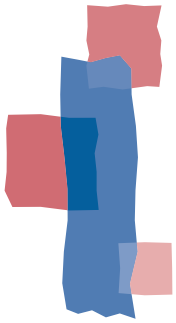

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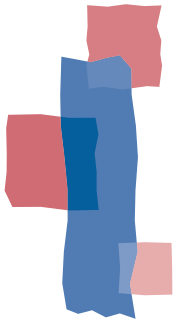

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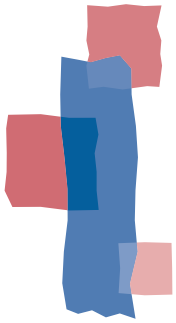

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Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families

This booklet addresses the first step in selecting evidence-based practices: understanding the population of interest. It identifies risk factors, protective factors, behavioral manifestations across three developmental stages, diagnostic criteria, co-occurring conditions, and the course of these disorders.

For additional references on interventions for disruptive behavior disorders, see the booklet, *Evidence-Based and Promising Practices*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Interventions for Disruptive Behavior Disorders KIT, which includes six booklets:

How to Use the Evidence-Based Practices KITs

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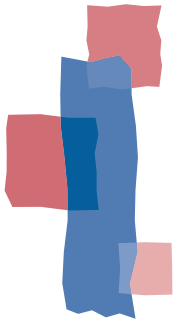

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Characteristics and Needs

Introduction

This KIT focuses on evidence-based interventions for children and adolescents with disruptive behavior disorders, specifically, Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). These diagnostic categories basically mean that a child's or adolescent's behavior is causing trouble at home, at school, or in the community. Such behavior may first appear in any of three developmental stages: early childhood, school age, or adolescence.

These behavioral problems have historically been considered difficult to treat effectively, and many professionals have been pessimistic about the effectiveness of usual care—normally, individual therapy. Previously, access to interventions with an evidence base was limited, but such interventions are now becoming more widely available.

The opportunity to intervene early is now feasible with new treatments that have been developed and tested for all three developmental stages.

Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families identifies risk factors, protective factors, behavioral manifestations across three developmental stages, diagnostic criteria, co-occurring conditions, and the course of these disorders.

Risk Factors

Considerable research has identified family, neighborhood, school, and societal factors that may place a youth at risk for long-term negative outcomes. Although these factors do not fully explain why disruptive behavior emerges in a child, they may point to areas for intervention (Walker and Sprague, 1999). See Table 1.

Table 1: Risk Factors

- Poverty
- Abuse and neglect
- Harsh and inconsistent parenting
- Drug and alcohol use by caregivers
- Emotional and physical or sexual abuse
- Modeling of aggression
- Media violence
- Negative attitude toward school
- Family transitions (death or divorce)
- Parent criminality

Protective Factors

A report from the Surgeon General (2001) outlined protective factors that may buffer or lower the risks of antisocial behavior or general delinquency. See Table 2.

Table 2: Protective Factors

Individual domain

- High IQ
- Being born female
- A positive social orientation

Family domain

- A warm supportive relationship with parents or older adults
- Parental monitoring or supervision activities

School domain

- Extracurricular activities
- Encouragement from teachers toward their future

Peer domain

- Having friends who behave conventionally
- Associating with peers who disapprove of violence

Behavioral Manifestations of Risk Factors by Developmental Stage

Risk factors may result in behavioral difficulties, which increase in severity as a child ages. See Table 3.

Table 3: Behavioral Manifestations of Risk Factors by Developmental Stage

Early on, such behaviors include the following (Walker and Sprague, 1999):

- Defiance of adults
- Lack of school readiness
- Coercive interactive styles (for example, threatening, manipulation)
- Aggression toward peers
- Lack of problem-solving skills

Behavior that is more problematic is observed in elementary and early secondary school age youth (Walker and Sprague, 1999):

- Truancy
- Peer and teacher rejection
- Low academic achievement
- High number of school discipline referrals
- Large number of different schools attended
- Early involvement with drugs and alcohol
- Early age of first arrest (under 12 years)

By adolescence and early adulthood, long-term and severe consequences include the following (Walker and Sprague, 1999):

- School failure and dropout
- Delinquency
- Drug and alcohol use
- Gang membership
- Violent acts
- Adult criminality
- Lifelong dependence on welfare system
- Higher death and injury rate

Diagnostic Criteria

Children who show the types of behavior identified on this page and who are brought into the mental health system are likely to be evaluated and identified as meeting criteria for a diagnosis of Oppositional Defiant Disorder or, less frequently, the more severe disorder of Conduct Disorder. These disorders are found in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* (2000). See Table 4.

Table 4: DSM Diagnostic Criteria for Oppositional Defiant Disorder and Conduct Disorder

313.81 Oppositional Defiant Disorder

A. A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months, during which four (or more) of the following are present:

1. Often loses temper
2. Often argues with adults
3. Often actively defies or refuses to comply with adults' requests or rules
4. Often deliberately annoys people
5. Often blames others for his or her mistakes or misbehaviors
6. Is often touchy or easily annoyed by others
7. Is often angry and resentful
8. Is often spiteful or vindictive

Note: Consider a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.

B. The disturbance in behavior causes significant clinical impairment in social, academic, or occupational functioning.

C. The behaviors do not occur exclusively during the course of a Psychotic or Mood Disorder.

D. Criteria are not met for Conduct Disorder.

312.8 Conduct Disorder

A. A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months.

Aggression to people and animals

1. Often bullies, threatens, or intimidates others
2. Often initiates physical fights
3. Has used a weapon that can cause serious physical harm to others (for example, a bat, brick, broken bottle, knife, gun)
4. Has been physically cruel to people
5. Has been physically cruel to animals
6. Has stolen while confronting a victim (for example, mugging, purse snatching, extortion, armed robbery)
7. Has forced someone into sexual activity

Destruction of property

1. Has deliberately engaged in fire setting with the intention of causing serious damage
2. Has deliberately destroyed others' property (other than by fire setting)

Deceitfulness or theft

1. Has broken into someone else's house, building, or car
2. Often lies to obtain goods or favors or avoid obligations (that is, "cons" others)
3. Has stolen items of nontrivial value without confronting a victim (for example, shoplifting, but without breaking and entering; forgery)

Serious violations of rules

1. Often stays out at night despite parental prohibitions, beginning before age 13 years
2. Has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
3. Often truant from school, beginning before age 13 years
4. Disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning

From *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.) (pp. 102-103 and 98-99). Arlington, VA: American Psychiatric Publishing. Copyright 2000 by the American Psychiatric Association.

Prevalence of Condition

Both ODD and CD occur fairly frequently among children and represent a large proportion of the youth seeking mental health services. It is estimated that ODD occurs in 2 percent to 16 percent of youth, depending on the population being examined and the method of diagnosis (for example, measured in research as opposed to existing clinical diagnosis).

For conduct disorder, which is more common in younger boys, the rates range from 6 percent to 9 percent.

Co-Occurring Conditions

Youth with either ODD or CD may also experience other emotional or behavioral conditions. Most common are the following:

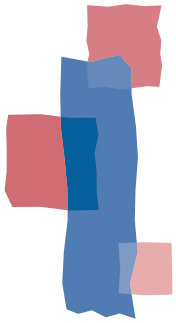
- Attention-deficit/hyperactivity and trauma symptoms in younger children;
- Anxiety and depressive disorders in children of school age; and
- Substance abuse among children in early adolescence.

A comprehensive assessment is indicated for youth presenting serious behavioral problems and, as is appropriate, clinical treatments for conditions that co-occur with ODD and CD.

Course of Condition

Both ODD and CD are likely to become evident at a young age, before a child is 8 years old for ODD and as early as 5 to 6 years old for CD.

Early onset of CD is likely to result in more serious long-term consequences than onset in adolescence which is rare (after 16 years of age). Early intervention is indicated for both conditions to prevent the emergence of more severe behavior and a greater impact on social functioning and school achievement.



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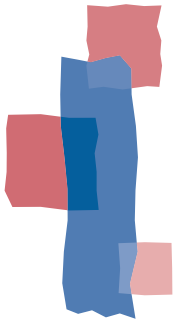

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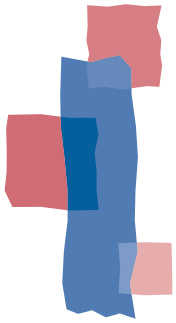

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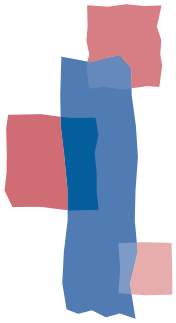

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This booklet provides indepth information about each intervention to help stakeholders identify and select evidence-based practices (EBPs) that might best fit the needs and preferences of communities, providers, practitioners, families, and youth.

Interventions for Disruptive Behavior Disorders

For references, see the booklet, *The Evidence*.

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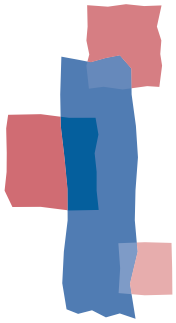

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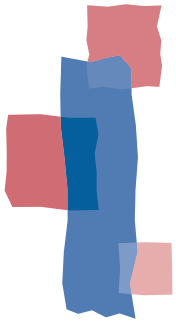

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Introduction

In *Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking* in this KIT, several tables summarize information about some of the main features of the KIT's 18 EBPs. This booklet has indepth information about each intervention to help stakeholders identify and select EBPs that might best fit the needs and preferences of communities, providers, practitioners, families, and youth.

18 Evidence-Based Practices Summarized in This Booklet

Prevention / Multilevel	Intervention
■ Triple P—Positive Parenting Program	■ Incredible Years
■ Project ACHIEVE	■ Helping the Noncompliant Child
■ Second Step	■ Parent Child Interaction Therapy
■ Promoting Alternative Thinking Strategies	■ Parent Management Training — Oregon
■ First Steps to Success	■ Brief Strategic Family Therapy™
■ Early Risers: Skills for Success	■ Problem-Solving Skills Training
■ Adolescent Transitions Program	■ Coping Power
	■ Mentoring
	■ Multisystemic Therapy
	■ Functional Family Therapy
	■ Multidimensional Treatment Foster Care

The interventions are each presented in the same format with the following information, when applicable:

- Intervention Description
  - Background
  - Characteristics of the intervention
- Research Base and Outcomes
- Implementation and Dissemination
  - Infrastructure issues
  - Training/coaching and materials
  - Cost of training/consulting
  - Developer involvement
  - Monitoring fidelity and outcomes
  - Financing the intervention
- Resources/Links
- References

The **Intervention Description** covers background information about the origin of the intervention, the developers, the population of interest, and essential characteristics of the intervention.

A key part of **Research Base and Outcomes** for each EBP is a summary table that allows for quick access to information about the researchers, the design, and outcomes. These tables include important information from relevant studies, and culturally and linguistically relevant information from the research studies is highlighted. For most interventions, this means that the populations used in the studies have been noted. For some, this means that research on cultural and linguistic adaptations of the intervention has been included. For example, the booklet notes that a culturally adapted version of Parent Management Training—Oregon is being evaluated with Spanish-speaking Latino parents and is called *Nuestras Familias*.

Implementation and Dissemination covers such topics as: infrastructure issues, training/coaching and materials, the cost of training/consultations, current developer involvement and contact information, the monitoring of fidelity and outcomes, and means of financing the intervention. This information was obtained in large part through telephone interviews with the developers of the EBPs and was then verified through edits and review.

Each intervention concludes with information about applicable **Resources**, including Web links, and a list of **References**.

Triple P – Positive Parenting Program

Intervention Description

Background

Triple P — Positive Parenting Program is a multi-level system of parenting and family support programs that apply to prevention, early intervention, and treatment. Triple P was developed by Matthew R. Sanders, Ph.D., and colleagues from the Parenting and Family Support Centre in the School of Psychology, University of Queensland in Australia.

During the past few years, Triple P has been disseminated to approximately 25 organizations within the United States and to 15 countries. Dissemination has been carried out as follows:

- Statewide in Wyoming as the centerpiece of the Wyoming Parenting Initiative (more than 500 practitioners trained to date).
- In 18 counties in South Carolina through the U.S. Triple P System Population Trial. Funded by the Centers for Disease Control and Prevention, this trial is being conducted by the University of South Carolina and the University of Queensland.
- At the Children's Medical Center of Akron, Ohio, and other parts of Ohio.
- Through organizations in California, Delaware, Florida, Georgia, Missouri, and Pennsylvania.
- In 14 countries in North America, Europe, and the Asia-Pacific region, where Triple P International is disseminated.

Figure 1

Triple P – Positive Parenting Program	
Type of EBP	■ Prevention/Multilevel
Setting	■ Clinic ■ Home ■ School
Age	■ 0–16
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Increase in parental confidence ■ Improvements in dysfunctional parenting styles ■ Reduction in child behavior problems

Characteristics of the intervention

Triple P aims to prevent or reduce severe behavioral, emotional, and developmental problems in children by enhancing the knowledge, skills, and confidence of parents. It is designed for families with children from birth to 16 years of age. Triple P can be delivered by a range of specialists in the field of primary care (for example, nurses, physicians), mental health (for example, social workers, psychologists, counselors), and education (for example, family/parent liaisons, day care administrators, school counselors).

It has been translated into 10 languages, most recently Spanish. Adaptations can be made for different cultural groups by using examples specific to the culture of a group.

Triple P offers five different levels of service that increase in intensity as child and family needs increase (Sanders, Markie-Dodds, & Turner, 2003):

Level 1

Level 1 is a universal prevention approach and is intended for all parents interested in information about their child's development. Level 1 is intended to support communities that have already begun to implement the other levels of Triple P. Strategies include the following:

- Media resources (newspaper-, radio-, or television-disseminated community service announcements);
- Self-directed information resources (parenting tip sheets and videos) with information about how to solve developmental and minor behavior problems;
- Group presentations; and
- Telephone referral services.

Level 2

Level 2 is a brief selective intervention aimed at parents with specific concerns about their child's behavior and development. Services include advice for specific child behavior problems and may be self-directed or involve telephone or face-to-face interaction with a clinician or participation in group sessions.

Level 2 usually consists of one or two 20-minute sessions. The settings can be maternal and child health services, physician practices, daycare centers, or schools. Practitioners who deliver the intervention are parent-support staff in their respective settings.

Level 3

Level 3 is a more narrowly focused intervention designed for parents with specific concerns about their child's behavior and development that require consultations or active parent-skills training. Services include one to four brief intervention sessions combining advice, rehearsal, and self-evaluation to learn how to manage specific behavior problems (for example, toilet training, tantrums, and sleep disturbances). The settings and practitioners are the same as in Level 2.

Level 4

Level 4 is a more broadly focused parent training intervention for parents wanting intensive training in positive parenting skills for children with more severe behavior problems. Eight to 10 sessions focus on improving parent-child interaction, applying parenting skills to a broad range of focused behaviors, and generalizing skills. Services may combine self-directed strategies, telephone or face-to-face meetings with a clinician, or group sessions. Practitioners are mental health, child welfare, or other health care professionals.

Level 5

Level 5 is the Enhanced Triple P and is an intensive, individually tailored intervention for families that have children with behavior problems and other family stressors (for example, parent depression, partner conflict). Services include the following:

- Active parenting-skills training;
- Home visits;
- Mood management;
- Stress coping skills; and
- Partner support skills.

Services may involve self-directed strategies, telephone or face-to-face meetings with a clinician, or group sessions. Practitioners are mental health, child welfare, or other health care professionals.

Modified levels are also available to meet the developmental needs of the children and parents, such as a self-directed workbook for parents.

Research Base and Outcomes

Triple P has a strong research base that includes multiple studies and evaluations dating back to 1977. The research assesses the effectiveness of various levels of Triple P for children from infancy to 16 years of age.

Research designs include 29 randomized clinical trials (RCT), 11 controlled single-subject evaluations, 9 effectiveness evaluations, 6 dissemination trials, and papers examining predictors, mediators, and moderators of intervention effects. Culturally and ethnically diverse research studies include one RCT with samples of children from China. Triple P has been evaluated with people treated in a broad array of settings including health care, mental health, social services, education, community centers, and workplaces. Trends in outcomes are evidenced by the specific studies referenced in Table 1.

Table 1: Triple P – Positive Parenting Program: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Sanders & Christensen (1985)	Randomized Control Trial (RCT) of families (n = 20) with a child (2–7 years) with Oppositional Defiant Disorder (ODD) comparing Child Management Training (Standard Triple P/ Level 3) without planned activities training and Standard Triple P (Level 4). Study population: ■ 60% Male ■ 40% Female	Both interventions demonstrated: ■ Significant reductions in observed child disruptive behavior and mother aversive behavior. ■ Significant increased use of focused parenting strategies.
Connell, Sanders & Markie-Dadds (1997) (in Sanders, Markie-Dadds, & Turner, 2003)	RCT of families (n = 60) with a child (age 7–12) comparing Enhanced Triple P (for stepfamilies), Enhanced Self-Directed Triple P and a waitlist (WL) control parents and stepparents of children with ODD or (Conduct Disorder) CD.	■ No differences found between the therapist-directed and self-directed programs. ■ Children in intervention groups showed significant reductions in parent reported disruptive behaviors. ■ Significant reductions in parenting conflict were reported by parents and stepparents in the intervention conditions only.
Sanders, Markie-Dadds, Tully & Bor (2000)	RCT comparing Standard Triple P, Self-Directed Triple P, Enhanced Triple P and a waitlist (WL) control of parents (n = 305) with children (mean age of 3 years) with clinically elevated disruptive behavior, and at least one family adversity factor (for example, low income, maternal depression, relationship conflict, single parent). Study population: ■ 68% Male ■ 32% Female ■ Predominately White	■ Children in the three intervention conditions showed greater improvement on mother-reported disruptive behaviors than the waitlist (WL) control. ■ Only those in the Enhanced Triple P and the Standard Triple P conditions showed significant improvement on observed disruptive child behavior and father reports. ■ Parents in two practitioner-assisted programs also showed significant reduction in dysfunctional parenting strategies (self-report) for both parents.
Sanders & McFarland (2000)	RCT of parents (n = 47) with a child (3–9 years) with ODD or CD and mothers with major depression comparing Standard Triple P and Enhanced Triple P.	Both interventions demonstrated: ■ Reduction in observed and parent reported disruptive child behavior. ■ Reductions in parental levels of depression. ■ Increase in parental confidence.
Ireland, Sanders, & Markie-Dadds (2003)	RCT of families (n = 44) concerned about their child's (2–5 years) disruptive behaviors and concurrent clinically elevated marital conflict. Families assigned to Group Triple P or Group Triple P with a partner support module.	Both interventions were associated with significant: ■ Improvements in parent-reported disruptive behavior. ■ Reduction in dysfunctional parenting strategies. ■ Reduction in parenting conflict. ■ Improvements in relationship satisfaction and communication.
Bor, Sanders, & Markie-Dadds (2002)	RCT with parents of children (n = 87, Mean age = 3) with co-morbid significantly elevated disruptive behavior and attention problems. Study population: ■ 68% Male ■ 32% Female ■ Predominately White	■ Both intervention programs were associated with significantly lower parent reported child behavior problems and dysfunctional parenting and significantly greater parenting confidence. ■ No condition effects were found for parent or teacher reports of disruptive behavior or for parental adjustment, parenting conflict or relationship satisfaction.
Leung, Sanders, Leung, Mak, & Lau (2003)	RCT of Chinese parents in Hong Kong (n = 91) with children (3–7 years) with conduct-related problems assigned to either Triple P intervention group (n = 46) or the waitlist control group (n = 45). 69 completed the study, 25 female and 44 male. Study population: ■ 100% Chinese	Intervention was associated with significant: ■ Reduction in child behavior problems. ■ Reduction in dysfunctional parenting styles. ■ Increase in parental confidence.

*Study sample's gender and race/ethnicity data provided where available.

Implementation and Dissemination

Infrastructure issues

Readiness

Triple P America does not have specific readiness assessments, but relies instead on initial information-gathering conversations with sites to clarify their needs and determine how Triple P interventions might address these needs.

Stakeholder buy-in:

- The intervention focuses on five developmental periods from infancy to adolescence. Within each period, the reach of the intervention can vary from being very broad (focusing on an entire population) to quite narrow (focusing only on high-risk children). Stakeholders must buy into the approach of specifying developmental periods.
- It is important to have buy-in of managers, supervisors, families and family advocacy groups, and executive level decisionmakers that control funds.
- Triple P should be integrated into a community or organization's strategic plan.

Possible barriers:

A specific barrier to successful implementation occurs when the agency or staff do not work with families at times that are convenient for families. This potential barrier is not specific to Triple P but rather to any parenting or family intervention.

Training/coaching and materials

- The level of the Triple P intervention that is implemented and the setting determines the preservice level of training. For Levels 2 and 3 (described previously) paraprofessionals that consult with families around parenting are eligible for training, whereas Levels 4 and 5 require more clinically trained professionals.
- Training consists of two onsite visits of 2 to 3 days each in which intensive training is followed by practice and competency demonstrations. There are 8 to 10 weeks between the first and second onsite training visits. The training methods include didactic presentation, self-study with practitioner manuals, videos, active practice and discussion in small groups, and roleplaying. People who successfully complete the training become accredited Triple P providers.
- All of the training is delivered by Triple P America. No established structure exists for training trainers. To deal with staff turnover, agencies may send staff to other sites where training is being held and pay for the individual training slots used.
- Manuals, facilitator kits, and training are available through the Triple P Institute.

The Triple P Web site is easy to navigate and offers a detailed explanation about the intervention and cost involved (**http://www.triplep-america.com**). For information about accessing training, contact Dr. Ron Prinz.

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Cost of training/consulting

- According to Triple P America, the most cost-efficient way of implementing the Standard Triple P (Level 4) is to train a group of 20 practitioners. The cost for training a group this size is $21,000, which includes two training visits involving 3 days for the first visit and 2 days (10 practitioners per day) for the second visit. This amount also covers the practitioner manuals, a practitioner kit, and a video for parents, as well as all of the trainer's travel costs.
- For small organizations that do not have 20 staff members, an alternative is to develop collaborative training with other agencies.
- Triple P America does not encourage long-term or intensive ongoing consultation. Consultation services are available on a contractual basis.
- Additional costs must be considered for the self-directed parenting resource materials. In addition, at higher levels of Triple P, there will be a cost for covering home visits if these are required at the level being implemented.

Developer involvement

- Triple P America is the primary disseminator of Triple P in the United States.
- Triple P America's trainer staffing pattern is flexible. It can usually expand its capacity to accommodate new sites.
- The goal of Triple P America is for sites to become independent through their initial training and consultation, through the quality of their materials and Web site, and by using a self-regulatory framework in peer support networks and supervision.
- For ongoing implementation, Triple P attempts to meet sites' needs through telephone, email, or site visits when needed, but they do not encourage long-term dependence.

Monitoring fidelity and outcomes

- Fidelity checklists are included in the manuals for every level of the Triple P intervention. These checklists facilitate self and supervisor tracking of intervention implementation and fidelity.
- Triple P does not have any requirements related to ongoing fidelity monitoring. It is the responsibility of each organization to ensure fidelity and to measure outcomes. However, every Triple P manual has designated measurement instruments that are suitable for outcome measurement.

Financing the intervention

Funding used for startup costs of Triple P include grants, state funds, and agency budgets. (R. Prinz personal communication, March 22, 2006.)

Resources/Links

Triple P-America Web site:
http://www.triplep-america.com.

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Project ACHIEVE

Intervention Description

Background

Project ACHIEVE is a universal, school-based intervention that applies to many educational settings. Howard M. Knoff, Ph.D., developed Project ACHIEVE and is its director. He also works as the director of the federally funded State Improvement Grant for the Arkansas Department of Education's Special Education Unit in Little Rock, Arkansas.

Project ACHIEVE training has been conducted in more than 1,500 schools and districts in 40 states since its inception in 1990.

Characteristics of the intervention

Project ACHIEVE is a comprehensive school-based prevention program that focuses on several different areas, including academic engagement and achievement, positive behavioral support systems, school safety, and parent and community involvement. It was designed for use in preschools and elementary and middle schools for children 3 to 14 years of age, and has been implemented in alternative schools, charter schools, self-contained special education facilities, and select high schools.

Teachers and school administrators are responsible for delivering and sustaining Project ACHIEVE, which is implemented over a 3-year period by following carefully sequenced steps.

The intervention uses professional development, inservice training, and onsite technical assistance and consultation to train school personnel at each facility. Consultation and training services are provided directly by Dr. Knoff and his master trainers. Most work is completed onsite, with offsite technical assistance available. All materials are available in English with some also available in Spanish.

Figure 2

Project ACHIEVE	
Type of EBP	■ Prevention/Multilevel
Setting	■ School-based (including alternative schools and charter school programs)
Age	■ 3–14
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Decrease in discipline problems. ■ Decrease in Special Education referrals and placements. ■ Increase in positive school climate. ■ Improvements in academic achievement.

Project ACHIEVE's seven components are as follows:

1. The **Strategic Planning, Organizational Analysis, and Development Component** focuses on assessing the organizational climate, administrative style, staff decisionmaking, and other interactive and interpersonal processes within a school. Important to this component is developing 1- and 3-year school improvement plans.

2. The **Problem Solving, Teaming, and Consultation Processes Component** focuses on the causes of students' behavior and on assessment leading to intervention to improve behavior. This response-to-intervention component emphasizes a problem-solving/consultation/intervention mode of operation that directly contrasts with past wait-to-fail and refer-test-place approaches, and is applied with students experiencing academic and behavioral concerns.

3. The **Effective School, Schooling, and Professional Development Component** focuses on helping students maximize their time spent on academics and other school-related tasks. Professional- and development-related activities are highlighted in this component to increase the knowledge, skill sets, and confidence of teachers, administrators, or counselors who implement the program.

4. The **Academic Instruction Linked to Academic Assessment, Intervention, and Achievement Component** matches students' current academic challenges to the appropriate curriculum to improve their overall performance. The instructional environment consists of the interdependent interactions in a classroom of the teacher-instructional process, the student, and the curriculum.

5. The **Behavioral Instruction Linked to Behavioral Assessment, Intervention, and Self-Management Component** assesses and focuses on a student's behavior by matching it with appropriate behavioral interventions and classroom management procedures. Using Project ACHIEVE's evidence-based Positive Behavioral Self-Management System, this whole-school approach involves students, staff, administration, and parents building and reinforcing the following:

   - Students' interpersonal, problem-solving and conflict-resolution skills and interactions;
   - Positive, safe, supportive, and consistent school climates and settings; and
   - School and district capacity such that the entire process becomes self-sustaining.

6. The **Parent and Community Training, Support, and Outreach Component** connects parents to the school to promote collaboration and improve the chances of students' success in school. The theory is that using coordinated community-based efforts will increase support, resulting in more positive outcomes.

7. The **Data Management, Evaluation, and Accountability Component** assesses outcomes collected through consumer satisfaction methods and other data, such as time and cost-effectiveness of the overall Project ACHIEVE intervention, as well as students' academic and behavioral progress.

Research Base and Outcomes

Project ACHIEVE's effectiveness has been demonstrated through the following:

- One quasi-experimental design;
- One qualitative design program evaluation using semi-structured interviews conducted by the American Institutes for Research through a contract with the U.S. Department of Education's Office of Special Education Programs (OSEP); and

- Continued longitudinal studies from research school sites. Project ACHIEVE results are also reported annually in Arkansas as a part of its state improvement grant, through which approximately 45 schools are implementing Project ACHIEVE as part of a 5-year grant from the U.S. Department of Education's OSEP.

As seen in Table 2, research has included White, African American, and Hispanic participants.

Table 2: Project Achieve: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Knoff & Batsche (1995)	Quasi-experimental design with matched comparison of one elementary-level treatment school and one control school. Data collected in treatment school for 1 year pretreatment and 3 years posttreatment. Data collected in control school for 1 year. Study population: Treatment school: ■ 60% White ■ 30% African American ■ 10% Other Comparison school: ■ 41% White ■ 54% African American ■ 6% Other	For the treatment school: ■ Decrease in referrals for special education. ■ Decrease number of students placed in special education. ■ Decrease in disciplinary referrals. ■ Decrease in student grade retention, decrease in incidences of out-of-school suspension, positive gains on the California Test of Basic Skills.
Killian, Fish, & Maniago (2006)	Pre-post study with a comparison group. Participants were students in grades 3–6, and their parents and guardians. Students in the treatment school received Project ACHIEVE curriculum. Date collected before implementing the curriculum and at 1-year post-implementation.	For the treatment school: ■ Consistent decreases in undesirable behaviors occurred across all grades in both classroom and non-classroom settings. ■ Decreases in serious offenses—for example, in the areas of theft and students' use of physical force. ■ Decreased discipline referrals to the principal's office. ■ School suspensions for disciplinary reasons decreased.
Project ACHIEVE research school results Knoff personal communications (2006)	Longitudinal data collection from designated research schools. No control group comparison. Study populations by school: Jessie Keen Elementary School ■ 60% White ■ 30% African American ■ 10% Other Cleveland Elementary School ■ 20% White ■ 62% African American ■ 17% Hispanic ■ 1% Other Hotchkiss Elementary School ■ 14% White ■ 42% African American ■ 39% Hispanic ■ 5% Other	Overall discipline referral to office decreased 16%. ■ School-based discipline referrals decreased 11%. ■ School bus discipline referrals decreased 26%. ■ Out-of-school suspension decreased 29%. ■ Grade retention decreased 47%. ■ Special Education referrals decreased 61%.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

- Sites undergo a formal readiness assessment to determine their organizational and motivational readiness and ability to implement the program.
- Project ACHIEVE will work with sites for 12 to 18 months to build their capacity for implementation, should they not already have the capacity to implement the program.

Staffing:

- Project ACHIEVE has a set of broad-based criteria for sites to use to help them hire staff to implement the program.
- One prerequisite is an organizational analysis and realignment (if needed) of the committee structure of the school and the development of a master calendar of meetings and professional development activities.
- A resource analysis is completed to identify the instructional, assessment, and intervention skills of staff in and available to the school.
- School administration and teachers are actively involved in implementing the program. Facilitators are chosen to receive additional training so they can guide the program and interventions in future years, at times through the DVD series, along with the ongoing support training provided by Dr. Knoff and his master trainers.

Family and child involvement:

- Consumers play a role in implementation, especially in designing and implementing the Positive Behavioral Self-Management System and through activities organized and implemented by the Community and Family Outreach Committee. Students are involved in the core components of the process but are not directly involved in the decision about whether Project ACHIEVE is brought to the school.
- Dr. Knoff is involved with the community, especially when social and cultural norms within the community make it important (for example, in American Indian communities). He often presents at Parent Nights to discuss home-based discipline and behavior management, and he attempts to engage families through his involvement in individual intervention-focused cases in the school.

Implementation timeline:

Project ACHIEVE is a 3-year intervention with carefully sequenced steps that must be followed. A sample timeline is as follows (H. Knoff, personal communication, June 22, 2006):

- **Pre-Year 1:** Organizational development and strategic planning; writing of Project ACHIEVE goals and objectives in the School Improvement Plan; evaluating the school's mission statement, organizational/committee structure, and resources; completing articulation activities and audits relative to problem areas in the school, early intervention referrals, and identifying students who need interventions for the next school year.
- **Year 1:** Social skills training, SPRINT Problem Solving training (separate sessions for the entire staff and specialists/study team), release time for planning, meetings, and technical assistance.

- **Year 2:** Social skills/SPRINT training and booster sessions, Behavioral Observation and Instructional Environment Assessment training, Curricular-Based Assessment and Measurement (CBA/CBM) training, academic and behavioral intervention training; release time for planning, meetings, and technical assistance.
- **Year 3:** Booster sessions in all components; parent-involvement planning; training and facilitation; grade-level intervention planning and implementation; leadership and facilitators' training; release time for planning, meetings, and technical assistance.
- **Beyond Year 3:** Continued, sustained implementation of all components; academic and behavioral intervention focus for students not responding to interventions; continued release time for all grade-level teams to plan and implement the activities identified on their Action Plans; additional consultation and technical assistance as needed.

Possible barriers:

- Some of the barriers to effective implementation are as follows (H. Knoff, personal communication, June 22, 2006):
- Organizational, administrative, financial, and resource limitations.
- The lack of personnel skilled in implementing and providing consultation and technical assistance in academic and behavioral interventions for students not responding to effective instruction and preventative strategies.
- Administrative personnel taking the time to learn about the program to make it the central feature of the School Improvement Plan and process. Not focusing attention to proactive versus reactive activities.
- Systemic barriers that may be locally driven.
- Certain mandates when the school focuses largely on classroom instruction, academic assessment, and academic outcomes to the detriment of other Project activities that more effectively support these important areas.
- The availability of trained personnel and the willingness of administrators to rethink using these personnel as consultants, along with their direct service responsibilities.
- The loss of principals, other administrators, and staff who leave the school or system after being trained, only to be replaced by new staff who need training. This occurs sometimes in the first year of the project.

Training/coaching and materials

- Depending on the existing status and skills of school staff, training typically involves 5 to 8 days during Year 1; 4 to 8 days during Year 2; and 4 to 6 days during Year 3. With consultation, travel, and material costs, Year 1 costs average approximately $30,000 to $35,000; Year 2 costs average approximately $20,000 to $25,000; and Year 3 costs average approximately $15,000.
- Dr. Knoff and his five to six master trainers are available for onsite consultation, booster sessions, and offsite assistance such as web-based training, teleconferencing, and web conferencing.
- A 12-set DVD series has all the content that helps in training the staff, who are considered to be facilitators. All personnel are actively involved in implementing the program, but Dr. Knoff works most closely with the school principal, whom he considers to be the CEO of this process; the chairs of the school improvement, discipline, SPRINT, and community and family outreach committees; and the various members of these committees.

- Training may vary according to the site, but ultimately it is a three-pronged approach aimed at providing knowledge, skills, and confidence. Demonstrations, consultation, technical assistance, and supervision are also provided.
- There are materials for the Stop and Think Social Skills program that are readily available for purchase. Schools are advised to commit to implementing Project ACHIEVE fully, as opposed to just purchasing the materials.

The following items are available for purchase:

- Stop & Think Social Skills Program (book, cue cards, stickers, stamps, t-shirts, pencils, and other materials for use in the classroom). Materials available for purchase at Sopris West Publishers (1-800-547-6747) or **http://www.sopriswest.com**.
- The Stop & Think Social Skills Program for Parents (involving a manual and 75-minute training DVD) is available through Dr. Knoff.

Information on training and materials can be obtained at: **http://www.projectachieve.info**.

Cost of training/consulting

- Costs will vary, but on average it costs $25,000/year ($75,000 total) to implement (see above).
- Cost per pupil to implement ranges from $30 to $150/per student, many times it depends on the need and cost of substitute teachers to release staff for training and other activities.
- All of these costs include consulting services, travel, and materials (printed and DVD).

Developer involvement

- Dr. Knoff is still actively involved in providing consultation services (onsite/offsite), writing research reports, and assessing readiness for a school to implement Project ACHIEVE.
- Dr. Knoff has a fully prepared grant insert that can be provided to those writing state, Federal, and foundation grants that will involve Project ACHIEVE implementation.

For information about implementing Project ACHIEVE, contact Dr. Knoff.

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Monitoring fidelity and outcomes

- A series of implementation check sheets address the different facets of the project to be used in monitoring adherence to the protocol.
- Two formal questionnaires for evaluating the discipline and behavior management attitudes and staff interaction characteristics of the school are used as pre- and post-measures of organizational development and change.
- Formal fidelity measures have been developed through a number of Federal and state grants that have implemented Project ACHIEVE in various schools.

- Discipline data is collected through a free software program, the Automated Discipline Data Review and Evaluation Software System (ADDRESS), which is loaded directly onto a school's computer system and used in-house.
- Through the onsite consultation services, the developer and master trainer develop other outcome measures designed to sensitively evaluate each year's Project ACHIEVE goals and objectives as written into the School Improvement Plan.

Financing the intervention

Schools and districts have used several different funding sources to help finance Project ACHIEVE:

- Title I funds of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6301 et seq.)
- Special education funds
- School improvement funds
- Safe and Drug-Free School funds
- Safe Schools/Safe Community funds
- Counseling in the Schools funds
- Private foundation funding
- No Child Left Behind funds
- Medicaid dollars for services that are part of the program (but cannot reimburse for the entire program itself)

Resources/Links

For more indepth information about Project ACHIEVE, please visit the following Web sites:

- Helping America's Youth: **http://www.findyouthinfo.gov/**
- Project ACHIEVE Home Page: **http://www.projectachieve.info**
- U.S. Department of Health and Human Services/Substance Abuse and Mental Health Services Administration, National registry of Evidence-Based Programs and Practices: **http://www.nrepp.samhsa.gov/**
- U.S. Department of Justice/Office of Juvenile Justice and Delinquency Prevention: **http://www.ojjdp.gov.mpg**
- American Institutes for Research/Center for Effective Collaboration and Practice: **http://cecp.air.org/**
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for the Application of Prevention Technologies: **http://captus.samhsa.gov/**
- Collaborative for Academic and Social-Emotional Learning: **http://www.casel.org**
- The Arkansas State Improvement Grant: **http://www.arstateimprovementgrant.com**

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Second Step

Intervention Description

Background

The Second Step program is a universal prevention and intervention program for children ages 4 to14. The program, developed in the mid-1980s, is disseminated by the Committee for Children, an organization based in Seattle, Washington. With wide implementation throughout the United States and 21 other countries and regions, the Second Step program is currently being taught to more than 7 million children with over 21,000 trained practitioners.

Characteristics of the intervention

The Second Step program is a classroom-based prevention program designed to reduce impulsive and aggressive behavior. It is classified as a prevention program and is therefore appropriate for most children.

The program is divided into the following three main skill-building areas:

- Empathy;
- Impulse control and problem solving; and
- Anger management.

It is delivered in sequential lessons by classroom teachers or counselors using curriculum kits.

The Second Step program focuses on the following three age groups:

- Preschool/kindergarten;
- First through fifth grade; and
- Middle school.

In the youngest group, students are exposed to photo-lesson cards, puppets, and sing-alongs that facilitate group discussions, skill practice, and transfer of learning. In the elementary age group, students are exposed to videos, photo-lesson cards, teacher-led discussions, role plays, and homework, all addressing the three skill areas.

The middle school curriculum uses fully scripted lessons, videos, and reproducible activity sheets. Also, a family guide helps families reinforce social and emotional skills at home, including communicating feelings, solving problems, and managing conflict.

Figure 3

Second Step	
Type of EBP	■ Prevention
Setting	■ School
Age	■ 4–14 years
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Increase in prosocial behavior and social reasoning. ■ Improvement in self-regulation of emotions. ■ Decreased verbal and physical aggression. ■ Decreased behavioral problems.

Research Base and Outcomes

At least a dozen research studies examined the Second Step program. In outcome measures collected from direct observations and child interviews, support exists for the intervention in reducing behavior problems, decreasing physical aggression, and increasing prosocial behavior. Outcome measures collected from teacher ratings were either not supported by the research or not present over time. Studies have included White, African American, and Hispanic participants.

