Evidence-Based Practices in Children's Mental Health

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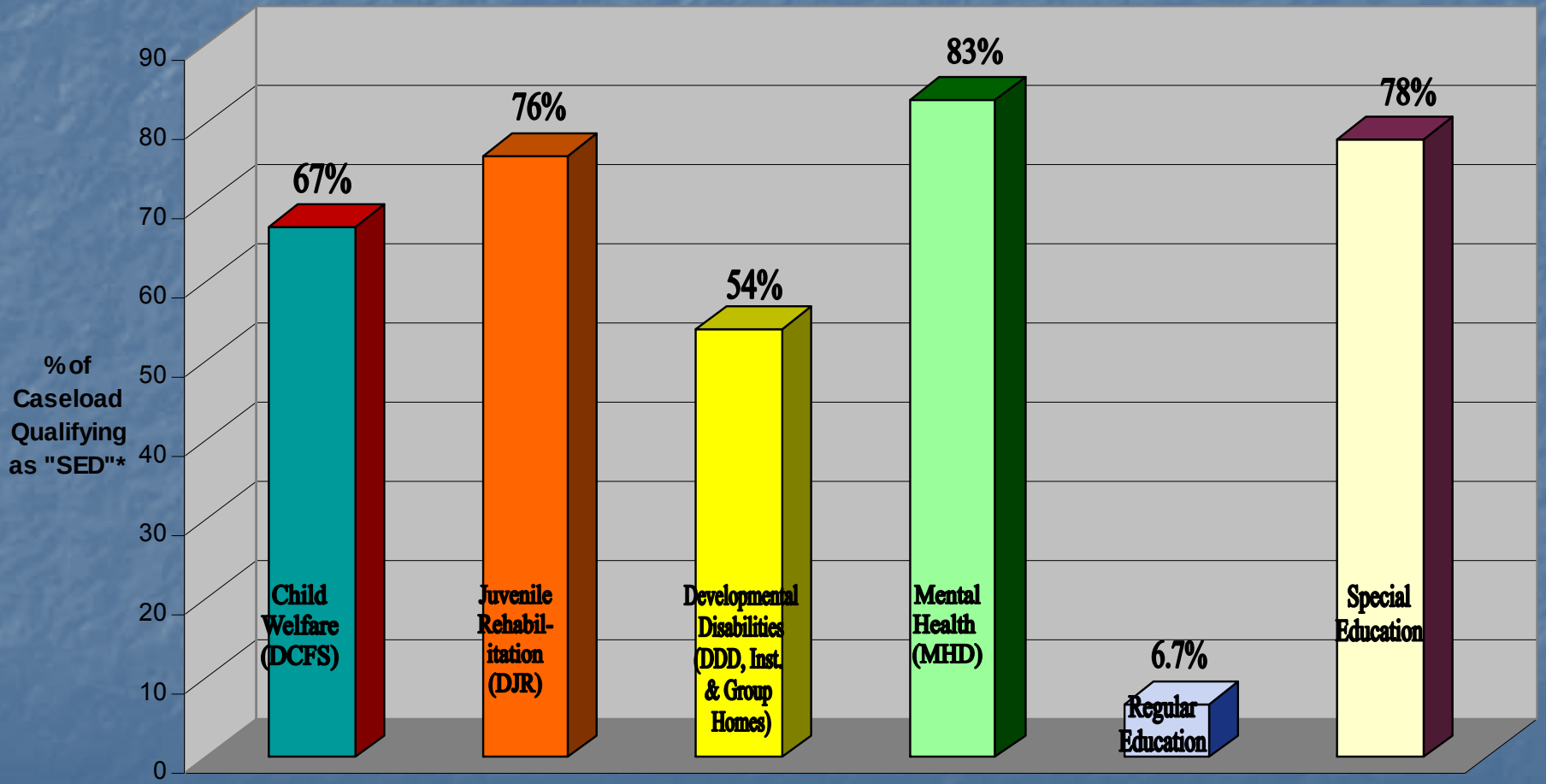
March 29, 2005

