors are the primary focus of treatment.
3. Individual sessions with counselors focus first on the target behaviors.
4. Instances of target behavior are analyzed using Chain Analysis.
5. Points, token economy are oriented to target behavior.

The Target Hierarchy

- Motivate and Engage
 - Suicidal and Self-injurious Behavior
 - Assaultive Behavior
 - Escape Behavior
 - Treatment-Interfering Behavior
 - Quality-of-Life-Interfering Behavior

Clinical Assumptions: Motivating and Engaging

- *Youth and families cannot fail in treatment.*
- *Youth and their families are doing the best that they can – and they need to do better.*

Clinical Assumptions: Motivating and Engaging, Cont'd.

- *Youth and families are not expected to enter the rehabilitation system motivated and ready to receive treatment from staff.*
- *It is staff's responsibility to help youth and families become and remain motivated for change.*

SKILLS TRAINING

Selecting Great Skill Sets

- Skills:
 - are offered for most/all critical classes of behavior
 - address broad areas of functioning
 - are “transportable” across situations
 - do not bring significant tradeoffs – need to meet most functions of maladaptive bx.
 - are recognized and responded to by those not “trained”

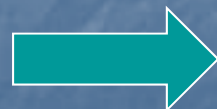
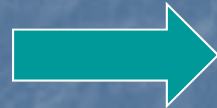
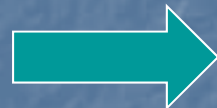
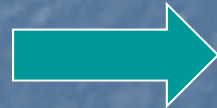
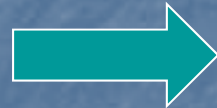
Behavior Treatment Clusters

- Behavior dysregulation
 - suicide threats, impulsive actions, substance abuse or addiction, promiscuity, criminal behavior
- Emotional dysregulation
 - anger, emotional instability, low frustration tolerance
- Interpersonal dysregulation
 - unstable relationships, history of loss, grief issues, poor peer group selection
- Cognitive disturbance
 - thinking errors, rigid thinking, “street mentality”
- Self dysfunction
 - unstable self-image, emptiness, low self-esteem
- Poor problem-solving

DBT Skill Sets

■ Skill Set

- Mindfulness / Observing
- Interpersonal Effectiveness
- Emotion Regulation
- Distress Tolerance
- Problem Solving



■ Symptom Cluster

- Problems with Self, Impulsivity
- Assertiveness, Friendship, Self-esteem
- Emotional Avoidance, Intensity, Grief/Shame
- Impulsivity, Distorted Thinking, Avoidance
- Problem Solving

Skills and Treatment

- Skills are solutions to problems – effective skills fit the context in which they are used.
- Skills may address issues at any given point of a behavior chain.
- Skills are modeled by staff.
- Skills are focus of staff attention (coaching, reinforcing).
- Skills are *not* treatment – treatment involves skills training plus many other elements.

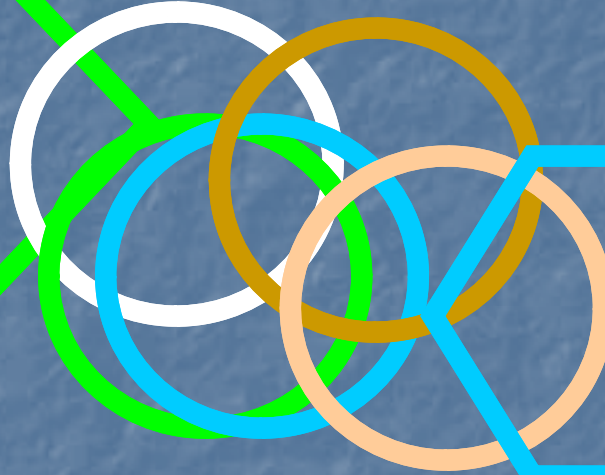
Chain Analysis: Understand the Moment

Vulnerability
Factors

Links=Emotions, Thoughts, Physical
Sensations, Urges, Actions, Events



Prompting
Event



Problem
Behavior



Short and Long Term
Consequences

Skills and Chains

- For each section of the chain – skills:
 - Vulnerabilities – reduce likelihood of reacting to cues. May treat emotional reactivity, cognitive distortions, impulsivity, illness, etc.
 - Cues – provide alternate responses to cues, and ability to tolerate the presentation of the cue.
 - Links – address thoughts, emotions, habits.
 - Problem Behavior – provide alternate (more adaptive) behavior to solve the youth's problem.
 - Outcomes – may be engaged to block outcomes.