Information about research conducted on the Second Step program is shown in Table 3.

Table 3: Second Step: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Grossman et al,. (1997)	The first randomized control trial design with children (n = 790, grades 2 and 3) from six matched pairs of schools. Assigned to either the Second Step intervention group or the control group. Outcomes were collected at three points: before the intervention, 2-week followup, and 6-month followup. Trained observers, parents, and teachers provided the rating of the students' behavior. Study population: ■ 53% Male ■ 37% Female ■ 79% White	Immediate results at the end of the intervention for treatment group: significant decreases in observed physical aggression and significant increases in observed neutral/prosocial behavior. Most significant changes not present at 6-month followup.
McMahon, Washburn, Felix, Yakin, & Childrey (2000)	Quasi-experimental design with pre- and post- evaluation of predominantly African American and Hispanic children (n = 109, ages 3–7). Data collected through child interviews (assessing knowledge and skills related to empathy, impulse control, problem solving, and anger management), teacher ratings, and behavioral observations. Study population: ■ 42% Male ■ 58% Female ■ 78% African American ■ 21% Hispanic ■ 1% White	Significant gains in knowledge collected in interviews and decreases in problem behaviors found on the basis of direct observations. However, teachers' ratings did not change significantly from the pre-intervention to post-intervention.
Taub (2002)	Quasi-experimental evaluation of the Second Step curriculum among 3rd through 5th grade students (n = 54) in a rural elementary school. Teachers rated children's social competence and antisocial behavior, and observers rated children's prosocial behaviors.	Compared to the control group, students who received Second Step lessons increased in social competence and decreased in antisocial behavior. Observational data further validated that program students showed higher levels of peer interaction skills and rule-adherence compared to control students.
Van Schoiack-Edstrom, Frey, & Beland (2002)	Quasi-experimental evaluation of the Second Step Middle School curriculum to examine the effects on levels of and attitudes toward physical and relational aggression in 6th and 7th grade students from five schools (n = 714) from the United States and Canada. Two-thirds of the students were taught Second Step lessons over a year; the remaining third were not. Study population: ■ 49% Male ■ 51% Female ■ Schools ranged from 4–89% White.	6th grade students who received the Second Step program endorsed less social exclusion; the 7th grade females showed less endorsement of physical aggression, and both females and males receiving the program perceived less social difficulty. No differences were found for social exclusion. Results indicate that the Second Step program has potential for modifying attitudes toward aggression and reducing relational aggression among early adolescents.

Table 3: Second Step: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
McMahon & Washburn (2003)	Pre- and post-study among 5th through 8th grade African American students (n = 156) to evaluate the impact of the Second Step Middle School curriculum on social skills knowledge, aggressive behavior, prosocial behavior, and school bonding. Study population: ■ 36% Male ■ 64% Female ■ 100% African American	Students who participated in the Second Step lessons increased social skills knowledge and prosocial and empathy skills. Changes in empathy were also related to lower levels of aggression at posttest.
Frey, Nolen, Van Schoiack-Edstrom, & Hirschstein (2005)	Children (n = 1253, ages 7–11) from 15 elementary schools assigned to the Second Step intervention group or the control group. Students' behavior and progress assessed with self-reports, teacher ratings, and direct observations. Study population: *Approximate school populations* ■ 51% Male ■ 49% Female ■ 70% White ■ 18% Asian American ■ 12% African American	Intervention group demonstrated a greater increase in prosocial behavior and social reasoning than the control group. Differences in teacher ratings of behavior were present at Year 1 but not Year 2.
Edwards, Hunt, Meyers, Grogg, & Jarrett (2005)	Sample of 4th and 5th grade students (n = 455) to investigate the effectiveness of a version of the Second Step curriculum adapted to include an anti-bullying component. Study population: ■ 32% Hispanic ■ 31% African American ■ 30% White	Students showed significant gains in knowledge about empathy, anger management, impulse control, and bully-proofing. Report card data also revealed modest gains in prosocial behavior.
Schick & Cierpka (2005)	Experimental study among children (n = 335, ages 5–8) who participated in Faustlos (German version of the Second Step program). Change in empathy and aggression was assessed against the control group by teachers and parents who completed a measure of internalizing and externalizing behaviors. Study population: ■ 51% Male ■ 49% Female ■ 100% German	Students who participated in the Second Step program showed significant declines in anxious, depressed, and socially withdrawn behavior compared to the control groups, based on parents' ratings. Parent reports also revealed significant gender differences: Only girls in the experimental group showed decreases in physical aggression and increased social competence when compared to control students.

* Study sample's gender and race/ethnicity data provided when available.

The Second Step Staff Training is a 1-day course designed to help participants learn to teach the Second Step curriculum to students. This training provides hands-on experience with the curriculum and helps teachers strengthen social-skills teaching techniques and identify opportunities to model and reinforce skills. As part of the program, each site receives a set of four staff-training videos that can be used to reinforce the skills that were learned and train new staff. (This training is available only onsite.)

Information about training and materials can be obtained at:
http://www.cfchildren.org/programs/ssp/overview/

Cost of training/consulting

- The regional Second Step Training for Trainers costs $499 per person ($399 per person if registered by Early Bird Discount deadline designated for each location).
- The maximum number of people recommended for the onsite Second Step Training for Trainers is 40 people. The cost for 25 people is $4,975. Each additional person is $100. The total cost for a training of 40 is $6,475 plus travel-related expenses.
- The onsite Second Step Staff Training costs $1,600 plus travel-related expenses.
- After participants have attended one initial training session, Committee for Children trainers are available to provide onsite consultation, booster sessions, or additional training. The fee for this service is $125 per hour.
- The cost for materials will vary according to the curriculum kits purchased and ranges from $159 to $289. Volume discounts are available for orders over a certain size.
- No certification is needed to implement the Second Step program.

Developer Involvement

The organization's program developers dedicate themselves to ongoing revision of the programs to maintain their effectiveness. The Committee for Children also remains focused on sustained partnerships with clients anchored in outstanding customer support and training and directed to clients' long-term success.

For more information, visit the Committee for Children's Web site:
http://www.cfchildren.org/programs/ssp/overview/

Monitoring fidelity and outcomes

Evaluation instruments are available for school and district administrators to gauge fidelity of implementation and assess outcomes of the Second Step program.

Sites are not required to submit fidelity or outcome data. The Committee for Children monitored the outcomes during the pilot phase for the Second Step program.

Financing the intervention

According to C. Glaze (personal communication, June 21, 2006):

- Approximately 80 percent of those who implement the Second Step program use Safe and Drug Free Schools funding to purchase the curriculum.
- Often, some of the resources required for training services derive from a site's staff development budget.

Resources/Links

Committee for Children: **http://www.cfchildren.org.**

Training Information:

http://www.cfchildren.org/programs/ssp/overview/

Office of Juvenile Justice and Prevention Programs: **http://www.dsgonline.com/mpg2.5//TitleV_MPG_Table_Ind_Rec.asp?id=422**

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Implementation and Dissemination

Infrastructure issues

Readiness:

The Committee for Children offers unlimited, free implementation support for the Second Step program. A knowledgeable team of program implementation specialists, all former educators, is available by phone to help interested parties plan for, implement, and sustain the program.

Additional support is available in the form of written materials that provide detailed information on a range of topics, such as how to secure buy-in, develop roll-out plans, involve families, provide ongoing support, and evaluate the program. A funding specialist is on staff to provide up-to-date grant announcements and funding opportunities.

Possible barriers:

- Lack of sponsorship at school or district level.
- Lack of buy-in—No commitment on the part of teachers and other adults responsible for implementing the program.
- Lack of time—Some mandates have influenced school districts to focus solely on academics, leaving little room for social and emotional learning programs.
- Constant leadership changes in administration affect the ability to sustain program implementation over time.
- Lack of funding.
- Lack of parent or caregiver involvement, hence no support outside of the classroom setting.
- No ongoing implementation support.

Training/coaching and Materials

Training models

The Committee for Children offers two training models for the Second Step program. The organization hosts 25 to 30 regional trainings in cities across North America. Attendance at a regional training allows participants to network with professionals outside their organization and can be a more cost-effective option when looking to train one person or a small group of people.

Committee for Children trainers are also available for travel to any community to deliver onsite Second Step training exclusively for school, agency, or district staff, providing the opportunity to plan program implementation as a group, address local issues, and network with colleagues.

Training programs

The Second Step Training for Trainers is a 2½-day course designed to help participants learn to teach the curriculum efficiently and return to their schools or agencies to conduct their own staff trainings, thus providing "local expertise."

In addition, participants can provide ongoing "booster" trainings, train new staff as they are hired, and assist with implementation support. Each participant receives a comprehensive trainer's manual, CD-ROM, and a set of four staff training videos.

Professional development credits are available for completion of the regional Second Step Training for Trainers. (This training is available both regionally and onsite.)

Promoting Alternative Thinking Strategies

Intervention Description

Background

Promoting Alternative Thinking Strategies (PATHS) is a universal prevention program that was developed by Carol Kusché, Ph.D., of the University of Washington and Mark Greenberg, Ph.D. of Pennsylvania State University.

This program is an elementary school-based (K-5) program that is delivered by the teachers to reduce and prevent emotional and behavioral problems. PATHS is delivered by national certified trainers through PATHS, LLC, based in Seattle, Washington. Since 2000, it has been disseminated to approximately 80,000 students in the United States, Switzerland, UK, The Netherlands, Germany, Belgium, Greece, Australia, Mexico, and South America. More than 200 organizations are receiving some type of PATHS services at any given time (M. Greenberg, personal communication, September 28, 2006).

Characteristics of the intervention

PATHS is a 5-year program that is implemented in the schools by teachers and counselors. The program is aimed at students who are either in mainstream or special education classes. The goal of the program is to increase social and emotional competencies while reducing aggressive, acting-out behaviors.

It is recommended that sites hire a PATHS coordinator to assist with implementation and help to ensure its quality. A coordinator should have a background in teaching with a solid foundation and experience in social and emotional learning.

Figure 4

Promoting Alternative Thinking Strategies	
Type of EBP	■ Prevention
Setting	■ School-based (including alternative schools and charter school programs)
Age	■ 5–12
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Increase in ability to label feelings. ■ Increases in self-control. ■ Reductions in classroom aggression. ■ Decrease in teacher-reported internalizing and externalizing negative behaviors.

PATHS is delivered by trained teachers three times a week for approximately 20 to 30 minutes. A manual is available with specific instructions and developmentally appropriate lessons that address five major domains: self-control; emotional understanding; positive self-esteem; relationships; and interpersonal problem-solving skills (Greenberg, Kusché, & Mihalic, 1998). Each domain has subgoals according to the developmental level of each child.

The PATHS program is delivered in developmentally tailored lessons by teachers using a variety of teaching methods. The curriculum consists of an instructional manual, six volumes of lessons, pictures, photographs, posters, Feeling Faces, and additional material. There are three major units:

- The Readiness and Self Control Unit (12 lessons);
- The Feelings and Relationships Unit (56 lessons); and
- The Interpersonal Cognitive Problem-Solving Unit (33 lessons).

A Supplementary Unit covers issues in friendship and moral decisionmaking and reviews lessons in the other units. The large instructional manual provides the scope and sequencing of the lessons for each developmental group. Younger children are exposed to the Turtle Unit (Readiness and Self-Control), which teaches readiness and self-control through metaphorical storytelling and behavioral support.

For children in the latter elementary years, a more cognitively advanced approach has a greater focus on problem-solving tasks and lessons. Flexibility exists in the program to allow teachers to tailor the lessons to their individual teaching style.

Research Base and Outcomes

Research on the effects of PATHS has been conducted since 1983, including five randomized control designs. Studies have examined the effectiveness of the program in real world settings, in samples of regular and special education classrooms, and with culturally diverse students that include African Americans, Hispanics, American Indians, and Asian Americans. Riggs (2006) specifically studied the effects of PATHS administered as a part of an after-school program with rural Latino children.

Research supports many positive outcomes of the PATHS intervention, such as reducing classroom aggression, internalizing problems, self-reporting depressive symptoms, and increasing developmental understanding of, and fluency with, discussing emotional experiences. Positive outcomes have been noted in both 1- and 2-year followup studies. See Table 4.

Table 4: Promoting Alternative Thinking Strategies: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Greenberg, Kusché, Cook, & Quamma (1995)	Randomized design with 30 classrooms of children (n = 286, grades 2-3) randomly assigned to be exposed to the PATHS curriculum or the control group to measure the effects of the intervention on a child's emotional understanding. Pre-post test measures and interview questions used to test children's understanding of emotional situations. Study population: ■ 58% Male ■ 42% Female ■ 58% White ■ 32% African American ■ 4% Asian American ■ 2.5% Filipino Americans ■ 2.5% American Indians ■ 1% Hispanic	Children exposed to PATHS demonstrated increased range of affective vocabulary and fluency in discussing emotional experiences, beliefs regarding management of emotions, and developmental understanding of some aspects of emotions.
The Conduct Problems Prevention Research Group (1999)	Randomized control design (n = 378), 198 1st grade classrooms assigned to treatment group (the PATHS intervention) and 180 assigned to the control group; all from high-crime neighborhoods. Study population: ■ Mean percentage of minority students (primarily African American) across all 378 schools was 49%. The range was from 1% to 90%.	After 1 year, children exposed to PATHS demonstrated reductions in classroom aggression and increases in self-control.
Kam, Greenberg, & Kusché (2004)	Experimental research design examining the long-term effects of the PATHS curriculum on the adjustment of school-age children receiving special education services. Special education classrooms (n = 18) were randomly assigned to the control group (no PATHS- intervention) or the treatment group (PATHS-intervention). Children (n = 133) grades 1st–3rd at start. Data collected for 3-successive years. Study population: ■ 73% Male ■ 27% Female ■ 66% White ■ 20% African American ■ 14% Other	For special education children, the PATHS intervention indicated reduced growth of internalizing and externalizing negative behaviors by teacher reports at 2 years after intervention. Additionally, PATHS intervention produced sustained reduction in child-reported depressive symptoms.
Riggs, Greenberg, Kusché, & Pentz (2006)	Randomized design studied the PATHS curriculum on 30 classrooms with 318 children, grades 2–3, to measure 1-year post-intervention outcomes on teacher-reported externalizing and internalizing behavioral problems, as well as mediation through tasks assessing executive functions. Study population: ■ 50% Male ■ 50% Female ■ 55% White ■ 33% African American ■ 22% Asian American, American Indian or other racial background	Results showed significant effects at posttest on children's inhibitory control and verbal fluency. Findings 1 year later showed significant teacher effects on students' externalizing and internalizing problems.
Domitrivich, Cortes, & Greenberg (2007)	Randomized design studied PATHS curriculum with children (grades K–6) from 20 classrooms (n = 246). 10 classrooms received PATHS curriculum; 10 were control classrooms. Study population: ■ 49% Male ■ 51% Female ■ 38% White ■ 47% African American ■ 10% Hispanic ■ 5% Other racial background	After exposure to PATHS, children in the PATHS classrooms had higher emotion knowledge skills and received higher ratings from parents and teachers for social competency than children in the control classrooms.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure Issues

Readiness:

No formal readiness instruments are available. An informal assessment process is conducted with an interested site and the PATHS trainers.

Training/coaching and materials

- Training is provided through PATHS Training, LLC.
- Training new sites requires a 2- to 3-day onsite visit, which involves teachers, school administrators, and on occasion, parents.
- Ongoing technical assistance and coaching usually consist of weekly or biweekly observations by curriculum consultants. These booster sessions can be individualized to the site. They can also last up to 4 to 5 years after initial implementation of PATHS. In subsequent years of PATHS implementation, teachers will receive a half-day of training.
- Whole school staff discussions occur quarterly.
- Trainer certification is available through PATHS Training, LLC. This certification requires working as a local PATHS coordinator and demonstrating leadership in assisting sites in implementing PATHS locally. This process will last 2 years, before advancing to intensive training. Fifteen trainers are in the United States.
- Materials available for purchase:
  - Complete PATHS curriculum (includes readiness curriculum) ($679);
  - PATHS Basic Kit ($579);
  - PATHS Readiness and Self-Control Turtle Kit ($159); and
  - Costs of additional materials ($100).
- Parent materials are available in Spanish.

Information about the curriculum can be obtained at: **http://www.prevention.psu.edu/projects/PATHSCurriculum.html**

Information about purchasing the curriculum can be obtained at: **http://www.channing-bete.com/prevention-programs/paths/**.

Cost of training/consulting

- Complete training and ongoing technical assistance costs are approximately $4,000 to $5,000 plus travel and per diem expenses for 1 trainer, 2 days, and 30 participants.
- For onsite training only (for 2 days and up to 30 participants), costs are approximately $3,000 plus travel and per diem expenses for the trainer.
- The developers project that the cost to implement PATHS is approximately $25 per student. Total costs including training and technical assistance for first year operations at an elementary school are around $10,000. In the following year, the costs would decrease to about $10 per student. Thus, the cost to implement the program over 3 years is approximately $15 per student. These costs do include some training materials, as outlined previously.

Developer involvement

The developers, Dr. Greenberg and Dr. Kusché, are actively involved in developing and modifying the program. However, PATHS, LLC, based in Seattle, is responsible for assessing interested parties in the PATHS program, assigning trainers, and managing the training process.

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Monitoring fidelity and outcomes

- Fidelity measures are available for sites to use. For some sites that are participating in a research study, the fidelity measures are required and sent monthly to PATHS, LLC. However, sites that are not a part of a study are not required to collect or report fidelity measures.
- Both fidelity and teacher-reported outcome measures are available at no charge from the publisher (Channing-Bete, Inc). Sites are advised to collect and report their outcome measures. PATHS, LLC does offer support to sites interested in using outcome data to better inform program decisionmaking.

Financing the intervention

- Most schools use Safe & Drug-Free school funds, school board funds, and short-term grants from local and federal agencies.
- The program is not covered by Medicaid (M. Greenberg, personal communication, September 28, 2006).

Resources/Links:

To order PATHS materials, go to:
http://www.channing-bete.com/prevention-programs/paths/paths.html

University of Colorado's Center for the Study and Prevention of Violence:
http://www.colorado.edu/cspv/

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First Steps to Success

Intervention Description

Background

First Steps to Success was developed in the early 1990s by Hill M. Walker, Ph.D., and his colleagues at the University of Oregon. This school-based program with home components is for kindergarten children who display early signs of aggression, oppositional behavior, and severe temper tantrums.

The goal is to divert future antisocial behavior. Within the past 2 years, more than 20 organizations, and between 1,500 and 2,000 practitioners have been trained to deliver First Steps to Success.

Characteristics of the intervention

The program comprises three interconnected components and is implemented in 3 to 4 months. First Steps to Success is designed for children with challenging behaviors, aggression, and acting out, and who victimize others in the school environment.

Coaches are trained to work with two to three students who coordinate the school and home components. Staff members who implement the program should possess a master's degree and have clinical experience.

Coaches have a critical role in the program:

- Working in the classroom;
- Gaining parent and guardian's support;
- Monitoring the program during the teacher component;
- Assisting parents and guardians in mastering the program; and
- Troubleshooting for the entire duration of the program.

Coaches will work alongside the teacher and parent to provide them with skills to identify the maladaptive behavior and reward good behavior.

Figure 5

First Steps to Success	
Type of EBP	■ Prevention/Multi-level
Setting	■ Home ■ School
Age	■ 5–6
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Decrease in aggression ■ Increase time spent on academics ■ More positive behavior demonstration.

The three interconnected modules of First Steps to Success are as follows:

1. **Screening:** A range of methods are used to assess kindergarteners, from teacher-reports to direct observation.

2. **School intervention:** This component focuses on the child's behavior in school using a contingency reward system. A consultant initially works with the student closely in the classroom, offering direct feedback using color cards to identify behavior. Children work toward a reward by demonstrating positive behavior.

3. **Home intervention:** The home-based model focuses on helping parents and caregivers support the child's progress. Six skills are practiced in the home to help the children succeed in the school environment:
   - Communication and sharing;
   - Cooperation;
   - Limit setting;
   - Problem solving;
   - Friendship making; and
   - Developing confidence.

Research Base and Outcomes

The research base for the First Step to Success program includes one experimental waitlist control group design, one replication study with a pre-post test design, a multiple case study design, a program evaluation, and a multiple-baseline across groups design with qualitative interviews as displayed in the table below.

Students and families from culturally diverse backgrounds were used in the studies: Hispanic, African American, and American Indian. The research points to a number of positive changes in the behavior of children identified to be at risk of developing a serious pattern of antisocial behavior.

Research also finds that when the program is implemented in kindergarten, positive behavior changes are maintained through 1st and 2nd grade. See Table 5.

Table 5: First Steps to Success: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Walker, Kavanagh, Stiller, Golly, Severson, & Feil (1998)	Randomized experimental waitlist control group cohort design of children in kindergarten (n = 46) identified as at risk for developing serious patterns of antisocial behavior, randomly assigned into one of two control groups (no First Steps to Success Intervention) or one of two intervention groups (First Steps to Success Intervention). Children assessed for reduction of aggression and improvement in using new prosocial behaviors. Data collected at pretest, posttest and 1st grade followup and 2nd grade followup. Study population: ■ 74% Male ■ 26% Female ■ 93% White ■ 7% Children of minority status	Children who participated in the First Steps to Success program showed significantly more adaptive behavior, less aggression, and less maladaptive behavior. Children who received First Steps to Success demonstrated more engagement in schooling activities. Results were similar at the 1st grade and 2nd grade followup.
Golly, Stiller, & Walker (1998)	Pre-post test design replication research study (n = 20) of kindergarten-aged children identified to have high aggression ratings, low-adaptive behavior ratings, high-maladaptive behavior ratings. Limitations include a lack of a control group. Study population: ■ 95% Male ■ 5% Female ■ 95% White ■ 5% American Indian	Outcomes in the replication study were similar to the original study. First Steps to Success program showed significantly more adaptive behavior, less aggression, and less maladaptive behavior.
Overton, McKenzie, King, & Osborne (2002)	Multiple case study (n = 16) using semistructured parent and teacher interviews. Study population: ■ 73% Male ■ 27% Female ■ 23% White ■ 32% African American ■ 23% White and African American ■ 4% Hispanic ■ 14% American Indian ■ 4% American Indian and White	Behavioral improvements as evidenced by increases of the Child Behavior Checklist were significant, but variable. Reports from semistructured interviews with parents/caregivers and teachers were generally positive.
Walker, Golly, McLane, Kimmich (2005)	Program evaluation of the implementation of First Steps to Success Program to focus on children grades K-2, (n = 181).	Results closely replicated the original study for behavioral outcomes for students. Evaluators found satisfaction from teachers and parents. Fidelity varied widely.
Diken & Rutherford (2005)	A multiple-baseline across groups design with qualitative interviews with American Indian students (n = 4, 2 at kindergarten level, 2 at 1st grade level). Outcome measures of direct observations and teacher and parent interviews. Study population: ■ 75% Male ■ 25% Female ■ 100% American Indian	Students' social play behaviors significantly increased when First Steps to Success intervention initiated. Substantial decreases in problem behaviors reported by teachers. Three of the 4 parents reported significant changes in problem behaviors of students. Parents reported high satisfaction with the program.

* Study sample's gender and race/ethnicity data provided when available.

Dr. Walker and colleagues are researching the implementation of First Steps to Success through two large grants from the Institute of Education Sciences within the U.S. Department of Education. Both studies are randomized control trials with a year-long followup of experimental and control condition participants. One is an efficacy trial in Albuquerque, New Mexico; the other is an effectiveness trial involving five sites nationally (H. Walker, personal communication, June 6, 2007.)

Implementation and Dissemination

Training/coaching and materials

- Five expert trainers are available to provide training to sites. The coaches participate in a 2-day training to learn about the program and the implementation sequence. The teachers participate in a 1-day training to learn about their responsibilities. The training structure incorporates didactic teaching, role plays, and question/answer demonstration.
- A manual is provided to the site once training and implementation begin. The training materials have been translated in Spanish, French, and Japanese.
- Information on purchasing the curriculum can be obtained at: **http://store.cambiumlearning.com**

Cost of training/consulting

The cost of training up to 30 coaches and 50 teachers is $1,000 to $1,500 per day plus the cost of the materials, training, and airfare (H. Walker, personal communication, June 6, 2007).

Developer involvement

The developer, Dr. Walker, is actively involved in developing and modifying the program, providing coaching/teacher training and followup technical assistance. Information about training can be obtained by contacting the developer:

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Monitoring fidelity and outcomes

Instruments for measuring fidelity of critical program features and the quality of the implementation are available. Coaches are required to complete program implementation-monitoring forms that document application and quality of the procedures (H. Walker, personal communication, June 6, 2007). Outcome measures are collected from designated research sites but not from nonresearch sites.

Financing the intervention

The program is usually funded through local school district, state, and federal government budgets (H. Walker, personal communication, August 30, 2006).

Resources/Links

- Office of Juvenile Justice and Prevention Program: **http://www.ojjdp.gov/MPG**
- Sopris West Educational Services (to order materials): **http://www.sopriswest.com**.
- University of Oregon's Institute on Violence and Destructive Behavior: **http://www.uoregon.edu/~ivdb**.

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Early Risers: Skills for Success

Intervention Description

Background

The Early Risers: Skills for Success program is a multicomponent, competency skill-based intervention designed for children ages 6 to 12 years who display, or are at risk of displaying, conduct-related problems and substance use.

The Early Risers program was developed by Gerald August, Ph.D., George Realmuto, M.D., and Michael Bloomquist, Ph.D., at the Center for Prevention and Children's Mental Health at the University of Minnesota. The program has been in existence since 1996 and has evolved from a school-based to a community-based prevention and intervention program.

The program has been implemented in more than 30 organizations within the past 4 to 5 years (G. August, personal communication, July 17, 2006).

Characteristics of the intervention

The Early Risers program provides comprehensive mental health promotion services to early elementary school-age children displaying early onset aggressive, disruptive, and socially withdrawn behaviors and to their families. The intervention model is grounded in social learning, social cognition, and social bonding theoretical perspectives.

The model features child-focused and family-focused components, each of which offers skill-building and support services delivered in unison over time. The Early Risers program involves collaboration between community public schools, community agencies, and University of Minnesota prevention specialists.

Figure 6

Early Risers: Skills for Success	
Type of EBP	■ Prevention
Setting	■ Home ■ School
Age	■ 6–12
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Gains in academic achievement. ■ Reduction in self-regulation problems. ■ Improved social skills and adaptability.

The program unfolds over 2 to 3 years and emphasizes four domains:

- Child academic competence;
- Child behavioral self-regulation;
- Child social-emotional competence; and
- Parent investment (August, Realmuto, Hektner, & Bloomquist, 2001).

Children are identified in early elementary grades through teacher nomination and standardized teachers' ratings of child behavior. The intervention is delivered by a "family advocate" who is usually a bachelor-degreed professional with at least 2 years' experience working with children and families.

To effectively deliver services, the family advocate must have the flexibility to work unconventional hours and be willing to visit families and children in multiple settings, such as home, school, or community (G. August, personal communication, July 17, 2006).

The family advocate coordinates services for both the child-focused and family-focused components. The child-focused component consists of a set of

education/skills training and support interventions for children. Child-focused interventions include the following:

- **Summer Day Camp (standardized):** This interaction is designed for delivery during the summer months. It works best when offered 4 days per week for 6 weeks. Implementers are required to offer three 1-hour curricula each day: social-emotional skills education and training, reading enrichment and appreciation, and creative arts experiences. A behavioral management protocol is administered throughout all activities.
- **School Year Friendship Groups (standardized):** Children are invited to attend small group sessions before, during, or after school. This program provides advancement of social-emotional skills education and training, reading enrichment and appreciation, and creative arts experiences. A behavioral management protocol is administered throughout all activities.
- **Monitoring and Mentoring School Support (tailored):** This feature occurs throughout each school year and is intended to help and modify academic instruction as well as address children's behavior while in school, through the support of the family advocate. In addition, a primary goal is to bridge family and school to foster continued success in learning. A home reading program is such a bridge.

The goal of the family-focused component is to empower families and to allocate the appropriate resources to help families reach their identified goals. Family-focused interventions include the following:

- **Family Nights with Parent Education (standardized):** Children and parents come to a center or school during the evening. Children participate in fun activities while their parents meet in small groups for 60 minutes of parent-focused education and skills training designed to enhance parent's knowledge of child development and parenting skills. This is followed by parent-child "bonding" activities. Family Nights occur five times during the school year between October and May.
- **Family Support (tailored):** This program is individually designed to address each family's specific needs, strengths, and maladaptive patterns. It is delivered in four phases:
  - Asset appraisal and needs assessment;
  - Goal setting;
  - Brief interventions and resources; and
  - Monitoring and reformulating goals.

In addition, if indicated, more intensive and tailored parent skills training is provided.

Research Base and Outcomes

The evaluation of the Early Risers program includes an initial efficacy study, an early-stage effectiveness trial, and an advanced-stage effectiveness trial, all with randomized control designs. See Table 6. The initial study was conducted with a semi-rural, White sample, while the validation study was conducted with a mostly African American, urban sample.

Overall, research supports significant relationships between children's level of participation throughout the Early Risers program (more than 1 year or more) and social competence, school adjustment, and academic achievement. August et al., (2004; 2006) point to the need for longer durations of interventions or booster sessions to maintain positive results, as well as the concern for attrition rates.

Table 6: Early Riser: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
August, Realmuto, Hektner, & Bloomquist (2001) August, Hektner, Egan, Realmuto, & Bloomquist (2002) August, Egan, Hektner, & Realmuto (2003) Bernat, August, Hektner, & Bloomquist (2007)	Efficacy Study: Randomized, controlled design of, children (n = 245) rated high risk by the Child Behavior Checklist – Teacher Rating form; 124 children at intervention schools and 121 children at control schools. Data are published for 2- and 3-year immediate intervention effects, and followup at Year 4 and Year 6. Study population: ■ White families	For intervention schools, the most severely aggressive children improved behavior at Years 2 and 3. Children improved on indicators of school achievement at Years 2 and 3. Program children evidenced better social adjustment at Year 3, and did better on a sociometric assessment of social status at Year 4 (less rejected and more accepted by prosocial peers). Parents with high program participation showed improvements in self-reported discipline methods at Years 2 and 3. Program children and their parents reported significantly fewer ODD symptoms at Year 6. Fewer ODD symptoms for program children at Year 6 were related to previous Year 3 improvements in child social skills and parent effective discipline practices (that is, mediational analyses).
August, Lee, Bloomquist, Realmuto, & Hektner (2003) August, Lee, Bloomquist, Realmuto, & Hektner (2004)	Early-Stage Effectiveness Trial: Randomized, controlled design (n = 327), kindergarten and 1st grade children from 10 low socioeconomic schools screened positive for aggressive behavior. Two years of continuous active intervention and 1 year of no formal intervention. Three groups: the full Early Risers program (child- and family-focused), partial Early Risers (child-focused only), and no intervention (control group). Because initial analysis comparing experimental groups showed no significant differences between groups on any outcome variables, the full Early Risers program and partial Early Risers Program were collapsed and compared as an augmented group to the control group. Data are published for two immediate intervention effects and followup at Year 3. Study population: ■ 80% African American ■ 20% White	Program children exhibited significant gains on measures of school adjustment and social competence. The most aggressive program children showed reductions in disruptive behavior. Program children's parents reported lower levels of stress. Program children maintained social competence gains at Year 3. School adjustment improvements and externalizing problems were not maintained at Year 3.
August, Bloomquist, Lee, Realmuto, & Hektner (2006)	Advanced-Stage Effectiveness Trial: Randomized, controlled design (n = 295), kindergarten and 1st grade children from 16 low socioeconomic schools with 2/3 of the population exhibiting a positive screen for aggressive behavior. Two years of continuous active intervention. In this initiative, a community agency assumed "ownership" of the program by funding it and its staff implemented all components with only technical assistance from program developers. The Early Risers program and a no intervention control group were compared. Data are published for 2-year immediate intervention effects. Study population: ■ 69% Male ■ 31% Female ■ 89% White ■ 11% Minority	Overall attendance rates were poor and this was attributed to the community agency insufficiently allocating resources to engaging families (for example, limited funding of transportation, agency downsizing, and high staff turnover). Although program children exhibited significant gains on teacher's ratings of disruptive behavior, no other previous findings were replicated. Dosage analysis, however, determined that program children who did attend at acceptable levels exhibited gains on indicators of social and academic competence, and a math achievement test. It was concluded that attention to family engagement and adequate resource allocation is essential to obtain positive program effects.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

The program provides a checklist used to screen and assess the capacity of the interested parties, and determine if Early Risers would be appropriate. For those sites that might not be best suited for the Early Risers program, the developers attempt to recommend a more "compatible" program.

For those sites that are appropriate, it may take 3 to 6 months to start the program due to recruitment and screening.

Possible barriers:

Some barriers to the implementation and sustainability are as follows:

- Funding problems;
- Turnover of key personnel; and
- Loss of a key staff member to ensure quality implementation and sustainability of the program.

Training/coaching and materials

- The training program is usually held over a 4-day period at the designated host site. About 20 family advocates and program supervisors can participate in the training at once.
- A Skills for Success training manual, video, and other programmatic resources are available for an additional charge.
- The developers maintain an ongoing relationship with a site for up to 2 years.
- The Early Risers Program is affiliated with the University of Minnesota.
- Information about training and materials can be obtained at: **http://www.psychiatry.umn.edu/research/earlyrisers/home.html**

Cost of training/consulting

The overall training, technical assistance, and supportive services costs range from $5,000 to $8,000. The cost to implement the Early Risers program is about $1,500 per child, per year.

Developer involvement

Currently, the developers are still very involved in implementing and disseminating Early Risers. For more information, contact Dr. August.

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Monitoring fidelity and outcomes

The fidelity of program delivery (that is, exposure, adherence, quality) is monitored throughout. Information is systematically collected and reviewed by the university prevention specialists, community agency supervisory staff, and family advocates. This includes examination of child and parent attendance, documentation of services provided, direct observation of intervention provision, and consumer satisfaction data. Adjustments in programming, staffing, and training are made based on fidelity monitoring.

At this present time, the developers of the program are completing the development of a web-based fidelity monitoring system. This system is being designed as a self-report mechanism offering background information (number of children and families served), how the program was delivered, and the methods used. A family advocate is to log-on once a week to offer this information. This is not a specific requirement, but is strongly encouraged.

The developers assist sites with collecting and interpreting outcome data. Part of the training focuses on identifying someone at the site who will collect this data.

Financing the intervention

Early Risers is typically paid for by local grant money (G. August, personal communication, July 17, 2006) or through access to local county dollars earmarked for prevention (Bloomquist et al., 2006).

Resources/Links

University of Minnesota-Department of Psychiatry: **http://www.psychiatry.umn.edu/research/earlyrisers/home.html**

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Bloomquist, M. L., Lee, S. S., & August, G. J. (2006). Sustainability of the Early Risers program financial infrastructure through a local county and community-based family services agency. Paper presented at the 14th Annual Meeting of the Society for Prevention Research, San Antonio, TX.

Adolescent Transitions Program

Brief Description

Background

The Adolescent Transitions Program (ATP) developed by Thomas Dishion, Ph.D., and Kate Kavanagh, Ph.D., is a multilevel, family-centered intervention that seeks to prevent teen antisocial behavior and drug experimentation. ATP was designed as a group psychoeducational intervention focused on family management practices and reducing deviant peer influences; it was offered to high-risk adolescents and families in an outpatient setting.

Continued research by developers led to a significant growth of the program, including implementation in the middle school setting and offering levels of the intervention that permeate the entire school environment (Dishion & Kavanagh, 2003).

Today, ATP is a three-tiered intervention that has both parent and child curricula delivered in both group and individual formats. The parent curriculum focuses on understanding family dynamics and effective parent management skills through encouragement, limit setting and supervision, problem solving, and communication patterns.

The child curriculum focuses on a social learning approach to behavior change through limit setting, problem solving, goal setting, outlining the appropriate steps to achieve goals, and developing peer support for prosocial behavior (Dishion & Kavanagh, 2003).

Figure 7

Adolescent Transitions Program	
Type of EBP	■ Prevention/Multilevel
Setting	■ School
Age	■ 11–18
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Reduction in negative parent-child interactions. ■ Decrease in antisocial behaviors at school. ■ Effective in reducing youth smoking.

Characteristics of the intervention

There are three levels of the ATP intervention: universal, selective, and indicated.

Level 1: Universal

The first level is aimed at the entire school population. A main component is the development of a Family Resource Center (FRC) within the school; a full-time coordinator is hired as a school employee to operate the center.

The goals of the FRC include:

- Encouraging referrals of at-risk students and families;
- Providing parents information about services;
- Disseminating information about parenting; and
- Working with school and community professionals on topics of identification and effective treatment of at-risk students (Dishion & Kavanagh, 2003).

Formats for disseminating information to parents include the following:

- School orientation meetings;
- Media on effective parenting and norms;
- Classroom-based parent-child exercises that support family management practices; and
- Phone calls and letters to parents about their child's activities at school.

The format for disseminating information to students is the Success Health and Peace (SHAPe) curriculum: 6 sessions, 40 to 60 minutes each, delivered weekly in health class or homeroom, implemented by teachers, yet supported and coordinated by FRC staff.

Level 2: Selective

The second level of the intervention provides selective assessment, identification, and professional support for at-risk children and their families through the administration of the Family Check-Up (FCU). The three-session intervention is designed to gather information about the family to develop a plan to support the well-being of the child and family.

- **Session 1:** The initial family interview is 90 minutes in length and includes two therapists, the parents, and the adolescent. The Family Intake Questionnaire–Adolescent Version is used to gain background information.
- **Session 2:** The comprehensive assessment of the family includes a videotaped session to measure family management practices and the completion of a Family Assessment Task.
- **Session 3:** The family feedback session is aimed at encouraging family engagement in the ATP process, the maintenance of positive family practices, as well as making changes in parenting problems (Dishion & Kavanagh, 2003).

Level 3: Indicated

The third level of the intervention is direct support focused on parents to help change clinically significant problems through a variety of services identified collectively as The Family Intervention Menu. Services, administered by masters-level clinicians known as "Group Leaders," include the following:

- Family Management Group: A 12-week group with 8 to 10 families using exercises, roleplays, videotapes, and booster sessions available monthly at the conclusion of groups for at least 3 months. A parent consultant who has completed the program can help guide the group's conversation and can be a bridge between parents and group leaders.
- A home-school card
- One to two sessions on special topics from the Family Management Curriculum
- Monthly monitoring
- Individual Family Management Therapy from the Family Management Curriculum
- Referrals to more intensive services

Research Base and Outcomes

ATP research studies include randomized clinical trials as well as replication studies. The research supports the intervention in successfully reducing adolescent problem behaviors of substance use as well as increasing family communication and relationships. Research participants include American Indians, African Americans, Asian Americans, and Latinos. Specific outcomes from ATP studies are outlined in Table 7.