The need for treatment

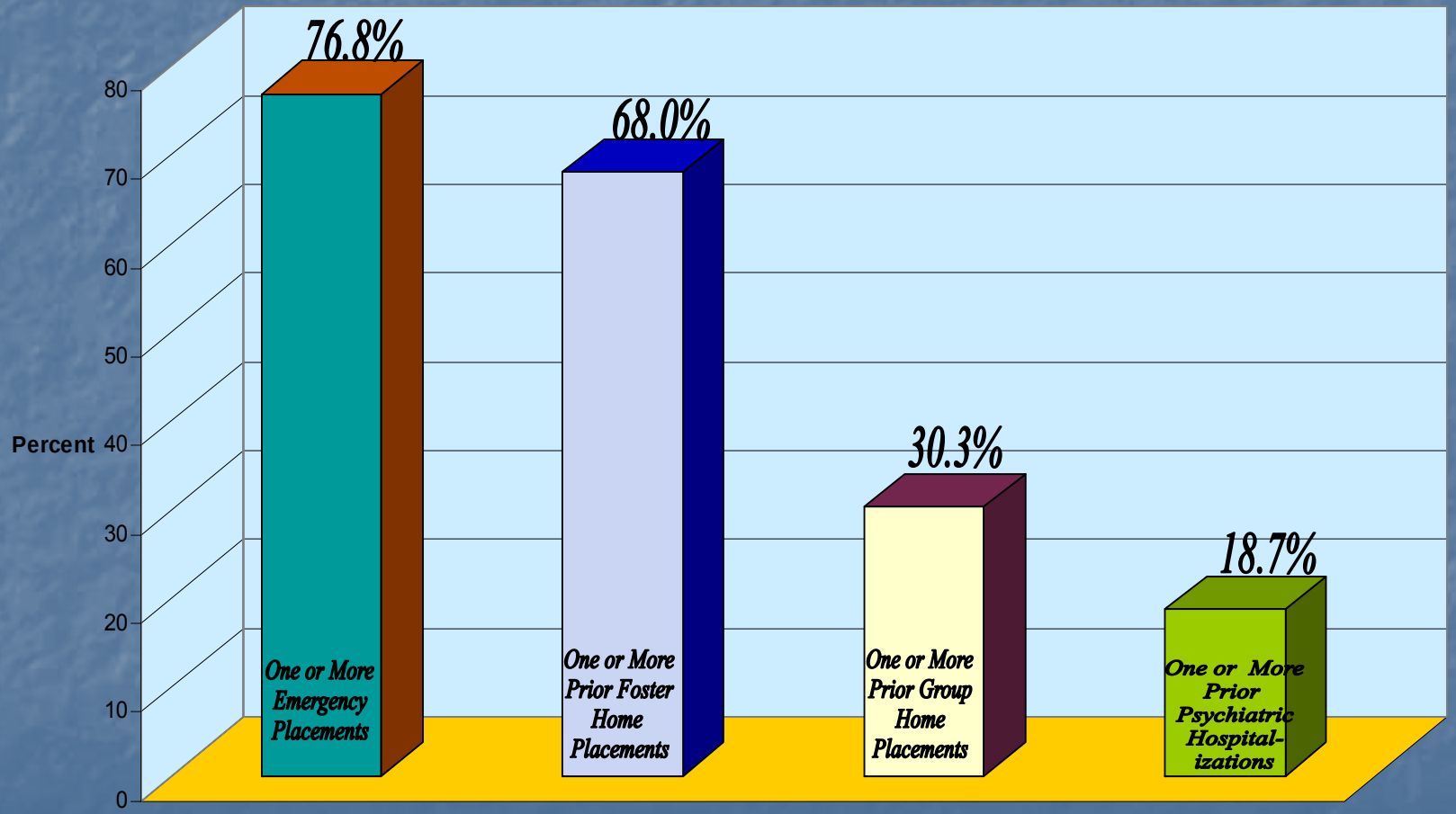
- 20% of youth in the general population experience a mental health or substance abuse diagnosis
- 9-13 % of children and adolescents qualify as Seriously Emotionally Disturbed