Behavior Chain:

Where could skills help?

Vulnerabilities:

Impulsive, gang values, no long-term goals.

Cue: Sees rival gang member on "turf."

Links: "He's punking me!" Shame, Anger.

Problem Behavior:

Youth assaults.

Outcomes: Youth's anger subsides; he gets respect, street credibility; arrested.



Teaching Skills

- ANY MOMENT can be a teaching moment – keep your eyes peeled!
- Create an atmosphere of experimentation; success is attempting, not perfection!
- Skills are not perfected immediately, but practiced and improved over multiple trials.
- Staff's task is to remind, encourage, demonstrate, practice, reinforce and critique.
- Keep in mind that learning new behavior is difficult, potentially embarrassing, etc.

Transition Planning The FIT Model

Recidivism in WA

- Within 3 years of release from Washington's Juvenile Rehabilitation Administration, 68-78% of youth were convicted of new felonies or misdemeanors
 - Felonies were >50% of total
 - Violent Felonies account for about 20% of total

(Washington State Institute for Public Policy, 2006)

Transition service planning for juvenile offenders

- Integrated transition services, including mental health and substance abuse treatment, financial assistance, and school placement, are rare
- Transition planning, post-release mental health services, receipt of financial assistance are associated with lower rate of re-offending at 6 month follow-up

(Trupin, Turner, Stewart, & Wood, 2004)

Beginnings of FIT: A recognized need for transition services

- 2000: Washington State Legislature initiated pilot rehabilitation program for youth with co-occurring disorders who are transitioning back to the community from JRA
- Directed that independent evaluation be carried out by Washington State Institute for Public Policy (WISPP)

Senate Bill 6853

Juvenile offenders receive treatment that is:

- Research-based
- Integrated
- Individualized mental health and chemical abuse treatment
- Family-centered
- Community involved
- Low caseloads
- Home or residence-based services
- Time-determinate to the extent possible
- Focus on peer and social structures
- Decreases factors associated with reoffending
- Increases factors associated with prosocial contacts and behaviors

Family Integrated Transitions (FIT)

- A family- and community-based treatment for youth with:
 - Co-occurring mental health and substance abuse diagnoses
 - Being released from secure institutions in Washington State's Juvenile Rehabilitation Administration

Targeted Impacts

- Lower risk of re-offending
- Connect youth with appropriate community services
- Achieve youth abstinence from drugs/alcohol
- Improve mental health status and stability
- Increase prosocial behavior
- Improve youth's educational level and vocational opportunities
- Strengthen family's ability to support youth

FIT is predicated upon the notion that treatment is most effective if all of the factors that sustain a problem behavior are addressed in an *integrated* manner



FIT Integrated Treatment Model

- MST is the foundation
- Incorporates and builds on JRA Integrated Treatment Model

FIT builds on skills developed while incarcerated, focuses on generalization

- JRA Integrated Treatment Model: framework for treatment planning
 - Use of evidence based approaches to treatment
 - Cognitive-behavioral basis
 - Coping Skill development: DBT
 - Functional analysis of behavior
 - Building commitment to change through motivational enhancement

Elements of FIT

- Focus on engagement of multiple systems involved in supporting youth's successful transition
- Youth and family are assessed to determine unique needs; services are individualized
- Treatment focuses on family strengths, and on goals set by the family
- Attention to generalization

FIT addresses the multiple determinants of behavior change

■ Engagement factors

- Commitment to change
- Participation in therapy



Motivational Enhancement

■ Family factors

- Parenting skills
- Family relationships



Parent Skill Training

Multisystemic Therapy

■ Systemic factors

- School
- Community
- Faith-based organizations
- Juvenile Justice



Multisystemic Therapy

■ Individual factors

- Emotion regulation
- Interpersonal Effectiveness
- Substance use/abuse
- Mental Health problems
- Prosocial behavior



Dialectical Behavior Therapy

Relapse Prevention

FIT: Target Population Inclusion Criteria

- Ages 11 to 17 at intake
- Substance abuse or dependence disorder AND
- Axis I Disorder OR currently prescribed psychotropic medication OR demonstrated suicidal behavior in past 6 months
- At least 2 months left on sentence

FIT Teams

- 3-4 therapists per team
 - 3-5 families per therapist at any given time
 - Frequent contact with the family, especially early on, to establish engagement and structure
- 1 supervisor per team (0.5 FTE)

FIT Oversight

- Weekly group supervision with supervisor
- Individual supervision as indicated
- Weekly telephone consultation with FIT consultants