Table 7: Adolescent Transition Program: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Dishion & Andrews (1995); Dishion et al., (1996) (in Dishion & Kavanagh, 2003)	Level 3 Research Study: Total n = 158 families with high-risk young adolescents (ages 11–14) in a randomized clinical trial (n = 119) assigned to one of four group intervention conditions 1) Family Management Curriculum (FMC) with parent focus, 2) FMC adolescent focus, 3) FMC parent & adolescent focus, 4) self-directed change (materials only). Intervention lasted 12 weeks. An additional n = 39 families of young adolescents were recruited as a quasi-experimental control. Followup at 1 year. Study population: ■ 52.5% Male ■ 47.5% Female ■ 95% White	Both Family Management Curriculum (FMC) and self-regulation were associated with reduction in negative engagement between parent and child. Teachers reported less antisocial behaviors for youth in FMC groups. Interventions with aggregated high-risk youth showed escalations in tobacco use and problem behavior at school, beginning at termination and persisting to followup when compared to control group. Parent-only condition nearly eliminated onset of youth smoking at 1 year, yet results faded after 1 year.
Irvine, Biglan, Metzler, Smolkowski, & Ary (1999)	Replication Study of Level 3 Research: Randomized clinical trial with high-risk rural families (n = 303) assigned to parent-focused FMC intervention group or a waitlist control group. Study population: ■ 61% Male ■ 39% Female ■ 88% White ■ 3% American Indian ■ 2% Hispanic ■ 7% Other	For the intervention group: Improvements in problem- solving interactions. Parents' overactivity and lax approach to child's behavior reduced. Parent's positive feelings toward child improved. Parent-reported antisocial behaviors decreased significantly. Measures of child adjustment improved.
Dishion, Kavanagh, Schneiger, Nelson, & Kaufman (2002); Dishion, Nelson, & Kavanagh (2003)	Multilevel Research Study 4-year longitudinal study of multiethnic 6th grade students (n = 672) and their families randomly assigned to ATP intervention or to control condition. Study population: ■ 52% Male ■ 48% Female ■ 41% White ■ 32% African American ■ 7% Hispanic ■ 6% Asian American ■ 2% American Indian Level 2 Research Study Within the context of the above study, high-risk youth and families (n = 71) selected for either Family Check Up (FCU) intervention (n = 35) or to the control group (no FCU) (n = 36). Study population: ■ 39% Male ■ 61% Female ■ 32% White ■ 51% African American ■ 14% Multiethnic ■ 3% Hispanic	Intervention reduced initiation of substance use in both at-risk students and those not at risk. Families assigned to the Family Check Up (FCU) intervention maintained positive parental monitoring practices; parents of high-risk adolescents decreased parental monitoring from grades 7 to 9. Prevention effect of the FCU on substance abuse was mediated by changes in parental monitoring.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

As indicated by Dishion (personal communication, September 13, 2006):

Readiness:

- On average, it takes 6 months from the initial contact with trainers for school staff training to begin.
- Top performance sites have strong leadership and organization that supports a culture of fidelity where professionals working with families are enthusiastic about having Family Management Groups taped and then examined to improve their work.
- Careful selection and training of staff is critical to the success of the program.
- It is advantageous for sites to secure state funding and school district support before implementing the program.

Facilitators:

According to Dishion & Kavanagh (2003):

- School administration facilitates the implementation of the program by rewarding effective group leaders and parent consultants.
- For a successful program, the school staff should value and support the Family Resource Center.
- A committee of school staff and parents should meet to decide how the FRC would fit into the school system.
- Space is needed in the school for the FRC: office, confidential meeting rooms, file cabinet, comfortable furniture, a telephone, a video-camera to record sessions, and computer software.
- An organized school operating system with a clear referral and reporting system is fundamental to successful implementation.

Possible barriers:

According to Dishion & Kavanagh (2003) and Dishion (personal communication September 13, 2006) barriers to implementation include the following:

- A lack of performance based standards, lack of funding, and changes in interest of the administrative leadership;
- A lack of engagement of parents; and
- Attitudes of negativity and avoidance of the intervention.

Training/coaching and materials

As indicated by Dishion (personal communication, September 13, 2006):

- Stage 1 training includes a 4- to 5-day workshop for school and staff personnel on specific program components.
- Stage 2 training involves reviewing video-taped sessions of group leaders to provide specific feed back about work.
- Stage 3 training, an advanced series of workshops around issues that experts have to deal with when implementing the intervention, is currently in development.
- Ongoing support is provided by the developers by telephone and email. Communication is voluntary, with the frequency determined by the site's needs.
- Currently, program materials may be purchased and implemented in a component fashion (for example, choosing to implement only the Family Checkup Intervention.)
- Training of trainers who are then qualified to train for their agency is available.
- Materials are available in Spanish.

Information about training and materials can be obtained at:
http://www.uoregon.edu/~cfc/atptraining.htm

Cost of training/consulting

The ATP program works individually with sites to tailor the training to available resources of school budgets. There is a per service fee for training and consultation:

Level 1: Universal:

Family Resource Centers Training

- Length: 6 hours
- Limit: 20 people
- 1–2 people, $500 + $25 each/materials
- 3–5 people, $750 + $25 each/materials

Level 2: Selective:

Family Check-Up Training

- Length: 2 days
- Limit: 20 people
- 1–2 people, $1350 + $75 each/materials (includes feedback on your implementation)
- 3+ people, $1850 + $75 each/materials (includes feedback on implementation).

Level 3: Indicated:

Family Management Curriculum Training

- Length: 1.5 days
- Limit: 20 people
- 1–2 people, $750 + $75 each/materials (excluding tapes)
- 3+ people, $1000 + $75 each/materials (excluding tapes)

Consultation

- $75/hour (any format: tape review, video conferencing, phone, review of materials, and so forth).
- There are additional travel fees and expenses if the training takes place at the program site.

Additional information can be obtained at: **http://www.uoregon.edu/~cfc/atp.htm**.

Developer involvement

The developers are currently involved in training and implementing the program:

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Monitoring fidelity and outcomes

Currently, monitoring fidelity occurs through the process of a trained supervisor's review of videotapes of group leaders working with the families.

- Fidelity ratings are provided by supervisors.
- Sites are required to provide fidelity data to the developer every 6 months.
- Collecting and reporting outcome measures is recommended.
- No formal training is provided to sites to develop systems to collect, analyze, or use outcome data collected.

Financing the intervention

Financing the intervention is through a site budget, primarily through federal grants.

Resources/Links

For information on the Child and Family Research Center at the University of Oregon, see **http://www.uoregon.edu/~cfc/atp.htm**.

For information about purchasing available resources, see **http://www.guilford.com/cgi-bin/cartscript.cgi?page=cpap/dishion.htm&cart_id**.

For additional information, see also **http://www.strengtheningfamilies.org/html/programs_1999/08_ATP.html**.

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Incredible Years

Intervention Description

Background

The Incredible Years series has been developed since the 1980s by Carolyn Webster-Stratton, Ph.D., of the University of Washington. Numerous studies have demonstrated many positive outcomes for children and their families in a variety of settings and countries.

The program has been disseminated in more than 46 states, Canada, Norway, Denmark, Wales, New Zealand, and Great Britain. In addition, the program has been tested with different cultural groups, such as East African, Vietnamese, Hispanic, and Chinese populations. Many of the materials have been translated into different languages to meet these varying cultural, ethnic, and linguistic needs.

Characteristics of the intervention

The Incredible Years program offers a comprehensive array of materials for parents and teachers and is tailored developmentally for children. The goal of this intervention is to reduce child aggression (ages 2 to 12) by teaching parents and teachers how to manage children's misbehavior and promote children's problem-solving strategies, emotional regulation, and social competence.

It can be delivered by parents, teachers, counselors, social workers, and therapists. These people must possess a bachelor's degree, but a master's degree is recommended for the parent and teacher program. Children who are actively displaying clinical levels of externalizing problems or who are at risk of aggressive behavior can receive the Incredible Years intervention components. Therefore, Incredible Years can be considered a multilevel prevention and intervention program.

Figure 8

Incredible Years	
Type of EBP	■ Intervention
Setting	■ Home ■ School
Age	■ 2–12
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Increase in parent's use of effective limit-setting, nurturing, and supportive parenting. ■ Improvement in teacher's use of praise. ■ Reductions in conduct problems at home and school.

The BASIC program (parent training) is the core component of Incredible Years, with the Teacher Training and Child training program complementing BASIC. The BASIC program has a preschool version (ages 2 to 5 years) and a school-age version (ages 6 to 12 years).

The BASIC program also has three other training components: the School Readiness Series, the School Age Program, and the ADVANCE program.

BASIC is a 12- to 14-week group-based program using video-vignettes to trigger group discussion. The emphasis is on parents' learning behavior management, social and emotional coaching skills, empathy, and ways to meet their children's temperamental and developmental needs.

BASIC also consists of parents' learning effective and nonviolent discipline strategies. The School Age component strives to assist parents with ways to strengthen their children's academic performance at home and bridge the communication between school and home. The ADVANCE program is a complement to the BASIC program, a 10- to 12-week supplement that addresses marital issues, communication skills, anger and depression management, and parental problem-solving skills. This supplement helps parents develop a better understanding of their own interpersonal issues and provides them with new coping skills.

The Teacher Training program is a 6-day workshop for teachers, counselors, and school psychologists to teach basic classroom management strategies for dealing with misbehavior and promoting positive peer relationships through student skill-building. Detailed behavior plans for managing children with externalizing and internalizing problems are developed.

The Child Training Program (Dinosaur Curriculum) focuses on appropriate classroom behavior, increased positive social skills, emotional literacy, anger management, and problem-solving skills for managing conflict. There is both a prevention classroom version of this curriculum as well as a small group treatment version.

The treatment version is offered to small groups of children (five to six per group) with conduct-related problems. The treatment groups are usually offered once a week for 2 hours or twice a week for an hour. The classroom version is offered two to three times weekly in circle-time discussions followed by small group activities. There are lesson plans for preschool through second grade.

Research Base and Outcomes

Extensive research has examined the efficacy and effectiveness of the Incredible Years series. Numerous randomized control group trials have been conducted by Webster-Stratton and colleagues, with at least an additional 15 studies by independent researchers replicating and measuring the effectiveness of the intervention.

Studies include eight randomized clinical trials by the developer and colleagues and five replication studies by independent investigators examining the parent training component (BASIC); two randomized clinical trials evaluating the effectiveness of the child training program; and two randomized clinical trials examining the teacher training program.

Studies have been conducted with different ethnic populations and in varying treatment settings (for example, foster care, daycare facilities, Head Start Families). Studies have been conducted in the United States, Canada, Norway, and the United Kingdom (http://www.incredibleyears.com). The intervention has been tested with various cultural groups: East African, Vietnamese, Chinese, and Hispanic (St. George, personal communication, April 19, 2006).

Table 8 provides an overview of research outcomes. For those interested, an extensive list of research articles is available at: **http://www.incredibleyears.com**.

Table 8: Incredible Years: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
BASIC Program		
Webster-Stratton (1981, 1982, 1984, 1990, 1994, 1998; In press); Webster-Stratton & Hammond (1997); Webster-Stratton, Hollingsworth, & Kolpacoff (1989); Webster-Stratton, Kolpacoff, & Hollingsworth (1988); Reid, Webster-Stratton, & Beauchaine (2001); Gross et al., (2003); Reid, Webster-Stratton & Hammond (2007)	8 randomized control trials and 5 replication studies Study population: 1982 study (n = 35) ■ 66% Male ■ 34% Female 1984 study (n = 35) ■ 71% Male ■ 10% Female 1988 and 1989 study (n = 114) ■ 69% Male ■ 31% Female 1997 study (n = 97) ■ 74% Male ■ 26% Female ■ 86% White 2001 study(n = 634) ■ 54% Male ■ 46% Female ■ 54% White ■ 19% African American ■ 12% Asian American ■ 11% Hispanic 2003 study (n = 208) ■ 57% African American ■ 29% Hispanic ■ 4% White ■ 4% Multiethnic ■ 6% Other	Increases in parent positive affect such as praise and reduced use of criticism and negative commands. Increases in parent use of effective limit-setting by replacing spanking and harsh discipline with nonviolent discipline techniques and increased monitoring of children. Reductions in parental depression and increases in parental self-confidence. Increases in positive family communication and problem-solving. Reduced conduct problems in children¹s interactions with parents and increases in their positive affect and compliance to parental commands. Reduced conduct problems, increased emotional regulation with parents. Mothers were more supportive and less critical with their children. Teachers reported parents were more involved in school, and children were less aggressive in the classroom.
Teacher Training Series		
Webster-Stratton et al., (2004); Webster-Stratton et al., (2001)	2 randomized control trials Study population: ■ 2004 study ■ 90% Male ■ 10% Female ■ 79% White	Increases in teacher use of praise and encouragement and reduced use of criticism and harsh discipline. Increases in children's positive affect and cooperation with teachers, positive interactions with peers, school readiness and engagement with school activities. Reductions in peer aggression in the classroom.
Child Training Series		
Webster-Stratton & Hammond, 1997; Webster-Stratton et al., 2004	2 randomized control trials Study population: 1997 study (n = 97) ■ 74% Male ■ 26% Female ■ 86% White 2004 study (n = 159) ■ 90% Male ■ 10% Female ■ 79% White	Increases in children's appropriate cognitive problem-solving strategies and more prosocial conflict management strategies with peers. Reductions in conduct problems at home and school.

* Study sample's gender and race/ethnicity data provided when available.

** Table adapted from version found at http://www.incredibleyears.com.

Implementation and Dissemination

Infrastructure issues

An agency readiness questionnaire is available for download on the Incredible Years Web site. After a site reviews and determines some of their readiness issues, the Incredible Years staff is available to help sites address their issues. For some sites, assistance is offered in securing money by helping with grant writing.

For Incredible Years to be successfully implemented and sustained, an agency and school must have continued funding support. In addition, it is important to have staff go through the mentoring and group certification process to help continue to implement the program with fidelity.

Training/coaching and materials

The training and materials for each program series vary. Each training series focuses on the parents, child, and teacher. All of the training manuals and other supportive materials can be ordered through the Incredible Years Web site.

Prices for the manuals and materials range from a few hundred dollars for a single program to $1,800 dollars for one complete parent training set of BASIC and ADVANCE.

Trainings are tailored to meet the needs of the identified site. Mental health agencies or schools may choose to be trained by the Incredible Years certified trainers onsite or offsite, depending on the size of the audience. For larger groups, 15 to 25 people, onsite training is offered. Offsite training would occur in the Seattle, Washington, area. Cost for the training varies depending on the type of training that a site chooses.

Certification is also offered by Incredible Years and is highly recommended. Certification indicates that a group leader is offering the program with fidelity. Certified group leaders are eligible for certification as mentors, which allows them to train others in authorized workshops in their own agency. To become certified as a mentor, one must have either a master's or doctoral degree. Certification is an additional training process and mentors in training receive close supervision and contact with the developer, Dr. Webster-Stratton and other certified trainers. Certification costs range from $150 to $700.

Some of the training materials have been translated into multiple languages. The BASIC parent program has translated manuals in Spanish, French, Norwegian, Swedish, Dutch, Danish, Russian, and Portuguese. In addition, some of the programs are also being used in Hong Kong, Singapore, and Malaysia.

The Parent Training curriculum comprises different sets of materials and manuals that are appropriate for different developmental age groups. The training time is approximately 3 days. The BASIC parent training program has two versions, one for early childhood (2 to 7 years) and one for school age (5 to 12 years). In addition, there is an advanced training program for school-age youth. There is also a school readiness program available to help prepare children for school. Costs for these training sets vary according to the material purchased.

The Dinosaur training curriculum is available for use by teachers or counselors and therapists. The training time for this series lasts about 2 to 3 days. This training program can be implemented in either a small group of children displaying aggressive behavior or as a prevention program for an entire classroom. Puppets, videos, and manuals are used to facilitate learning.

The teacher classroom-management training curriculum has different training manuals and materials. The training lasts about 3 days for group leaders. Teachers participate in training that lasts 5 to 6 days. The different programs are geared toward preschool and school-age children.

There are supplemental video vignettes and instructions for teachers working with the Dinosaur program and school-aged population.

Cost of training/consulting

The cost for each site will vary depending on the type of training requested and the materials purchased. Training offsite in Seattle ranges from $300 to $400 per person. Training at one's agency costs $1,500/per day for one trainer, plus transportation costs and other travel expenses. Consultation services range from $150 to $200/per hour.

Developer involvement

Dr. Webster-Stratton is directly involved in disseminating the Incredible Years program. She continues to deliver these programs with families, teachers, and children and to serve as a consultant to other research projects trying to replicate her program. At the same time, she conducts her own research studies evaluating new program components of the Incredible Years Series. Currently she is evaluating the program with parents of children with Attention Deficit Disorder. To obtain more detailed information about Incredible Years, please contact the Administrative Director:

Lisa St. George
Administrative Director
Incredible Years
1411 8th Avenue West
Seattle, WA 98119
(888) 506-3562 or (206) 285-7565
http://www.incredibleyears.com
incredibleyears@incredibleyears.com

Monitoring fidelity and outcomes

Fidelity measures exist for the curricula within the Incredible Years program. Incredible Years is not collecting fidelity measures on a widespread basis.

Outcome measures are recommended, but sites do not have to report this information to Incredible Years.

Financing the intervention

According to the developer, many sites receive grants; others build the program into their ongoing services to receive funding from their state. Incredible Years does not track financing information from sites that have successfully implemented the program.

Resources/Links

http://www.incredibleyears.com

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Helping the Noncompliant Child

Intervention Description

Background

Helping the Noncompliant Child (HNC) is a parent-training program that was developed out of the original work in the late sixties by Constance Hanf, Ph.D., and Rex Forehand, Ph.D., of the Universities of Vermont and Georgia, respectively. Robert McMahon, Ph.D., of the University of Washington modified Hanf's program to develop HNC more than 30 years ago.

HNC offers a controlled learning environment for parents to learn new "adaptive" ways to interact with their children. Currently, it is being implemented in more than a dozen states and several foreign countries (for example, Canada, United Kingdom, Australia) (Forehand, 2006).

Characteristics of the intervention

Helping the Noncompliant Child's primary treatment goal is the secondary prevention of serious conduct disorder problems in preschool and early elementary school-aged children, and the primary prevention of subsequent juvenile delinquency (Office of Juvenile Justice and Delinquency Prevention Model Programs Guide).

The program is delivered to boys and girls 3 to 8 years of age who are at risk for or are displaying aggressive and oppositional behaviors. It is best implemented in a therapeutically controlled environment, such as a clinic-based playroom with a one-way mirror and audio equipment (although the mirror and audio equipment are not required). HNC can also be delivered in the child and family's home. Children and their parents meet while the therapist helps guide parents with practicing new skills and focusing on the positive and negative behaviors of the child.

Figure 9

Helping the Noncompliant Child	
Type of EBP	■ Intervention
Setting	■ Clinic ■ Home
Age	■ 3–8
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Improvement in parenting skills ■ Improvement in child's behavior and compliance

The parent-training program is divided into the following two phases:

- Differential Attention; and
- Compliance Training.

The length of the program depends on each family, but typically a total of 8 to 10 sessions are standard for both training periods. Average sessions last approximately 75 to 90 minutes. Ideally, sessions should occur about twice a week. If parents do not have the resources or time for twice weekly sessions, the therapists are encouraged to keep in phone contact.

Therapists who deliver the HNC program must possess a master's degree. Throughout the training, a therapist will assign homework to facilitate parents' practicing what they have learned in the controlled environment. It is essential to the program that parents agree to practice the parenting skills between sessions as directed by the therapist.

In the Differential Attention phase, a major goal is to break out of the coercive cycle of interaction by establishing a positive, mutually reinforcing relationship between the parent and child.

Parents learn to systematically use different types of positive attention (that is, verbally tracking the child's behavior, praise, positive physical attention) to increase desirable child behaviors. They also learn a planned ignoring procedure to decrease undesirable child behaviors (McMahon & Forehand, 2003).

Succession through the phases depends on parent's skill acquisition as assessed by the therapist (observational forms available in training book). During the Compliance Training phase, parents learn to do the following:

- Give clear, concise instructions to their child;
- Provide positive attention for child compliance to the instruction; and
- Use a brief time-out procedure for child noncompliance.

Parents also learn to use rules, and to implement the phase I and II skills in settings outside the home. Therapists extensively employ demonstration and role-play procedures to teach the different skills to the parent and to the child who also participates in the treatment sessions.

Research Base and Outcomes

HNC has been extensively researched since the 1970s in a series of studies that examined various aspects of the intervention (McMahon & Forehand, 2003). Research has included the following:

- Clinic laboratory observation studies to examine the effects of the individual components of HNC.
- Clinic laboratory observation and comparative studies to examine immediate outcomes of the program as a whole in the laboratory setting.
- Studies in community settings using single group or comparison group with pre-post tests and followup to examine generalizability of the effects across time, settings, siblings, and behaviors.
- Studies assessing: social validity, side effects, procedures for enhancing generalization, and self-administered written forms of components of the intervention.
- Two independent replication studies comparing HNC to other interventions.

Samples, while predominantly Caucasian, have included African American populations as well (McMahon & Forehand, 2003; NREPP).

Research has shown many positive outcomes: improvements in parenting skills and child compliance in the home to within the normal range; improvements of parents' perceptions of their children's adjustment, regardless of the children's age (within the 3- to 8-year-old range) or the families' socioeconomic status (although families from lower socioeconomic backgrounds are less likely to complete the program); and maintenance effects ranging from 6 months to more than 14 years after treatment termination (McMahon & Forehand, 2003). See Table 9.

Table 9: Helping the Noncompliant Child: Research Base and Outcomes		
Reference	**Research Design and Sample***	**Outcomes**
Peed, Roberts, & Forehand (1977)	Mothers (n = 12) and their children (2.5–8.5 years) assigned to either a treatment or a waitlist control group. Parent training conducted in a controlled learning environment. Study population: ■ 67% Male ■ 33% Female	Both parents and children in treatment group report demonstrated multiple positive behavior changes of parent-child interactions such as parents' perceptions of children. The control group did not change over the waiting period.
Wells, Forehand, & Griest (1980)	Noncompliant, clinic-referred children and their mothers (n = 12) who received parent training program (HNC) compared to non-clinic, non-treatment normative group (n = 12). Study population: ■ 62.5% Male ■ 37.5% Female	Clinic-referred children significantly increased their compliance from pretreatment to post treatment, whereas the non-clinic group did not. For the clinic group only, untreated child inappropriate behaviors decreased significantly (aggression, tantrums, crying)
Baum et al., (1986) In McMahon & Forehand (2003)	Children (n = 34, 6–10 years) and their parents received either HNC intervention or a parent discussion group based on Systematic Training for Effective Parenting (STEP).	Observed behavior improvements in the HNC group at both post-treatment and 6–8month followup. No change in behavior for STEP group.
Wells & Egan (1988)	Families (n = 19) with a child (ages 3–8 years) with OD, randomly assigned to receive either social learning based parent training (HNC) or family systems therapy.	Observation measures of parent child behaviors found HNC more effective than family systems therapy.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

No formal readiness assessment is used for sites interested in becoming trained to deliver HNC.

Training/coaching and materials

- Currently, qualified trainers are readily available to provide training in HNC for all areas of the country.
- The training requires at least 2 days.
- There is no minimum number of training participants. However, there is a maximum of 16 to 20 participants in a training session.

Onsite practice and followup supervision can be provided. On an individualized basis, the trainers can offer further onsite or offsite technical assistance.

- Trainees of the model should be prepared to role-play.
- If staff turns over, the developers will consult within the agency to help them train the new staff.

The trainer's manual, training videotape, and self-help book for parents must be purchased separately (see **http://casat.unr.edu/bestpractices/view.php?program=45**).

The training manual is Dr. McMahon and Dr. Forehand's (2003) book, *Helping the Noncompliant Child: Family-Based Treatment for Oppositional Behavior*, New York: Guilford Press. The developers encourage trainees to read the book prior to the training.

The book for parents (*Parenting the Strong-Willed Child*, Forehand & Long, 2002) has been translated into several languages and is available from McGraw-Hill for $14.95.

The training videotape is available from Child Focus, 17 Harbor Ridge Road, South Burlington, VT 05403, for $29.95.

To obtain information on training and materials, contact Dr. McMahon.

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Cost of training/consulting

- Training costs: $1,500/day plus expenses (2- day minimum).
- Per Dr. Forehand (personal communication, June 23, 2006) the typical cost to train therapists and to provide ongoing support in providing Helping the Noncompliant Child would average $7,000 to $12,000, depending on the extent to which post-initial training booster sessions and telephone consultation are involved. This includes materials.

Developer involvement

- Developers can be contacted directly to help implement the intervention.
- The developers are responsible for providing the 2-day onsite training as well as followup services.

Monitoring fidelity and outcomes

A fidelity checklist is available from Dr. Forehand at rex.forehand@uvm.edu. Measures for assessing outcomes are available from McMahon and Forehands' 2003 book, *Helping the Noncompliant Child: Family-Based Treatment for Oppositional Behavior*.

The developers are not actively involved in collecting fidelity measures for program sites, although sites can choose to submit fidelity data to the developers.

- Developers are willing to help sites develop systems to collect, analyze, and use data to improve services.
- Sites do not have to submit outcome measures to the developers, but it is highly recommended.

Financing the intervention

- According to Dr. Forehand, the majority of financing is through state funding or private grant dollars.
- Some third-party payers for mental health services (for example, Medicaid, private insurers) will also reimburse for the components of the service as outpatient therapy.
- To sustain the program, the developers advise that the cost of the program be built into multiple years of funding. The developers are willing to collaborate on an ongoing basis after the program has been implemented.

Resources/Links

To learn more about Helping the Noncompliant Child, see:

- Office of Juvenile Justice and Delinquency Prevention (OJJDP) Model Programs Guide: **http://www.ojjdp.gov/MPG**
- McMahon and Forehand's (2003) book, *Helping the Noncompliant Child: Family-Based Treatment for Oppositional Behavior*.

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Parent-Child Interaction Therapy

Intervention Description

Background

Parent-Child Interaction Therapy (PCIT) is a parent training/coaching program for families with children 2 to 7 years of age who are exhibiting disruptive behaviors. This program has been in existence since the early seventies.

It was developed by Shelia Eyberg, Ph.D., of the University of Florida. The development of PCIT was influenced by the earlier work of Constance Hanf, Ph.D., and Diane Baumrind, Ph.D.

Dr. Hanf was focused on working with mothers to increase their child's compliance, and Dr. Baumrind studied how different parenting styles affect children. Currently, PCIT is being implemented in the United States, Puerto Rico, Norway, and Hong Kong. It has been implemented in laboratory clinical settings, community mental health systems, Head Start programs, schools, and foster care settings (R. Chase, personal communications, September 21, 2006).

Characteristics of the intervention

The program has two phases that are based on attachment theory and social learning theories. In the first phase of the training, Child Directed Interaction (CDI), parents learn how to strengthen their attachment to their child through being warm, responsive, and sensitive to their child's behavior.

In the second phase of the training, Parent Directed Interaction (PDI), parents learn how to be strong authority figures with their child through giving directions in age-appropriate, positive ways; setting consistent limits; and learning how to appropriately implement consequences, such as time-out.

Figure 10

Parent-Child Interaction Therapy	
Type of EBP	■ Intervention
Setting	■ Clinic
Age	■ 2–7
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Improvement in parent-child interaction style. ■ Improvement in child behavior problems.

PCIT is structured through 10 to 16 weekly 1-hour sessions with either the parent alone or parent and child together, and delivered by trained master's or doctoral level therapists. These sessions consist of the following (Herschell et al., 2002; **http://www.pcit.org**, retrieved 2006):

- Pre-treatment assessment of child and family functioning;
- Teaching, coaching, and feedback in the CDI skills phase;
- Teaching, coaching, and feedback in the PDI skills phase;
- Teaching generalization skills related to rules at home, behavior in public, and behavior with siblings;
- Five to 10 minutes of homework per day practicing learned interactions; and
- Posttreatment assessment of child and family functioning.

Clients progress through the sessions of each phase by achieving set skills that are monitored and assessed by the therapist. In research settings, the therapist uses a one-way mirror to observe the parent-child interactions and coaches the parents through a microphone in their ear (Herschell,

2002). In nonlaboratory community settings, some changes to the therapy have been made, but the effectiveness of PCIT with these changes is unknown (Franco et al., 2005).

Research Base and Outcomes

PCIT originated in 1982 and has been tested in a number of replication and followup studies. PCIT has been found to be efficacious in improving the interaction style of parents and in improving behavior problems of children at home and in school, in comparison to waitlist control groups, normal classroom control groups, untreated classroom control groups, modified treatment groups, treatment dropouts, and in comparison to children with varying severity of problems (Herschell et al., 2002).

New directions of the research include support for a culturally sensitive adaptation of PCIT for Puerto Rican families (Matos et al., 2006). See Table 10.

Table 10: Parent-Child Interaction Therapy: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Eyberg & Robinson (1982)	Families (n = 7) with one child (age 2–7) with a behavioral problem and also a sibling (age 2–10) without a behavioral problem. Changes observed in pre-post test observed ratings. Study population: ■ 86% Male ■ 14% Female	Significant improvements on observer ratings of child behavior, untreated sibling behavior, and parental adjustment.
McNeil, Eyberg, Eisenstadt, Newcomb, & Funderburk (1991)	Children (n = 30). Control Group design, but not randomly assigned. Children treated with PCIT (n = 10) compared with normative control group (n = 10) and problem behavior control group (n = 10).	PCIT group reduced problem behaviors at home, improvements on the number of classroom measures for disruptive behaviors.
Schuhmann, Foote, Eyberg, Boggs, and Algina (1998);	Boggs et al., (2004) In McMahon et al., (2005) Randomized control design with families with 3–6 year old child with ODD (n = 64) assigned to treatment of PCIT or a waitlist control condition. Study population: ■ 77% White ■ 14% African American ■ 9% Hispanic, Asian American, and Multiethnic	Followup study from Schumann et al., (1998) compared 23 families that completed PCIT to 23 families that dropped out. PCIT group demonstrated greater reductions in child behavior problems; parents expressed decreases in stress and increase in control; parent interacted more positively with their child and were more successful in gaining their child's compliance. Effects maintained at 4-month followup. Families who completed treatment maintained gains at followup. Families who did not returned to pre-treatment levels of child behavior problems.
Nixon, Sweeney, Erickson, & Touyz (2003, 2004)	Randomized control design with families with behaviorally disturbed children (n = 54, ages 3–5) assigned to PCIT standard group, PCIT modified group, or no treatment control group. Study population: ■ 70% Male ■ 30% Female ■ 95% White ■ 5% Australian Chinese, Australian Indian, Australian Koori	Outcomes of an abbreviated version of PCIT was comparable to the regular PCIT at 6-month followup; treatment gains were maintained at 1 and 2 years.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

There is no formal readiness assessment.

Facilities and equipment:

It is advantageous to implement PCIT in similar conditions to which it was initially tested (that is, using a one-way mirror as the therapist coaches the parent in another room through a small microphone in the parent's ear). For information about how to access this equipment, go to **http://www.pcit.org**.

However, these conditions cannot always be met in community settings (R. Chase, personal communication, September 21, 2006). An alternative adaptation is for the therapist to sit next to the mother and coach by whispering in her ear.

Implementation challenges:

Implementation in a community mental health system (Franco, 2005) presented the following challenges and issues:

- Time commitment for implementation at each level of PCIT needed from clinicians, supervisors, and families.
- Management needed to remove barriers to clinician and family involvement.
- Additional training to ensure fidelity, as well as ongoing supervision and consultation.
- Keeping the interest and motivation of families to complete each phase of PCIT—it often takes longer to master skills than prescribed.

Family involvement:

PCIT includes therapy orientation sessions to describe the intervention, as well as the time and tasks required of the family, to assess the family's willingness, to discuss barriers, and to problem-solve. The weekly therapy can be a burden for families with transportation difficulties or child care issues (R. Chase, personal communication, September 21, 2006).

Training/coaching and materials

Sheila Eyberg, Ph.D., and Stephen Boggs, Ph.D., are the master trainers with graduate students.

Training is provided two to three times per year at the University of Florida and two times per year at the University of Oklahoma. Training is also provided at local sites for special projects, research grants, and in other countries than the U.S.

PCIT experts at the University of Oklahoma Health Sciences Center are currently investigating an alternative co-therapy PCIT training model using Internet-based remote live consultation.

The basic PCIT training involves a 5 full-day intensive workshop in PCIT, which includes an overview of PCIT, assessment procedures, coding system to identify interaction processes and skills acquired by parents in each phase, specific clinician skills training in the two phases of treatment, and adherence to the manualized treatment sessions. Training involves didactic instruction, role-playing, and a case demonstration.

- There is no standard booster training.
- A comprehensive treatment manual is available (Eyberg & Calzada, 1998).
- The materials are available in English and Spanish.
- Supervisor training involves a 3-day advanced training.

To obtain information about materials and training, contact: **http://www.pcit.org**

Cost of training/consulting

- The cost per clinician trainee is $3,000.
- There is an additional cost for audiovisual equipment, which is desirable but not necessary. See **http://www.pcit.org** for pricing.
- There is no annual or ongoing cost for consultation.

Developer involvement

After the training, no ongoing formal relationship is expected between the developer and sites. However, consultation is available through email, telephone, and onsite visits as needed.

There are no ongoing data collection requirements by the developer, unless the site is part of a research study. To contact the developer:

Sheila Eyberg, Ph.D.
Child Study Laboratory
Department of Clinical and Health Psychology
University of South Florida
P.O. Box 100165
Gainesville, FL 32610
Phone: (352) 273-6145

Monitoring fidelity and outcomes

- Fidelity adherence checklists are used for every session to monitor adherence to the treatment manual.
- Outcome measures for monitoring progress are recommended and are described on the PCIT Web site. These include the following:
- Eyberg Child Behavior Inventory;
- Sutter-Eyberg Student Behavior Inventory-Revised;
- Dyadic Parent-Child Interaction Coding System to measure the quality of parent-child interactions;
- Therapy Attitude Inventory;
- Child Rearing Inventory; and
- Parenting Locus of Control – Short Form.

The developers do not follow a site to collect data or monitor fidelity, unless the project is part of a formal research or evaluation grant.

Financing the intervention

PCIT has been funded through research and evaluation grants. In some states, it is financed through private insurance companies and Medicaid as family therapy.

Resources/Links

PCIT Web site: **http://www.pcit.org**.

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Parent Management Training — Oregon

Intervention Description

Background

The Parent Management Training–Oregon (PMTO) model is based on social interaction theory developed by Gerald Patterson, Ph.D., Marion Forgatch, Ph.D., and colleagues at the Oregon Social Learning Center (OSLC). Currently, Dr. Forgatch of OSLC is leading dissemination efforts.

PMTO is considered a behavioral preventive and clinical intervention model designed to enhance effective parenting and reduce coercive practices while making relevant adaptations for contextual factors (Forgatch, Patterson, & DeGarmo, 2005).

Currently, PMTO is disseminated nationally in more than 30 sites in Norway. In the Netherlands, PMTO is disseminated with 30 therapists from four agencies who are currently in training within three major regions in the country (Amsterdam, Drenthe, and Leiden).

The purveyors of PMTO are mentoring four supervisors in coaching. Within the United States, PMTO has been disseminated in 13 sites in the state of Michigan.

Characteristics of the intervention

PMTO is designed for boys and girls ages 4 to 12 years who have displayed serious acting-out and disruptive behaviors. It is implemented in clinic and home-based settings by trained therapists (master's level), lasting approximately 20 sessions, although it can vary depending on individual family needs and skill acquisition.

Figure 11

Parent Management Training — Oregon	
Type of EBP	■ Intervention
Setting	■ Clinic ■ Home
Age	■ 4–12
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Significant reductions in child's behavior problems. ■ Reductions in coercive parenting. ■ Increases in effective parenting.

Parents or guardians of identified children and youth must participate in treatment, since it is aimed at them.

PMTO is a manualized approach to treatment as detailed in Parenting Through Change (Forgatch, 1994) and Marriage and Parenting in Stepfamilies (Forgatch & Rains, 1997). Training materials are also available (Forgatch, Rains, & Knutson, 2005; Knutson, Rains, & Forgatch, 2006).

PMTO has five essential implementation components (Forgatch, Patterson, & DeGarmo, 2005):

- **Skill encouragement** teaches prosocial development through breaking behavior down to small steps and contingent positive reinforcement.
- **Discipline** decreases deviant behavior with appropriate and contingent use of mild sanctions.
- **Monitoring (supervision)** tracks children's activities, associates, and location.

- **Problem-solving skills** help families negotiate agreements, establish rules, and set contingencies.
- **Positive involvement** assists parents with offering loving, positive attention.

Research Base and Outcomes

The program has been evaluated extensively in community settings. In addition, a number of comparison studies have been conducted using random assignments for treatment.

Studies with active control groups have yielded promising results (Fonagy & Kurtz, 2002; McMahon, Wells, & Kotler, 2005). The evidence supports the claim that treatment effects may be generalized across settings, may be maintained for up to 2 years posttreatment, may benefit other children in the same family, and also may extend to other deviant behaviors beyond those emphasized in treatment (Fonagy & Kurtz, 2002).

Cross-cultural replications of PMTO have been conducted in Norway (McMahon, Wells, & Kotler, 2005; Ogden, Forgatch, Askeland, Patterson, & Bullock, 2005). Replication studies of culturally adapted parent management training are being conducted with Latino clients (Forgatch, personal communication, June 22, 2006; Martinez & Eddy, 2005).

Evidence from a sample of studies indicating specific results are located in Table 11.