Prevalence of Serious Emotional Disturbance (SED) in Washington State

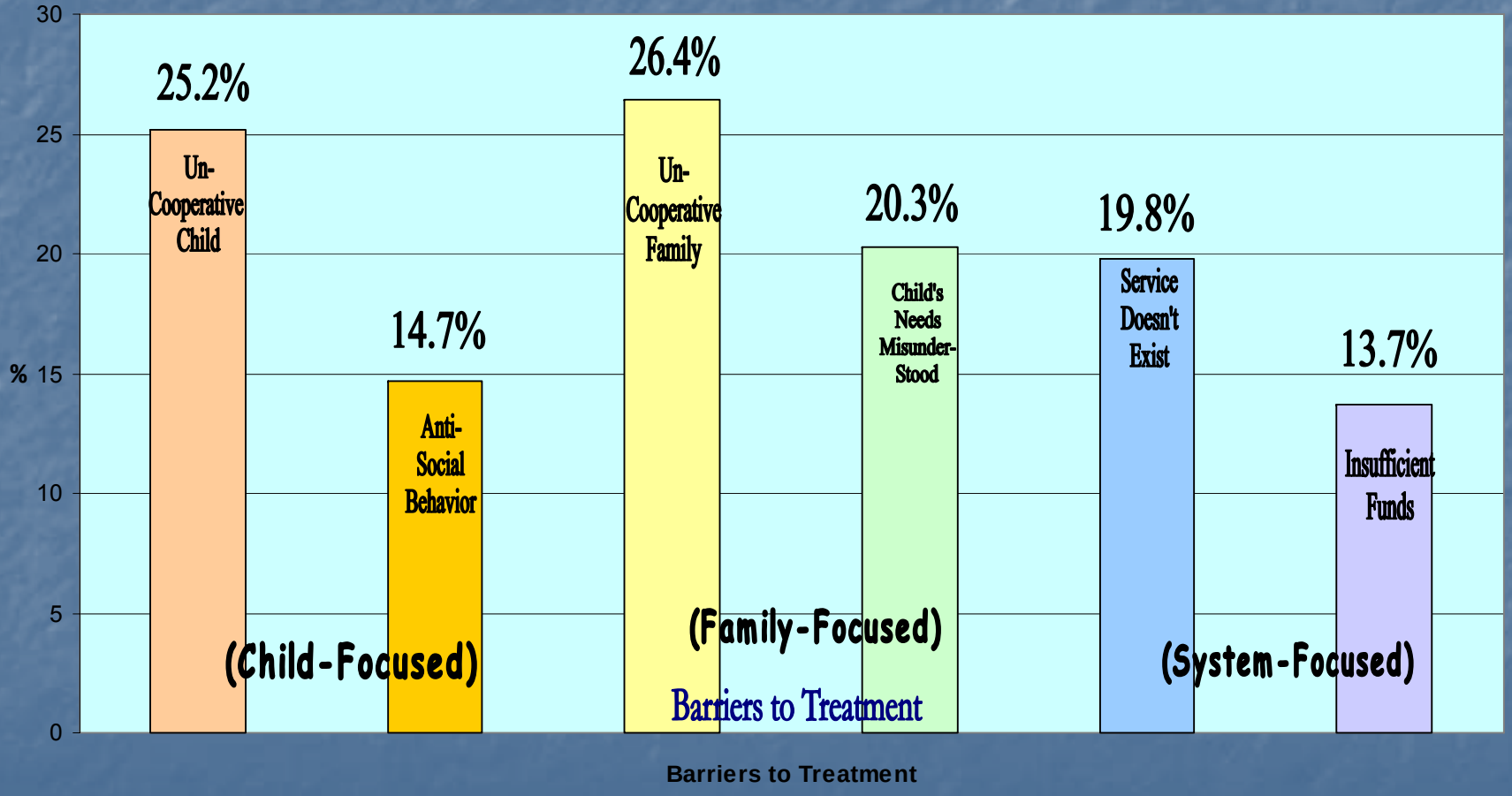


* Percent of Cases "Not different from" the profile of an SED child, based upon five clinical and environmental indices; α = .01

Percentage of SED Children With Prior Out-Of-Home Placements (DSHS Sample)



Primary Service Barriers for Seriously Emotionally Disturbed (SED) Children and Youth (As Reported by Caseworkers and Teachers)



What is Evidence-Based Treatment?

Interventions for which there is consistent scientific evidence indicating that they improve clinical outcomes

Status of Mental Health System and Evidence-Based Treatments

- President's Commission reports public mental health system is "in a shamble" (President's new Freedom Commission Report, 2004)
- 90% of public mental health services do not deliver treatments programs or services that have empirical support (Elliot, 1999; Henggeler et al., 2003)

Why is Evidence Based Treatment often not implemented, or implemented inadequately?

Barriers to the Implementation of Evidence-Based Treatments (EBT)

- Clinical trials are often not generalize-able to the "real world"
  - Participants in research trials are often carefully selected, and are often screened out if they have multiple problems
  - Research Clinicians work exclusively with one population and one intervention
  - Treatment is typically manualized and closely supervised
  - All materials that are needed for an intervention are available.

Barriers to Implementation of EBT

- Clinicians often work with individuals who vary widely in age, acuity, and presenting problem(s)
  - Can not be experts on best practice for all diagnoses, all ages
- Clinicians working with children must address the treatment needs of the parents and other family members, as well as the children.

Barriers to Implementation of EBT

- High cost of initial training, too few resources, too little supervision
- Clinicians often spend much time in therapy “putting out fires”—not much time for a systematic approach to intervention
- Poor dissemination—clinicians may not have access to research literature or time to review it.

Barriers to Implementation of EBT

- Traditional mental health settings place a high value on clinician creativity and intuition.
- Manualized interventions may be viewed as overly simplified, “cookie-cutter” approaches that are dehumanizing to the client and stifling to the therapist.

Given these barriers, how can evidence-based treatments be implemented in “real world” settings?

Balancing the Science of Evidence-Based Practice with the "Heart" of Therapy

- Regardless of the approach used, engagement is critical for successful treatment
- Therapists must be able to inspire hope and a commitment to change
- This requires exceptional communication skills, creativity, ability to modulate approach to the needs and capacities of a client, and a sense of humor.

Use of Evidence-Based Practices in Clinical Settings

- Therapists to make informed decisions regarding treatment planning and implementation
  - Which approaches have been shown to work
  - Which approaches have been shown to actually do harm
- Focus on supporting client's general skill development
  - Target symptoms, rather than diagnoses or underlying issues
- Treatment manuals can be used flexibly
  - But, it is important to adhere to the core principles

How does one determine whether a treatment qualifies as “evidence based”?