FIT: Treatment

- Begins 2 months before release to allow time to prepare family and systems to support successful transition
- Therapist meets with family at least once per week
- Therapist on call 24/7
- Treatment takes place in the community where the youth lives

The FIT Manual

- Chapter 1: Overview of FIT, goals of program
- Chapter 2: Description of theory and practice of key therapeutic approaches
- Chapter 3: Therapist's Toolbox
- Chapter 4: Referral and Engagement
- Chapter 5: Pre-Release Multisystemic Interventions
- Chapter 6: Parent Behavioral Skills Training
- Chapter 7: Pre-Release Sessions
- Chapter 8: Homecoming
- Chapter 9: Maintenance
- Chapter 10: DBT skills
- Chapter 11: Barriers and Solutions

Therapist's Toolbox

- Contains information on a variety of techniques from different intervention approaches that are to be employed throughout the intervention
 - Fit circles
 - Behavior Chain Analysis
 - Readiness rulers
 - Pros and Cons
 - Goal setting
 - Interaction techniques
 - Commitment strategies
 - Mindfulness exercises
 - Diary card
 - Educational handouts

FIT Evaluation Outcomes

- Recidivism (UW DPBHJP & WSIPP)
- Cost-benefit (WSIPP)

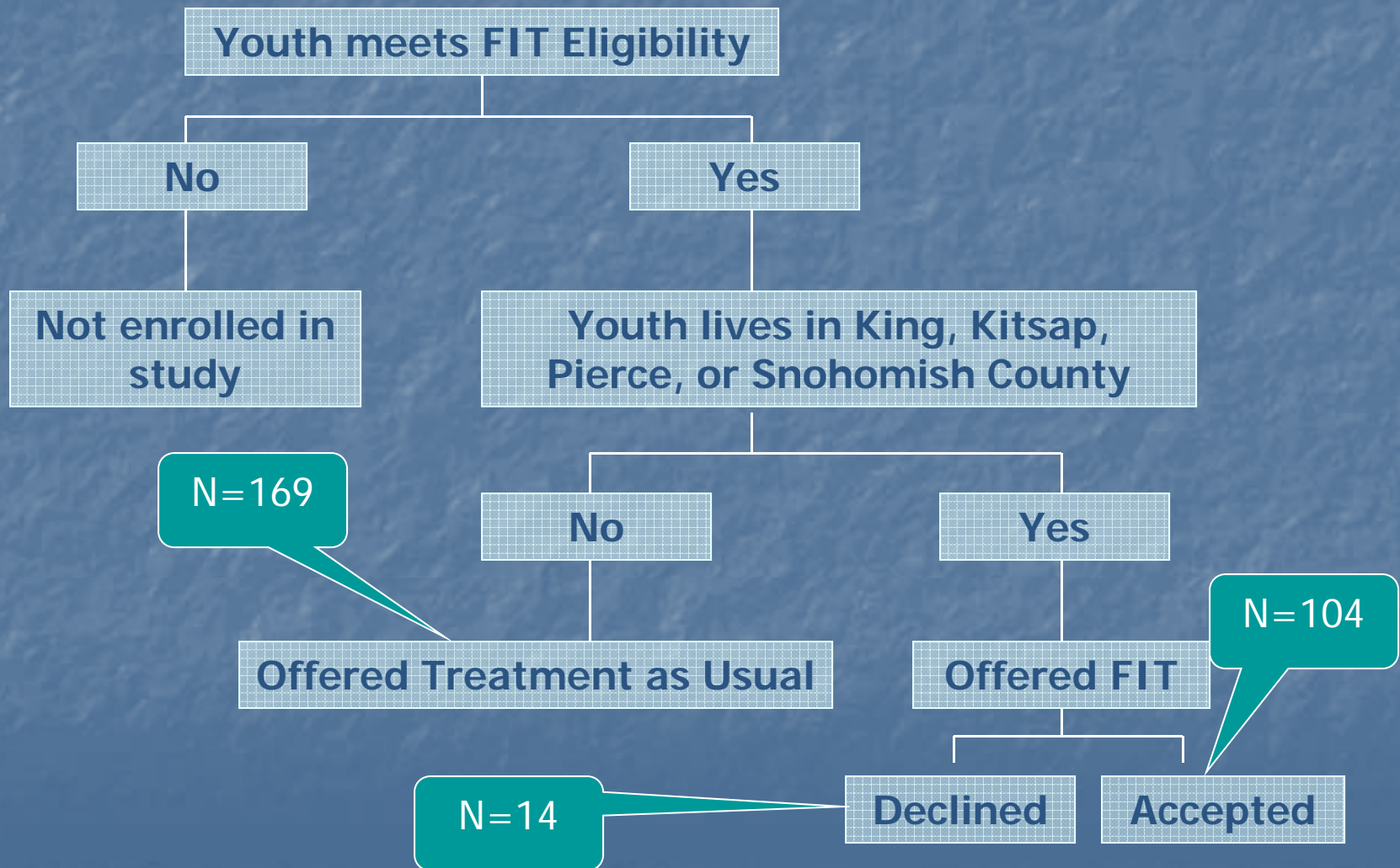
In 1990's, at the behest of the Washington State Legislature, WSIPP started to:

- Evaluate programs to decrease crime and the cost of crime to taxpayers and crime victims
- Develop models to estimate the cost of crime to taxpayers and crime victims
- Do not consider other program effects such as substance use, educational outcomes, or scores on assessment tools

FIT Eligibility Criteria

- Under 17 ½ years old
- In JRA institution
- Scheduled to be released to four or more months of parole supervision
- Substance abuse or dependence
- One or more of the following:
 - Any Axis 1 disorder (excluding youth with only diagnoses of Conduct Disorder, Oppositional Defiant Disorder, Paraphilia and/or Pedophilia); or
 - Currently prescribed psychotropic medication; or
 - Demonstrated suicidal behavior within the past 3 months

Matched Control Research Design



FIT Program

Evaluation Design and Methods

To account for non-random assignment and differences between groups, data analytic strategies included:

- 25% reduction in the estimated effect of the FIT program on recidivism while calculating cost-benefit ratio
- Stratified the survival analysis to account for proportionally more African American youth in the FIT sample compared with the Control group

Selection Biases between treatment groups?

- There is a possibility of differences between FIT participants and comparison
 - 88% of eligible youth received FIT (non-participating youth might be different)
 - Families in different geographical areas might face different circumstances (i.e., counties eligible for FIT were more metropolitan – containing Seattle and Tacoma)

Differences between FIT group and Comparison group

- FIT participants more likely than comparison youth to
 - Identify as African American
 - Have a prior property offense
 - Have higher Initial Security Classification Assessment (ISCA) scores (JRA tool for measuring risk for re-offense)
- FIT participants less likely than comparison youth to identify as Latino
- No significant differences in age at release, age at first conviction, gender, prior drug convictions, criminal history, prior violent convictions, or Native American ethnicity
- Arguably, FIT group more prone to re-offend