Table 11: Parent Management Training-Oregon: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Bernal, Klinnert, & Schultz (1980)	Randomized control trial design of families (n = 36) of a child (ages 5–12) with conduct problem were assigned to behavioral parent training, client-centered counseling or waitlist. 6-month, 1-year, and 2-year followups. Study population: ■ 86% Male ■ 14% Female	Parent reports and paper-and-pencil tests of child deviance and parent satisfaction showed a superior outcome for behavioral parent training over client-centered treatment and waitlist control group, and no difference between the latter two groups. At followup, there was no maintenance of this superiority.
Christensen, Johnson, Phillips, & Glasgow (1980)	Randomized clinical trial of families (n = 36) with problem children (4–12 years) assigned to either PMTO- individual format, PMTO- group format or bibliotherapy (control group). Study population: ■ 78% Male ■ 22% Female	PMTO individual and group interventions both superior to bibliotherapy as indicated by measures of parent attitude and observational data collected from audio recordings made in homes of families.
Patterson, Chamberlain & Reid (1982) In McMahon, Wells, & Kotler (2005)	Randomized clinical trial design assigned families (n = 19) to parent training (PMTO) or waitlist control group (which became a comparison treatment group by default as 8 of the 9 families in the control group obtained treatment from other clinics in the community; treatment styles ranged from eclectic to behavioral). Study population: ■ 68% Male ■ 32% Female	Reductions in a child's conduct problem behaviors when parents have been exposed to parent training versus waiting list control/comparison treatment group.
Patterson & Chamberlain (1988); Reid (1987) (in McMahon, Wells, & Kotler (2005))	Families (n = 70) with children with conduct problems (6–12 years) randomly assigned to parent training or eclectic family therapy.	Preliminary results indicated parent training intervention reduced child conduct problem behavior significantly. Mothers in parent training group reported significant reductions in self-reported depression levels.
Bank et al., (1991)	Randomized control trial design assigned families (n = 55) of chronically offending adolescent delinquents (13–18 years) to parent training courses or services typically provided by the court system. Study population: ■ 100% Male	Results indicated that the parent training families exerted quick and effective control over their sons' official delinquency rates. Relative to the controls, parent training families were able to establish control with significantly less reliance on incarceration.
Forgatch & Degarmo (1999)	Randomized control trial of divorcing mothers (n = 238) with sons in Grades 1–3 (mean age 7.8 years) assigned to either treatment or control group to examine the efficacy of group-based parent training. Study population: ■ 100% Male ■ 86% White ■ 1% African American ■ 2% Hispanic ■ 2% American Indian ■ 9% Multiethnic	Demonstrated positive effects of the intervention in reducing coercive parenting, prevented decay in positive parenting, and improved effective parenting.
Martinez & Eddy (2005)	Randomized control trial implementing a culturally adapted PMTO intervention, "Nuestras Familias," with Spanish-speaking Latino parents (n = 73) with middle school-aged youth at risk for problem behaviors, assigned to either intervention group or control group. Study population: ■ 56% Male ■ 44% Female ■ 100% Hispanic	Findings provide strong evidence for the feasibility of delivering the intervention in a larger community. Parent Outcomes: Increased measures of general parenting, skill encouragement, and overall effective parenting. Youth Outcomes: Decreased measures of aggression, externalizing likelihood of smoking and use of alcohol, marijuana, and other drugs.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

- A set of readiness questions is available to assess sites' abilities to effectively implement the program.
- Sites are selected if they have a long-term commitment to engage in evaluation, are willing to be subjected to evaluation, and are willing to devote the time to implement the program.
- If sites do not have the capacity (for example, time, staffing, and financial resources) to implement, the disseminators of PMTO suggest that they not use this intervention. In some cases, the purveyors will recommend other programs, such as Triple P, or the Incredible Years.

Staffing:

- A readiness checklist is available for agency leaders and managers to use when hiring staff to implement the intervention.
- PMTO trainers consider staff selection to be an extremely high and important priority. One issue that is particularly important concerns staff biases toward behavioral approaches.

Training/coaching and materials

According to Dr. Forgatch (2006), 18 workshop days are spread over the course of a year to adequately train practitioners.

- The first two workshops are about a month apart, followed by three more. After the second workshop, practitioners should be working with families. Next, another set of three trainings occurs, which should take place 2 to 3 months apart.
- Practitioners create a "fictional family" that is recorded on a DVD to demonstrate their skills, which expert trainers review.
- After review of the fictional family case, practitioners enroll three families and record their sessions. Direct feedback is provided by the expert trainers.
- Feedback continues to occur until about eight DVD-recorded sessions of three families are reviewed.
- After review of these eight sessions (on average), two new families are enrolled with approximately four sessions reviewed for final certification purposes.
- Ongoing support and coaching is provided through a network of coaches.
- There are approximately six PMTO trainers at the current time.

Two books contain some of the manual and training materials, *Parenting Through Change* (Forgatch, 1994) and *Marriage and Parenting in Stepfamilies* (Forgatch & Rains,1997).

Materials related to PMTO are available in Norwegian, Dutch, Icelandic, and Spanish languages. Additionally, cultural adaptations for language, materials, and methods are negotiated between the program purveyors and the program recipients during the training process with each new culture. The fundamental method of training for professionals and for families is role-playing and not didactic (M. Forgatch, personal communication, July 22, 2006).

The company that handles readiness, training, and implementation efforts is Implementation Sciences International, Inc.

Developer involvement

Dr. Forgatch is the key developer of the intervention. She currently is involved in helping others use the program as part of a dissemination group that is directly involved with implementation efforts.

Contact information:

Marion S. Forgatch, Ph.D.
Executive Director
Implementation Sciences International, Inc.
2852 Willamette Street, #172
Eugene, OR 97405
Email: marionf@oslc.org

Monitoring fidelity and outcomes

A site must commit to implementation with complete fidelity. Part of the readiness checklist assesses a site's ability to do this and plans for followup fidelity checks.

A recent study by Forgatch, Patterson, & DeGarmo (2005) found that using the Fidelity of Implementation Rating System to measure adherence to the program was effective. Specifically, if the program is implemented "true to the model," parenting practices were improved.

Financing the intervention

In Michigan, for example, the state and agency collaborate in funding for PMTO training. Medicaid is also involved in financing.

In Norway and the Netherlands, the government pays for the majority of the training and services; agencies share the cost.

Resources/Links

Substance Abuse and Mental Health Services Administration, National registry of Evidence-Based Programs and Pratices:
http://nrepp.samhsa.gov/

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Brief Strategic Family Therapy

Intervention Description

Background

Brief Strategic Family Therapy™ (BSFT™) is a family therapy intervention for children and adolescents aged 6 to 18 years who have engaged, or are engaging, in substance use, coupled with behavioral problems at home and school.

BSFT™ was developed by the Spanish Family Guidance Center (which later became the Center for Family Studies) at the University of Miami, over 35 years ago to focus on drug use and behavior problems of Cuban American adolescents.

For the first 15 years of BSFT™'s existence, therapists worked solely within the Hispanic population. However, since 1991, BSFT™ research has included African Americans. Within the past 2 years, more than 40 organizations and 120 practitioners have participated in BSFT™ training (J. Szapocznik, personal communication, September 11, 2006).

Characteristics of the intervention

BSFT™ can be delivered in a variety of settings, such as social service agencies, mental health clinics, and local community health agencies. For youth to receive BSFT™ they must have a permanent family environment, thus excluding foster children. BSFT™ is delivered by clinicians with master's level or higher degrees.

Figure 12

Brief Strategic Family Therapy	
Type of EBP	■ Intervention
Setting	■ Clinic ■ Home
Age	■ 6–18
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Decrease in substance abuse. ■ Improved engagement in therapy. ■ Decrease in problematic behavior. ■ Increased family functioning. ■ Decrease in socialized aggression and conduct disorder.

Sessions last for approximately 60 to 90 minutes, for an average of 12 to 16 sessions. BSFT™ focuses on three central constructs: system, structure/patterns of interaction, and strategy (Szapocznik & Williams, 2000). The process of BSFT™ involves three components: joining, diagnosis, and restructuring.

- **Joining** is very important and occurs at two levels. These levels involve, first, establishing a relationship with each family member and, then, establishing a relationship with the entire family system. There are a number of techniques that may be used to join with the family.
- **Diagnosis** involves identifying the maladaptive patterns that encourage the problematic youth behavior. Therapists carefully observe and examine the family's interactions along five domains: structure, resonance, developmental stage, identified patient, and conflict resolution.

- **Restructuring** involves the therapists deciphering family patterns of interactions and developing specific plans to change maladaptive patterns. This is a problem-focused intervention aimed at the level of family system interactions that prevent each member from being successful. BSFT™ is designed to help the entire family system attain a higher level of functioning and to reduce problems such as the adolescent's drug use and behavior problems.

Research Base and Outcomes

Numerous studies over the past 35 years have examined the effectiveness of BSFT™. Many of these studies were experimental in design, using randomized control trials to measure the effectiveness of the BSFT™ intervention compared to other interventions and/or a control group. Studies have demonstrated significant and positive effects of the BSFT™ intervention. Study populations have included primarily Hispanic families. A sample of specific research studies are listed in Table 12.

Table 12: Parent Management Training-Oregon: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis (1983; 1986)	Hispanic families with adolescents with behavior problems (n = 37 in 1983 study, n = 35 in 1986 study) randomly assigned to either conjoint family or one-person structured family therapy (BSFT™). Study population: ■ 100% Hispanic	Treatments equally effective in: ■ Reducing substance use ■ Reducing behavior problems ■ Improving family functioning
Szapocznik et. al., (1988)	Examined the effectiveness of an enhanced engagement for hard to reach cases. Hispanic families (n = 108) in which adolescents (males and females) were observed with, or suspected of drug use, were randomly assigned to either the enhanced-engagement BSFT™ group or the control group (BFST™ engagement as usual condition). Study population: ■ 100% Hispanic	Increased engagement in therapy in the treatment group: ■ 93% of families in the treatment group engaged in therapy vs. 42% of families in the control group. ■ 77% of families in the treatment group completed treatment vs. 25% of the control group families.
Szapocznik, et al., (1989	Hispanic male children (n = 69, ages 6 12) with moderate behavioral and emotional problems were randomly assigned to either the structured family therapy (BSFT™), psychodynamic therapy, or a recreational group. Study population: ■ 100% Male ■ 100% Hispanic	Reduction of problem behaviors in both treatment groups. For BSFT™ improved family functioning at 1-year followup.
Santisteban et al., (1997)	A basic one-group pretest/posttest/followup design with Hispanic and African American children (n = 122, ages 12–14) exhibiting problem behaviors assigned to BSFT intervention. Study population: ■ 66% Male ■ 34% Female ■ 84% Hispanic ■ 16% African American	Intervention effective in reducing behavior problems and improving family functioning.
Santisteban et al., (2000) (In Szapocznik & Williams, 2000)	Hispanic boys and girls (N = 79) randomly assigned to either BSFT™ treatment group or group counseling control group. Study population: ■ 100% Hispanic	Participants in BSFT™ treatment group demonstrated reduction of problem behaviors, reduction in socialized aggression and conduct disorder more than group counseling.
Santisteban et al., (2003)	Hispanic adolescents (males and females) displaying behavioral and drug problems (n = 126, ages 12–18) were randomly assigned to BSFT™ or group counseling. Study population: ■ 75% Male ■ 25% Female ■ 100% Hispanic	BFST™ more effective in reducing marijuana use than control group. BFST™ treatment group demonstrated improved family functioning.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

- The BSFT™ Team has several teleconferences, followed by an onsite visit to agencies to assess their funding options, sustainability plan, and ability to deliver family services successfully.

Possible barriers:

- The culture of the agency can affect the successful implementation of the practice of BFST™. Specifically, some agencies put more emphasis on seeing as many clients as possible. On the other hand, some agencies are more actively engaged in retaining and keeping their clients in treatment, which would be a good fit for the BFST™ model (J. Szapocznik, personal communication, Sepstember 11, 2006).

Training/coaching and materials

- Training infrastructure for the BSFT™ intervention can be tailored to meet the individual needs of the agency. BSFT™ training requires acquiring basic clinical skills in family systems therapy.
- BSFT™ involves four 3-day workshops followed by weekly supervision. Training methods involve didactic teaching, role playing, and videotape reviews. These workshops are conducted at the agency site. The first workshop introduces the basic concepts of BSFT™ using the training manual as guidance. The second workshop uses videotapes to teach how to diagnose family processes and to set up in-session family interactions. After the second workshop, therapists initiate treatment with new families, tape their sessions, and then send the tapes to be reviewed by BSFT™ trainers. The last two workshops are devoted to rehearsing very specific BSFT™ strategies for orchestrating change within the family system.
- After approximately 8 months of supervision, BSFT™ trainees are certified in the practice of BSFT™. This certification is renewable every 2 years. Recertification would involve additional costs to the agency.
- All requests for training are made through the University of Miami's Center for Family Studies, BSFT™ Training Institute.
- Information about training and materials can be obtained at: **http://www.bsft.org/**

Cost of training/consulting

The cost for training workshops and supervision in BSFT™ is $60,000 per agency. This figure includes supervision for up to 8 months and all the materials, workshops, and phone consultations. Costs of BSFT trainer travel and per diem would be separately reimbursed. Contact:

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Developer involvement

José Szapocznik, Ph.D., and colleagues of the University of Miami's Center for Family Studies are involved in actively implementing and refining BSFT™.

Monitoring fidelity and outcomes

- Fidelity measures are collected weekly during the 8 months of supervision. After the 8 months of supervision, BSFT™ trainers collect fidelity measures at certification and re-certification.
- Outcome measures are not reported by the sites. However, BSFT™ trainers will work with the sites interested in research to help them collect and analyze data.

Financing the intervention

BSFT's startup costs and training have been funded using various grants. The BSFT™ Training Institute will assist agencies with securing funding through grant support. Many of the agencies fund ongoing BSFT™ services through their regular state funding.

Some of the funding also comes from Medicaid (J. Szapocznik, personal communication, September 11, 2006). In addition, third-party insurance payers can also fund the program through billing family therapy codes, or even case management.

Resources/Links

Office of Juvenile and Justice Prevention Program:

http://www.ojjdp.gov/MPG

http://www.bsft.org/

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Problem-Solving Skills Training

Intervention Description

Background

Problem-Solving Skills Training (PSST) is a cognitive behavioral approach for treating children ages 6 to 14 years with conduct and delinquency-related problems. This intervention was developed by Alan Kazdin, Ph.D., and his colleagues out of the earlier work of Myrna Shure, Ph.D., and George Spivak, Ph.D., on problem-solving techniques for children.

Characteristics of the intervention

PSST emphasizes teaching skills related to the later stages of information processing (McMahon, Wells, & Kotler, 2005). The goal of this intervention is to improve a child's interpersonal and cognitive problem-solving skills. This intervention is used with another intervention, Parent Management Training (McMahon, Wells, & Kotler, 2005).

The Parent Management Training portion of the intervention is administered to parents or caregivers for approximately 15 sessions, lasting approximately 1.5 to 2 hours each.

The therapist works with the parents or caregivers as the agents of change to help identify and address the child's maladaptive thinking and behaviors (McMahon, Wells, & Kotler, 2005).

Figure 13

Problem-Solving Skills Training	
Type of EBP	■ Intervention
Setting	■ Clinic ■ Home
Age	■ 6–14
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Improvement in behavior as rated by teachers and parents. ■ Family life functioning improvements.

PSST is administered in 20 therapeutic sessions that last approximately 45 to 50 minutes each, and is delivered in either a clinic or a home setting by a master's level therapist.

PSST does not work with the children in groups, only individually with the child and parent. The therapist works with the child to review his or her process for addressing interpersonal situations and encourages the child to use a step-by-step approach with self-talk to achieve effective solutions (Fonagy & Kurtz, 2002).

Modeling and direct reinforcement are techniques the therapist uses. Components of PSST will include practice, feedback, homework assignments, role-playing, and reinforcement schedules (Fonagy & Kurtz, 2002).

Additionally, the children receive in vivo practice to apply the skills in a variety of settings. In vivo practices involve structured assignments to help children apply problem-solving skills in everyday situations.

Research Base and Outcomes

PSST is an evidence-based intervention that has been extensively researched in randomized control designs for the past 30 years, with Kazdin and colleagues' formative research beginning in the late 1980s. Research studies have included samples of youth from both inpatient and outpatient settings, and both White and African American populations.

Research has continued to demonstrate that the PSST intervention significantly decreases aggression at home and in school, decreases deviant behaviors and increases prosocial behaviors. Additionally, research has demonstrated greater impact on outcomes when PSST is combined with Parent Management Training and Parent Problem-Solving Intervention. See Table 13.

Table 13: Problem-Solving Skills Training: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Kazdin, Esveldt-Dawson, French, & Unis (1987)	Psychiatric hospitalized children (n = 56, ages 7–13) randomly assigned to PSST intervention group, relationship-based therapy, or control group. Behavioral ratings were obtained from parents and teachers pre- and post-treatment (after 1 year) to determine improvements. Study population: ■ 80% Male ■ 20% Female ■ 77% White ■ 23% African American	PSST group had significantly greater decreases in externalizing, aggressive behaviors, behavioral problems at home/school, and increases in prosocial behavior and adjustment.
Kazdin, Esveldt-Dawson, French, & Unis (1987) In Fonagy & Kurtz (2005)	Psychiatrically hospitalized children (n = 40, ages 7–12) were randomly assigned to either a combined PSST and PMT intervention group or a minimal intervention control group.	PSST/PMT group showed a reduction in aggression at home and at school, as well as increases in prosocial behavior.
Kazdin, Bass, Siegal, & Thomas (1989)	Random-assignment of mixed sample inpatient/outpatient children (n = 112, ages 7–13) to a PSST group, a PSST group plus in vivo practice outside the treatment setting, or relationship therapy (control group).	Both PSST groups showed significant reductions in deviant behaviors at 1-year followup: children in control group did not improve.
Kazdin, Siegel, & Bass (1992)	Children referred for severe antisocial behavior (n = 97, ages 7–13) and their families randomly assigned to a PSST only group, a PMT only group, or a combined PSST /PMT group. Study population: ■ 78% Male ■ 22% Female ■ 69% White ■ 31% African American	All three groups were associated with significant improvements at home, in school and in the community. Improvement was demonstrated in overall child dysfunction, prosocial confidence, and aggressive/antisocial and delinquent behavior. There was a greater impact demonstrated in the combined PSST/PMT group on measures of aggression, antisocial behavior, delinquency, parental stress, and depression.
Kazdin & Whitley (2003)	Children (n = 127, ages 6–14) and their families randomly assigned to a PSST and PMT group or a PSST, PMT and Parent Problem-Solving Intervention (PPS) group. Study population: ■ 79% Male ■ 21% Female ■ 69% White ■ 21% African American ■ 5% Hispanic ■ 2% Asian American ■ 3% Multiethnic	Children's disruptive behavior improved whether or not the PPS intervention was introduced; the PPS families experienced greater therapeutic change and reduced barriers to treatment participation.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Training/coaching and Materials

Typically, a therapist would need a 6-month training period to learn how to deliver PSST. Therapists are usually trained through academic research programs. A formalized intensive training for therapists is available for Parent Management training and soon will be available for PSST.

For information about training and materials, contact: **http://www.yale.edu/childconductclinic/**.

Cost of training/consulting

Not applicable because training is not currently available outside of clinical academic research programs.

Developer involvement

The developer, Alan Kazdin, is not actively involved in disseminating or implementing PSST. However, workshops may be available for those interested in training. A formalized intensive training program is available for Parent Management Training at: **http://www.yale.edu/childconductclinic/**.

Monitoring fidelity and outcomes

Fidelity measures are in place. In addition, therapists are observed in a live session delivering PSST.

Financing the Intervention

PSST is typically covered by Medicaid, as it is clinic-based.

Resources/Links

http://www.yale.edu/childconductclinic/

References

Fonagy, P. & Kurtz, A. (2002). Disturbance of conduct. In P. Fonagy, M. Target, D. Cottrell, J. Phillips, & Z. Kurtz (Eds.). *What works for whom: A critical review of treatments for children and adolescents*, (pp.106–192). New York: Guilford Press.

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Coping Power

Intervention Description

Background

The Coping Power program is an empirically supported program that was derived from the original Anger Coping Program. In the original Anger Coping Program, only a child component existed. In the Coping Power program, there is a child and a parent component.

The program was developed by John Lochman, Ph.D., of the University of Alabama and Karen Wells, Ph.D., of Duke University School of Medicine. Coping Power has been disseminated and implemented in rural and urban settings in North Carolina; three counties in Alabama; a residential school for deaf children; international locations such as the Netherlands, Puerto Rico, and Spain; a university–public school system collaborative project; a medical school–community center and a graduate training center in Oregon.

Characteristics of the intervention

The program is intended for boys and girls, approximately 9 to 11 years of age (4th to 6th grade), who have been screened for disruptive and aggressive behavior. It has also been adapted for younger and older children.

It is considered a prevention and intervention program, based on social-cognitive principles, that is most often implemented in a school environment. The social-cognitive model focuses on the contextual parenting processes and on children's sequential cognitive processing (Lochman & Wells, 2004). Children with disruptive and aggressive behaviors cognitively distort incoming social cues and situations and inaccurately interpret events. Additionally, these children have an inability to effectively problem solve.

Parents of aggressive children also affect the way in which a child handles a situation, and a negative pattern can be created between parent and child. Therefore, Coping Power focuses on addressing these cognitive distortions with the children and assisting parents with modifying their reactions to their children's behavior.

Figure 14

Coping Power	
Type of EBP	■ Intervention
Setting	■ School
Age	■ 9–11
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Decrease in substance abuse. ■ Improvement in social skills. ■ Less aggressive belief system.

Coping Power has two components that work with one another. The entire Coping Power program can be delivered in 15 to 18 months in a school.

- The **child component** consists of 33 group sessions, which include eight sessions in the first intervention session (first academic year) and 25 in the second intervention year (second academic year). The group sessions last about 40 to 60 minutes with approximately four to six children in each group led by a master's level clinician.

During the child component sessions, the therapists emphasize behavioral and personal goal setting, awareness of feelings, use of coping self-statements, distraction techniques, relaxation methods, organizational and study skills, perspective taking, and social skills building.

- The **parent component** consists of 16 group sessions over the same 15- to 18-month period. Group sessions usually last 90 minutes and occur at the school. Sessions include groups of four to six single parents or couples led by master's level clinicians.

Parents acquire skills through training in identification of prosocial and disruptive behaviors, rewarding appropriate child behaviors, giving effective instructions, establishing age appropriate rules and expectations, developing effective consequences, and creating open communication.

Research Base and Outcomes

The Coping Power intervention, and its formative intervention, Anger Coping, has been extensively researched for over 20 years, with more than 48 controlled studies in a variety of settings (Fonagy & Kurtz, 2002). The first randomized control study was in 1984 (Lochman, Burch, Curry, & Lampron).

Research has demonstrated associations between the Coping Power intervention and improvements in children's social skills, as rated by teachers, and less aggressive beliefs and anger in social situations. Studies have included both Caucasian and African American youth and families.

Currently, the program is being evaluated in four grant-funded intervention research studies and has been translated and disseminated in clinical trials in the Netherlands (retrieved 11/3/2006, **http://www.bama.ua.edu/~lochman/program_background.htm**). The Coping Power program has also been disseminated to aggressive deaf children in a residential setting (Lochman et al., 2001). See Table 14.

Table 14: Coping Power: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Lochman, Burch, Curry, & Lampron (1984); Lochman & Lampron (1988). In Fonagy et al., (2005)	First controlled evaluation with aggressive boys (n = 76, ages 9–12 years), teacher-identified sample, assigned to one of four groups: anger coping, goal setting, anger coping plus goal setting, or no treatment. Subsample followup of the 1984 study, examined 7-month outcomes. Study population: ■ 100% Male ■ 53% African American ■ 47% White	At 1-month followup, study found that anger coping groups were more effective in reducing aggressive and disruptive off-task behaviors as an intervention than either a behavioral program with goal setting or a control group. High levels of on-task behavior maintained; disruptive behavior reductions not maintained.
Lochman, Lampron, Gemmer, & Harris (1989). In Fonagy et al, (2005); Lochman (1992). In Fonagy et al., (2005)	Randomized control trial with youth (n = 32, ages 9–13) assigned to one of three groups: coping power intervention with teacher consultation, coping power intervention, regular, or control group.	Both treatment groups superior to control group; however, there was no significant difference between treatment groups. 3-year followup study demonstrated a reduction in substance abuse use and alcohol use compared to untreated boys. As well, booster sessions significantly contributed to maintenances of reduced off-task behavior.

Table 14: Coping Power: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Lochman & Wells (2002b; 2003)	Randomized control trial examining the post-intervention and 1-year followup effects of Coping Power. Aggressive children (n = 245, grades 5th and 6th) were randomly assigned to Coping Power, Coping Power plus a universal intervention (Coping with the Middle School Transitions), the universal intervention alone, or a control group. Study population: ■ 66% Male ■ 34% Female ■ 78% African American ■ 21% White ■ Less than1% Hispanic	Coping Power intervention demonstrated significant preventive effects in children's substance use, reductions in proactive aggression, improved social competence, and greater teacher-rated behavioral improvement at intervention's end in comparison to control group. (Lochman & Wells, 2002b). The 1-year followup effects were replicated in a second sample, as Coping Power produced reductions in delinquency, substance use, and aggressive behavior relative to two comparison conditions (Lochman & Wells, 2003).
van de Weil, Matthys, Cohen-Kettenis, & van Engeland, (2003); van de Weil, Matthys, Cohen-Kettenis, Maassen, Lochman, & van Engeland (In press); Zonnevylle-Bender, Matthys, van de Wiel, & Lochman (2007).	Randomized control trial of children (n = 77, ages 8–13 years) with ODD or CD in outpatient treatment, randomly assigned to either Dutch adaptation of Coping Power (UCPP: Utrecht Coping Power Program) or to care as usual. Study population: ■ 88% Male ■ 12% Female ■ 100% Dutch	The Dutch adaptation of Coping Power (Utrecht Coping Power Program) has produced cost-effective postintervention effects on children's aggressive behaviors, and has produced significant reductions in substance use at a 4-year followup, in comparison to care-as-usual.
Lochman & Wells (2004)	Experimental design to test the effectiveness of Coping Power and its sustained effects after 1 year. 4th and 5th grade boys (n = 183) screened for aggression who met criteria randomly assigned to the child-intervention only group, child plus parent intervention group, or the control group. Study population: ■ 100% Male ■ 61% African American ■ 38% White ■ 1% Other	At 1-year followup, study indicated that boys in child intervention plus parent group had lower rates of self-reported covert delinquent behavior. Boys who received coping power intervention demonstrated increased behavioral improvements during the academic year following treatment, as indicated by teacher reports. Coping Power demonstrated clearer effects on Caucasian boy's parent-rated substance abuse use and school behavior functioning than seen for minority children parent ratings; most minority children were African American. However, covert delinquency outcomes produced equivalent effects for minority and Caucasian children.
Lochman, Boxmeyer, Powell, Roth, & Windle (2006)	Randomized control trial evaluating an abbreviated version of Coping Power (24 child sessions; 10 parent sessions) with aggressive boys and girls (n = 240) assigned to Coping Power intervention group or to the control condition. Study population: ■ 64% Male ■ 36% Female ■ 69% African American ■ 30% White ■ 1% Other race or ethnicity	The abbreviated version of Coping Power produced significant postintervention effects on children's externalizing behavior problems.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

- There is no formalized process for assessing a site's readiness to implement the program. The developers conduct telephone screens to assess a site's willingness and ability to implement, but use no instrument.
- According to Dr. Lochman, a key issue in deciding to work with a site is its willingness to do some type of evaluation after staff have received the training.
- There is no readiness assistance to those sites that may not have the full capacity to implement their program.

Training/coaching and materials

- Usually, Dr. Lochman and a doctoral-level researcher travel to sites to conduct a 3-day workshop.
- The 3-day workshop covers the background and development of the program and reviews the empirical findings of Coping Power.
- Monthly consultations are included in the costs. These are conference calls that usually last 60 to 90 minutes and may occur more frequently than once a month depending on the agreement with the site.
- Training materials have been translated in Dutch and Spanish.

Information on training and materials can be obtained at:
http://www.bama.ua.edu/~lochman/index2.htm

Cost of training/consulting

The cost for training is approximately $5,000 plus travel expenses and material costs.

Developer involvement

The developers are currently involved in the program. Currently an informal group offers the training and consultation services. Those wishing to learn more about training services should contact Dr. Nicole Powell or Dr. Lochman directly through email or phone.

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Monitoring fidelity and outcomes

- Developers ask that sites use an objectives checklist to ensure implementation of Coping Power as designed. Measures are self-reported by the staff.
- The Coping Power program does not require collection of outcome data from the sites, but encourages evaluation of outcomes.

Financing the intervention

- Some sites use the Safe and Drug Free Schools funding to help finance the intervention.
- Other sites use local community funding and grant funding to help pay for the Coping Power program.

Resources/Links

The Coping Power Web site:
http://www.bama.ua.edu/~lochman/index2.htm

Office and Juvenile Justice and Delinquency Prevention Model Programs:
http://www.dsgonline.com/mpg

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Mentoring

Intervention Description

Background

Mentoring programs are the formal mechanisms for developing positive, supported, professional relationships between at-risk youth and caring adults. The process of mentoring holds the belief that when youth have the presence of a caring, available adult in youth's lives, they are more likely to become successful adults themselves. (Jekielek, Moore, Hair, & Scarupa, 2002).

While mentoring programs vary in structure and emphasis, overall, mentoring is an effective tool for positively effecting the development of youth (Jekielek et al., 2002). Two key organizations in the mentoring field are:

- **MENTOR/The National Mentoring Partnership:** An organization started in 1990 to support and encourage the efforts of new and existing mentoring programs by providing research, policy recommendations, and practical tools to help connect youth with mentors; it is the "mentor's mentor" (**http://www.mentoring.org**).
- **Big Brothers Big Sisters of America (BBBSA):** The largest organized mentoring affiliation in the U.S. The Big Brother and Big Sister programs started in 1902 and became a united organization in 1977. Today, more than 500 agencies work as partners of BBBSA under the shared mission statement that youth can become "confident, competent and caring individuals by providing committed volunteers, national leadership, and standards of excellence" (McGill, 1998, p. 13).

Figure 15

Mentoring	
Type of EBP	■ Intervention
Setting	■ Home
Age	■ 6–18
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Increased confidence in school performance. ■ Improved family relationships. ■ Increased prosocial behaviors.

Characteristics of the intervention

Mentoring organizations are located in a number of settings: schools, communities, faith-based organizations, agencies, juvenile corrections, and on the Internet through e-mentoring. The characteristics of mentoring vary and include traditional one-on-one mentoring, group mentoring, team mentoring, peer mentoring, and e-mentoring (**http://www.mentoring.org/start_a_program/planning_and_design/**).

BBBSA is an example of a traditional one-on-one mentoring program with a strict, standard process that is clearly specified. Services start with a case manager, who often has a B.A. or M.A. in social work, and has the responsibility of following the life of the mentor-youth relationship. Services can be conceptualized in seven stages (McGill, 1998):

- **Inquiry:** An initial referral made to the agency on behalf of the youth or an initial contact from potential mentors.
- **Orientation:** Face-to-face contact between volunteers and program staff to determine if BBBSA fits a volunteer's needs.

- **Volunteer screening:** A written application, background check, written references, a psychosocial interview, and a home assessment, which may or may not include a home visit.
- **Youth assessment:** A written application, an interview with parent and child, and a home assessment to establish the goals for the mentor relationship. The case manager places information into a formal individualized case plan that is updated over time.
- **Matching:** Made based on needs of the youth, volunteers' abilities, and considerations of program staff.
- **Match supervision:** Encouragement and support provided to aid in the effectiveness of the match. Contact consists of an initial conversation within the first 2 weeks of the match with the youth, the parent or guardian, and the mentor; monthly contact with all parties are held for the first year; and a written evaluation is prepared at the end of the first year.
- **Closure:** It is the responsibility of the case manager to officially close the relationship if either the youth or mentor decides they can no longer fully participate, or if the youth reaches the age of 18 years.

Mentors commit to at least 1 year of volunteer service, with an average contact of 4 hours per mentor-youth meeting, three times a month. While the actual activities are not structured by BBBS, the mentor and youth participate in developmentally appropriate activities: taking a walk, playing catch, watching television, watching a sporting event, going to the library, or just hanging out (McGill, 1988).

Research Base and Outcomes

Even though mentoring programs have existed for more than 100 years, research that evaluates the benefits of these programs has appeared in the literature only for roughly the past 20 years (DuBois et al., 2002). A meta-analysis, conducted by DuBois et al., (2002), reviewed 55 evaluations of mentoring programs.

Favorable effects were found across age, gender, race, ethnicity, and family structure. The largest effect sizes were observed with youth at risk due to environmental conditions or disadvantage; no overall favorable effect was found, however, for youth at risk due to individual-level characteristics (that is, youth with significant personal problems).

Research also supports the finding that the effects of a mentoring program are enhanced significantly by adherence to theory and empirically based "best practices." (DuBois et al., 2002). Table 15, *Mentoring: Research Base and Outcomes*, highlights outcomes from a longitudinal BBBSA study.

Table 15: Mentoring: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Tierney, Grossman, & Resch (1995); Grossman & Rhodes (2002)	18-month study of adolescents (n = 959, 10–16 years) from eight BBBSA agencies, randomly assigned to a mentor or a waitlist. Study with the same sample above examined the effects and predictors of youth mentor relationships. Study population: ■ 62% Male ■ 38% Female ■ 71% African American ■ 18% Hispanic ■ 11% Other	Compared to waitlist control group, mentored youth were: ■ 46% less likely to initiate drug use. ■ 27% less likely to initiate alcohol use. ■ Almost one-third less likely to hit someone. ■ Skipped half as many school days. ■ Felt more competent at schoolwork and showed improvement in grade point average. ■ Displayed better relationships with their parents and peers at the end of the 18-month study period. Adolescents in relationships that lasted 1 year or longer reported the largest number of improvements, with progressively fewer effects emerging among youth who were in relationships that terminated earlier. Adolescents in relationships that terminated in less than 6 months reported decrements in several indicators of functioning. Older adolescents, as well as those referred for services, or those who had sustained emotional, sexual, or physical abuse were most likely to be in early terminating relationships.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

Factors to consider during the planning process include the following (DuBois et al., 2002):

- Recruitment of prospective mentors;
- Screening process of mentors to include background checks;
- Levels of training and supervision provided to mentors;
- Characteristics of the youth participants;
- Qualities of the mentor-youth relationships that are formed; and
- Assessment of the intervention.

Recommended implementation practices:

Recommended implementation practices include the following:

- The use of mentors with backgrounds in the helping professions (Dubois et al., 2002).
- Ongoing training for mentors beyond initial training (Dubois et al.).
- Structured activities for mentors and youth (Dubois et al.).
- Appropriate framing of the mentor-youth relationship; time is needed for the relationship to form (Pryce, Kelly, & Keller, 2007); realistic expectations but frequent, regular contact between the mentor and youth is needed (Dubois et al, 2002).
- Encouragement of parents to know the mentors and to be involved in supporting the relationship (Dubois et al.).
- Communication and collaboration among parent, mentors, and the agency (Pryce, Kelly, & Keller).
- Monitoring program implementation and adjusting the program accordingly (Dubois et al.).

Components:

- Resources needed for implementing a mentor program include office space with privacy, a place for mentor training and for locked files, volunteer recruitment materials, liability insurance, and staffing.
- The National Mentoring Institute provides a *Checklist for Program Progress: Program Design and Planning in Section IV of How to Build a Successful Mentoring Program Using the Elements of Effective Practice*, available online (**http://www.mentoring.org**). This document outlines the process from pre-implementation to program evaluation.

Startup:

According to the BBBSA model, creating a new program takes roughly 1 year and includes the following (McGill, 1998):

- An advisory board should be created with members of other local organizations who may be interested in BBBSA program in the community.
- A needs-assessment should be conducted, including a plan and timetable for implementation, to be drafted by the advisory board.
- The needs assessment is reviewed by the national staff.
- If a program is accepted, permission is granted to use BBBSA's name for fundraising, startup costs; the site becomes an "Agency-in-formation."
- When a site graduates to a "Provisional Member," services are allowed to begin, following guidelines and standards.
- For the creation of a BBBSA mentoring program as a satellite office for an existing program, the local or national program should be contacted, and an advisory board would be formed (McGill, 1998).

- Effective programs incorporate standard, recommended procedures in their operations (Pryce, Kelly, & Keller, 2007); program effectiveness increases in direct proportion to the number of specific program practices that are employed (DuBois et al., 2002).

Possible barriers:

- A limited number of adults to serve as mentors (Grossman & Garry, 1997).
- A scarcity of organizational resources necessary to carry out a successful program (Grossman & Garry, 1997).

Training/coaching and materials

- Twenty-seven State Mentoring Partnerships offer training (**http://www.mentoring.org/find_resources/state_partnerships/**).
- The National Mentoring Institute offers information on training opportunities (**http://www.mentoring.org/events/**) as well as online training for face-to-face mentoring (**http://apps.mentoring.org/training/TMT/index.adp**) or e-mentoring (**http://www.Mentoring.org/emc**). Extensive literature on program design and planning tools is also provided, including the downloadable document, *How to Build a Successful Mentoring Program Using the Elements of Effective Practice*. The document may be downloaded from this Web site in Spanish. (**http://www.mentoring.org/downloads/mentoring_418.pdf**),
- BBBSA has developed a number of 2- and 5-day *Educational Institutes* for training executive directors, middle managers, and case managers. A "train-the-trainer" program is offered by BBBSA for mentor training for local program staff. It consists of 10 2-hour modules on the topics of relationship-building, communication skills, and child development (McGill, 1998). Contact the national organization (**http://www.bbbsa.org**).

Cost of training/consulting

- Training and consultation costs vary depending on the program. Some state programs are free. Other national conferences have a registration fee along with travel expenses.
- Extensive program design and planning tools are available for free on the National Mentor Institute's Web site (**http://www.mentoring.org**).

Specifically for BBBSA:

- Cost of the Educational Institutes is shared by the local organization and the national office; the local organization pays for travel expenses (McGill, 1998).
- Startup budget needed for an independent agency is $30,000 to $50,000; startup budget needed for a satellite program is $20,000 to $40,000.
- An initial fee is paid to BBBSA for consultation and materials during the needs assessment process. An additional $3,000 fee is charged if the program becomes a Provisional Member.

Developer involvement

Contact the National Mentoring Partnership at:

MENTOR/National Mentoring Partnership
1600 Duke Street, Suite 300
Alexandria, VA 22314
Phone: (703) 224-2200
http://www.mentoring.org

Contact the Big Brothers Big Sisters of America's National Office at:

Big Brothers Big Sisters of America National Office
230 North 13th Street
Philadelphia, PA 19107
Phone: (215) 567-7000
Email: national@bbbsa.org

Monitoring fidelity and outcomes

- The National Mentoring Institute supports monitoring outcomes. Section IV of *How to Build a Successful Mentoring Program Using the Elements of Effective Practice* provides information on program evaluation. (**http://www.mentoring.org/downloads/mentoring_418.pdf**).
- The BBBSA program outlines fidelity standards in *Standards and Required Procedures for One-to-One Service*. Standards are reinforced through training and conferences on the national and regional levels and agency evaluations. Adherence to the national standards is required for member affiliation (McGill, 1998).

Financing the intervention

- The National Mentoring Institute provides information about how to develop a financial plan for diversified funding in Section V of the downloadable document How to Build a Successful Mentoring Program Using the Elements of Effective Practice (**http://www.mentoring.org/downloads/mentoring_418.pdf**).
- The U.S. Department of Education had a competition for funding under its Mentoring Programs grants through FY 2009 when $50 million was available for funding. This program provided competitive grants to support school-based mentoring programs for children in need of assistance. The National Mentoring Institute will work to restore funding.

Resources/links

For more information on MENTORING/ The National Mentoring Partnership, see **http://www.mentoring.org**.