Guidelines for Choosing Evidence-Based Treatments

Level 1: Best Support

- At least two good between-group design experiments demonstrating that the treatment is
  - Superior to placebo or another treatment, OR
  - Equivalent to an already established treatment

OR

- A large series of single case design experiments (n>9), using good experimental design, demonstrating efficacy.

AND

- Experiments must be conducted with treatment manuals.
- Characteristics of the client samples must be clearly specified.
- Effects must have been demonstrated by at least two different investigators

Guidelines for Choosing Evidence-Based Treatments, continued

Level 2: Good Support of Moderate Support

- Two experiments showing the treatment is superior to a waiting-list control group. *Manuals, specification of sample, and independent investigators are not required.*

OR

- One between-group design experiment with clear specification of group, use of manuals, and demonstrating that the treatment is either:
  - Superior to placebo or another treatment.
  - Equivalent to an already established treatment

OR

- A small series of single case design experiments (n>3) with clear specification of group, use of manuals, good experimental designs, and compared the intervention to placebo or to another treatment.

Guidelines for Choosing Evidence-Based Treatments, continued

Level 3: Promising Practice

- The treatment has a sound theoretical basis in generally accepted psychological principles, or has been demonstrated to be effective with another target behavior.
- A substantial clinical-anecdotal literature exists indicating the treatment's value with the target behavior.
- The treatment is generally accepted in clinical practice as appropriate for use with the target behavior.
- There is no clinical or empirical evidence or theoretical basis indicating that the treatment constitutes a substantial risk of harm to those receiving it, compared to its likely benefits.
- The treatment has a book, manual, or other available writings that specifies the components of the treatment protocol and describes how to administer it.

Guidelines for Choosing Evidence-Based Treatments, continued

Level 4: Practices with Known Risks

- At least one study or review demonstrating harmful effects of a treatment.

Evidence-Based Child and Adolescent Psychosocial Interventions

Problem Area	Level 1: Best Support	Level 2: Good / Moderate Support	Level 3: Promising Practices	Level 4: Known Risks
Anxious or Avoidant Behaviors	Manualized Cognitive Behavior Therapy for Anxiety Disorders			
Attention and Hyperactive Disorders	Multi-Modal Approaches using Medication, Cognitive Behavioral Therapy, Parent Training and School Intervention			
Autistic Spectrum Disorders	Applied Behavior Analysis		Auditory Integration Training; Functional Communication Training	
Bipolar Disorders	Medication		Multi-Family Group Treatment; CFF – Cognitive Behavioral Therapy; Cognitive Behavioral Therapy – IP	
Depressive or Withdrawn Behaviors	Manualized CBT for Depression; Interpersonal Therapy (Manualized IPT-A); Medication		Dialectical Behavior Therapy	

Evidence-Based Interventions Continued

Problem Area	Level 1: Best Support	Level 2: Good/Moderate Support	Level 3: Promising Practices	Level 4: Known Risks
Eating Disorders		Family Therapy (Anorexia Only)	Dialectical Behavior Therapy; Cognitive Behavioral Therapy; Interpersonal Therapy	Some Group Therapies
Disruptive and Oppositional Behaviors	Parent & Teacher Behavior Management (e.g. Incredible Years, Barkley curriculum, Patterson curriculum)	Anger Coping Therapy; Functional Family Therapy	Multi-Systemic Treatment; CBT; Dialectical Behavior Therapy; Multi-Dimensional Family Treatment	Group Therapy without a skills focus
Self-harming Behaviors			Dialectical Behavior Therapy; Multi-Systemic Treatment	
Assaultive and Aggressive Behaviors	Aggression Replacement Therapy	Multi-Systemic Treatment	Multi-Dimensional Family Treatment	
Sexually Aggressive Behaviors		Multi-Systemic Treatment; CBT for children with sexual behavior problems		
Traumatic Stress	Trauma-Focused Cognitive Behavioral Therapy	Eye Movement Desensitization & Reprocessing	Trauma-Focused Integrative Eclectic Therapy; Trauma-Focused Play Therapy	

Evidence-Based Interventions Continued

Problem Area	Level 1: Best Support	Level 2: Good/Moderate Support	Level 3: Promising Practices	Level 4: Known Risks
Interpersonal Relationships	Cognitive Behavioral Therapy; Skills training		Dialectical Behavior Therapy; Functional Family Therapy	
Attachment Problems (0-5)		Parent-Child Interaction Therapy; Behavioral Parent Training; Family Focused, Child Centered Treatment		Coercive or Aversive Therapies; Attachment Therapy
Schizophrenia and other psychotic disorders	Medication	Assertive Community Treatment for Adolescents; social skills training	Family Psychoeducation; Multi-Family Group Treatment	
Substance Use	Cognitive Behavioral Therapy	Voucher-Based Contingency Management; Purdue Brief Family Therapy; Motivational Enhancement Therapy; Multi-Dimensional Family Treatment; Multi-Systemic Treatment	Dialectical Behavior Therapy	Group Therapy
High Conflict Families		Functional Family Therapy	CBT;Intensive Family Prevention Services; Parenting Wisely	