Outcome variable: Recidivism

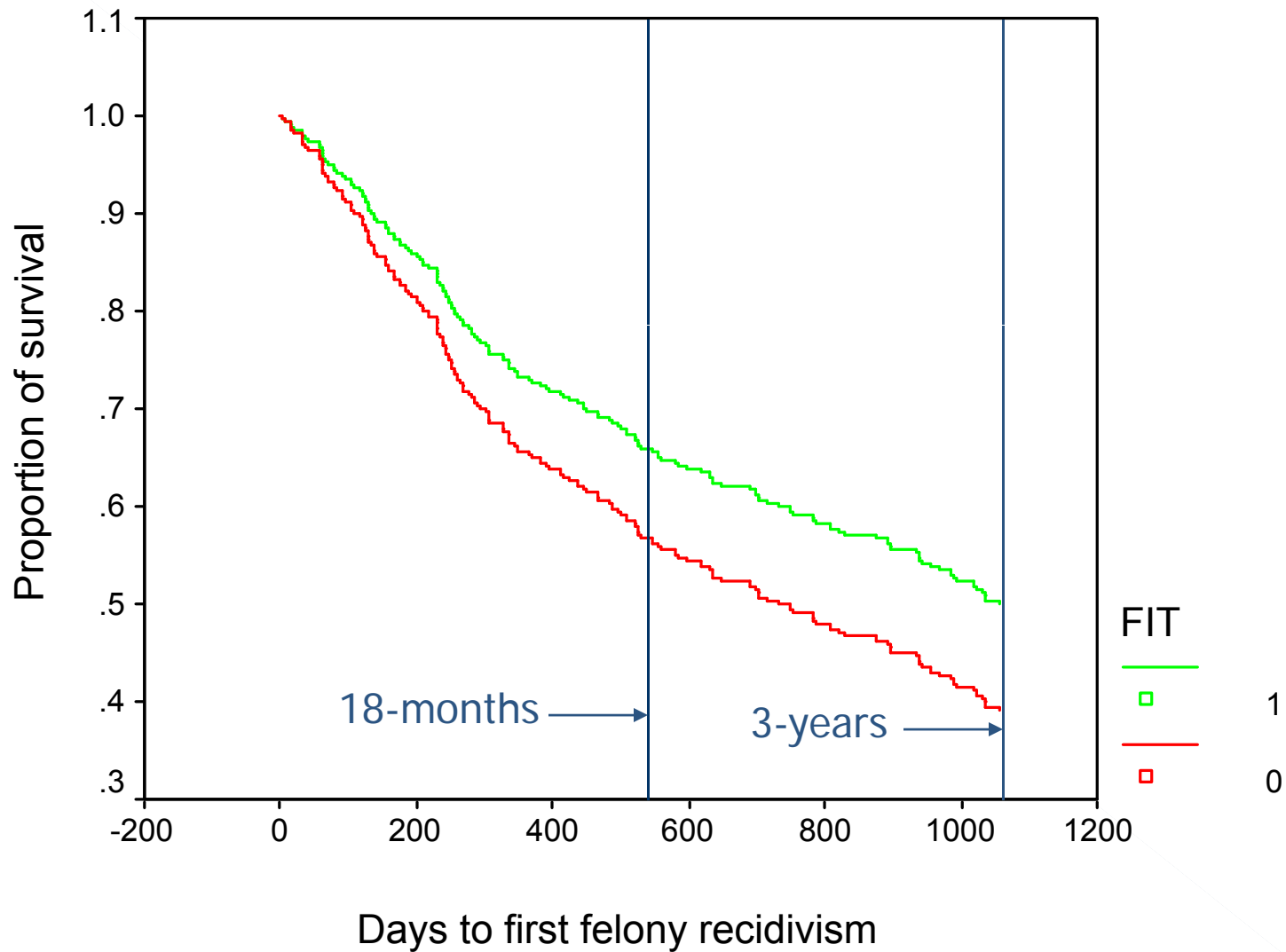
- Obtained through statewide database
- Conviction rates for juvenile or adult offenses
- Follow-up period of 36 months post-release
- Conviction classifications
 - Total recidivism: misdemeanor + felony
 - Felony recidivism
 - Violent felony recidivism

Effects of Participation in FIT on 36-month Recidivism

- Utilized stratified Cox regression to adjust for unequal distribution of African American youth in the FIT sample
- Percent that did NOT have a felony conviction 36 months post-release:
 - FIT participants: 45.0%
 - Comparison: 37.4%
 - Youth in FIT 30% less likely than youth not in FIT to have felony recidivism
 - Wald=4.26, $p=0.039$, hazard ratio=.697

3-year Recidivism

Survival pattern for FIT



FIT Benefit-Cost Analysis

FIT Benefit-Cost Analysis

- Total cost of FIT per participant: \$9,665
- Benefits to taxpayers in criminal justice savings per participant: \$19,502
- Benefits to non-participants from avoided criminal victimizations per participant: \$30,708
- Total savings per participant = \$50,210
- Net gain per participant = \$40,545

FIT Benefit-Cost Analysis

- Benefit-to-Cost Ratio: (Total Benefit/Total Cost) = (\$40,545/\$9,665) = \$4.20

Next Steps

- Reaffirm findings as they relate to cultural minorities
- Examination of psycho-social impacts of FIT intervention (move beyond recidivism)

OJJDP Model Programs

- Rating: Effective
- Can be found on-line at:

http://www.dsgonline.com/mpg2.5/TitleV_MPG_Table_Ind_Rec.asp?id=710

“Vision without action is a daydream. Action without vision is a nightmare.”

Japanese proverb

Citations

- FIT Outcome Evaluation

- S. Aos, M. Miller, and E. Drake (2006). *Evidence-Based Public Policy Options to Reduce Future Prison Construction, Criminal Justice Costs, and Crime Rates*. Olympia: Washington State Institute for Public Policy.
 - <http://www.wsipp.wa.gov/rptfiles/06-10-1201.pdf>

- WSIPP Models for the Cost of Crime

- S. Aos, R. Lieb, J. Mayfield, M. Miller, & A. Pennucci (2004). *Benefits and costs of prevention and early intervention for youth, Technical Appendix*. Olympia: Washington State Institute for Public Policy.
 - <http://www.wsipp.wa.gov/rptfiles/04-07-3901a.pdf>

Citations

- Schmidt, H. and Salsbury, R. (2009)
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