For more on Big Brothers Big Sisters of America, see **http://www.bbbsa.org**.

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Multisystemic Therapy

Intervention Description

Background

Multisystemic Therapy (MST) is an intensive family and community-based treatment for youth with serious conduct-related problems and substance abuse issues. It was developed in the late 1980s and early 1990s, and limited training in the model was provided by the Family Services Research Center (FSRC) of the Medical University of South Carolina, Department of Psychiatry and Behavioral Sciences.

Since 1996, MST Services has been the university-licensed organization responsible for transporting and implementing MST to community sites. More than 350 MST teams are implementing the program throughout the United States and in nine other countries.

A significant amount of the growth in MST programs has come through the 20+ MST "training organizations" known as MST Network Partners; see below under *Training/coaching and Materials* for more information about Network Partner organizations.

MST Network Partners directly support transporting and implementing more than 250 of the existing 350 teams. Teams are comprised of three to four therapists each carrying a caseload of four to six families and a clinical supervisor.

Figure 16

Multisystemic Therapy	
Type of EBP	■ Intervention
Setting	■ Home ■ School
Age	■ 12–18
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Decreased arrests and re-arrests. ■ Increased school attendance. ■ Decreased behavior problems. ■ Decreased substance use.

Characteristics of the intervention

MST treatment is a multi-faceted family and community-based treatment for youth who are at imminent risk of out-of-home placement due to serious antisocial behavior and substance abuse problems. Intervention strategies integrate techniques from empirically supported treatments including the following:

- Structural and strategic family therapies;
- Parent management training;
- Marital therapies;
- Behavioral therapy; and
- Cognitive–behavioral therapy.

Treatment sessions involve identifying strengths in the everyday contexts of the youth and family (for example, youth, family, peers, school, neighborhood, community) that can be used as levers for change to address the combination of known risk factors in those contexts that contribute to the youth's referral problems.

MST is delivered by trained master's level or highly experienced bachelor's level therapists. Therapist implementation of MST is supported by model-specific training, onsite clinical supervision, and expert consultation from doctoral- or master's-level people trained in MST. All therapists have a small caseload and are available to the family on a 24-hour basis.

The course of treatment ranges from 3 to 5 months. Treatment occurs in the family's home and other locations (for example, school, neighborhood, mall, etc.) in which the youth's problems occur and must be addressed. Therapists and families together develop and continuously revise interventions on the basis of observations of intervention success and failure, and plan how to address problem areas and goals for treatment. To measure and determine progress, the therapist and family set and review goals weekly.

The main focus of MST is to cultivate among the youth's caregivers the skills and naturally occurring resources to effectively address the challenges presented by the youth's behavior problems. In school settings, the therapists work to facilitate a collaborative relationship between the school and parents needed to conjointly design strategies to improve identified performance and behavior problems at school.

With respect to peers, therapists work with the youth's caregivers and the caregivers of the youth's peers to decrease association with delinquent and drug-involved friends and increase association with positive peers.

The treatment of MST is guided by the nine MST principles (retrieved from **http://www.mstservices.com/text/treatment.html#nine**):

- Comprehensive assessment to understand the child and family problems and functioning in relation to their broader systemic context.
- Therapeutic contacts emphasize the positive and use systemic strengths as levers for positive change.
- Interventions are designed to promote responsible behavior and decrease irresponsible behavior among family members.
- Interventions are present-focused and action-oriented, emphasizing specific and well-defined problems.
- Interventions focus on sequences of behavior within and between multiple systems that maintain the identified problems.
- Interventions are developmentally appropriate and fit the developmental needs of the youth.
- Interventions are designed to require daily or weekly effort by family members in trying out new behaviors and ways of relating.
- Intervention effectiveness is evaluated continuously from multiple perspectives, with MST team members assuming accountability for overcoming barriers to successful outcomes.
- Interventions are designed to promote treatment generalization and long-term maintenance of therapeutic change.

Research Base and Outcomes

Fifteen published studies on the effectiveness of the MST program were conducted between 1986 and 2005. Of these 15 studies, 14 randomized control trials and one quasi-experimental design have demonstrated positive effects.

Table 16 summarizes studies of MST that involved substance abusing and delinquent youths, and youth experiencing serious emotional disturbance (**http://www.mstservices.com/text/research.html, retrieved 05/03/07**).

Table 16: Multisystemic Therapy: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Henggeler, Rodick, Borduin, Hanson, Watson, & Urey (1986)	Quasi-experimental design study with delinquents (n = 57) MST comparison to diversion services. Study population: ■ 84% Male ■ 16% Female ■ 65% African American ■ 35% White	At posttreatment, MST group improved family relations, decreased behavior problems, and decreased association with deviant peers.
Henggeler, Borduin, Melton, Mann, Smith, Hall, Cone, & Fucci (1991)	Randomized control trial with adolescent (n = 200) who were serious juvenile offenders. MST compared to individual counseling and usual community services. Study population: ■ 67% Male ■ 33% Female ■ 70% White ■ 30% African American	At 3 years, MST group demonstrated reduced alcohol and marijuana use and decreased drug-related arrests.
Henggeler, Melton, & Smith (1992); Henggeler, Melton, Smith, Schoenwald, & Hanley (1993)	Randomized control trial with violent and chronic juvenile offenders (n = 84). MST compared to usual community services. Studies population: ■ 77% Male ■ 26% Female ■ 56% African American ■ 42% White ■ 2% Hispanic	■ At 59 weeks, MST group improved family relations, improved peer relations, decreased recidivism (43%), decreased out-of-home placement (64%). ■ At 2.4 years, MST group decreased recidivism (doubled survival rate).
Borduin, Mann, Cone, Henggeler, Fucci, Blaske, & Williams (1995); Schaeffer & Borduin (2005)	Violent and chronic juvenile offenders (n = 176). MST compared to individual counseling. Studies population: ■ 68% Male ■ 32% Female ■ 70% White ■ 30% African American	■ At 4 years, MST group improved family relations, decreased psychiatric symptomatology, decreased recidivism (69%), decreased rearrests (54%). ■ At 13.7 years MST group decreased days incarcerated (57%).

Table 16: Multisystemic Therapy: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Henggeler, Melton, Brondino, Scherer, & Hanley (1997)	Randomized control trial with violent and chronic juvenile offenders (n = 155). MST compared to juvenile probation services – high rates of incarceration. Studies population: ■ 82% Male ■ 18% Female ■ 81% African American ■ 19% White	At 1.7 years, MST group decreased psychiatric symptomatology, decreased days in out-of-home placement (50%), decreased recidivism (26% not significant), treatment adherence linked with long-term outcomes.
Henggeler, Rowland, Randall, Ward, Pickrel, Cunningham, Miller, Edwards, Zealberg, Hand, & Santos (1999); Schoenwald, Henggeler, Brondino, & Rowland (2000); Huey, Henggeler, Rowland, Halliday-Boykins, Cunningham, Pickrel, & Edwards (2004); Henggeler, Rowland, Halliday-Boykins, Sheidow, Ward, Randall, Pickrel, Cunningham, & Edwards (2003); Sheidow, Bradford, Henggeler, Rowland, Halliday-Boykins, Schoenwald, & Ward (2004)	Randomized control trial with youths (n = 116, final sample n = 156) presenting psychiatric emergencies. MST compared to Psychiatric hospitalization. Studies population: ■ 65% Male ■ 35% Female ■ 65% African American ■ 38% White ■ 1% Other	■ At 4 months postrecruitment: MST decreased externalizing problems (CBCL), improved family relations, increased school attendance, higher consumer satisfaction, 75% reduction in days hospitalized, 50% reduction in days in other out-of-home placement, decreased rates of attempted suicide. ■ Favorable 4-month outcomes noted above dissipated.
Henggeler, Pickrel, & Brondino (1999); Schoenwald, Ward, Henggeler, Pickrel, & Patel (1996); Brown, Henggeler, Schoenwald, Brondino, & Pickrel (1999); Henggeler, Clingempeel, Brondino, & Pickrel (2002)	Randomized control trial with substance abusing and dependent delinquents (n = 118). MST compared to Usual community services. Studies population: ■ 79% Male ■ 21% Female ■ 50% African American ■ 47% White ■ 1% Asian American ■ 1% American Indian ■ 1% Hispanic	■ At 1 year: Decreased drug use at posttreatment, decreased days in out-of-home placement (50%), decreased recidivism (26%, not significant), and treatment adherence linked with decreased drug use. ■ At 1 year: Incremental cost of MST nearly offset by between-groups, differences in out-of-home placement, increased attendance in regular school settings. ■ At 6 months: Decreased violent crime. ■ At 4 years: Increased marijuana abstinence.
Ogden & Halliday-Boykins (2004); Ogden & Hagen (in press)	Randomized control trial with Norwegian youths (n = 100) with serious antisocial behavior. MST compared to usual Child Welfare Services. Study population: ■ 63% Male ■ 37% Female ■ 100% Norwegian	■ At 6-month postrecruitment, decreased externalizing and internalizing symptoms, decreased out-of-home placements, increased social competence and, increased consumer satisfaction, ■ 18-month followup, decreased externalizing and internalizing symptoms; decreases in out-of-home placements.

Table 16: Multisystemic Therapy: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Rowland, Halliday-Boykins, Henggeler, Cunningham, Lee, Kruesi, & Shapiro (2005)	Randomized control trial with youths (n = 31) with serious emotional disturbance. MST compared to Hawaii's intensive Continuum of Care. Study population: ■ 58% Male ■ 42% Female ■ 83% Multiracial (White and Asian American) ■ 10% White ■ 7% Asian American	At 6 months postrecruitment, decreased symptoms, decreased minor crimes, decreased days in out-of-home placement (68%).
Timmons-Mitchell, Kishna, Bender, & Mitchell (2006)	Randomized control trial with juvenile offenders (felons, n = 93) at imminent risk of placement. MST compared to usual community services. Study population: ■ 78% Male ■ 22% Female ■ 77.5% White ■ 15.5% African American ■ 4.2% Hispanic ■ 2.8% Multiethnic	At 18-month followup improved youth functioning, decreased re-arrests (37%).
Henggeler, Halliday-Boykins, Cunningham, Randall, Shapiro, & Chapman (2006)	Randomized control trial with substance abusing and dependent juvenile offenders in drug court (n = 161). MST compared to four treatment conditions, including Family Court with usual services and Drug Court with usual services. Study population: ■ 83% Male ■ 17% Female ■ 67% African American ■ 31% White ■ 2% Multiethnic	At 12 months postrecruitment: MST enhanced substance use outcomes. Drug courts were more effective than Family Court at decreasing self-reported substance use and criminal activity.
Henggeler, Rodick, Borduin, Hanson, Watson, & Urey (1986)	Quasi-experimental design study with delinquents (n = 57). MST comparison to diversion services. Study population: ■ 84% Male ■ 16% Female ■ 65% African American ■ 35% White	At posttreatment, MST group improved family relations, decreased behavior problems, and decreased association with deviant peers.

Table adapted from http://www.mstservices.com/text/research.html, retrieved May 3, 2007.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

A site assessment process guides the exploration of interested service systems, provider organizations, and communities concerning the needs for which MST is perceived as a possible solution, the demonstrated capacity of MST to meet those needs, and the readiness of the partners in implementation (that is, referral agencies, payers, provider agencies, consumers, MST Services or one of its Network Partners) to launch an MST program.

Initial steps in the needs assessment process typically take place over the telephone and subsequent steps involve one or more site visits conducted by MST Services. The site visit is designed to include critical community stakeholders in the process of learning about the MST model, considering the extent to which identified service needs can be met by MST and determining the viability of implementing and sustaining MST services in the existing community practice context.

Staffing:

MST Services can provide selection criteria for staffing an MST program. In addition, MST Services offers protocols for supervisors and therapists that include sample job advertisements, initial screening criteria, and interview questions.

Training/coaching and materials

Training is available only to "licensed" MST programs. As a general rule, all trainings are held onsite except for orientation trainings for replacement staff, which are conducted in Charleston, South Carolina, as well as at designated Network Partner sites, such as those in Middletown, Connecticut; Denver, Colorado; and Latrobe, Pennsylvania.

Training is conducted on certain dates; schedules are available through **http://www.mstservices.com**.

The MST training curriculum consists of a 5-day orientation training, booster sessions every quarter, weekly onsite clinical supervision for treatment teams and supervisors, and weekly consultation from a doctoral- or master's-level MST expert. In addition to these trainings are supervisor trainings and "advanced" supervisor training.

Orientation training:

The initial orientation training is 5 days long, and all service provider agency staff with clinical treatment and clinical supervisory responsibility for the youth and families treated in the MST program must attend all 5 days of training.

Agencies collaborating in the development and support of the MST program are also invited and can also send key administrators or other stakeholders to learn about MST on the first day of the orientation training. The goal of the 5-day orientation training is for participants to become familiar with the strategies used in MST, to understand the causes of serious behavior problems in youth and how to treat those problems, and the theory and research behind the treatment.

The clinical interventions focused on the family, peer group, school, and identified youth are discussed, and participants practice assessing the nature of the problems and strategies to begin to address them. Participants practice assessing clinical problems and delivering MST interventions in group exercises and role-plays.

Quarterly booster sessions:

As therapists gain field experience with MST, quarterly booster sessions are conducted onsite by the MST Expert assigned to work with the team for ongoing training and quality assurance. The purpose of these 1.5-day boosters is to provide additional training in areas identified by therapists (for example, marital interventions, treatment of

parental depression in the context of MST) and to facilitate indepth examination, enactment, and problem-solving of particularly difficult cases.

Weekly calls:

Weekly phone consultation is provided for each treatment team (therapists and supervisor) by their assigned MST Expert. Consultation sessions focus on promoting adherence to MST treatment principles, developing solutions to difficult clinical problems, and designing plans to overcome any barriers to obtaining strong treatment adherence and favorable outcomes for youths and families.

As noted earlier, high treatment adherence is critical to obtaining favorable long-term outcomes for serious juvenile offenders, and, as such, the central goal of the training and consultation process is to maximize adherence to the MST principles.

Supervisor orientation training:

- Training is offered on select dates in Charleston, South Carolina.
- This training is offered for supervisors during the first 6 months of performing the job. Training is highly interactive and helps supervisors practice their skills. In addition, supervisors identify their strengths and weaknesses in areas of clinical development, community collaboration, group supervision, and hiring.

Advanced supervisor training:

This level of training is offered only once a year in Charleston, South Carolina. It is designed for those supervisors who have been in their position 6 months or more. Three different topical areas are addressed at least once a year:

- Group supervision;
- Clinician development; and
- Program continuous quality improvement management.

Network partners and the train-the-trainer approach:

MST has a train-the-trainer approach. When certain conditions allow (for example, scale of implementation, adherent implementation, etc.), an MST training organization can be developed with the support of MST Services. Such organizations are called MST Network Partners.

This network of organizations is committed to the transport of the MST model with full integrity and fidelity. It is a key to the transport strategy employed by MST Services.

MST Network Partner organizations employ staff fully trained in MST program development as well as clinical staff training and development and quality assurance monitoring. MST Services maintains an ongoing working relationship with each MST Network Partner organization, focused on staff development, quality improvement, and quality assurance activities.

Network Partners are able to offer training to new sites and communities. More than 20 network partner organizations directly support over two-thirds of the MST teams operating around the world. For a list of MST Network Partners, see the MST Services Web site: **http://www.mstservices.com/text/network%20partners.htm.**

Manualization:

Several manuals are available for implementing different aspects of MST.

Henggeler, S. W., & Schoenwald, S. K. (1998). *MST Supervisory Manual*. New York: Guilford Press.

Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., Rowland, M. D., & Cunningham, P. B. (1998). *Multisystemic treatment of antisocial behavior in children and adolescents*. Treatment manuals for practitioners. New York: Guilford Press.

Henggeler, S. W., Schoenwald, S. K., Rowland, M. D., & Cunningham, P. B. (2002). *Serious emotional disturbance in children and adolescents: Multisystemic Therapy*. New York: Guilford Press.

Schoenwald, S. K. (1998). *Multisystemic Therapy Consultation Manual*. New York: Guilford Press.

Strother, K. B., Swenson, M. E., & Schoenwald, S. K. (1998). *Multisystemic Therapy Organization Manual*. Charleston, SC: MST Institute.

For information on training and materials, go to **http://www.mstservices.com**.

Cost of training/consulting

Costs can depend on how many MST teams a site chooses to create. A team usually involves three to five staff members, including the team supervisor. It would cost approximately $26,000 for a single team to become trained and receive ongoing support. At a larger scale of implementation, these costs can decline to as low as $17,000 per team. However, other costs are not included in this price, such as licensing fees of $4,000 per agency and other per diem and travel costs for staff to receive the initial training or advanced training.

When viewed as a part of the cost of services to clients, the total cost of all training, licensure, and travel range from $500 per youth treated to $300 per youth treated depending on the scale of the MST system being supported.

Additionally, when a system has developed its own MST Network Partner infrastructure, almost all of the above costs are internal to the system itself in the form of salaries paid to staff and associated staff support costs.

Developer involvement

The developers of MST are not directly involved in the transport and implementation of MST, although the protocols for treatment, clinical supervision, and expert consultation they designed form the basis for the training procedures and materials used in such transport.

MST Services is the university-licensed company responsible for the transfer of MST technologies to community settings, and thus responsible for supporting the transport and implementation of MST. The MST model developers oversee the work of MST Services through their involvement on its Board of Directors.

MST Network Partner organizations employ staff fully trained in MST program development, clinical staff training and development, and quality assurance monitoring. MST Services maintains an ongoing working relationship with each MST Network Partner organization focused on staff development, quality improvement and quality assurance activities.

Monitoring fidelity and outcomes

MST Services requires that sites submit fidelity data through a secured Internet-based data collectionsite at **http://www.mstinstitute.org**.

In addition to the submission of fidelity data, sites submit their outcome data through **http://www.mstinstitute.org**.

Financing the intervention

Many sites pursue funding for MST through various child human service systems, often juvenile justice or child welfare.

Medicaid may provide reimbursement for some components of MST.

Resources/Links

http://www.mstservices.com

http://www.mstinstitute.org

University of Colorado Center for the Study and Prevention of Violence:
http://www.colorado.edu/cspv/

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Functional Family Therapy

Intervention Description

Background

Functional Family Therapy (FFT) is an empirically based clinical system that focuses on youth who are at risk of, or currently displaying, aggressive behavior, violence, and substance-use.

FFT has been in existence for more than 30 years with well-documented results. It was originally developed by James Alexander, Ph.D., and Bruce Parsons, Ph.D., of the University of Utah.

More than 50 percent of the current practices of FFT are implemented in the juvenile justice system. However, FFT can be offered in a variety of settings: mental health, schools, child welfare, probation, parole/aftercare, and as an alternative to incarceration or out-of-home placement.

Characteristics of the intervention

FFT is a short-term therapy designed for male and female youth ages 11 to 18 years. The youth must be part of a psychosocial system that constitutes a family and not currently have active homicidal or suicidal ideation, nor substance use that requires detoxification.

The three main goals that are fundamental to the success of the program are (Alexander et al., 2002):

- Changing maladaptive behaviors of youth and relational dynamics of families, especially ones that may not be motivated to change;
- Reducing the personal, societal, and economic consequences that can result from various disruptive behaviors of youth; and
- Offering this intervention at lower cost, in terms of time and money as compared to more expensive treatment.

Figure 17

Functional Family Therapy	
Type of EBP	■ Intervention
Setting	■ Clinic ■ Home ■ Juvenile Court
Age	■ 11–18
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Reduction in recidivism. ■ Reduction in out-of-home placements.

The program is implemented on average in 8 to 12 1-hour sessions. However, for more challenging cases, longer duration of treatments may be needed.

The program is designed to be administered by licensed professionals with a master's degree or paraprofessionals who are highly supervised by a master's-level clinician. FFT can be implemented in a home, clinic, or juvenile court program. It must be implemented in sequential phases, each of which has its own assessment process and intervention components.

Engagement and Motivation:

This phase is concerned particularly with family member's expectations about treatment and positive effects resulting from treatment. Clinicians identify and assess protective and risk factors. They also help label the cognitive, behavioral, and emotional expectations of each family member.

Cognitive therapy techniques are used to help replace negative or maladaptive attributions such as hopelessness and lack of motivation, with positive ones.

Behavior change:

Various behavioral techniques are applied during this phase, such as cognitive reframing, communication skills training, and contingency management. In this phase, the therapist is modeling, labeling, and directing positive behavioral change.

Generalization:

In this phase, the clinician's job is to sustain the momentum of change as well as to foster family independence from therapy. If families are involved in multiple systems, clinicians help the family address these various systems, such as school and legal.

Throughout the intervention, interpersonal interactions among family members are assessed and addressed to improve family functioning.

Research Base and Outcomes

The efficacy of FFT has been supported by 29 years of evaluation. Fourteen studies between 1973 and1998 included primarily matched and randomly assigned comparison/control groups, with followup periods of 1, 2, 3, and 5 years (Alexander et al., 2002).

FFT has been implemented in rural and urban settings, and with families from diverse racial/ethnic groups, including Caucasian, African American, Asian American, Hispanic/Latino, and American Indian. (Diverse populations were primarily included in replication studies). As of 2002, the developers noted recidivism rates did not vary across ethnic/racial groups, supporting the generalizability of the intervention (Alexander et al., 2002).

In addition, research from the Washington State Institute for Public Policy 2004 report on the cost effectiveness of evidence-based practices for prevention and intervention provides support for FFT; in 2003, the national rate net benefit over costs per child was $26,216, or $13.25 per day (Aos et al., 2004).

Included in Table 17 is a sample of the studies that demonstrate positive outcomes across varied group participants (Alexander et al., 1998).

Table 17: Functional Family Therapy: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Alexander (1971); Alexander & Barton (1976; 1980)	RCT of 40 adolescent (ages 13–16 years) delinquents arrested and detained for runaway, ungovernable, or habitually truant randomly assigned to one of four groups: ■ FFT + Individual Therapy, ■ FFT only, ■ Individual Therapy only, or ■ Control Group with minimum attention from a probation officer. Study population: ■ Predominately White	FFT and FFT + Individual Therapy produced significantly greater improvements in communication style (less defensive, hostile, and submissive communication) than other conditions.
Alexander & Parsons (1973)	Adolescents (n = 99, ages 13–16) arrested and detained for running away, declared ungovernable or habitually truant, randomly assigned to one of 4 groups: ■ FFT, ■ Client-Centered Family Therapy, ■ Eclectic psychodynamic family therapy, ■ Nontreatment control group. Study population: ■ 44% Male ■ 56% Female ■ Predominately White	FFT group demonstrated significant improvements in family interactions compared to all other groups.
Regas & Sprenkle (1982) from Alexander (2002)	Adolescents (n = 55) diagnosed with ADHD, referred to child protective services randomly assigned to one of three groups, ■ FFT, ■ Group therapy, or ■ No treatment control group.	Positive increases in family concept of FFT group; both treatment groups demonstrated significant improvements on ADHD behaviors at home and at school.
Friedman (1989)	Adolescent drug abusers (n = 166, mean age = 17.8) randomly assigned to one of two groups: ■ FFT or ■ parent group. Study population: ■ 60% Male ■ 40% Female ■ 89% White ■ 11% Nonwhite	FFT group demonstrated greater parental involvement and lower family dropout rate.
Hannson (1998) from Alexander (2002)	2-year study of Swedish Adolescents (n = 95) referred following arrest for serious offenses, randomly assigned to one of two groups: FFT or social service as usual. Study population: ■ Predominantly male ■ 100% Swedish	Reduced maternal depression, somatization, and anxiety in FFT group.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

Before implementation, FFT, LLC (the dissemination organization of FFT) undertakes a formalized assessment process for determining sites' ability to implement the program. It can be in the form of conference calls, reviewing applications for funding of FFT, and in-house discussions with sites.

A 1-day stakeholder meeting is held at the site with site representatives and informal discussions with therapists. There is flexibility in assisting sites with adopting FFT.

Through the initial readiness assessment, FFT Inc. works to gain buy-in. Depending on the community, consumers are sometimes involved in the decision to adopt the program.

Staff selection:

Developers have mock interview questions to help agencies choose the therapists to implement the program. Many agencies modify the interview questions that are specific to the agency.

Staff must be open to being monitored by supervisors for quality implementation (fidelity) to the FFT model.

Possible barriers:

As identified by the developers, two barriers to implementation are funding to sustain FFT and the referral process to maintain a consistent caseload of appropriate FFT clients. These two issues seem to pose the greatest challenge to implementation efforts (Kopp, 2006).

Training/coaching and Materials

The training of staff in the use of FFT is a systemic process that is gradually phased in and usually occurs over a 1-year period, though different levels of certification require additional time. To become a trained FFT user, specific steps must be followed. Additionally, FFT has four levels of certification:

FFT therapist:

- Requires 1 year of training with supervision and followup support.

FFT clinical supervisor:

- Requires 1 year of training as a FFT therapist (see above), an additional year of training with supervision and followup support, plus the supervision courses necessary to receive designation as a certified FFT clinical supervisor.
- Such staff generally are clinically responsible for all cases of FFT and for providing group and individual supervision within agencies. FFT Clinical Supervisors carry a minimum number of active cases.

FFT Trainers:

- Requires all training at the clinical supervisor level plus a supervised course, ongoing consultation in FFT training, and active participation in the FFT Inc. organization.

To be considered a certified site, the following components are necessary:

- Two-day initial onsite clinical training;
- Clinical FFT externship for one member of the site;
- Two-day offsite team clinical training;
- Followup training and supervision visits (three visits per year at 2 days each);
- Weekly phone consultation in Year 1, biweekly phone consultation for team lead in Year 2;
- Supervision consultants with FFT supervisors for first 2 years of implementation; and
- Use of all components of FFT Family Assessment Protocol and Clinical Services System, and appropriate caseload and team size.

FFT, LLC has a built-in infrastructure to handle requests for training, support, and materials. In relation to capacity for training, FFT, LLC employs and contracts 25 to 35 people, ranging from IT technical support to administrative and clinical personnel.

Training materials are available to families in English and Spanish.

Contact for training and implementation:

Holly DeMaranville
Functional Family Therapy, LLC
1611 McGilvra Boulevard East
Seattle, WA 98112
Cell phone: (206) 369-5894
Fax: (206) 664-6230
Email: hollyfft@comcast.net
Web site: http://www.fftinc.com.

Cost of training/consulting

- Detailed information about cost of implementation is available at **http://www.fftinc.com**.
- The cost associated with Phase 1, including implementation and training of three to eight therapists to become certified FFT users, an externship, assessment, onsite clinical training, ongoing telephone consultation, three followup site visits, and offsite team training in Indiana, is $36,000, plus the cost of staff travel.
- The cost associated with Phase 2, including site certification supervision training, phone consultations, and followup onsite training, is approximately $18,000.
- Other ongoing FFT site certification training activities costs average $7,000. This includes onsite day visits, monthly hour-long phone consultations, and access to Clinical Services System (a web-based fidelity monitoring system).

Developer involvement

The developers are still involved with the program, and do provide some initial and advanced clinical training.

Monitoring fidelity and outcomes

- Staff at FFT, LLC help programs develop systems to collect and analyze data to make systemic improvements.
- A web-based monitoring system, the Clinical Services System, is used to monitor and report fidelity.
- Therapist notes are reviewed by expertly trained supervisors and results of the Counseling Process Questionnaire (completed by family members) are reviewed.
- Each site may use its outcome data to satisfy grant requirements or other fund-related requirements. FFT, LLC is mostly interested in increasing sites' ability to use their data to improve adherence to the program.

Financing the intervention

FFT can be financed in various ways, depending on state policies and practices. For example, in the state of Washington, current legislation and funding is attached to programs such as FFT. In Pennsylvania, grant dollars are used to pay for FFT to develop a statewide quality improvement process for the Commission on Crime and Delinquency.

Medicaid dollars may be used to pay for some of the services, but again it may be state dependent. FFT Medicaid codes are available in the states of New Mexico and Pennsylvania. Additionally, some states may use a Medicaid waiver, rehabilitation, or home-based and community-based service codes.

Resources/links

Federal Web site providing interactive tools and other resources to help youth-serving organizations.
http://www.findyouthinfo.gov

Functional Family Therapy, Inc.
http://www.fftinc.com

Office of Juvenile Justice and Deliquency Prevention Model Programs Guide.
http://www2.dsgonline.com/mpg

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Multidimensional Treatment Foster Care

Intervention Description

Background

Multidimensional Treatment Foster Care (MTFC) was developed in the early 1980s by Patricia Chamberlain, Ph.D., and colleagues at the Oregon Social Learning Center to address serious and violent juvenile offenders who would otherwise need to be placed in a group or residential program.

Thirteen years later, Philip Fisher, Ph.D., and colleagues developed the MTFC program for preschoolers (MTFC-P). This intervention is similar to the earlier developed MFTC but is tailored to meet the developmental needs of preschoolers who display early aggressive and acting-out behavior and can benefit from intensive treatment in the home and community.

MFTC has been disseminated in many states and countries, such as Great Britain, Sweden, and the Netherlands. Within the last 2 years, more than 65 organizations have implemented MTFC (P. Chamberlain, personal communication, June 6, 2007).

Characteristics of the intervention

MTFC is delivered by trained treatment families to provide intensive supervision and support to children and adolescents at home, in the community, and at school. MTFC and MTFC-P children considered eligible for services are those who are at risk of being placed or are currently placed outside the home in the child welfare, mental health, or juvenile justice systems. Therefore, many of the children referred to MTFC and MTFC-P come from one of these agencies.

Figure 18

Multidimensional Treatment Foster Care	
Type of EBP	■ Intervention
Setting	■ Clinic ■ Home ■ School
Age	■ 3–18
Gender	■ Males ■ Females
Training/Materials Available	■ Yes
Outcomes	■ Decrease in arrest rates. ■ Decrease in violent activity involvement. ■ Fewer runaways. ■ Less chance of incarceration after completing program. ■ Fewer permanent replacement failures (MTFC-P).

Treatment families are recruited and screened before youth are placed in their homes. Formal training, ongoing supervision, and weekly meetings with parents are held to help families address problems and to note youth progress. A trained case manager connects daily with the treatment family and is also available to the child's biological family.

In both MTFC and MTFC-P, the goal is for the youth to continue to sustain contact with his or her biological family and for that family to get services while the child is in placement so that they are better prepared when the child returns home. Youth participate in skill-enhancing therapy.

Treatment families maintain close contact with the schools about their child's behavior and progress in the school environment. If the youth is involved with a probation system or other youth system, the case manager helps the youth and treatment family maintain contact.

Research Base and Outcomes

MTFC has been researched extensively since 1990. The research base includes randomized control trials examining the effect of the intervention over control groups (retrieved from **http://www.mtfc.com/program_effectiveness.html**). Across studies, evidence supports the intervention. Specifically, the research on adolescents has found that youth in MFTC have fewer runaway incidences and are arrested less often than youth in group care. Research supports that MTFC youth have significantly fewer days in locked settings (detention, training schools, hospitals, etc.) at followup. (**http://www.mtfc.com**). For preschool children, those in MTFC-P had fewer placement disruptions in followup. Further information about MFTC studies is presented in Table 18.

Table 18: Multidimensional Treatment Foster Care: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Chamberlain (1990)	Youth committed to state training schools (n = 32, ages 12–18), matched comparison design on age, sex, and date of commitment. Youth selected for either Treatment Foster Care (TFC) group or another community based treatment. Followup period of 2 years. Study population: ■ Male 62.5% ■ Female 37.5%	TFC participants spent fewer days incarcerated.
Chamberlain & Reid (1991)	Randomized control trial design with youth from Oregon State Hospital, (n = 20, ages 9–18) assigned to either TFC or typical community treatment. Followup period of 7 months. Study population: ■ Male 60% ■ Female 40%	TFC placed out of hospital at higher rate; more TFC were placed in family homes.
Chamberlain, Moreland & Reid (1992)	Randomized control trial design with foster care families (n = 70) assigned to assessment only group (AO), increased payment only group (IP), or enhanced training and support (ETS) with TFC methods. Followup period of 7 months. Study population: ■ Male 60% ■ Female 40% ■ 86% White ■ 6% African American ■ 4% Hispanic ■ 4% American Indian, Asian American, Mixed	ETS group had greater foster parent retention and fewer disruptions in placement than AO or IP group.
Chamberlain & Reid (1997)	Randomized control trial of male juvenile offenders (n = 79, 12–17 years, mean offenses = 13), assigned to MTFC or group care for 1-year period. Study population: ■ 100% male ■ 85% White ■ 6% African American ■ 6% Hispanic ■ 3% American Indian	At follow up, MTFC group had half as many arrests, fewer days incarcerated, and higher rates of program completion.

Table 18: Multidimensional Treatment Foster Care: Research Base and Outcomes

Reference	Research Design and Sample*	Outcomes
Eddy, Bridges, & Chamberlain (2004)	Randomized control trials, youth (n = 79), assigned to either MTFC group or service as usual/ group care. Data collected every 6 months for 2 years. Study population: ■ 100% male ■ 85% White ■ 6% African American ■ 6% Hispanic ■ 3% American Indian	MTFC youth were significantly less likely to commit violent offenses; 5% of MTFC youth had two or more criminal referrals for violent offenses at 2 years compared to 24% of the control group.
Fisher, Burraston, & Pears (2005)	Randomized control trial of children (n = 90, ages 3–6) assigned to foster care placement or MTFC-P placement. Study population: ■ Male 63% ■ Female 37% ■ 85% White ■ 11% Hispanic ■ 4% American Indian	Children in the MTFC-P program experienced fewer permanent placement failures.
Leve, Chamberlain, & Reid (2005)	Randomized control trial of girls with chronic delinquency (n = 81, ages z13–17) assigned to either MTFC or group care (GC). Study population: ■ Female 100% ■ 74% White ■ 12% American Indian ■ 9% Hispanic ■ 2% African American ■ 1% Asian American ■ 2% Other or Mixed Ethnicity	MTFC youth had a greater reduction in the number of days spent in locked settings and in caregiver-reported delinquency. MTFC group has 42% fewer criminal referrals than GC youth at 12-month followup.
Chamberlain (1990)	Youth committed to state training schools (n = 32, ages 12–18), matched comparison design on age, sex, and date of commitment. Youth selected for either Treatment Foster Care (TFC) group or another community based treatment. Followup period of 2 years. Study population: ■ Male 62.5% ■ Female 37.5%	TFC participants spent fewer days incarcerated.

* Study sample's gender and race/ethnicity data provided when available.

Implementation and Dissemination

Infrastructure issues

Readiness:

The formal readiness process involves a conversation, a self-evaluation form, and, if needed, a site visit. A discussion is held with the site to determine whether it is advantageous to bring this program to their site.

A readiness checklist is used as a resource. Before sending the checklist, an initial conversation is held and a packet of information is sent. After receipt and completion of the readiness checklist by the site, the Oregon team reviews the checklist and further discusses the process.

Staffing:

Criteria are available for MTFC and MTFC-P sites that outline the staff best suited to implement the program.

Possible barriers:

Challenges for both MTFC and MTFC-P include funding, the need for solid organizational structure with key champions helping to drive and sustain implementation efforts, and the need for practitioner commitment to the model.

Training/coaching and materials

TFC Consultants, Inc. disseminates MTFC (**http://www.mtfc.com**).

- Four trainings are offered per year in Eugene, Oregon. Each site sends a team of key professionals, including a supervisor, to attend the training. The training for program supervisors lasts approximately 5 days. The remaining key professionals attend 4 days of training. The training uses didactic and role- playing instruction methods. In addition, the attendees also observe a foster parent meeting with a supervisor.
- Upon completion of the staff training, the MTFC or MTFC-P program is ready for implementation. Members of the Oregon team come to the site to conduct the first foster parent meeting with site staff observing. After this meeting, telephone calls with the site consultant and review of videotaped foster parent and clinical meetings are conducted.
- Up to 6 days of onsite consultation are available to sites throughout the startup and implementation.
- Typically, sites will be fully operational after a full year.
- Sites can become MTFC or MTFC-P certified after successfully graduating seven youth. The criterion-based certification requirements are available on the MTFC Web site. A self-evaluation tool is available, but the certification review is conducted by a research group not connected with the program's disseminating group, TFC Consultants. Initial certification lasts 1 year; recertification can last up to 2 years. TFC Consultants are available to offer support to those sites that are not ready for certification.

For information on training and materials, contact:

TFC Consultants, Inc.
Gerard Bouwman, President
Telephone: (541) 343-2388 ext. 204
Cell phone: (541) 954-7431
Fax: 541-343-2764
gerardb@mtfc.com

Center for Research to Practice
Rebecca Fetrow
Program Evaluation
Telephone: (541) 343-3793
beckyf@cr2p.org

Cost of training/consulting

- There is no cost for the readiness process, unless a site visit is required.
- The cost to implement either MTFC or MTFC-P is $40,000 to $50,000.

Developer involvement

- **MTFC:** The developer, Dr. Patricia Chamberlain, is still involved in disseminating the program.
- **MTFC-P:** The developer, Philip Fisher, PhD, is currently involved in disseminating the preschool program.

Monitoring fidelity and outcomes

- Fidelity measures exist for both MTFC and MTFC-P. TFC Consultants collect fidelity data from sites.
- The reporting of outcomes is required when implementing MTFC and MTFC-P to obtain certification.

Financing the intervention

Many sites apply for grant dollars and use funds from child welfare, early childhood special education funds, and county mental health funds to finance the MTFC or MTFC-P intervention. Sites with an older youth population have used juvenile justice funding.

The treatment foster care element of the intervention may be covered by Medicaid.

Resources/Links

http://www.mtfc.com

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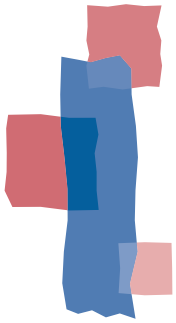
*Extensive reference list is available from **http://www.mtfc.com**.



EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

Evidence-Based and Promising Practices

The development of the Guide was funded by the Child, Adolescent and Family Branch of the SAMHSA Center for Mental Health Services. The Guide was developed by a team composed of:

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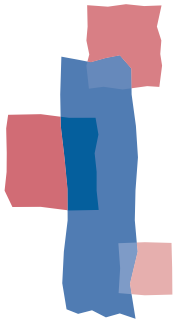

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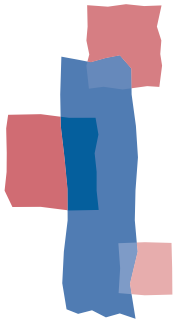

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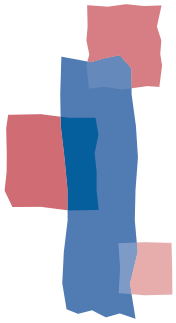

EVIDENCE-BASED PRACTICES KIT

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How to Use the Evidence-Based Practices KITs

The Evidence-Based Practices KITs, a product of the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Mental Health Services (CMHS), give states, communities, administrators, practitioners, consumers of mental health care, and their family members resources to implement mental health practices that work.