Population Based Interventions

Problem Area	Best Support	Good/Moderate Support	Promising Practices	Known Risks
Juvenile Offenders	Multi-Systemic Therapy; Multi-Dimensional Family Treatment Foster Care; Functional Family Therapy; Aggression Replacement Therapy	Dialectical Behavior Therapy; Family Integrated Transitions (FIT)		Group Therapy without a skills focus
At Risk for Out of Home Placement		Family Group Conferences; Parent-Child Interaction Therapy; Behavioral Parent Training; Family Focused, Child Centered Treatment		
History of Abuse and Neglect	Parent-Child Interaction Therapy	Cognitive Behavioral Therapy for Children with Sexual Behavior Problems; Eye Movement Desensitization and Reprocessing; Child/Parent Physical Abuse CBT	Trauma-Focused Integrative Eclectic Therapy; Trauma-Focused Play Therapy	
School-Aged Prevention		Promoting Alternative Thinking Strategies (PATH); Project ACHIEVE; Families and Schools Together (FAST); Anger Coping Self-Instruction Training		

Examples of EBT used for multi-problem, “real world” clients

- Multisystemic Therapy (MST)
- Dialectical Behavior Therapy (DBT)
- Functional Family Therapy (FFT)
- Parent-Child Interaction Therapy (PCIT)

Multi-Systemic Therapy (MST)

- Target population is youth at risk of out-of-home placement due to behavior problems.
- Has been shown to be effective with youth who have conduct disorder, serious emotional disturbance, drug and alcohol abuse

Multisystemic Therapy (MST)

- Based on of the idea that behavior is determined not only by the individual, but also by the family, school, peer group, and community.
- Goal is to change the youth's behavior by changing the natural environment that reinforces the behavior.

Nine Principles of MST:

1. Understand the fit between identified problems and their broader context
2. Emphasize the positive and use systemic strengths as levers for change
3. Promote responsible behavior and decrease irresponsible behavior among family members
4. Interventions are present-focused and action-oriented; specific and well defined problems are targeted
5. Interventions target sequences of behavior between multiple systems

Nine Principles of MST, continued:

6. Interventions are developmentally appropriate
7. Interventions require daily or weekly effort by the family
8. Intervention effectiveness is evaluated continuously from multiple perspectives; providers assume accountability for successful outcomes
9. Interventions promote treatment generalization and long-term maintenance of therapeutic change

Evaluation of MST

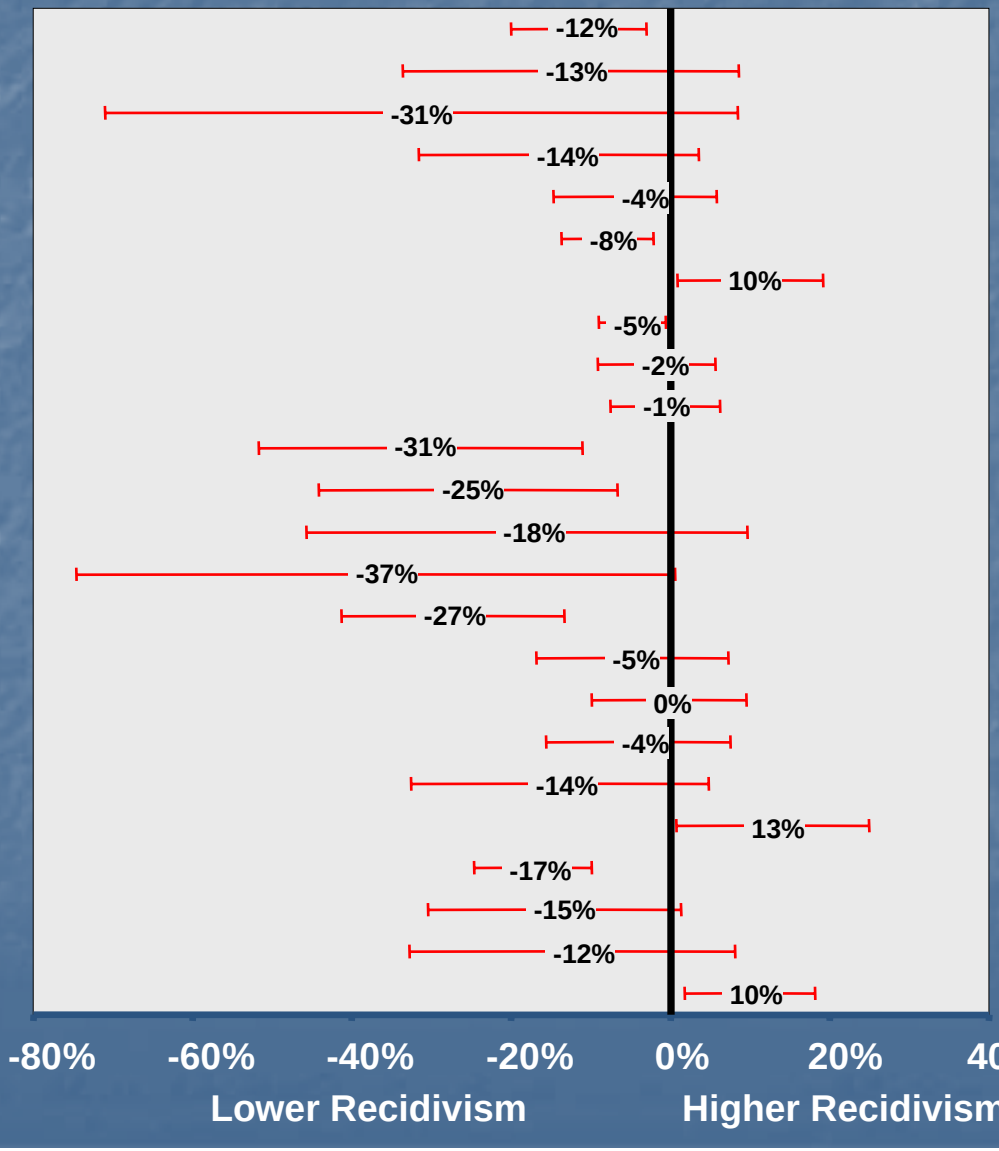
- Outcome studies indicated that MST with delinquent youth
  - Decreased behavioral problems
  - Improved family relationships
  - Decreased psychiatric symptomatology
  - Decreased number of days spent in out of home placements
  - Decreased recidivism
  - Improved clinical outcomes