This KIT introduces the evidence-based practices for Interventions for Disruptive Behavior Disorders and guides readers through their implementation. *How to Use the Evidence-Based Practices KITs,* provides an overview of the KIT's contents and guidance on using the KIT.

Interventions for Disruptive Behavior Disorders

For additional references on interventions for disruptive behavior disorders, see the booklet, *Evidence-Based and Promising Practices*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Interventions for Disruptive Behavior Disorders KIT, which includes six booklets:

How to Use the Evidence-Based Practices KITs

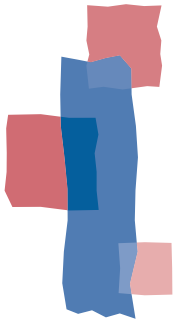
Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families

Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Implementation Considerations

Evidence-Based and Promising Practices

Medication Management



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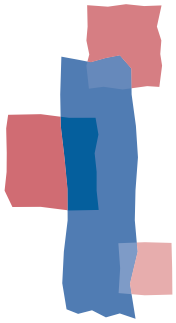
What's in *How to Use the Evidence-Based Practices KITs*

Interventions for Disruptive Behavior Disorders



EVIDENCE-BASED PRACTICES KIT

Knowledge Informing Transformation

Guide to EBPs

How to Use the Evidence-Based Practices KITs

Background and Purpose

Evidence-based practices (EBPs) are interventions—or treatments—whose effectiveness is supported by scientific proof. They offer hope that the lives of children and youth with disruptive behavior disorders (DBDs)—and the lives of their families—can be enhanced. By appropriately using mental health interventions shown by research to be effective, the likelihood that children and youth will have positive outcomes can be increased.

This KIT was created to help promote the use of evidence-based practices in mental health service systems—a need that was highlighted in the 1999 report *Mental Health: A Report of the Surgeon General,* which advised the country to close the gap between scientific research and clinical practice (U.S. Department of Health and Human Services).

EBPs are currently being promoted at the federal level by a series of demonstration grants through the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services (CMHS) and at the state level through initiatives of state and local mental health agencies. This KIT, funded by the Child, Adolescent, and Family Branch of the Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Mental Health Services (CMHS) is an extension of these activities.

The major goal of the Interventions for Disruptive Behavior Disorders EBP KIT is to provide a resource that will promote adopting, implementing, and disseminating EBPs in children's mental health service systems and throughout the professional field.

A major reason for the current attention to EBPs in mental health is that scientific knowledge about effective practices has grown dramatically. Professionals, communities, and families now can choose among interventions that have been proven effective in various settings and with various populations.

Scientific evidence supports adopting EBPs. These practices, however, may still not be readily available in some communities or part of the usual array of services offered by most mental health providers. Some of these practices are available at multiple sites, but are not widely disseminated throughout the nation.

Audience of Interest

The KIT is written primarily for administrators and planning groups or advisory committees in agencies and communities. Those groups and committees would include decisionmakers from various areas, including families and youth, advocates, practitioners and supervisors, and local and state agency administrators.

EBPs are used in various service sectors and in different community-based settings, so this KIT is designed to be useful to individuals and agencies in both mental health and other child-serving sectors including child welfare, juvenile justice, and education.

What Type of Information Is Available in the KIT?

Several stages are involved in implementing EBPs, including the following:

- Exploring;
- Selecting and adopting programs;
- Installing the program;
- Initially implementing the program;
- Fully operating;
- Enhancing the implementation; and
- Sustaining the implementation (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

This KIT focuses primarily on the first stage: selecting and adopting EBPs. The KIT contains information that will help agencies and communities identify EBPs that will meet the needs of families they serve. Other sections of the KIT contain general information about steps needed when implementing EBPs and information about implementing the specific EBPs included within the KIT.

The KIT includes the following booklets:

- **How to Use the Evidence-Based Practices KITs** provides an overview of the KIT's contents and guidance on how to best use the KIT.
- **Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families** provides information about the population of children and youth who might benefit from the EBPs presented in the KIT.

- **Selecting EBPs for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking** introduces readers to EBPs in general and the specific EBPs included in the KIT. It also helps direct readers to resources where they can obtain more information about EBPs. A list of the main factors to consider when selecting EBPs is provided. The comprehensive tables describe each EBP and provide important summary information, such as the following:
  - The level of evidence to support the effectiveness of the practice;
  - Whether the practice is aimed at preventing or treating disruptive behavior disorders; and
  - The demographic characteristics of children and youth who participated in the research studies that evaluated the effectiveness of the EBPs.

  The summary tables can be used to narrow the set of 18 EBPs covered in the KIT to a more manageable number of EBPs that most closely match the needs of the community for which an EBP will be selected. Two case vignettes illustrate how to use the KIT.

- **Implementation Considerations** provides a general overview of the scientific literature on implementing EBPs and lessons learned by communities when implementing and disseminating EBPs.

  Readers should scan this booklet early to become aware of the extent to which building an infrastructure for training, financing, evaluation, and management-information systems will facilitate implementing EBPs within a continuous quality improvement framework. This booklet also looks at the ways EBPs relate to culture and the cultural competency of providers.

- **Evidence-Based and Promising Practices** provides specific, indepth descriptions of the 18 EBPs found in the KIT. Each EBP has been categorized as either a *Prevention/Multilevel Practice*, which can serve as either a prevention or treatment program, or an *Intervention Practice*, which is designed to treat the symptoms of behavior disorders.

- **Medication Management** describes types of medications that have been used to treat these disorders and refers readers to available clinical guidelines. Readers should keep in mind, however, that no specific evidence-based medication algorithms (meaning systematic steps for physicians to consider in selecting medications) exist for treating disruptive behavior disorders.

The KIT for Interventions for Disruptive Behavior Disorders is organized in the same way that an advisory group might think about selecting and adopting a new practice:

- Identifying a need for an EBP;
- Considering various factors and issues that could affect decisions about implementing EBPs in a program; and
- Examining what treatments and services exist to address identified needs.

What Are Disruptive Behavior Disorders?

The topic for this KIT is disruptive behavior disorders (DBDs) which can include diagnoses of Oppositional Defiant Disorders (ODD) and Conduct Disorders (CD).

DBDs occur across the stages of child and youth development; have a significant impact on a child's functioning across many social settings (for example, home, school, community, etc.); involve multiple service sectors (for example, mental health, education, child welfare, juvenile justice, etc.); and can result in great social costs to communities when untreated (U.S. Department of Health and Human Services, 1999). DBDs are described in more detail in *Characteristics and Needs of Children with Disruptive Behavior Disorders and their Families*.

What Are Evidence-Based Practices?

EBPs are interventions for which strong scientific proof shows that certain outcomes will be achieved. This does not mean that other interventions do not work or do not produce favorable outcomes. It may be that those interventions have not yet been fully researched—that research has not been conducted at a sufficiently appropriate level for scientists to say that strong evidence exists to prove or disprove that a specific intervention is effective.

Keep two major ideas in mind when discussing EBPs. The first is the idea of scientific proof or evidence—EBPs have been researched scientifically and evidence shows that they are effective. The second is the use (the practice) of evidence-based practices—the EBPs found in this KIT are meant to be used to the benefit of children, youth, and their families. Evidence for their effectiveness is based on how, with what children, and in what contexts they are used, among other things.

It is the responsibility of the provider to inform the consumer and family member about the best intervention that can be used to address the problem and to achieve desired outcomes. The health provider and consumer may jointly decide which intervention to select after weighing information about evidence and use.

This shared decisionmaking process is an important principle identified by the Institute of Medicine (2001). The shared decisionmaking process benefits greatly from an understanding of research designs, which are examined in *Selecting EBPs for Children with Disruptive Behavior Disorders to Address Unmet Needs*. For sources of more information about EBPs, see Table 1. Several definitions for EBPs are presented in Table 2.

Table 1: Sources of Information for Identifying Evidence-Based Practices

- Effective psychosocial treatments of conduct disorder children and adolescents: 29 years, 82 studies, and 5,272 kids (Brestan and Eyberg 1989)
- Evidence-based psychosocial treatments for children and adolescents with disruptive behavior (Eyberg, Nelson, & Boggs 2008)
- *School-Based Mental Health* (Kutash, Duchnowski, & Lynn, 2006)
- Developer Interviews (National Implementation Research Network at the University of South Florida)
- *Blueprint for change: Research on child and adolescent mental health* (National Institute of Mental Health, 2001). Available from Education Resources Information Center (ERIC) (#ED462650). (**http://www.eric.ed.gov/**)
- SAMHSA National Registry of Evidence-Based Programs and Practices (NREPP) (**http://www.nrepp.samhsa.gov/**)
- Input from Consensus Panel Meeting on Implementation Resource Kit

Table 2: Definitions of Evidence-Based Treatment and Practices in Scientific Literature

- An evidence-based practice is considered to be any practice that has been established as effective through scientific research according to a set of explicit criteria (Drake et al., 2001).
- Evidence-based treatment is the use of treatments for which there is sufficiently persuasive evidence to support their effectiveness in attaining desired outcomes (Rosen and Proctor, 2002).
- Evidence-based practice is an approach to healthcare wherein health professionals use the best evidence possible to make clinical decisions for individual patients (McKibbon, 1998).
- Evidence-based practice is the integration of best research evidence with clinical expertise and patient values (Institute of Medicine, 2001).

What Are the Evidence-Based Practices Presented in this KIT?

Tables 3 and 4 present the 18 different EBPs that are described in considerable detail within this KIT.

- Most of the EBPs have achieved a level of research evidence that is considered to be *good support*.
- The various EBPs cover a broad age and race range of children and adolescents from birth to 18 years.
- Many of the EBPs were designed to either prevent disruptive behavior disorders or treat the symptoms of disruptive behavior disorders. Several of the EBPs are multilevel and address both prevention and treatment goals.
- Most of the EBPs include family involvement.
- Many of the EBPs include cognitive-behavioral approaches or parent training.
- The EBPs are delivered in a range of community-based settings, including schools, clinics, and homes.
- All of the EBPs have training materials, and most have formal training programs.
- Many of the treatment-oriented EBPs have clinical components that can be covered financially by Medicaid or private insurance.

Table 3: Prevention/Multilevel Practices							
Prevention practice	**Age of youth**	**Race/ethnicity of children and families who participated in EBPs studies**	**Setting**	**Format**	**Length**	**Family component**	**Outcomes**
Triple P-Positive Parenting Program	0–16	Groups of children and families in Australia who were primarily White. One study was conducted in China with 90 Chinese children.	Clinic, Home, School	Individual, Group	Varies: 1–2 sessions to 8–10 sessions	Parent training, home visits, partner support skills, mood management workbook material	■ Increase in parental confidence. ■ Decrease in child behavior problems. ■ Improvement in effective parenting styles.
Project ACHIEVE	3–14	Evaluation was carried out with groups that were approximately half white, and half diverse populations, primarily African American.	School	Group	School year	Parent training	■ Decrease in discipline problems. ■ Decrease in special education referrals and placements. ■ Increase in positive school climate. ■ Improvement in academic achievement.
Second Step	4–14	Diverse groups studied. Two studies were conducted primarily with White children. In another two studies, the population was primarily African American; in one study the proportions of White, African American, and Hispanic participants were approximately equal. In another study, the majority of participants were African American and secondarily, Hispanic. Another study included a small percentage of Asian Americans and one study was conducted in Germany.	School	Group	School year	Family Guide that includes a video-based parent training program that helps parents reinforce skills at home	■ Increase in positive social behavior and social reasoning. ■ Improvement in control of emotions. ■ Decrease in verbal and physical aggression and problem behaviors.
Promoting Alternative Thinking Strategies	5–12	Groups studied were approximately one-half White and one-quarter to one-third African American. Asian American, American Indian, and Hispanic children combined, made up the remainder of the groups.	School	Group	K–5th grade, 3 times a week for 20–30 minutes	None	■ Increase in ability to label feelings. ■ Decrease in classroom aggression. ■ Increase in self control.
First Steps to Success	5–6	The children involved in two studies were primarily White. Smaller case studies involved primarily African American and some American Indian children with minimal participation from Hispanic children.	School, Home	Individual	3–4 months	Parent training delivered in the home	■ Decrease in aggression. ■ Increase in time spent on academics. ■ Increase in positive behavior.

Table 3: Prevention/Multilevel Practices

Prevention practice	Age of youth	Race/ethnicity of children and families who participated in EBPs studies	Setting	Format	Length	Family component	Outcomes
Early Risers: Skills for Success	6–12	Evaluations included two groups of predominately White children and one group of predominately African American children.	School	Individual	School year and summer	Parent education workshops, individualized family support	■ Improvement in academic achievement. ■ Improved control of emotions. ■ Improvement of social skills.
Adolescent Transitions Program	11–18	Two studies included primarily White children. One study was primarily White and African American with very small proportions of Hispanic, Asian American, and American Indian children.	School	Individual, Group	Varies: 3–12 sessions	Family management groups, individual family therapy	■ Increase in positive parent-child interactions. ■ Improvement in behaviors at school. ■ Decrease in youth smoking.

Table 4: Treatment Practices

Prevention practice	Age of youth	Race/ethnicity of children and families who participated in EBPs studies	Setting	Format	Length	Family component	Outcomes
Incredible Years	2–12	Four studies have had primarily White participants with no description of other ethnic or racial groups. Two studies included African American, Hispanic, and other multiethnic groups in small proportions.	School, Home	Group	Less than 22 weeks	Parent training	■ Increase in parents' use of effective limit setting, nurturing, and supportive parenting. ■ Improvement in teachers' use of praise. ■ Decrease in conduct problems at home and school.
Helping the Noncompliant Child	3–8	No specification of ethnicity or race among the studied groups was available.	Clinic, Home	Individual	8–10 sessions	Parent training	■ Improvement in parenting skills. ■ Decrease in oppositional behavior.
Parent-Child Interaction Therapy	2–7	One study included approximately three-fourths White and one-fourth diverse populations (primarily African American). Support exists for a culturally sensitive adaptation for Puerto Rican and Mexican American families.	Clinic	Individual	10–16 sessions	Parent training, coaching	■ Improvement in parent-child interaction style. ■ Improvement in child behavior problems.
Parent Management Training – Oregon	4–12	Evaluated primarily on White children and parents. A culturally sensitive adaptation of PMTO for Hispanic families has been evaluated as well.	Clinic, Home	Individual	20 sessions	Parent training	■ Decrease in child's behavioral problems. ■ Increases in effective parenting.

Table 4: Treatment Practices

Prevention practice	Age of youth	Race/ethnicity of children and families who participated in EBPs studies	Setting	Format	Length	Family component	Outcomes
Brief Strategic Family Therapy™	6–18	Evaluated primarily with Hispanic families. One study's sample was one-fifth African American.	Clinic, Home	Individual	12–16 sessions	Family therapy	■ Decrease in substance abuse. ■ Increase in commitment to therapy. ■ Decrease in problematic behavior. ■ Increase in family functioning. ■ Decrease in aggression.
Problem-Solving Skills: Training	6–14	Studied with groups of approximately three-fourths White and one-fourth African American children.	Clinic, Home	Individual	20 sessions	Parent training	■ Improvement in behavior. ■ Improvement in positive family functioning.
Coping Power	9–11	Groups studied were approximately half White and half African American children. One study was in the Netherlands with Dutch children.	School	Group	15–18 months	Parent training	■ Decrease in substance abuse. ■ Improvement in social skills. ■ Decrease in aggressive thoughts.
Mentoring	6–18	The major study included a group of approximately three-fourths African American children and one fourth Hispanic children.	School, Home	Individual	1 year or longer	None	■ Increase in confidence in school performance. ■ Improvement in family relationships. ■ Increase in positive behaviors.
Multisystemic Therapy	12–18	Most groups that have been evaluated have been approximately 60% African American children and 40% White children, except for two that were approximately 70% White and 30% African American. One study included an 84% multiracial group of African American and Whites. One study was conducted in Norway with Norwegian children.	School, Home	Individual	3–5 months	Family therapy, parent training	■ Decrease in arrests and re-arrests. ■ Increase in school attendance. ■ Decrease in behavior problems. ■ Decrease in substance use.
Functional Family Therapy	11–18	Groups were predominantly White families. In unpublished studies, diverse populations (primarily African American and Hispanic) made up between one fourth and one half of the group. One study was conducted in Sweden.	Clinic, Home	Individual	8–12 sessions	Family therapy	■ Decrease in out-of-home placements. ■ Decrease in re-arrest rates. ■ Improvements in family communication style. ■ Improvement in family interactions.
Multidimensional Treatment Foster Care	3–18	Studies were primarily of White children. African American, Hispanic, and American Indian children were represented in very small proportions.	School, Clinic, Home	Individual	6–9 months	Training, weekly meetings	Decrease in arrest rates. Decrease in violent activity involvement. Increase in permanent placement success.

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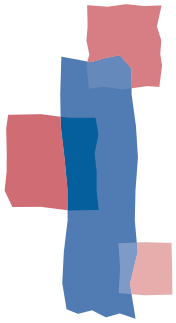

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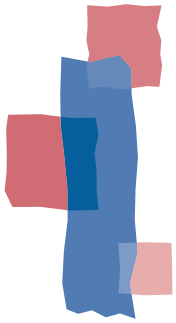

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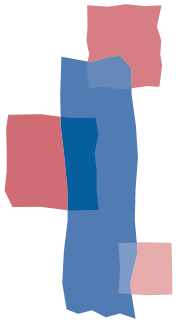

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This booklet provides an overview of activities associated with implementing evidence-based practices (EBPs) and enhancing the cultural competence of EBPs. This booklet is particularly relevant to mental health authorities and agency staff who develop and manage EBP programs.

Interventions for Disruptive Behavior Disorders

For references, see the booklet, *The Evidence*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Interventions for Disruptive Behavior Disorders KIT, which includes six booklets:

How to Use the Evidence-Based Practices KITs

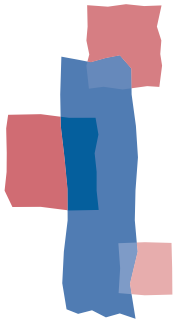
Characteristics and Needs of Children with Disruptive Behavior Disorders and their Families

Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Implementation Considerations

Evidence-Based and Promising Practices

Medication Management



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Introduction

A broad range of activities are essential to successfully implement an Evidence-Based Practice (EBP). These activities help build support for the EBP, integrate the EBP into agency policies and procedures, train staff agency-wide on basic EBP principles, and allow for ongoing monitoring and evaluation of the program. Practitioner training in how to deliver an EBP is only one aspect of EBP implementation.

This booklet introduces the general range of activities involved in successfully implementing EBPs. For more information about implementing specific EBPs, see Evidence-Based and Promising Practices in this KIT, which contains detailed, EBP-specific information on such activities as staffing, training, financing, and fidelity measuring.

Build Support for Change: Five Steps for Consensus Building

Within a system, change affects different stakeholders differently. When changing the mental health system, mental health agencies should expect varied reactions from staff, community members, providers, and families and youth.

Since misunderstanding EBPs can stand in the way of your efforts to implement EBPs, proactively building a consensus to change the system or implement EBPs in the community is an essential component of success. This can be done through a five-step process (see Figure 1).

Figure 1: Five Steps for Consensus Building

To start implementing your EBP:

1. Identify key stakeholders who will be affected by implementing the EBP.
2. Invite potential champions from each stakeholder group to participate in an EBP advisory committee.
3. Ask the committee to advise you during the process.
4. Build an action plan.
5. Actively involve committee members in such ongoing activities as the following:

- Participating in EBP basic training;
- Providing basic information about the EBP to their stakeholder groups;
- Advising you during all phases of the implementation process; and
- Participating in an ongoing evaluation of the EBP.

Step 1 Identify key stakeholders who will be affected by implementing the EBP.

Stakeholders may include provider agency personnel at all levels, mental health authority staff, family organizations, family members, youth, researchers, policymakers, and funders. Consensus building should also involve a broad array of community agencies in education, child welfare, juvenile justice, and health care.

Step 2 Invite potential champions from each stakeholder group to participate in an EBP advisory committee.

According to agencies who have successfully implemented EBPs, identifying ongoing champions and forming an advisory committee are critical activities for success. Although you may feel that creating an advisory committee slows the process, it soon becomes apparent that any amount of time used to build stakeholder support is worth the effort.

EBPs have little hope for success if the community fails to recognize that they are needed, affordable, worth the effort, and congruent with community values and the agency's practice philosophy. Mental health authorities and agency administrators must convey to key stakeholders a clear vision and a commitment to implementing the EBP.

By forming an advisory committee of potential champions from each stakeholder group, you will be able to disseminate information broadly

within the community. You should plan to build committee members' knowledge in the EBP and then ask them to hold informational meetings or to disseminate information regularly to their stakeholder groups.

Step 3 Ask the committee to advise you during the process.

In addition to having them conduct community education activities, ask committee members to advise you during all phases of the implementation process. This is why the advisory committee should be instituted and members educated about the EBP early in the planning process. Community members may help assess how ready the community and the agency are to implement the EBP and its activities. Once the EBP is in place, committee members can keep EBP staff informed of relevant community trends that may have an impact on providing the evidence-based services.

EBP advisory committees are crucial for sustaining the EBP over time. When EBP staff turn over, or other well-trained staff leave and must be replaced, or when funding streams or program requirements change, community alliances are essential to maintain the EBP. A well-established committee can champion the EBP through changes.

Step 4 Build an action plan.

Once key stakeholders basically understand the EBP, have your advisory committee develop an action plan for implementation. Action plans outline activities and strategies involved in developing the EBP program, including the following:

- Integrating the EBP principles into mental health authority and agency policies and procedures;
- Outlining initial and ongoing training plans for internal and external stakeholders;
- Designing procedures to monitor and evaluate the EBP regularly; and
- Base the activities in your action plan on the needs of the population you serve, your community, and your organization.

Step 5 Actively involve committee members in ongoing activities.

Committee members can help you with such tasks as deciding which outcomes you should emphasize. They can help you evaluate and integrate continuous quality improvements and engage in other essential activities.

Integrate the EBP into Policies, Procedures, and Financing

Examine policies and procedures

Mental health authorities and agencies that have successfully implemented EBPs highlight the importance of integrating the EBP into policies and procedures. For example, you will immediately face decisions about staffing the EBP program.

Mental health authorities can support the implementation process by integrating staffing criteria into regulations. Agency administrators should select an EBP program leader and practitioners based on mental health authority regulations and qualifications that the EBP requires. New EBP position descriptions should be integrated into the agency's human resource policies.

Agency administrators and mental health authorities should also review administrative policies and procedures to ensure that they are compatible with EBP principles. For example, you may need to modify admission and discharge assessment, treatment planning, or service-delivery procedures. Make sure policies and procedures include information about how to identify children and adolescents who are most likely to benefit from the EBP and how to integrate inclusion and exclusion criteria into referral mechanisms.

Examine policies and procedures early in the process. Integrating EBP principles into policies and procedures will build the foundation of the EBP program and will ensure that the program is sustainable. While most changes will occur in the planning stages, monitoring and evaluating the program regularly will allow you to periodically assess the need for more changes.

Assessment instruments can help identify strengths and areas of infrastructure that may need reinforcement to support implementing and disseminating EBPs. Examples of assessment instruments that can be used to help integrate EBPs into policies and procedures are presented in Figure 2.

Figure 2: Assessments for Integrating EBPs into Service Systems

The **State Health Authority Yardstick (SHAY)** (Finnerty, Rapp, Lynde, & Goldman, 2005) was developed by the New York State Department of Mental Health to assess state infrastructure to support EBPs. It was developed in collaboration with the SAMHSA-CMHS-funded National EBP Implementation Project. Corresponding directly to the infrastructure domains, the areas measured on the SHAY include:

- Planning for EBP implementation
- Financing (adequacy, startup, conversion)
- Training (ongoing consultation and technical support, quality, infrastructure/sustainability)
- Leadership (state commissioner and EBP leader)
- Policy and regulations of the State Mental Health Authority (SMHA) and Non-SMHA agencies related to EBP program standards
- Quality improvement (client outcomes, stakeholder support)

The **Organizational Readiness for Change** (Lehman, Greener, & Simpson, 2002) instrument was developed for use in substance abuse treatment organizations to assess the readiness of an organization to implement EBPs. This tool also affords opportunities for use in children's mental health service provider organizations. There are two versions—one for directors and another for staff—which assess 18 domains in the following areas:

- Motivational readiness (perceived need for improvement, training needs, pressure for change)
- Institutional resources (office, staffing, training, resources, computer access, electronic communication)
- Staff attributes (value placed on professional growth, efficacy, willingness and ability to influence co-workers, adaptability)
- Organizational climate (clarity of mission and goals, staff cohesiveness, staff autonomy, openness of communication, level of stress, openness to change)

Measures are available at **http://www.ibr.tcu.edu/pubs/datacoll/commtrt.html#Form-ORC**.

The **Evidence-based Practice Attitude Scale** (Aarons, 2004) was designed to assess mental health provider attitudes toward adopting evidence-based practices. This brief measure assesses four dimensions related to the following:

- Appeal of evidence-based practices
- Likelihood of adopting given requirements to do so
- Openness to new practices
- Perceived divergence of EBPs from usual practices

Identify funding issues

Identifying and addressing financial barriers is critical because specific costs are associated with starting new EBP programs and sustaining them. Identify short- and long-term funding mechanisms for EBP services, including federal, state. Private foundation funds are also important. You can use your EBP advisory committee to project startup costs by identifying the following:

- Time for meeting with stakeholders that is not reimbursed;
- Time for staff while in training;
- Costs associated with reducing productivity requirements to account for time spent planning;
- Travel to visit other model EBP programs; and
- Costs for needed technology (cell phones and computers) or other one-time expenses accrued during the initial implementation effort.

You should also identify funding mechanisms for ongoing EBP services and the support of continuous quality improvement efforts, including ongoing training, supervision, technical assistance, fidelity, and outcomes monitoring. In addition, you may need to revise rules for reimbursement that are driven by service definitions and criteria. This may require interagency meetings at the federal, state, and local levels. Resources that will help you plan for financing issues are presented in Figure 3.

Figure 3: Resources for Exploring Financing Options

- A Self Assessment and Planning Guide: Developing a Comprehensive Financing Plan (Armstrong et al., 2006).

  This guide was developed to increase understanding of financing structures and strategies to support effective systems of care. It was designed to guide service systems and individual communities in assessing their current financing structures and strategies and to prioritize a strategic financing plan for moving forward. It provides a means for projecting possible outcomes that are to be achieved and strategies for achieving those outcomes.

- Public Financing of Home and Community Services for Children and Youth with Serious Emotional Disturbance: Selected State Strategies (Ireys et al., 2006).

  This monograph, sponsored by the U.S. Department of Health and Human Services, provides information about sources of federal funding for child mental health services and profiles state approaches to financing home and community based services, including various Medicaid options.

Understand Medicaid

Medicaid is an essential resource for funding many EBP programs, and understanding how it works is essential for agencies planning to adopt an EBP. Medicaid is a federal-state partnership. The federal government develops regulations based on federal statutory requirements. State Medicaid agencies have the responsibility to implement the program in their state.

The federal statute holds the Medicaid state agency and the Medicaid director responsible for all aspects of the program. While Medicaid state agencies may collaborate and contract with other public and private agencies, including mental health agencies, the Medicaid director is held accountable for all activities.

Medicaid now funds more than half of public mental health services administered by states and could account for two-thirds of such spending by 2017 (Buck, 2003). Accordingly, Medicaid is the single largest source of funding for public mental health services for children, youth, and their families.

Medicaid eligibility

Medicaid provides access to health coverage for low-income women and their children and for people with disabilities and others who have high medical costs. To qualify, all these individuals must have low or moderate incomes, but Medicaid eligibility is also linked to age, with specific eligibility categories for elderly people as well as children.

Since Medicaid is a means-tested program, it has extensive rules on income and resources. In addition, individuals must fit into one of the eligibility categories established by federal law and meet other criteria, such as residency requirements and citizenship or immigration status. Children are the largest age group covered under Medicaid and represent about half of all beneficiaries.

Medicaid-covered services

The Medicaid benefits or services package is broad. More than 30 services listed in Medicaid Statute Section 1902(a) are either optional or mandatory. If they are mandatory, states must provide these services. In addition, states may choose to cover certain optional services.

In both cases, Federal Financial Participation (FFP) is available as a match from the federal government to the states for services provided. A number of broad-based services that are covered are extremely important for maintaining an adequate mental health care system and that in fact are the basis for the entire health care system. In the following material, Medicaid services that are important for mental health service delivery are discussed and defined.

Physician services

These are services provided by psychiatrists; primary care physicians such as pediatricians, family practitioners, and internal medicine physicians; and specialists, including those in neurology, obstetrics and gynecology (OB-GYN), and surgery.

Services that are important for children and youth can include screening for mental health issues and physical examinations to rule out physical health problems that can mimic mental health issues, such as hyperthyroidism and Attention Deficit Hyperactivity Disorder (ADHD).[1] Neurological issues such as temporal lobe seizures can mimic mental health issues and should be considered. Payment for these services is covered under Medicaid for eligible individuals.

Psychiatry services for therapy and medication monitoring are common reasons for providing mental health services. Medicaid expenditures for physician services are second only to those for pharmaceuticals for all age groups. See Medicaid statute 1905(a)(5)(A) and (B) and regulation 42CFR440.50.

Inpatient hospital services

These services include general hospitals and specialty hospitals such as mental health and children's acute care hospitals. The acute care hospitals can provide a full range of services: medical, surgical, obstetrics, and inpatient mental health; but not for Institutions for Mental Disease (IMD).

For children and youth, this inpatient care can also include long-term mental health hospitalization. See Medicaid statute 1905(a)(1) and regulation 42CFR440.20.

Federally Qualified Health Centers (FQHC)

These facilities provide comprehensive ambulatory, community-based services in medically underserved areas. Services include adult medicine, pediatrics, OB-GYN, pharmacy, laboratory and radiology, and mental health services by referral.

Case management is provided. A number of FQHCs provide co-located physical and mental health services. An example is the FQHC in Greenwood, North Carolina. Federal Medicaid payment regulations require enhanced reimbursement rates to cover the cost of providing comprehensive health and, where applicable, mental health services. See Medicaid statute 1905(a)(2)(C) and 1905(L)(1) and (2) and regulation 42CFR491.1-491.11.

Rural health clinic

These facilities provide health services in rural and medically underserved areas. Services may or may not be as comprehensive as those offered through FQHCs. See Medicaid statute 1905(L)(1) and (2) and 1905(I)(1) and regulations 42CFR440.20(b) and (c).

Laboratory and X-ray services

These are often used as part of a comprehensive assessment of children and youth. Laboratory services may be used to ensure that the use of psychotropic medications is safe and that the liver, blood, and kidney functions are adequate to metabolize these medications. They can also be used to rule out physical health diseases that can mimic mental health issues (for example, hyperthyroidism). See Medicaid statute 1905 (a)(3). Various mechanisms for financing services through Medicaid are presented in Figure 4.

[1] Some states consider ADHD as a mental health condition.

Figure 4: Range of Medicaid Financing Mechanisms for Home and Community-Based Services for Children and Youth

Clinic Option

States can provide non-hospital-based community services, but only in community clinics and under the direction of a medical doctor.

- Services typically include traditional counseling, psychotherapy, and medication management.
- Not typically used to expand home and community-based services because of the limitation in setting.

Early Periodic Screening, Diagnosis, and Treatment (EPSDT)

- As part of regular screening for physical and mental health conditions of Medicaid eligible children under 21 years of age, states are required to provide services that are federally authorized by Medicaid, but not necessarily covered in a State Medicaid Plan.
- States have not been using proactively to expand home and community-based services.

Managed Care Waivers 1915 (b) and Demonstration Waivers 1115

- Managed care mechanism "carved" out from the regular state plan that limits choice of provider under Medicaid.
- Managed care entity can use funding streams beyond Medicaid.
- 1915 waivers are approved for 2 years and states can renew.
- Demonstration waivers (1115) allow states to innovate through expanding eligibility or services, not typically covered by Medicaid, or to test innovative service delivery systems.

Medicaid 1915 (c) Home and Community-Based Services Waivers

- States can expand Medicaid coverage of community-based services, not otherwise covered, for a designated number of individuals as an alternative to institutional care (that is, hospital).
- States can expand Medicaid eligibility to populations, not otherwise eligible for Medicaid (for example, uninsured).

Rehabilitation Option

- Rehabilitation service defined as "any medical or remedial services (provided in a facility, home, or other setting) recommended by a physician or other licensed practitioner…for the maximum reduction of physical or mental disability and restoration of an individual to the best possible functional level."
- Services can include:
  - Restoration and maintenance of daily living skills;
  - Training in social skills;
  - Development of appropriate social networks;
  - Recreational services that are therapeutic in nature; and
  - Telephone counseling services.
- Wide variation in services provided by states under the Rehabilitation Option. Some states cover:
  - Psychological assessment;
  - Crisis intervention;
  - Individual, group, family therapy;
  - Day treatment;
  - Home-based services;
  - Behavioral management skills training;
  - Therapeutic foster care;
  - Family preservations services;
  - Care coordination; and
  - Help in medication compliance.

TEFRA Katie Beckett Provision

States can expand Medicaid eligibility to children with disabilities by waiving parental income for children who are living at home but who would otherwise be eligible for Medicaid-funded institutional care.

(Summarized from Ireys, Pires, & Lee, 2006)

Figure 4a: What Do State Medicaid Plans Cover?

- Varies from state to state.
- See Medicaid Plan for your state.
- For summary of clinic services covered by Medicaid in your state in 2004, see: **http://www.kff.org/medicaid/benefits/service.jsp?gr=off&nt=on&so=0&tg=0&yr=2&cat=12&sv=5**.

Guidance

- Include State Medicaid agency, other healthcare funders, and managed care organizations in discussions early.
- Read more about the various mechanisms described above.
- In preparing to work with State Medicaid agency:
  - Clearly define the EBP being considered.
  - Identify components of the EBP (match what is already covered).
  - Describe qualifications of practitioners.
  - Describe the dose and duration of the service.
  - Present cost-effectiveness data, if available (See Washington State Institute for Public Policy report on Benefits and Costs of Prevention and Early Intervention Programs for Youth at: **http://www.wsipp.wa.gov/pub.asp?Docid=04-07-3901**).

References

Ireys, H.T., Pires, S., & Lee, M. (2006). Public financing of home and community services for children and youth with serious emotional disturbances: Selected state strategies. (2006). Washington, DC: Office of Disability, Aging and Long Term Care Policy, Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. Center for Medicare and Medicaid Services.(2005). Medicaid support of evidence-based practices in mental health programs. Available at: **http://www.cms.hhs.gov/PromisingPractices/Downloads/EBP_Basics.pdf**.

State and program examples of Medicaid funding

States that are actively trying to expand coverage for intensive home and community-based services typically use a combination of Medicaid financing options in addition to other mechanisms, including contracting with care management entities for high-risk populations and using blended or braided funds from other agencies, including Medicaid (Ireys et al., 2006). See Figure 5 for an illustration of Michigan's Home- and Community-Based Waiver Program.

Other examples of state programs include the following:

- Five states with home and community-based waivers (IN, KS, NY, VT, and WI) cover parent/family/home education, support, and training (Ireys et al., 2006).
- Two states with home- and community-based waivers (VT & WI) cover therapeutic foster care (Ireys et al., 2006).

Multisystemic Therapy Services, the disseminators of MST, developed a position statement on Medicaid funding for MST that outlines strengths and weaknesses of Medicaid as a funding source. To find the document, go to: **http://www.mstservices.com/userauth/Medicaid%20Standards.htm**.

The website also contains information on each state's position on funding MST with Medicaid dollars. For states that do fund MST with Medicaid (for example, Arizona, California, Indiana), between 40 and 60 percent of a model program budget is covered.

Figure 5: Illustration of Michigan's 1915[c] Home and Community-Based Waiver

The Home and Community-Based waiver, (1915[c] waiver), for children with serious emotional disturbance (SED) is administered by the Michigan Department of Community Health (MDCH) and funded with federal Medicaid dollars matched by local resources including the state general funds allocated to the Michigan Community Mental Health Services (CMHSP) program.

The waiver is designed to provide in-home services and supports to children under age 18 with SED who meet the criteria for admission to a state inpatient psychiatric hospital and who are at risk of hospitalization if waiver services are not provided. The waiver is limited to children residing in counties that that have been pre-approved through the waiver. Under Medicaid statutory and regulatory requirements, all matching funds must be local funds.

Examples of local funds used in this waiver are CMHSP general revenue funds, local child care funds. However, Title IV-E Foster Care (SSA 45CFR Parts 1355, 1356, 1357) funds cannot be used as match as they are federal funds. To ensure that all matching funds are local, CMHSP must document the type and source of funds used to meet the match obligation. The documentation is provided in both the individual child's budget and in the written agreement between the State agencies: CMHSP and MDCH.

Eligibility criteria for the program include the following. The child must:

- Be at risk of hospitalization in the state psychiatric facility,
- Demonstrate serious functional limitations. The criteria will be identified using the Child and Adolescent Functional Assessment Scale (CAFAS®),
- Be under 18 years old,
- Be financially eligible for Medicaid when viewed as a family of one (that is, Katie Beckett option) or otherwise eligible for Medicaid, and
- Be in need of and receive at least one waiver service per month.

Birth and adoptive families must choose these services as an alternative to hospitalization, participate in developing the plan of service, allow services to be provided in the home setting, and provide care and supervision beyond the services authorized in the waiver.

The services that are provided use the "Wraparound" as a framework for providing and coordinating services that are family-centered. It will also include the services that are traditionally provided such as physician services, medication management, family therapy, i.e., functional family therapy.

Functional family therapy can be provided in the community and in the home. If the family members are Medicaid eligible then the services can be provided through Medicaid.

Reference

Michigan Department of Community Health, SED Waiver, *A Home and Community-Based Waiver for Children with Serious Emotional Disturbance, A Technical Assistance Manual*, May 2007, taken from **http://michigan.gov /documents/mdch/SED_Waiver_TA_Manual_5-9-07_FINAL_196150_7.pdf**).

Train All Levels of Staff in the Agency

One of the next steps in implementing your EBP is to develop a training plan. You may gauge the amount of training needed by assessing the readiness of your community. If a community is uninformed about the EBP and is unaware of the existing need, you may have to conduct a wide range of educational activities. If a community already understands the EBP and knows how it may address problems that community members want to solve, you may need fewer educational activities.

Agency administrators who have successfully implemented EBPs highlight the importance of providing basic training on the EBP to all levels of staff throughout the agency. Educating and engaging staff will ensure support for the EBP. In the long run, if they are well trained, EBP staff will have an easier time obtaining referrals, collaborating with staff from other service programs, and facilitating a continuum of care.

You can help train key stakeholder groups if you first train members of your EBP advisory committee and then ask them to disseminate information about the purpose and benefits of the EBP.

Ongoing inservice training is an efficient way to provide background information, the EBP practice philosophy and values, and the basic rationale for EBP service components in a comfortable training environment. Consider including members of your advisory committee in decisions about the frequency and content of basic EBP training.

Offer more intensive training to program leaders and practitioners

While staff at all levels in the agency should receive basic EBP training, the EBP program leader and practitioners will require more intensive training. To help practitioners integrate EBP principles into their daily practice, offer comprehensive skills training to those who provide EBP services. For information about training requirements and resources for the EBPs covered in this KIT, see *Evidence-Based and Promising Practices*.

Although most skills that practitioners need may be introduced through formal training, research and experience show that the most effective way to teach EBP skills is through supervision, on-the-job consultation, and coaching (Fixsen et al., 2005).

In many mental health agencies, turnover is high. This means that a single training will not be sustained unless the new expectations are incorporated into ongoing training efforts for new employees. Early in the process, mental health authorities and agency administrators must decide how to do the following:

- Identify internal and external stakeholders who will receive basic training;
- Determine how often basic training will be offered;
- Identify who will provide the training;
- Identify EBP staff and advisory group members who will receive comprehensive skills training;
- Determine the training format for ongoing training to EBP staff;
- Determine whether EBP staff may visit a model EBP program; and
- Determine how consultation and coaching will be provided.

Many agencies have found it useful for EBP program leaders and practitioners to become familiar with the structure and processes of the practice by visiting agencies that have successfully implemented the EBP.

Monitor and Evaluate Regularly

Key stakeholders who implement EBPs may find themselves asking two questions:

- Has the EBP been implemented as planned?
- Has the EBP resulted in the expected outcomes?

Asking these two questions and using the answers to improve your EBP program are critical components for ensuring the success of your EBP program.

- To answer the first question, collect process measures, which capture how services are provided.
- To answer the second question, collect outcome measures, which capture the program's results.

As you prepare to implement an EBP, it is strongly recommended that you develop a quality assurance system using both process and outcome measures to monitor and improve the program's quality from the start through its mature development.

Why you should collect process measures

Process measures give agency staff an objective, structured way to gain feedback about program development and about how services are provided. Experience suggests that this is an excellent method to diagnose program weaknesses and to clarify strengths.

Process measures also give mental health authorities a comparative framework in which to evaluate statewide implementation of an EBP. They allow mental health authorities to identify statewide trends and outliers. Once EBP programs reach high fidelity, ongoing monitoring allows agency staff to test local innovations while ensuring that EBP programs do not drift from core EBP principles. (See Figure 6.)

Figure 6: What Does Fidelity Mean?

Sometimes an evidence-based practice does not produce expected outcomes because it is not being implemented according to the model (the model is the version of the intervention that research found to be effective). A practice is not implemented well or "according to the model" when critical features or components of the intervention are not included in the version of the EBP being implemented. Research has shown the EBP to be effective if key components of the intervention are in place. When these components are absent, the version of the EBP being implemented is no longer "true to the model." It lacks fidelity.

Fidelity refers to the degree that the version of the EBP being implemented is "true to the model." If most of the key components are present, the implemented version has high fidelity; if most are absent, it has low fidelity.

Fidelity scales are used to measure the degree to which the critical components of an EBP are present. The reason such scales are important is that they are like a thermometer—they tell you if the EBP is being implemented as it should be or if adjustments need to be made. Often, if an intervention is not producing desired outcomes, a clinician will recommend an alternative. Before switching interventions, it helps to make sure that the intervention was properly designed and administered. Fidelity scales indicate any modifications that are needed. In this sense, fidelity measures are a gauge of the quality of services that consumers and family members receive.

For many interventions, fidelity scales do not exist. In this situation, standards and clinical guidelines are used to assure quality instead of fidelity measures.

Why you should collect outcome measures

While process measures capture how services are provided, outcome measures capture the program's results. Every mental health service intervention—whether considered treatment or rehabilitation—has both immediate and long-term client goals. In addition, children and families have goals for themselves, which they hope to attain by receiving mental health services. These goals translate into outcomes and the outcomes translate into specific measures.

Some outcomes result directly from an intervention, such as staying in school. Others are indirect, such as improving a family's quality of life as a result of the child being able to stay in school. Some outcomes are concrete and observable, such as the number of days attending school in a month. Others are subjective and private, such as being satisfied with EBP services.

Family and child outcomes are the bottom-line for mental health services, which is analogous to the role of profit in business. No successful businessperson would assume that the business was profitable just because the enterprise produced a number of widgets or because employees worked hard. Productivity does not necessarily lead to profit.

Assessing child and family outcomes

A review of the most frequently identified client outcomes assessed across the EBPs contained in this KIT included reduction of disruptive behavior, improved family functioning, the reduction of delinquent behavior, and improved parenting skills (Zubritsky et al., 2007). Table 1 summarizes the instruments for measuring these types of outcomes and information about how these materials can be acquired.

Table 1: Measurement Instruments for Assessing Child and Family Outcomes

Instrument	Age Range	Outcomes Assessed	# of Items	Informant	Reference/Publisher
Child Behavioral Symptoms					
Behavioral Assessment System for Children (BASC-2)	2–21	Aggression, conduct problems	100–160	Parent, teacher, child (8–21)	2nd Ed: Reynolds & Kamphaus, 2004* http://ags.pearsonassessments.com
Achenbach System of Empirically Based Assessment	1.5–18	Aggressive behavior	99–118	Parent, teacher, child (11–18)	Achenbach & Rescorla, 2000, 2001* http://www.aseba.org http://www.assess.nelson.com
Early Childhood Inventory-4 & Children's Symptom Inventory-4	3–18	Oppositional behavior, oppositional defiant disorder, conduct disorder	108	Parent, teacher, child (12–18)	Sprafkin & Gadow, 1996* Gadow & Sprafkin, 1995* http://www.checkmateplus.com
Conners' Rating Scales: Long & Short Form	3–17	Oppositional behavior	27–80	Parent, teacher, child (12–18)	Conners, 1997* http://www.pearsonassessments.com
Revised Behavior Problem Checklist	5–18	Conduct disorder	89	Parent & teacher	Quay & Peterson, 1996*
Eyberg Child Behavior Inventory (ECBI)	2–16	Conduct disorder, oppositional defiant disorder	36	Parent	Eyberg, 1999**
Strengths and Difficulties Questionnaire (SDQ)	3–16	Strengths & difficulties	25	Parent, teacher, child (11–16)	Goodman, 1997 Goodman, Meltzer, Bailey, 1989 http://www.sdqinfo.org http://www.routledge.com
Peabody Treatment Progress Battery: Symptoms & Functioning Severity Scale	11–18	Global measure of severity of symptoms of conduct disorder and oppositional defiant disorder	33	Youth, adult, caregiver, and clinician	Bickman et al., 2007 http://peabody.vanderbilt.edu/ptpb
Child Functioning					
Child and Adolescent Needs and Strengths- Mental Health (CANS-MH)	4–21	Oppositional behavior, antisocial behavior	41	Clinicians	Lyons, 1999** http://www.buddinpraed.org/cans/
The Child and Adolescent Functioning Scale (CAFAS)	5–18	Aggression, conduct disorder, oppositional defiant disorder, behavioral non-compliance	165	Clinicians	Hodges, 2000, 2004 http://www.CAFAS.com
Parent/Family Assessment					
Dyadic Parent-Child Interaction Coding System III	3–6	Quality of parent-child social interactions		Structured observation of parent-child interaction	Eyberg, Nelson, Duke, Boggs, 2005 http://pcit.phhp.ufl.edu/Measures.htm
Behavioral Coding System		Quality of parent-child interactions		Structured observation of parent-child interaction	Forehand & McMahon, 1981 McMahon & Forehand, 2003, (p. 58).
Caregiver Wish List	3–18	Caregiver's parenting skills and child's behavioral compliance	67	Caregiver, parent	Hodges, 2002 http://www.CAFAS.com
Parenting Scale	1.5–4	Parenting skills	30	Parent	Arnold, O'Leary, Wolff, & Acker,1993

*In McMahon, R., & Frick, P. (2005). Evidence-based assessment of conduct problems. *Journal of Clinical Child and Adolescent Psychology, 34* (3), 477-505.

** In Grisso, T., & Underwood, L. (2003). *Screening and assessing mental health and substance use disorders among youth in the juvenile justice system: Research and Program Brief*. Delmar, NY: National Center for Mental Health and Juvenile Justice.

Additional sources for measurement instruments include the following:

Maruish, M. (Ed.). (2004). *The Use of Psychological Testing for Treatment Planning and Outcome Assessments: Instruments for Children and Adolescents* (3rd ed.). Mahwah, NK: Lawrence Erlbaum Associates, Inc.

Rush, A. J., First, M. B., & Blacker, D. (Eds.) (2008.) *Handbook of Psychiatric Measures, Second Edition*. Arlington, VA: American Psychiatric Publishing, Inc.

Children develop within microcultures of families and neighborhoods that are influenced by larger macrocultures characterized by particular languages, traditions, social structures, economies, values, and attitudes. A concern about assessment measures is their generalizability to multiethnic cultures. Achenbach & Rescorla (2007) point to the need for multicultural research to develop and test assessment instruments for use with children from multiple cultures.

Address Cultural Competence and EBPs

You can improve the quality of your EBP program if you ensure that it is culturally competent—that is, it adapts to meet the needs of families from diverse cultures. It is important, however, to ensure that you are informed about culture and cultural competence and issues associated with these concepts.

Cultural competence defined

Cultural competence is an approach to delivering services that assumes that services are more effective when they are provided within the most relevant and meaningful cultural, gender-sensitive, and age-appropriate context for the people being served.

The U.S. Surgeon General has defined *Cultural competence* in the most general terms as:

> ...the delivery of services responsive to the cultural concerns of racial and ethnic minority groups, including their languages, histories, traditions, beliefs, and values.

In most cases, cultural competence refers to sets of guiding principles developed to increase the ability of mental health providers, agencies, or systems to meet the needs of diverse communities, including racial and ethnic minorities.

While families, providers, policymakers, and administrators have long acknowledged the intrinsic value of cultural competence, sufficient research has not yet been dedicated to identifying its key ingredients. Therefore, the field still struggles to define cultural competence, put it into operation, and measure it in a manner that is generally accepted by researchers and practitioners alike.

The word *competence* is somewhat misleading in that it implies that a set of criteria has been developed for use in evaluating a program. This set of criteria, however, has not yet been completely identified; cultural competence is still under-researched. In this context, competence means that the responsibility to tailor care to different cultural groups belongs to the system, not to the consumers of services. Every provider or administrator who is involved in delivering care at every level—from mental health authorities to clinical supervisors and practitioners—bears responsibility for making their programs accessible, appropriate, appealing, and effective for the diverse communities they serve. Many providers do this as a matter of course within their practice.

What culture is and how it affects care

Broadly defined, a *culture* is a common heritage or set of beliefs, norms, and values that a group of people shares. People who are placed—either by census categories or by identifying themselves—into the same racial or ethnic group are often assumed to share the same culture. However, this can be misleading.

A great diversity exists within each broad category. Individuals may identify with a given racial or ethnic culture to varying degrees. Others may identify with multiple cultures, including those associated with their religion, profession, sexual orientation, region, or disability status.

Culture is dynamic, changing continually, and influenced both by people's beliefs and the demands of their environment. Immigrants from different parts of the world arrive in the United States with their own cultures but gradually begin to adapt and develop new, hybrid cultures that allow them to function in the dominant culture. This process is called *acculturation*. Even groups that have been in the United States for many generations may share beliefs and practices that maintain influences from multiple cultures. This complexity necessitates an individualized approach to understanding culture and cultural identity in the context of mental health services.

People's culture influences many aspects of care, starting with whether they think care is even needed. Culture influences the concerns that people bring to the clinical setting, the language they use to express those concerns, and the coping styles they adopt.

Culture affects family structure, living arrangements, and the degree of support that people receive during difficult times. Culture also influences help-seeking behavior, whether people begin with a primary care doctor, a mental health program, a minister, spiritual advisor, or community elder. Finally, culture affects whether people attach a stigma to mental health problems and how much trust they place in providers.

The professional culture of agencies, administrators, and practitioners influences how care is organized and delivered. Cultural influences affect the manner in which practitioners ask questions or how they interact with families. Culture also affects equally important aspects of care that may be less overt, such as the following:

- The operating hours of an agency;
- The importance that staff attaches to reaching out to family members and community leaders; and
- The respect that staff gives to the culture of families who enter their doors.

Knowing how culture influences so many aspects of mental health care underscores the importance of adapting agency practices to respond to and respect the diversity of the surrounding community.

The need for cultural competence

For decades, many mental health agencies neglected to recognize the growing diversity around them. Often, people from nonmajority cultures found programs off-putting and hard to access. They avoided seeking care, stopped looking for care, or—if they managed to find care—dropped out.

Troubling disparities resulted. Many minority groups faced lower access to care, lower use of care, and poorer quality of care. Disparities are most apparent for racial and ethnic minority groups, such as:

- African Americans;
- American Indians and Alaska Natives;
- Asian Americans;
- Hispanic Americans; and
- Native Hawaiians and other Pacific Islanders.

However, disparities also affect many other groups, such as:

- Women and men;
- Children and older adults;
- People from rural and frontier areas;
- People with different sexual orientations; and
- People with physical or developmental disabilities.

Altogether, those disparities meant that millions of people suffered needless disability from mental illness.

Starting in the late 1980s, the mental health profession responded to the issue of disparity with a new approach to care called *cultural competence*. Originally defined as a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and that enables that system, agency, or those professionals to work effectively in cross-cultural situations, cultural competence was intended to do the following:

- Improve access to care;
- Build trust; and
- Promote engagement and retention in care.

How cultural competence relates to EBPs

According to the Surgeon General, evidence-based practices are intended for every individual who enters care, regardless of his or her culture. But many providers ask, "How can we know if EBPs apply to a particular ethnic, racial, or cultural group if the research supporting those practices was done on a very different population?"

The answer is that we do not yet know how these EBPs may apply to various cultural groups. However, the research base on adapting EBPs across multicultural groups is beginning to accumulate. In *Evidence-Based and Promising Practices* in this KIT, which describes the EBPs in greater detail, formal adaptations of EBPs that are being tested for particular ethnic and racial groups are described. (See *Parent Child Interaction Therapy and Parent Management Training-Oregon* in that booklet.)

While more research is being conducted, programs may try to adjust EBPs to make them accessible and effective for cultural groups that differ in language or behavior from the original study populations used to develop the EBP.

It is important to be aware, however, that any adjustments made to the original EBP model that was found to be effective could affect the fidelity and outcomes of the EBP. Therefore, it is very important to carefully document adjustments and to monitor the outcomes that result from these adjustments.

How to put cultural competence into practice

Since the goal is for all programs is to be more culturally competent, we offer a variety of straightforward steps to help agency administrators respond more effectively to the people it serves. These steps apply to all facets of a program; they are not restricted to the EBP program. Please note that these steps are meant to be illustrative, not prescriptive.

- Understand the racial, ethnic, and cultural demographics of the population served.
- Become most familiar with one or two of the groups you most commonly encounter.
- Create a cultural competence advisory committee consisting of youth, family, and community organizations.
- Translate your forms and brochures.
- Offer to match a consumer with a practitioner who has a similar background.
- Have ready access to trained mental health interpreters.
- Ask youth and families about their cultural backgrounds and identities.
- Incorporate cultural awareness into assessment and treatment.
- Tap into natural networks of support, such as the extended family and community groups that represent the culture of the youth and family.
- Reach out to religious, faith and spiritual organizations to encourage referrals or as another network of support.
- Offer training to staff in culturally responsive communication or interviewing skills.
- Understand that some behaviors that one culture may consider to be signs of psychopathology may be acceptable in a different culture.
- Be aware that people from other cultures may hold different beliefs about causes and treatments of illness.
- Collect and analyze data to examine disparities in services.
- Designate specific resources for cultural competence training.
- Include cultural competence in quality-assurance and quality-improvement activities.
- Compare outcome data for different cultural groups that are receiving EBPs.
- Collect and analyze fidelity and outcome data for any adjustments made to specific components of EBPs to make them more sensitive to different cultural groups.

Implementation Considerations

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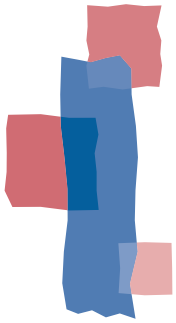

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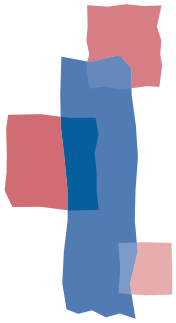

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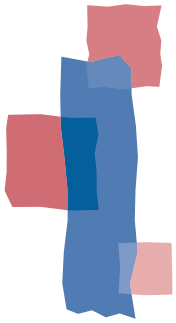

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Medication Management

This booklet covers medications available to youths with disruptive behavior disorders (DBDs). The information will help child-caring agencies understand what medical treatment options exist and how to prevent the inappropriate use of antipsychotic medications with children and youth.

Interventions for Disruptive Behavior Disorders

For additional references on interventions for disruptive behavior disorders, see the booklet, *Evidence-Based and Promising Practices*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Interventions for Disruptive Behavior Disorders KIT, which includes six booklets:

How to Use the Evidence-Based Practices KITs

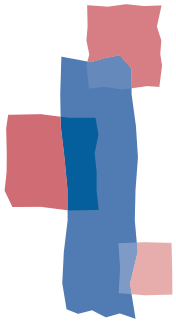
Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families

Selecting Evidence-Based Practicess for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Implementation Considerations

Evidence-Based and Promising Practices

Medication Management



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Medication Management

Introduction

As noted in *How to Use the Evidence-Based Practices KITs*, no specific evidence-based medication algorithms exist (meaning systematic steps for physicians to consider in selecting medications) for treating disruptive behavior disorders (DBDs). While the concept of evidence-based practice (EBP) has been present in the mental health literature for more than 15 years, it has not been used frequently in the medical literature on mental health.

In the absence of controlled clinical trials, the judgments of individual clinicians often become the basis for the standards by which medications are assessed for effectiveness. These judgments give rise to a consensus in the field. This is the case for many psychopharmacologic interventions.

Further complicating the evidence base for medications used for treatment of psychological disorders is the fact that many of the medications used to treat DBDs are often "off label," meaning that the medications are used in a manner that was not identified in the initial clinical trials or in the approvals from the U.S. Food and Drug Administration (FDA).

Traditionally, studies that have been undertaken have focused on using psychopharmacologic interventions for specific disorders. More recently, however, studies have focused on the symptoms that are key hallmarks of these disorders. For example, studies in the past have focused on treatment for specific DBDs such as Conduct Disorder, while more recent studies have looked at treatment for aggression.

This booklet focuses on medical interventions for both the specific disruptive behavior disorders and aggressive behavior, which is the hallmark of all of the DBDs.

The most widely studied medications for DBDs fall into the following categories:

- Atypical antipsychotics (risperidone, quetiapine, aripiprizole, olanzapine);
- Mood stabilizers (valproic acid, lithium); and
- Alpha agonists (clonidine, guanfacine).

Atypical (Second Generation) Antipsychotic Medications

Maladaptive aggression is the hallmark for most of the DBDs. In fact, aggression is the primary reason for referral to child psychiatric clinics in the United States, and much of the aggression has been associated with DBDs.

While it is clear that maladaptive aggression is not limited to the DBDs, the level of co-morbidity (the appearance of both) suggests that there is a strong association between aggression and the DBDs. As a result, researchers have begun looking at the symptoms such as aggression as the focus of treatment rather than at the disorders themselves.

Although atypical antipsychotic medications have been used to treat aggressive behaviors for years, research has been limited in this area. (*Atypical* and *second-generation* can be confusing to lay people. They simply mean these medications were developed after the first generation of psychiatric medications. At one time it was "atypical" to use these medications, but their use has become more common.)

Many of the studies that have formed the basis of the evidence for this commonly increasing practice are case studies and small, less sophisticated studies. Relatively few controlled studies exist at this time, although the numbers are increasing.

The drugs in this category that have been studied in relation to DBDs include risperidone, quetiapine, aripiprazole, ziprasidone, olanzapine, and clozapine. Although the physiological basis for using these medications to treat aggressive behavior is unclear, the current evidence suggests that they act through their effect on the serotonin and dopamine neurotransmitter systems.

These medications were first approved as a treatment for psychotic disorders. The symptoms of psychosis that have been treated with these medications include hallucinations (hearing voices or seeing things that are not there) and delusions (beliefs that are not based in reality).

Atypical antipsychotic drugs studied for effects on DBDs

- Risperidone
- Quetiapine
- Aripiprazole
- Ziprasidone
- Olanzapine
- Clozapine

Further study has shown that these medications also have several other positive effects beyond the treatment of psychosis. These medications have been shown to reduce severe aggression and behavioral problems in youth with DBDs. They also act as mood stabilizers, which help reduce mood swings as well as decrease symptoms of mania and depression in youth.

A few caveats must be considered when prescribing these medications to youth. Most of the studies using these medications involved adults. Relatively few studies were conducted with adolescents and even fewer studies with younger children.

Also, significant side effects are associated with this class of drugs. Because of these side effects, it is important for people to be closely monitored by a physician. Before starting treatment, the youth should have a thorough physical examination to identify and address any preexisting medical conditions. This will include monitoring the youth's weight, heart rate, and blood pressure. The doctor will likely order several blood tests, including a baseline blood sugar level and cholesterol level.

It is important for these lab tests to be checked every few months to make sure that the medications are not having any negative side effects, most commonly weight gain and sometimes sedation.

As a general rule, these medications' side effects can be adequately addressed without long-term consequences, as long as the medications are being carefully monitored by the physician.

Another test, which should occur at the initiation of these medications, is the Abnormal Involuntary Movement Scale (AIMS). This test will involve the physician visually monitoring the youth for any movements in the youth's tongue, face, legs, and arms. Other potential side effects, generally thought to be rare, include changes in blood sugar, increased cholesterol levels, and early onset diabetes.

It is important that the doctor repeat this examination every few months to make sure that the youth is not developing any abnormal movements. The most serious of these movement disorders is called *tardive dyskinesia* and is characterized by abnormal and uncontrollable body and facial movements. These movements may be very subtle but may also appear as sudden, jerking movements.

Although these symptoms do not usually appear until a person has been on these medications for several months to years, it is important to monitor them closely because they are often irreversible.

Table 1 includes a list of potential side effects associated with atypical antipsychotics. The youth's physician should be made immediately aware if any of these symptoms arise. For the rare and serious side effects, it is important to address these symptoms immediately, and 911 should be called.

The best source of information about an individual youth is the physician prescribing the medications. A thorough discussion of the potential side effects and the method for handling these side effects should occur at the time that the medications are prescribed.

Table 1: Side Effects Associated with Atypical Antipsychotics

Common	Rare	Rare and serious (Call 911)
Sedation	Dry mouth	Tardive dyskinesia
Insomnia	Dizziness	Allergic reactions (for example, trouble breathing, swelling of lips and tongue)
Headache	Restlessness	
Nausea	Tremor, muscle stiffness	Frequent thirst or urination
Increased appetite (weight gain)	Slow movements, movement problems	Sudden stiffness or high fever

Mood Stabilizers

Mood stabilizers, including valproic acid, carbamazepine, and lithium, have demonstrated efficacy in reducing aggressive behaviors in adolescents with DBDs. Valproic acid and carbamazepine have a long history in the treatment of seizure disorder and these two medications, along with lithium, have a long-standing history in the treatment of Bipolar Disorder.

More recent evidence has shown that they are also effective agents for decreasing the level of impulsivity and aggression in people with DBDs.

Mood stabilizing drugs studied for effects on DBDs

- Valproic acid
- Carbamazepine
- Lithium

As with the atypical antipsychotic medications, these medications require ongoing safety monitoring. Although these medications are classified as a single group for the purposes of this presentation, the side effect profiles differ.

Before prescribing these medications, it is important that a thorough medical history be obtained and that the youth has a physical examination to identify preexisting medical conditions. Valproic acid and carbamazepine are associated with weight gain, blood disorders, and potential liver problems, which must be closely monitored. Lithium is associated with fatigue, enuresis, nausea, vomiting, increased thirst, and weight gain.

Baseline laboratory monitoring should be completed before the initiation of these medications and at specified intervals after the initiation to monitor and prevent negative side effects.

Unlike the previous medications, each of these drugs has a therapeutic "window." This therapeutic window is the level of drug in the body at which the drug works optimally. This therapeutic window is monitored through blood testing, which will initially be performed about once a month, with this interval decreasing until monitoring occurs once per 6 months to a year after the youth is stable on the medication. Additionally, monitoring liver functioning, as well as monitoring white blood cell count, is indicated for carbamazepine, as it may reduce white blood cells and platelets, placing the youth at risk for infection and bleeding problems if not adequately monitored. Lithium can negatively affect the kidneys and thyroid as well as bone marrow activation. These areas must be monitored through medical laboratory testing.

It is important that potential risks and benefits be discussed with the youth and family so that an appropriate informed decision can be made. The side effects associated with these medications are presented in Tables 2 and 3.

Table 2: Side Effects Associated with Mood Stabilizers

Common	Rare	Rare and Serious
Sedation	Dry mouth	Liver problems
Dizziness	Dizziness	Bone marrow suppression—decreased white blood cell count (Tegretol brand of carbamazepine only)
Headache	Restlessness	Pancreatitis
Nausea, vomiting, indigestion	Migraine headaches	Problems with blood clotting
Increased appetite (weight gain)	Rash, itching	Sudden stiffness or high fever
Tremor	Hair loss	Severe allergic reactions (for example, trouble breathing, swelling of lips and tongue)
Constipation	Hives	

Table 3: Side Effects Associated with Lithium

Common	Rare	Rare and Serious
Sedation	Muscle weakness	Hypothyroidism (temperature sensitivity, weight gain, hoarseness, decreased energy)
Insomnia	Dizziness	Increased white blood cell count
Headache	Restlessness	Muscle weakness
Nausea, vomiting, diarrhea	Tremor	Frequent thirst or urination
Increased or decreased appetite	Rash, itching	Lithium toxicity (Sudden onset of tremor, nausea, vomiting)

Alpha Antagonists

The medications in this category that are most often used to treat youth are clonidine and guanfacine. These medications are effective in treating impulsive behaviors and aggression associated with DBDs, but they have the potential for adverse side effects. These medications have been used with youth who have a history of aggression, temper tantrums, and fighting.

Mood stabilizing drugs studied for effects on DBDs

- Clonidine
- Guanfacine

These medications have FDA approval in treating hypertension in adults. Clinicians must therefore exercise great care when prescribing these medications to youth because there is the risk of decreasing blood pressure to dangerously low levels. In addition to potential hypotensive episodes, one must also be aware of syncopal (decreased blood pressure leading to loss of consciousness) episodes as well as cardiac problems, which may also be associated with the using these medications. Many of the side effects that are more common in adults are less common in youth (for example, hypotension).

Side effects should be thoroughly discussed with the physician at the time that the medication is prescribed so that both the youth and family are aware of them and how they will be handled if they arise.

Any side effects should be reported to the physician at once. It is important that the medication not be discontinued abruptly because of the risk of rebound hypertension, which results in a potentially dangerously high blood pressure. Side effects associated with these medications are shown in Table 4.

Table 4: Side Effects Associated with Alpha Blockers

Common	Rare	Rare and Serious
Sedation	Confusion	Severe dizziness
Hypotension	Nocturnal enuresis (bedwetting)	Irregular heartbeat
Headache	Muscle cramps	Difficulty urinating
Stomachache	Tremor	Fainting
Lightheadedness, dizziness	Rash, itching	Trouble breathing
Decreased pulse rate	Runny nose	Swelling of lips and tongue

Other Medications

Treating aggression is challenging, and clinicians will often use second-line medications in treating aggression associated with DBDs. Second-line agents are medications that are used to treat DBDs where the initial treatment/medication fails.

A number of medications have been used to treat DBDs in the past but are no longer first- or second-line agents. This is due to unfavorable possible side effects and the introduction of newer medications with greater efficacy and more favorable side effect profiles.

Before the advent of the atypical antipsychotic agents, the older antipsychotic medications including haloperidol and molindone were used to treat aggressive behaviors in youth with Conduct Disorder. Although these medications had demonstrated efficacy in double-blind studies for treating aggression in youth with Conduct Disorder, numerous potential side effects existed, including tardive dyskinesia and neuroleptic malignant syndrome. Although these medications are not used as first-line agents in treating aggressive behavior, they remain viable alternatives for treating aggression.

Older agents such as tricyclic antidepressants have been used to treat aggressive behavior. These medications are no longer used frequently to treat aggressive behavior due to their level of side effects, including sedation, cardiac conduction delays, urinary hesitancy, and dry mouth.

Beta blockers can have significant side effects, including sedation, hypotension, bradycardia, and bronchoconstriction in children with asthma, which limit their utility in treating youth.

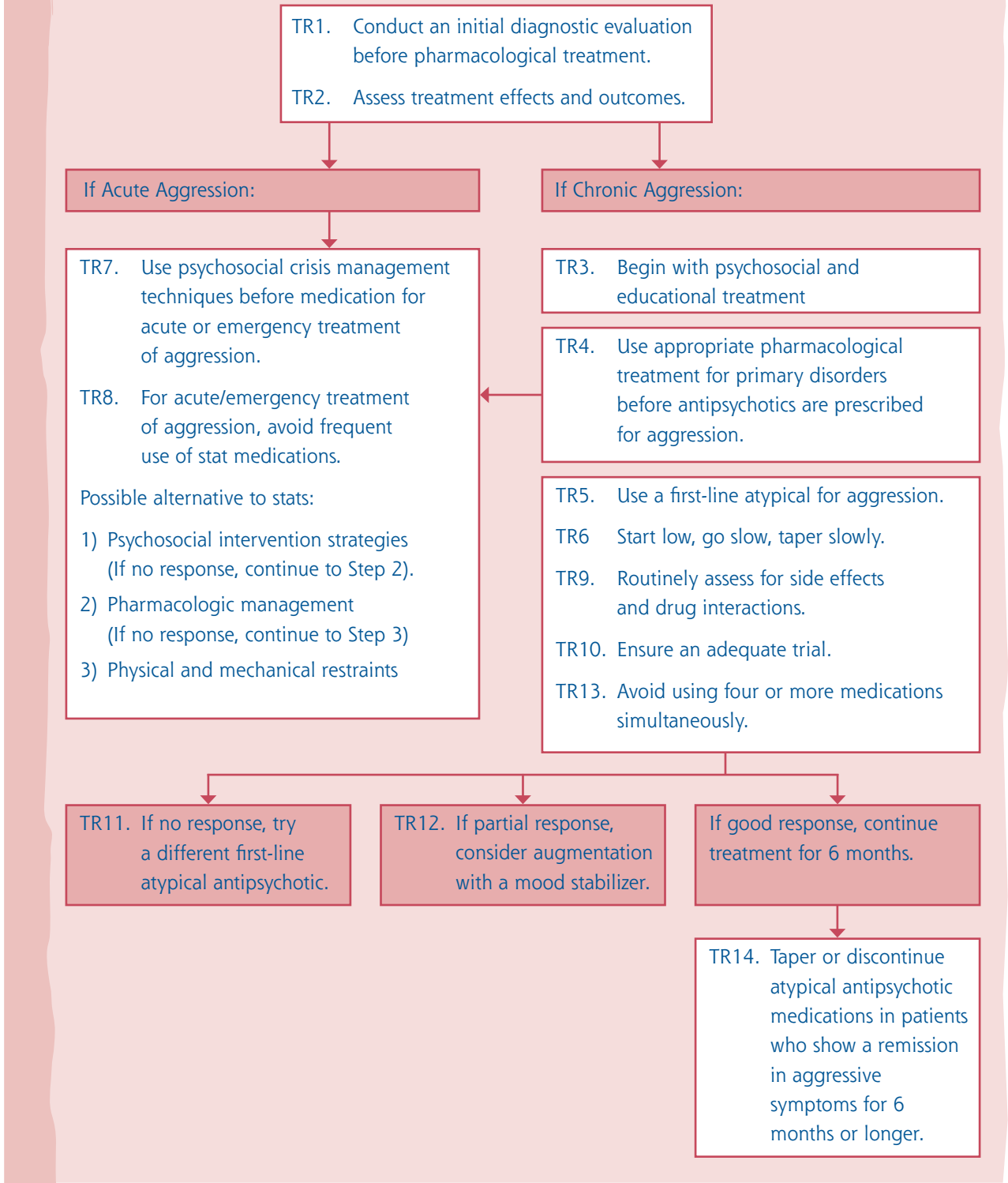
Recommendations

The Treatment Recommendations for the Use of Antipsychotics for Aggressive Youth (TRAAY) used the available evidence to develop guidelines to treat youth with aggressive behaviors. The guidelines were based on expert clinical consensus, as well as the available evidence in the research literature. These recommendations did not consider the diagnosis of the youth, but many of the youth met criteria for DBDs. The 14 treatment recommendations are presented in Figure 1.

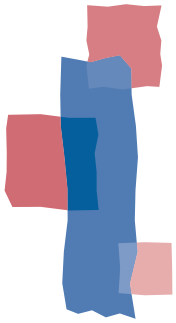
The goal of TRAAY was to develop guidelines to prevent the inappropriate use of antipsychotic medications for aggressive symptoms. While no evidence exists that this systematic approach will improve treatment outcomes, it represents the best integration of evidence-based practice for this population to date. It provides a method for emphasizing symptoms based on the best available current evidence, rather than emphasizing diagnoses, which may lead to unsuccessfully following a constellation of symptoms.

It is important to realize that the evidence for using these medications continues to expand. Also, the information used to prescribe these medications for youth with DBDs is not as strong as it is for many of the psychosocial interventions presented in this KIT. Much work remains to be done before these important disorders can be fully addressed.

Figure 1: Treatment Recommendations for the Use of Antipsychotics for Aggressive Youth



TR=Treatment Recommendation. See *TRAAY Pocket Reference Guide* by P. S. Jensen, J. C. MacIntyre, and E. A. Pappadopulos, 2004, New York, NY: State Office of Mental Health and Center for the Advancement of Children's Mental Health at Columbia University, Department of Child and Adolescent Psychiatry.



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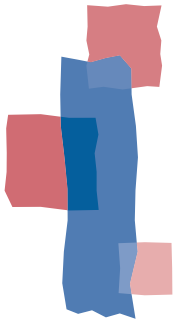

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Interventions for Disruptive Behavior Disorders

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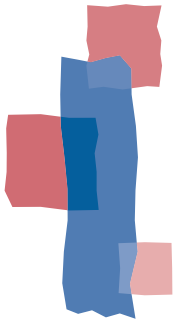

EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

Selecting Evidence-Based Practices

For Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Interventions for Disruptive Behavior Disorders

U.S. Department of Health and Human Services
Substance Abuse and Mental Health Services Administration

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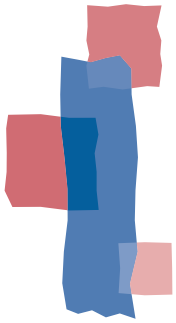


EVIDENCE-BASED PRACTICES KIT

Knowledge Informing Transformation

Guide to EBPs

Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

This booklet provides a comprehensive, step-by-step guide to making decisions about implementing evidence-based practices (EBPs). It walks readers through the process of considering EBPs and matching them with the needs of communities, agencies, families, and youth. It also presents critical information that will help readers understand and use scientific evidence when choosing a practice.

Interventions for Disruptive Behavior Disorders

For additional references on interventions for disruptive behavior disorders, see the booklet, *Evidence-Based and Promising Practices*.

This KIT is part of a series of Evidence-Based Practices KITs created by the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

This booklet is part of the Interventions for Disruptive Behavior Disorders KIT, which includes six booklets:

How to Use the Evidence-Based Practices KITs

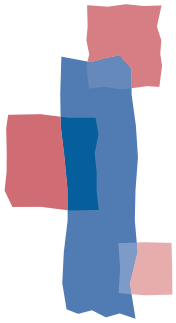
Characteristics and Needs of Children with Disruptive Behavior Disorders and Their Families

Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking

Implementation Considerations

Evidence-Based and Promising Practices

Medication Management



EVIDENCE-BASED PRACTICES

KIT

Knowledge Informing Transformation

Guide to EBPs

What's in *Selecting Evidence-Based Practices for Children with Disruptive Behavior Disorders to Address Unmet Needs: Factors to Consider in Decisionmaking*

Interventions for Disruptive Behavior Disorders

EVIDENCE-BASED PRACTICES KIT

Knowledge Informing Transformation

Guide to EBPs

Selecting EBPs

Introduction to the Six-Step Decisionmaking Process

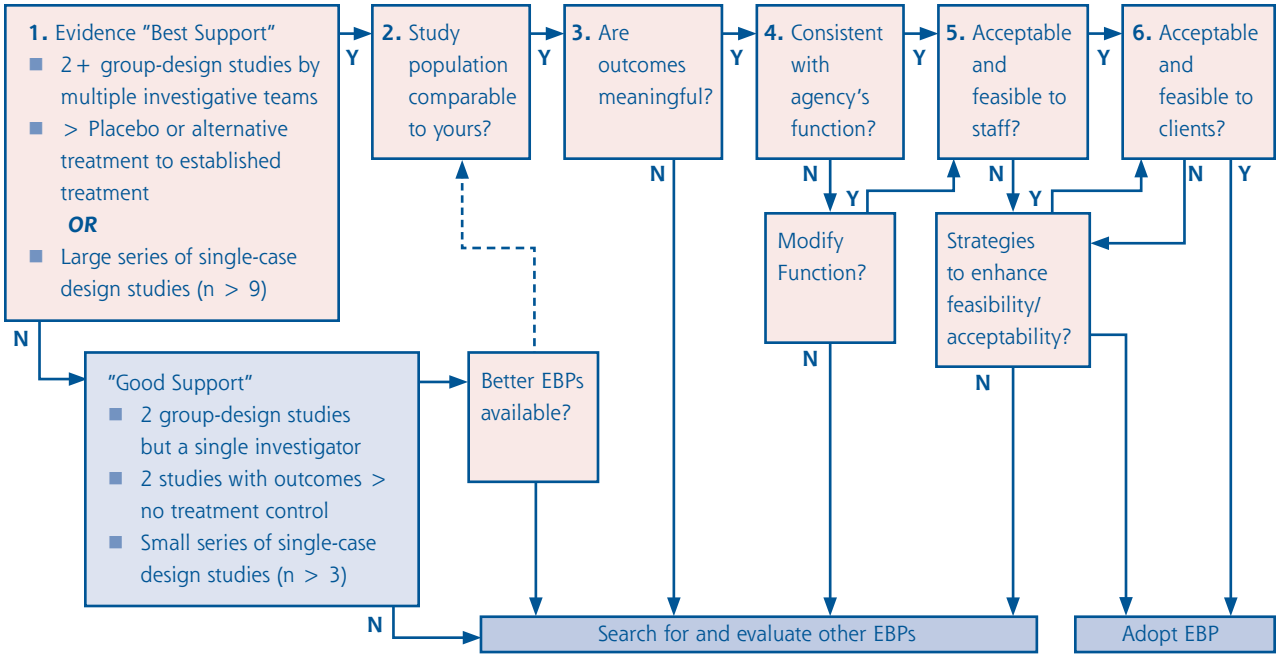
This booklet walks readers through the process of considering EBPs and matching them with the needs of communities, agencies, families, and youth. It also presents critical information that will help readers understand and use scientific evidence when choosing a practice.