(Henggeler et al., 1986; Henggeler et al., 1997;Schoenwald et al., 2000)

Cost-Effectiveness of MST in Juvenile Justice Populations

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.

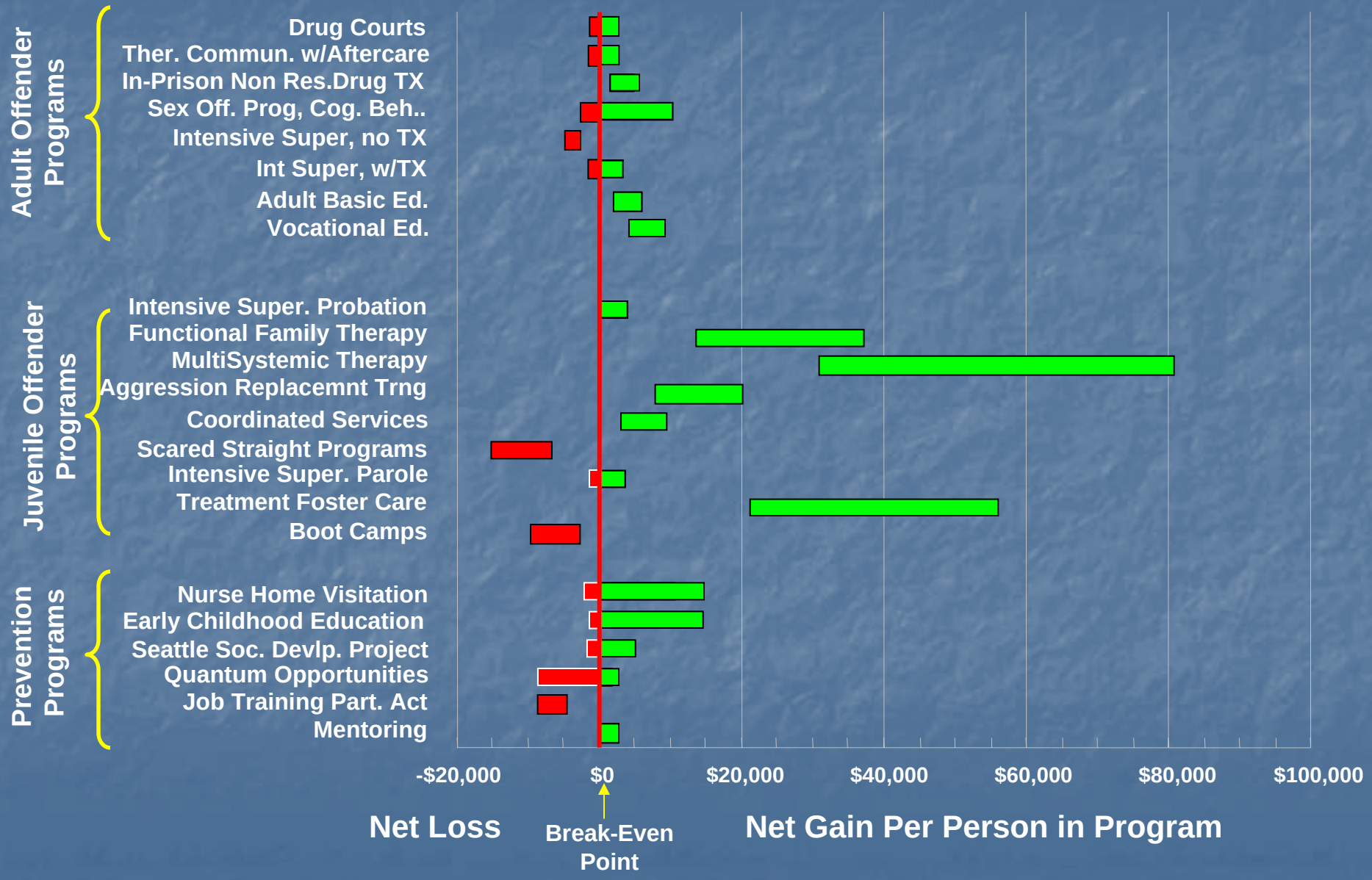


Type of Program, and the Number (N) of studies in the Summary

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



Video

Last Chance: MST with Substance Abusing Adolescents

48 Hours

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Dialectical Behavior Therapy (DBT)

- Developed by Marsha Linehan as an outpatient treatment for parasuicidal women with Borderline Personality Disorder (BPD).
  - Range of problems associated with BPD, including trauma, substance abuse, depression, various environmental stressors

Evaluation: DBT is effective for this traditionally hard-to-treat population

- Outcome studies with women with Borderline Personality Disorder indicate that, compared to those who received treatment as usual, those who received DBT had
  - reduced frequency and medical severity of parasuicide;
  - greater reductions in their frequency and length of inpatient hospitalization;
  - better treatment retention
  - reduction in anger experienced and dissociation
  - decrease in impulse control problems

(Linehan et al., 1991; Koons et al., 2001; Verheul et al., 2003)

Adaptation of DBT

- Emotional dysregulation related to a range of problems commonly seen in the Juvenile Justice Population
  - Substance abuse, depression, anxiety, poor impulse control, poor anger management
- DBT: a promising treatment for juvenile offenders?

Components DBT

- Emphasis on mindfulness
- Behavioral therapy components
  - Goal-focused interventions
  - Emphasis on skill development
  - Functional behavior analysis is used to identify antecedents and consequences of behavior, and to prompt consideration of alternative courses of action
  - Recognition that one needs to change one's behavior in order to change one's feelings

DBT in Juvenile Justice Settings

- Delivered through groups, individual therapy, and daily interactions with staff
- Behavioral analysis, cognitive restructuring, skills coaching
- Integrated into the culture of the institution

DBT Skills

- Core Mindfulness
- Emotion Regulation
- Distress Tolerance
- Interpersonal Effectiveness

Mindfulness

- Awareness of the moment
  - Environment
  - Thoughts
  - Feelings
- Maintaining focus
- Doing what one needs to do to be effective in a given situation

Core Mindfulness Skills: Skills to Achieve "Wise Mind"

- "What" skills
  - Observe
  - Describe
  - Participate
- "How" skills
  - Non-judgmentally
  - One-mindfully
  - Effectively

Emotional Regulation skills

- Emotion identification
  - Expand ability to accurately monitor and identify emotional state
- Building positive experiences
  - “You have to do better before you feel better.”
- Opposite to emotion
  - Act in a way that is opposite to the way that your emotion makes you want to act

Example: Opposite-to-emotion

- Fear
  - Do what you are afraid of doing…over and over until the fear decreases.
  - Do things to give yourself a sense of control.
- Guilt/Shame
  - Repair the problem: Apologize or do something nice for that person.
  - Promise yourself that you'll try to avoid making that mistake in the future.
  - Accept the consequences and then *let it go*.
- Sadness/Depression
  - Get active, "approach, don't avoid".
  - Do things that help you feel self-confident.
- Anger
  - Avoid people or situations that trigger your anger.
  - Try to feel empathetic for the person rather than blaming them.

Distress Tolerance: Getting through a moment without making things worse

- Self Soothing
- Distracting
- Radical acceptance
- Evaluating the Pros/Cons

Example: Pros/Cons

- Describe behavior
- Describe alternative behavior
- Evaluate pros/cons of each

Pros and Cons

Behavior: Skipping School	
Pros	*Cons*
1. Avoid getting yelled at by teacher 2. Avoid detention for not doing homework 3. Avoid boring class 4. Get to have fun with friends	1. Will get more severe punishment later 2. Will get further behind in school 3. Will further damage relationship with teacher 4. Risk getting thrown off football team if I have any more absences
Alternative behavior: Going to school today	
Pros	*Cons*
1. Will get work done for the day 2. Can try to improve relationship with teacher by being attentive 3. Avoid getting into deeper trouble than I am already in	1. I might feel uncomfortable if the teacher yells at me 2. I get bored in math class 3. I will miss out on whatever my friends are doing

Interpersonal Effectiveness Skills

- Communication skills to improve ability to make requests and interact with others in a way that is likely to get needs met
  - Validation
  - Reinforcement
  - “being gentle”
  - Humor
  - Not acting helpless
  - Negotiation
  - “I” statements

Is DBT effective in juvenile justice settings?