The information available for each of the 18 EBPs defined in Tables 3 and 4 of *How to Use the Evidence-Based Practices KITs* can be overwhelming. Even after educating yourself about the details of each EBP, deciding which EBP to implement in an organization and how to implement that EBP can be daunting. To help you in the selection process, this booklet gives you examples of implementation factors to be considered at each step in the decisionmaking process. Characteristics of the EBPs that influence decisionmaking are also summarized.

This booklet can serve as a shortcut for indepth browsing through the 18 EBPs presented in *Evidence-Based and Promising Practices* of this KIT to narrow the search to match your population of interest, your agency, and your staff and, most important, to satisfy the needs of families and children served. Figure 1 presents the six steps in selecting a specific EBP or set of EBPs to add to a service array:

- Determining the evidence for the EBP;
- Determining the target population of the EBP;
- Determining if the outcomes of the EBP are meaningful to a local population;

Figure 1: Decisionmaking in the selection of evidence-based practices



Adapted from Selecting an evidence-based practice (pp. 1-15), by P. A. Areán and A. Gum, in S. E. Levkoff, H. Chen, J. E. Fisher, & J. S. McIntyre (Eds.), *Evidence-based behavioral health practices for older adults,* 2006, New York, NY: Springer. Copyright 2006 by Springer.

- Determining if the practice is consistent with an agency's function;
- Determining if implementation is feasible to staff; and
- Determining if the EBP is acceptable to clients.

Specific characteristics of the individual EBPs are presented in the tables in this booklet. The decisionmaking process for selecting an EBP entails matching characteristics found in these tables with the process illustrated in Figure 1.

Tables 1A and 1B and all of the summary tables that follow are organized into the following two groups:

- EBPs that focus primarily on *prevention*; and
- EBPs that focus on *intervention*.

The prevention EBPs are also described in the table headings as *Prevention/Multilevel* because many have program components aimed at different levels of prevention. For example, some prevention programs are considered to be *universal* because they focus on an entire population to prevent disruptive behavior disorders. Examples of such programs could be outreach or media programs.

Several other prevention programs are called *selected* because they focus on a specific subpopulation to improve behavior problems that could turn into disruptive behavior disorders among that group of youth. Still others, labeled *indicated*, provide treatment or intervention as well as prevention services.

Intervention usually refers to the treatment of a specific disorder, as opposed to the *prevention* of a problem condition.

Tables 1A and 1B show the level of evidence for each EBP and the age, gender, and race/ethnicity of the children and adolescents who participated in the evaluation of the practice. For example, Table 1A shows that Project ACHIEVE is a multi-level prevention program that has a moderate level of evidence to support its effectiveness. Project ACHIEVE has been evaluated with boys and girls 3 to 14 years of age. Approximately half of the children who participated in the evaluations were White, and half were from diverse populations, primarily African American.

Table 1A: What is the Level of Evidence for an EBP and is the Population Comparable to Yours? — Intervention EBPs

	Level of Evidence	Age Range	Gender: Boys | Girls	Race and Ethnicity*
Triple P-Positive Parenting Program	Good support	0–16	B and G	Groups of children and families in Australia who were primarily White. One randomized controlled trial was conducted in China with Chinese children.
Project ACHIEVE	Moderate support	3–14	B and G	Evaluation was carried out with groups who were approximately half White and half from diverse populations, primarily African American.
Second Step	Good support	4–14	B and G	Diverse groups studied: Two studies were conducted primarily with White children. In another two studies, the population was primarily African American. In one study the proportions of White, African American, and Hispanic participants were approximately equal. In another study, the majority of participants were African American and secondarily, Hispanic. Another study included a small percentage of Asian Americans; and one study was conducted in Germany.
Promoting Alternative Thinking Strategies	Good support	5–12	B and G	Groups studied were approximately one-half White and one-quarter to one-third African American. Asian American, American Indian, and Hispanic children combined made up the remainder of the group
First Steps to Success	Moderate support	5–6	B and G	The children involved in two studies were primarily White. Smaller case studies involved primarily African American and some American Indian children with minimal participation from Hispanic children.
Early Risers: Skills for Success	Good support	6–12	B and G	Evaluations included two groups of predominately White children and one group of predominately African American children.
Adolescent Transitions Program	Good support	11–18	B and G	Two studies included primarily White children. One study involved primarily White and African American children with very small proportions of Hispanics, Asian Americans, and American Indians.

* See *Evidence-Based and Promising Practices* for more information about the race/ethnicity of the children and adolescents who participated in the individual research studies, which established the effectiveness of the EBPs.

Table 1B: What is the Level of Evidence and is the Population Comparable to Yours? — Intervention EBPs

	Level of Evidence	Age Range	Gender: Boys | Girls	Race and Ethnicity*
Incredible Years	Good support	2–12	B and G	Four studies have had primarily White participants with no description of other ethnic/racial groups. Two studies included African American, Hispanic and other multiethnic groups in small proportions.
Helping the Noncompliant Child	Moderate support	3–8	B and G	No specification of ethnicity or race among the studied groups was available.
Parent-Child Interaction Therapy	Good support	2–7	B and G	One study included approximately three-fourths White and one-fourth diverse populations (primarily African American). There is support for a culturally sensitive adaptation for Puerto Rican and Mexican American families.
Parent Management Training–Oregon	Best support	4–12	B and G	Evaluated primarily on White children and parents. A culturally sensitive adaptation of PMTO for Hispanic families has been evaluated as well.
Brief Strategic Family Therapy™	Good support	6–18	B and G	Evaluated primarily with Hispanic families. One study's sample was one-fifth African American.
Problem-Solving Skills Training	Good support	6–14	B and G	Studies with groups of approximately three-fourths White and one-fourth African American children.
Coping Power	Good support	9–11	B and G	Groups studied were approximately half White and half African American children. One study was in the Netherlands with Dutch children.
Mentoring	Moderate support	6–18	B and G	The major study included a group of approximately three-fourths African American children and one fourth Hispanic children.
Multisystemic Therapy	Best support	12–18	B and G	Most groups that were evaluated were approximately 60% African American children and 40% White children, except for two that were approximately 70% White and 30% African American. One study included an 84% multiracial group of African American and Whites. One study was conducted in Norway with Norwegian children.
Functional Family Therapy	Good Support	11–18	B and G	Groups were predominantly White families. In unpublished studies, diverse populations (primarily African American and Hispanic) comprised between one fourth and one half of the group. One study was conducted in Sweden.
Multidimensional Treatment Foster Care	Good Support	3–18	B and G	Studies were primarily White children. African American, Hispanic and American Indian children were represented in very small proportions.

* See *Evidence-Based and Promising Practices* for more information about the race/ethnicity of the children and adolescents who participated in the individual research studies, which established the effectiveness of the EBPs.

Finally, while this KIT focuses on matching EBPs with the needs of children, youth, and families and the needs of organizations serving them, consider the context in which programs are run. Evidence shows that implementing an EBP program within a framework of continuous quality improvement (CQI) has benefits for all concerned.

EBPs and continuous quality improvement

Results of state demonstration projects show that implementing EBPs in organizations within a framework of continuous quality improvement (CQI) has several benefits:

- It builds momentum to get a project off the ground;
- It creates the organizational traction needed to achieve broader dissemination of the EBP around the state; and
- It can provide the justification for sustaining the project.

Continuous quality improvement principles focus on five areas:

- Customer and other stakeholder satisfaction with the quality and outcomes of services;
- Employee and customer empowerment to identify problems, identify opportunities for improved care, and take necessary action;
- The identification of organizational processes and systems, not individuals, as the source of problems;
- The use of structured problem-solving approaches based on data analysis; and
- The use of inclusive cross-functional teams (Shortell et al., 1995).

In a CQI framework, the needs of the child and family are comprehensively assessed and carefully matched with services and treatments. Outcomes are routinely monitored to ensure that the services and treatments are producing the desired results. Efforts to improve and enhance services and treatments are implemented as needed to improve outcomes for children and families.

Step 1 What is the evidence for a practice?

The first step shown in Figure 1 is to determine how much evidence supports an intervention. As examples, two categories are in the left boxes: *Best Support* and *Good Support*. Other levels of support are also possible. Generally, a higher level of evidence is desirable.

This booklet uses Hawaii's system of rating EBPs, because it is based on the criteria used by the American Psychological Association but integrates a broader range of evidence, with five categories:

- Best support;
- Good support;
- Moderate support;
- Minimal support; and
- Known risks.

Categories are based on the type and amount of rigorous scientific study that a practice has undergone. The following outline presents the criteria of the system's ratings. Find the ratings with explanatory material at **http://hawaii.gov/health/mental-health/camhd/library/pdf/ebs/ebs011.pdf**.

The EBPs covered in the KIT have levels of evidence of at least *moderate support*, while most have *good support*. Using Hawaii's system of rating, see that most interventions in Tables 1A and 1B are at the second level because they have undergone rigorous testing but only by one group of researchers. In other words, separate, independent researchers have not replicated the findings, either because no independent research studies have been completed or because independent studies did not confirm the results of earlier studies.

Criteria for level of evidence (Hawaii EBP Services Committee, 2004)

Level 1: Best Support

I. At least two good between-group design experiments demonstrating efficacy in one or more of the following ways:

a. Superior to pill placebo, psychological placebo, or another treatment

b. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989)

OR

II. A large series of single case design experiments ($n > 9$) demonstrating efficacy. These experiments must have:

a. Used good experimental designs

b. Compared the intervention to another treatment as in I.a.

AND

Further criteria for both I and II:

II. Experiments must be conducted with treatment manuals.

III. Characteristics of the client samples must be clearly specified.

IV. Effects must have been demonstrated by at least two different investigators or teams of investigators.

Criteria for level of evidence (Hawaii EBP Services Committee, 2004)

Level 2: Good Support

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

OR

II. One between-group design experiment with clear specification of group, use of manuals, and demonstrating efficacy by either:

a. Superior to pill placebo, psychological placebo, or another treatment

b. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989)

OR

III. 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 pill or psychological placebo or to another treatment.

Level 3: Moderate Support

I. One between-group design experiment with clear specification of group and treatment approach and demonstrating efficacy by either:

a. Superior to pill placebo, psychological placebo, or another treatment

b. Equivalent to an already established treatment in experiments with adequate statistical power (about 30 per group; cf. Kazdin & Bass, 1989)

OR

II. A small series of single case design experiments ($n > 3$) with clear specification of group and treatment approach, good experimental designs, at least two different investigators or teams, and comparison of the intervention to pill, psychological placebo, or another treatment.

Level 4: Minimal Support: Treatment does not meet criteria for Levels 1, 2, 3, or 5.

Level 5: Known Risks

Step 2 Is the study population comparable to yours?

Step 2 is relatively straightforward. Stakeholders must decide if an intervention is appropriate for the population they serve.

Even if an intervention has not been studied for use with a particular population, it doesn't necessarily follow that the EBP will be ineffective with that population. The only conclusion that can be drawn is that no current evidence shows that it is effective with that population. See the following note on race and ethnicity.

Race and Ethnicity

It is important to mention here that the issue of race and ethnicity is quite controversial because children and families of diverse races and ethnicities frequently are represented in very small proportions, if at all, in studies evaluating the effectiveness of interventions. This issue is particularly relevant for Hispanic, American Indian, and Asian groups.

Isaacs, Huang, Hernandez, and Echo-Hawk (2005) suggest two approaches for ensuring culturally competent EBPs for children and families of color:

- Cultural adaptations of existing evidence-based practices; and
- Use of culturally specific interventions.

It is beyond the scope of this KIT to provide information about practice-based evidence models that may be used across many different cultures for working with children and youth with Disruptive Behavior Disorders. However, see Isaacs et al. (2005) for a comprehensive discussion of the issues.

Also, obtain information at the Portland Research and Training Center about a current project to develop and test practice-based evidence approaches to establish the effectiveness of programs and services, including culturally specific practices.

See **http://www.rtc.pdx.edu/**

Step 3 Are outcomes meaningful to a local population?

The next step in the process is to answer the question, Are the outcomes of the EBP meaningful to my agency and the children and families we serve? Some of the more commonly desirable outcomes for children and adolescents with Disruptive Behavior Disorders include the following:

- Reduction in:
  - Aggressive behavior;
  - Family conflict;
  - School absences and failure; and
  - Legal system involvement.
- Increase in:
  - School achievement;
  - Positive peer relationships;
  - Parenting skills; and
  - Ability to access other services.

Tables 2A and 2B provide a quick reference to the outcomes that have been seen in the evaluation studies conducted on the EBPs included in this KIT.

Step 4 How does a practice fit with an agency?

Adding EBPs to existing service arrays often requires, at a minimum, carefully examining staffing patterns, staff training and supervision, procedures for measuring and monitoring treatment fidelity and outcomes, and financing methods.

Unless agencies are already thoroughly engaged in valuing and using data for continuous quality improvement, most agencies will have to commit to change. This will entail building an infrastructure to accommodate and support evidence-based decisionmaking and EBPs.

Therefore, the closer the fit between the characteristics of an EBP with an agency's mission and functions, the easier the accommodation may be for the agency.

Evidence-Based and Promising Practices in this KIT contains extensive descriptions of all 18 of the EBPs with detailed information about characteristics of the EBPs, training requirements, and specifics about how these EBPs have been financed. Tables 3A, 3B,4A,4B, 5A, and 5B in this booklet provide an overview of characteristics of EBPs that help determine if they are good fits with an agency.

Table 2A: Are the Prevention/Multilevel Outcomes Meaningful to a Local Population?

Intervention	Outcomes
Triple P-Positive Parenting Program	■ Increase in parental confidence ■ Reduction in child behavior problems ■ Improvements in dysfunctional parenting styles
Project ACHIEVE	■ Decrease in discipline problems ■ Decrease in special education referrals and placements ■ Increase in positive school climate ■ Improvements in academic achievement
Second Step	■ Increase in prosocial behavior and social reasoning ■ Improvement in self-regulation of emotions ■ Decreased verbal and physical aggression ■ Decrease in problem behaviors
Promoting Alternative Thinking Strategies	■ Increase in ability to label feelings ■ Reductions in classroom aggression ■ Increase in self-control; ■ Decrease in teacher-reported internalizing and externalizing behaviors
First Steps to Success	■ Decrease in aggression ■ Increase in time spent on academics ■ More positive behavior demonstrated

Table 2B: Are the Intervention Outcomes Meaningful to a Local Population?

Intervention	Outcomes
Incredible Years	■ Increases in parents' use of effective limit setting, nurturing, and supportive parenting ■ Improvement in teachers' use of praise ■ Reductions in conduct problems at home and school
Helping the Noncompliant Child	■ Improvement in parenting skills ■ Improvement in child's behavior and compliance
Parent-Child Interaction Therapy	■ Improvement in parent-child interaction style ■ Improvement in child behavior problems
Parent Management Training–Oregon	■ Significant reductions in child's behavioral problems ■ Reductions in coercive parenting ■ Increases in effective parenting
Brief Strategic Family Therapy™	■ Decrease in substance abuse ■ Improved engagement in therapy ■ Decrease in problematic behavior ■ Increased family functioning ■ Decrease in socialized aggression and conduct disorder
Problem-Solving Skills Training	■ Improvement in behavior as rated by teachers and parents ■ Family life-functioning improvement
Coping Power	■ Decrease in substance abuse ■ Improvement in social skills ■ Less aggressive belief system
Mentoring	■ Increased confidence in school performance ■ Improved family relationships ■ Increased prosocial behaviors
Multisystemic Therapy	■ Decreased arrests and re-arrests ■ Increased school attendance ■ Decreased behavior problems ■ Decreased substance use ■ Improved family relations
Functional Family Therapy	■ Reduction in recidivism and out-of-home placements ■ Improvements in family communication style, family concept, and family interaction
Multidimensional Treatment Foster Care	■ Fewer runaways ■ Less chance of arrest or decrease in arrest rates ■ Decrease in violent activity involvement of incarceration after completing program ■ Fewer permanent placement failures.

Tables 3A and 3B summarize key features of the various EBPs. They include the following:

- The setting for prevention/multilevel or intervention programs;
- The length of prevention/multilevel or intervention programs;
- Whether a family component exists;
- Who delivers the programs; and
- The format of the EBP (individual or group sessions).

Table 3A: Fit with Agency: Prevention/Multilevel EBPs

	Setting				Format
	Clinic Home or School	What is its length?	Family component	Who delivers?	Individual or Group?
Triple P–Positive Parenting Program	C, H, S	Varies due to level implemented (from 1–2 sessions to 8–10 sessions)	Parent training, home visits, partner support skills, mood management workbook material	Trained mental health professionals, health care professionals and school staff (counselors, parent liaisons)	I, G
Project ACHIEVE	S	3 years	Parent training	School administrators, teachers and chosen facilitators	G
Second Step	S	School year	Family guide that includes a video-based parent training program to help parents reinforce skills at home	Classroom-based intervention implemented by teachers and counselors	G
Promoting Alternative Thinking Strategies	S	5 years, 3 times a week for 20–30 minutes	None	Teachers and counselors. It is recommended to hire a PATHS coordinator.	G
First Steps to Success	H, S	3–4 months	Parent training delivered in the home	Coaches with MA degree plus clinical experience work alongside teachers and parents/guardians	I
Early Risers: Skills for Success	H, S	3–6 months for recruitment/ screening 2–3 years for the intervention	Parent education workshops, individualized family support	Specially trained family advocate	I
Adolescent Transitions Program	S	Varies by level: Level 1: 6 weeks Level 2: 3 sessions Level 3: 12 sessions with 3-month followup	Family management groups, individual family therapy	Master's level counselors	I, G

Table 3B: Fit with Agency: Intervention EBPs

	Setting:				Format:
	Clinic Home or School	What is its length?	Family component	Who delivers?	Individual or Group?
Incredible Years	H, S	Less than 22 weeks	Parent training	Parents, teachers, counselors, social workers or master's level therapists	G
Helping the Noncompliant Child	C, H	8–10 sessions	Parent training	Master's level therapist	I
Parent-Child Interaction Therapy	C	10–16 sessions	Parent training, coaching	Master's or doctoral level therapist	I
Parent Management Training–Oregon	C, H	20 sessions over 13 months	Parent training	Trained master's level therapist	I
Brief Strategic Family Therapy™	C, H	12–16 sessions over 3 months	Family therapy	Master's or doctoral level therapist	I
Problem-Solving Skills Training	C, H	20 sessions	Parent training	Master's level therapist	I
Coping Power	S	15-18 months	Parent training	Program specialist/master's or doctoral level therapist and school guidance counselor	G
Mentoring	H, S	1 year or longer	None	Trained adults	I
Multisystemic Therapy	H, S	3-5 months	Family therapy, parent training	Master's or doctoral level therapist	I
Functional Family Therapy	C, H	8-12 sessions	Family therapy	Paraprofessionals and master's level therapists	I
Multidimensional Treatment Foster Care	C, H, S	6-9 months	Training, weekly meetings	Trained treatment families	I

Tables 4A and 4B address training the workforce in the skills and competencies required for the various EBPs. They cover the following:

- The developer's involvement in training;
- Location of training;
- Length of training;
- Cost of training; and
- Availability of followup coaching.

Table 4A: Fit with Agency: Training and Coaching/Consultation — Prevention/Multilevel EBPs

	Training by developer?	Where?	Length of training?	Cost?	Is followup coaching available?
Triple P– Positive Parenting Program	Yes	Onsite and Regional	2 sets of 2–3 days with repeat in 8–10 weeks	$21,000 per 20 trainees	Yes
Project ACHIEVE	Yes	Onsite	YR1:5–8 days YR2:4–8 days YR3:4–6 days	Average of $25,000 per year to $75,000 for 3 years	Yes
Second Step	Yes	Onsite or offsite options	2½ days or 1-day option	Options: ■ $399–$499 per person off site ■ Onsite for $6,475 + travel for up to 40 people ■ $1,600 1-day version onsite	Yes
Promoting Alternative Thinking Strategies	Indirectly	Onsite	2–3 days	Options: ■ 1 trainer, 2 days, and 30 participants and ongoing technical assistance (TA) for $4,000–$5,000 plus travel ■ 1 trainer, 2 days, and 30 participants but no ongoing TA for $3,000 + travel	Yes
First Steps to Success	Indirectly	Onsite	2 days for consultants/ caseworkers, 1 day for teachers	$1,000-1,500 per day plus travel expenses for up to 30 coaches and 50 teachers	Yes
Early Risers: Skills for Success	Yes	Onsite	4 days	$5,000–8,000	Yes
Adolescent Transitions Program	Yes	Onsite	Stage 1: 4-5 days Stages: 2 and 3 varies	Varies by stage and size of group from $500–1,850 + materials	Yes

Table 4B: Fit with Agency: Training and Coaching/Consultation—Intervention EBPs

	Training by developer?	Where?	Length of training?	Cost?	Is followup coaching available?
Incredible Years	Yes	Onsite and offsite	2–3 days per curriculum (3 possible curricula in total)	$300–400 per person offsite $1,500 per day + travel expenses onsite	Yes
Helping the Noncompliant Child	Yes	Onsite	2 days minimum	$1,500 per day + expenses	Yes
Parent-Child Interaction Therapy	Yes	Offsite	5 days	$3,000	No
Parent Management Training–Oregon	Yes	Onsite	18 workshop days spread over 1 year	$25,000 per trainee	Yes
Brief Strategic Family Therapy™	Yes	Onsite	4 (3-day) workshops	$60,000 (includes coaching)	Yes
Problem-Solving Skills Training*	Yes	Onsite	6–12 months	Graduate school tuition	No
Coping Power	Yes	Onsite	3 days	$5,000 + travel expenses and materials	Yes
Mentoring	No	Regional	Varies by model	Varies by model; some free	Yes
Multisystemic Therapy	Yes	Regional	5 days for staff; 2 days for supervisors	$26,000 for a team of 4–6 staff members	Yes
Functional Family Therapy	Yes	Onsite and offsite	2 days onsite plus 2 days offsite. Followup training of 3 onsite visits per year, 2 days each	For 3-8 therapists, about $35,000 Year 1; $18,000 Year 2	Yes
Multidimensional Treatment Foster Care	Yes	Onsite and offsite	4–5 days for staff; 2 days for treatment parents	$40,000–$50,000 per site	Yes

* Graduate students have been trained as therapists as part of research studies. An infrastructure for training other clinicians is in the planning stages.

The final tables that refer to Fit with Agency are Tables 5A and 5B on *Monitoring and Financing Options*. An integral part of using EBPs within a CQI framework is measuring and assessing the fidelity of the interventions (that is, the extent to which the treatment is delivered as intended) and the client outcomes that result from treatment. The availability of measurement instruments facilitates these processes.

Tables 5A and 5B provide brief information about whether such instruments are available from the developer or purveyor of the various EBPs, and the developers' expectations about their ongoing measurement. Tables 5A and 5B also provide information obtained from the developers of the EBPs related to how the EBPs have been financed.

Table 5A: Fit with Agency: Monitoring and Financing Options—Prevention/Multilevel EBPs

	Is there a fidelity/ adherence measure?	If Yes, What Is the expectation of use?	Is an outcome measure specified?	Financing options
Triple P–Positive Parenting Program	Yes	Not required	Yes	Grants, State Funds
Project ACHIEVE	Yes	Required	Yes	Special Education Funds, School Improvement Funds, Safe School Grants, Foundation, Partial Medicaid
Second Step	Yes	Not required	Yes	Safe and Drug Free Schools
Promoting Alternative Thinking Strategies	Yes	Not required	Yes	Safe and Drug Free Schools, School Board Funds, Grants
First Steps to Success	Yes	Required	Yes	School Districts, Grants
Early Risers: Skills for Success	Yes	Not required	Yes	Local Grants, County Funds
Adolescent Transitions Program	Yes	Required	Yes	Federal Grants

Table 5B: Fit with Agency: Monitoring and Financing Options—Intervention EBPs

	Is there a fidelity/ adherence measure?	If Yes, What Is the expectation of use?	Is an outcome measure specified?	Financing options
Incredible Years	Yes	Not required	Yes	Grants, State Funds
Helping the Noncompliant Child	Yes	Not required	Yes	Grants, State, Private Insurance, Medicaid
Parent-Child Interaction Therapy	Yes	Not required	Yes	Grants, State, Private Insurance, Medicaid
Parent Management Training–Oregon	Yes	Required	Yes	Grants, State, Private Insurance, Medicaid
Brief Strategic Family Therapy™	Yes	Required	Yes	Grants, State, Private Insurance, Medicaid
Problem-Solving Skills Training	Yes	Not required	No	Grants, State, Private Insurance, Medicaid
Coping Power	Yes	Not required	No	Safe and Drug Free Schools, Local Grant Funding
Mentoring	Yes	Not required	Yes	Grants, Medicaid
Multisystemic Therapy	Yes	Required	Yes	Grant, State, Medicaid
Functional Family Therapy	Yes	Required	Yes	Grant, State, Medicaid
Multidimensional Treatment Foster Care	Yes	Required	Yes	Grant, State, Medicaid

Step 5 How does a practice fit with staff?

Another important piece to consider when selecting an EBP is its fit with an organization's clinicians and other staff members. Gregory Aarons' (2004, 2005) study on provider attitudes about implementing EBPs has shown that the following factors effect an EBPs fit:

- The appeal of the specific EBP itself;
- The requirement to use an EBP;
- The openness of the provider to new practices; and
- The perceived difference between usual practices and an EBP (Aarons, 2005).

Step 6 How does a practice fit with youth and family?

Families and youth are driving changes to systems. These mental health services should:

- Be culturally sensitive;
- Allow for shared decisionmaking;
- Incorporate strength-based principles; and
- Respect each individual family member's voice.

Additionally, their selection of EBPs may be dependent on several factors, such as

- Presenting problems or diagnosis;
- Access to care;
- Availability of care;
- Personal choice; and
- Cost.

Difficulty accessing services and the limited availability of services affect the experience of families and youth in mental health systems. Insurance coverage and transportation availability can present more barriers.

Michigan's Association for Children's Mental Health guide for families *Evidence-Based Practice—Beliefs, Definitions, Suggestions for Families* (2004) is a helpful resource for families and youth preparing for meetings with care providers. (See **http://www.acmh-mi.org/41447_ACMH_Booklet.pdf**.)

The family worksheets accompanying this KIT contain sample questions that families may ask to assess the fit of EBPs with their own needs and circumstances.

Case Illustrations

The following two case illustrations provide examples of the process of selecting EBPs. One focuses on prevention, the other on intervention.

Case Illustration 1: Prevention/Multilevel

The Case of Oyster Elementary Public School

As principal of Oyster Elementary Public School, I have noticed a growing need for mental health services for children in our school. In the last few years, the number of children who demonstrate verbally and physically aggressive behaviors, limited social reasoning, and an inability to manage emotions has increased.

At the last school staff meeting, teachers and school counselors, growing increasingly frustrated with negative classroom behaviors, asked for leadership on how to respond in an effective, unified way to meet the needs of the children.

An increasing number of parents have also approached me with concerns about their child being bullied at school or on the bus.

Consultation

After speaking with my school superintendent, I consulted with our state project director of mental health services, Dr. Jones. I asked her for information on possible programs to implement in our school to prevent the negative child behaviors. Dr. Jones directed me to the resource, *A Guide for Selecting and Adopting Evidence-Based Practices for Children and Adolescents with Disruptive Behavior Disorder.*

She informed me that the guide included 18 practices, 7 of which fit in the category of Prevention/Multilevel Practices that were primarily implemented in schools. Dr. Jones also suggested that I bring together an advisory panel for the process of selecting and implementing a program.

The advisory panel

Following her advice, I brought together an advisory panel that consisted of the following people:

- The state children's mental health director;
- The director of a community mental health center;
- The superintendent of the school district;
- The school district psychologist;
- The director of special education at the school;
- The director of guidance counseling from the school;
- Two classroom teachers;
- A group of parents; and
- Myself.

The panel agreed to commit themselves to a series of meetings for the selection and implementation process.

The following process took place over a number of months.

Considering needs of audience of interest

The first thing that we explored were the demographics of the children at our school: boys and girls at the K-5 grade level, from White, African American, and Hispanic backgrounds. The KIT (see Table 1A) provided quick access to prevention programs that, at first glance, were a match with our school community: Project ACHIEVE, Second Step, and Promoting Alternative Thinking Strategies (PATHS).

Considering desired outcomes

Then, we explored how meaningful each programs' expected outcomes and levels of evidence were to Oyster Elementary's students. We decided that we would form focus groups to gather formal information from the school community about desired outcomes from an intervention. We conducted the focus groups and then matched the information gathered with the program outcomes identified within the KIT (see Table 1A). By doing this, we realized that the choice of prevention programs that now seemed most appropriate to consider narrowed to two: Second Step and PATHS.

Considering fit with the school

Next, we explored together how well each program would fit with our school. Through our discussion, it became clear that Oyster is a school where teachers and counselors were highly invested in acknowledging the problem and actively participating in the solution. For this reason, we knew we were looking for a program where our school staff would be heavily involved in the process.

The Guide highlighted that both Second Step and PATHS are programs implemented in the school by teachers and counselors (see Table 2A). The advisory panel agreed that we appeared to be on the right track.

Considering intervention characteristics

The Guide helped to highlight quickly differences between the two programs (see Table 3A). The PATHS program did not include a family component. From discussions among the advisory panel members, it became clear that some members of the panel believed that changes in children's behaviors would be more successful if families were involved in the process. However, the advisory panel as a whole was not ready to exclude a program on this one component.

The final concern of the advisory panel was that a program would be able to track fidelity and provide outcome measures. The advisory panel wanted to be sure the program would be implemented both according to design and the program's positive, measured, effect on the children. The Guide showed that both Second Step and PATHS designated both the fidelity and outcome measures we wanted (see Table 5A). It appeared to all on the advisory panel that two programs could potentially be used in their school. To continue the decision process, the advisory panel decided they would use the program descriptions provided in the Guide to gain more detailed information.

Indepth review of multilevel/prevention programs

First, we reviewed the Second Step program. A few panel members noted that Second Step was implemented using curriculum kits. It was also noted that in regard to training, each participant receives a comprehensive Trainer's Manual, CD-ROM, and a set of four staff training videos.

Professional development credits are available for completion of the regional Second Step Training for Trainers. The panel recognized that this feature would appeal to the teaching staff. The advisory panel noted too that the cost for materials varies according to the curriculum kits purchased and ranges from $159 to $289, but that volume discounts are available for orders over a certain size. Finally, the advisory panel noted that Second Steps has a funding specialist on staff to provide information on up-to-date grant announcements and funding opportunities. The advisory panel decided to explore the developer's website, as this information was provided as part of the program description.

Next, the panel reviewed the PATHS program. The Guide showed that PATHS is a 5-year program. The PATHS curriculum provided a manual with specific instructions and developmentally appropriate lessons. The advisory panel noted that the curriculum materials ranged from $100 to $679, higher than Second Step. Unlike Second Step, the PATHS curriculum was available in Spanish. The advisory panel considered how useful this would be for the students. PATHS, however, did not provide any formal readiness instruments, something the panel felt would be important for the teachers. The program description provided the developer's contact information. The panel decided to contact the developers to have their remaining questions clarified.

Further directions

With the help of the *Guide for Selecting and Adopting Evidence-Based Practices,* the advisory panel gathered information that considered the needs of the community, the population served, and the fit of the intervention with the agency, the families and the youth. From here, the panel would further explore the two programs, decide on one, and then bring the program to the school board, the school staff, and the parent association for review.

Case Illustration 2: Intervention

A recent needs assessment revealed that an urban community just outside of a major U.S. city saw an increase in disruptive behaviors of adolescents. Examples of these include juvenile arrests, underage substance use, and lower school performance. As a result of this assessment, the community buzzed about the need for some type of intervention. The director of a major mental health clinic, Dr. Cook decided to bring together an advisory panel to help consider a number of possible interventions that could be implemented to address the growing need of adolescents in the community.

The advisory panel that was created consisted of a number of different voices in the community:

- The state mental health director;
- The directors of the local child welfare agency;
- Juvenile justice agency;
- The community mental health clinic director;
- Clinicians from the mental health center;
- Area high school principals;
- Representative of family organizations;
- Families; and
- Youth.

Dr. Cook decided to use the resource, *A Guide for Selecting and Adopting Evidence-Based Practices for Children and Adolescents with Disruptive Behavior Disorder*, as a tool for selecting an evidence-based practice. As the advisory panel met, it soon become apparent that a number of decisions were to be made to narrow down the information in the Guide to just one program.

The first decision was whether to implement a prevention program or an intervention. The advisory panel noted that their interest lay in addressing the needs of children with identified disruptive behavior disorders. Therefore, the panel focused only on the programs marked as Interventions in the Guide.

Considering the population of interest and desired outcomes

The advisory panel first explored the Guide (see Tables 1A and B) to compare the identified population of the interventions with their own community needs. Knowing that the focus was on late adolescence, the panel did not consider any program that did not extend to youth age 18 years. Neither did it consider any program that had not included Hispanic populations, as the community was predominantly Hispanic. With these limitations, the advisory panel was considering four interventions: Brief Strategic Family Therapy™, Functional Family Therapy, Mentoring, and Multidimensional Treatment Foster Care.

The next choice to make was to identify the specific outcomes that the panel believed were important to address. In the Guide (see Table 3B), the outcomes from the Brief Strategic Family Therapy and Mentoring were of most interest.

Considering the characteristics of agency

Next, the advisory panel reviewed the intervention characteristics in the Guide (see Table 3B). The advisory panel decided to exclude Mentoring from further consideration because of the lack of a family component. Perhaps, the advisory panel considered, Mentoring could be an intervention that was added to the community, but not necessarily through the community mental health clinic.

Considering the implementation process

Now only considering Brief Strategic Family Therapy™ and Multisystemic Therapy, the panel explored the cost and length of training highlighted in the Guide (see Table 4B). A significant difference in cost existed between the models; this was not, however, an immediate concern or reason to exclude either program yet.

Further directions

The panel decided that it would read the individual program descriptions in more detail, and meet again to discuss the idea of implementing one or both of the programs at the clinic. Two panel members also volunteered to contact the program developers to gather more detailed information. The advisory panel would meet again to discuss the information and continue the process of selecting an intervention or interventions to implement in the community.

Hints on Understanding Research Study Designs

Some readers want a better grasp of research so that they have a clearer understanding of the ways in which the EBPs in this KIT were evaluated. This section provides a very brief overview.

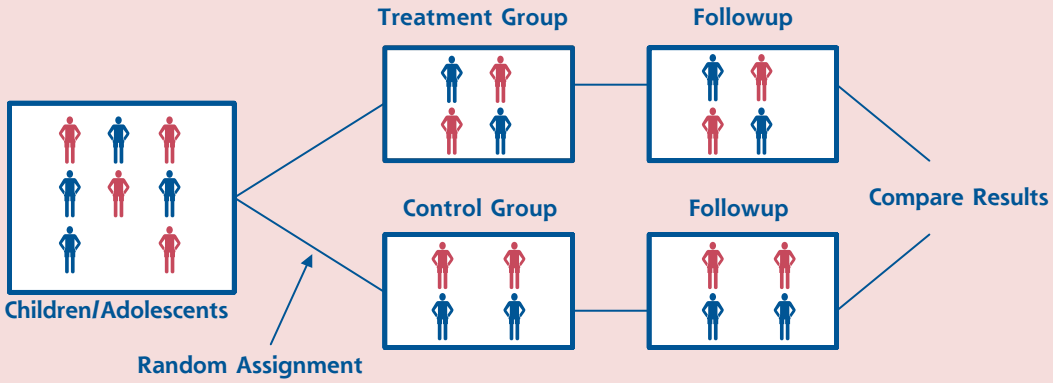
How do we know that the evidence for one intervention is better or stronger than for another intervention? The answer depends on the way the studies are designed and conducted. As a study's results show that an intervention is effective and has achieved the desired outcome, it is also important to verify that people who received the intervention did not improve for some other reason. Research designs do this by controlling for variables that could contribute to the person's improvement. For example, people can get better because an illness simply took its course, or perhaps their health improved because of additional care they received beyond the intervention itself. Others might appear to get better because of the way the study was designed and conducted. A study that is not well designed might incorrectly lead to the conclusion that the intervention made people better when that was indeed not the case.

Some research designs compare one group of people who received the intervention (the experimental group) with another group that did not (the control group). If most people in the experimental group improved while those in the control group did not, one conclusion might be that the intervention is effective and that people in the experimental group that received the intervention are better as a result.

Can we say that? Is such a conclusion valid? Not necessarily; significant differences might have existed between the two groups in terms of age, sex, ethnicity, or other characteristics that could affect the outcome.

Researchers use specific designs called randomized control trials (RCT) to address these alternative explanations. As shown in Figure 2, an RCT is a study in which there are two groups: one treatment and one control group. The treatment group receives the treatment under investigation, and the control group receives either no treatment or standard treatment. An important feature of RCT studies is that children and adolescents are randomly assigned to each group so that each group has a similar sample population.

Figure 2: Randomized Control Trial (RCT) Design



Note: Chart is adapted from "Understanding Research Study Designs" by the University of Minnesota Bio-Medical Library, 2010, Minneapolis, MN: Author. Copyright 2010 Regents of the University of Minnesota and the Health Sciences Libraries

Randomized control trials are considered to have stronger "proof" than other types of studies. When many such RCT studies are conducted—in different locations, by different researchers, in settings that resemble the real world—the evidence that the intervention is effective builds and is increasingly corroborated. These interventions are the ones that obtain the highest rating in terms of evidence.

Other studies may have been conducted by just one group of researchers or in just one place. These interventions have less evidence, but may still be effective.

Other types of studies, termed *quasi-experimental*, are similar to the randomized control trial, except that there are no random assignments to the different groups. This type of study is still useful in determining the effectiveness of an intervention, but the evidence resulting from this type of study is not as strong as a randomized control trial.

The important point here is that some interventions have more—or higher—levels of evidence than others. These levels of evidence are based on the selection of study designs and the number of times the interventions have been evaluated as successful. Different schemes exist to describe such levels of evidence. The American Psychological Association has a hierarchy of the levels of evidence. The National Institute of Mental Health (NIMH) also has an approach to such levels. These can be accessed at **http://www.apa.org** and **http://www.nimh.nih.gov**, respectively.

In the booklets of this KIT, you will see many references to the level of evidence found for the 18 EBPs covered in this KIT. All 18 EBPs have at least a moderate to good level of evidence support.

Selecting EBPs

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