- Outcome research is limited
- Girls in mental health cottage who received DBT had significantly lower 12 month felony recidivism rate than those who were residents of the cottage before the DBT program began(10% vs. 24%). (WSIPP, 2002)
- Punitive actions by staff in mental health cottage decreased when cottage began implementing DBT. (Trupin, Stewart, Beach & Boesky, 2002)

An Integration of MST and DBT to Support Youth Transitioning From Incarceration to the Community

- How can we give youth with co-occurring disorders the skills they will need to avoid recidivating?

Family Integrated Transitions (FIT)

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

FIT targets the multiple determinants of antisocial behavior

- Multisystemic Therapy framework to change the systems that create the reinforcement contingencies for behavior
- Dialectical Behavior Therapy to promote emotional and behavioral regulation
- Motivational Enhancement Therapy to promote engagement in treatment
- Relapse Prevention to give youth skills to promote sustained abstinence

Family Integrated Transition (FIT): Target Population

- 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 4 months left on sentence
- Residing in service area

Effects of Participation in FIT on Recidivism

- Recidivism of youth who participated in FIT was compared with recidivism of youth were eligible for FIT, but lived outside of the service area
- At 18 months post-release, felony recidivism was 34% lower for FIT clients (27%) than for comparison youth (41%).

(Washington State Institute of Public Policy, 2004)

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Functional Family Therapy

- Targets youth aged 11-18 who are at risk for or present with delinquency, violence, substance use, or disruptive behavior disorders
- 8-12 hours for families with moderate problems, 26-30 hours for families with higher acuity problems

Functional Family Therapy: Goals

- To addresses risk and protective factors within the family, with a focus on relationship issues
- To improve family communication and decrease negativity

FFT Phase 1: Engagement and Motivation

- Therapist aims to create hope, enhance motivation, and decrease resistance by
  - reframing maladaptive perceptions, beliefs, emotions
  - building alliance and trust with family members
  - developing a sensitivity to cultural factors that may influence family functioning

FFT Phase 2: Change of Problematic Behavior

- Therapist aims to promote positive communication
- Parents are taught behavior management techniques
  - Contingency management
  - Behavioral contracting
  - Token economy
  - Reinforcement of positive behavior

FFT Phase 3: Generalization

- Help families to anticipate and overcome the “ups and downs” that they will face in continued use of skills
- Help families to use acquired skills in new situations
- Engage community resources to support family

Evaluation of FFT

Compared to a range of alternative programs, FFT is associated with

- Reduced rate of out-of-home placement by 25% to 60%
- Decreased criminal recidivism
- Improved family interactions
- Reduced probability of younger siblings developing disruptive behavior

Gains maintained at follow-up of up to 5 years

(outcome literature summarized in Alexander, Pugh, Parsons, & Sexton, 2000)

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Parent-Child Interaction Therapy (PCIT)

- A treatment targeting young children with externalizing behavior disorders

- Goals
  - Support parent-child attachment
  - Teach parent management skills

Stage 1 of PCIT: Child Directed Interaction

- Purpose: to teach parents to build warm, responsive relationships with their children
- Parents and children take part in play sessions. Parents are taught
  - To follow their child's lead in play
  - To ignore minor misbehavior
  - To avoid criticism
  - To increase use of specific praise, description and imitation of appropariate behavior, reflection
  - To enthusiastically participate in play

Stage 2 of PCIT: Parent Directed Interaction

- Purpose: to teach parents to monitor and provide consistent consequences for negative behavior
- Parents and children participate in “minding exercises”. Parents are taught
  - To give commands that are age-appropriate, direct, specific, calm
  - To provide specific praise for compliance
  - To provide appropriate consequences for non-compliance

Evaluation of PCIT

- Significant reductions of child disruptive behavior and parenting stress maintained at 2-year follow-up

  (Eyeberg, Funderburk, Hembree-Kigin, McNeil, Querido, & Hood, 2001)

- Physically abusive parents who had PCIT were less likely to have a re-report of abuse than parents who attended a standard parenting group at 2-year follow-up

  (Chaffin, Silovsky, Funderburk, Valle, Brestan, Balachova, Jackson, Lensgraf, Bonner, 2004)

Synthesis: What do EBTs have in common?

- Focus on clearly specified problems, not on underlying issues
- Skill development is major goal
- Relatively brief treatment
- Continuous assessment of client progress

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

Japanese Proverb