

# PARENT TRAINING PROGRAMS: INSIGHT FOR PRACTITIONERS



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION**





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Atlanta, Georgia

2009

*Parent Training Programs: Insight for Practitioners* is a publication of the National Center for Injury Prevention and Control of the Centers for Disease Control and Prevention.

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*Suggested citation:* Centers for Disease Control and Prevention. *Parent Training Programs: Insight for Practitioners*. Atlanta (GA): Centers for Disease Control; 2009.

## INTRODUCTION

The Centers for Disease Control and Prevention (CDC) is currently conducting research and analyses to guide practitioners in making evidence-based program decisions. A meta-analysis of the current research literature on training programs for parents with children ages 0 to 7 years old was recently conducted by CDC behavioral scientists. This document presents a summary of their findings.

Various parent training programs exist throughout this country. Many of these programs are widely used by child welfare services to improve the parenting practices of families referred for child maltreatment. Approximately 800,000 families receive such training each year (Barth et al. 2005). Despite variations in how they are comprised and delivered, the “components” associated with more effective or less effective parent training programs have rarely been examined.

Through meta-analysis, researchers investigated strategies that were currently being used in many types of programs. Rather than just assessing specific programs, they focused on program components, such as content (e.g., communication skills) and delivery methods (e.g., role-playing, homework).

By analyzing the components of evaluated parent training programs, researchers gained valuable information that could be applied to other such programs. For example, components associated with more effective programs could be integrated into existing ones, thereby minimizing costs, training needs, and other barriers that often discourage the adoption of evidence-based strategies. Similarly, the components associated with less effective programs may be eliminated to minimize the burden on practitioners and families.



This meta-analysis does not provide all the answers, but it does impart useful information to practitioners working with families. CDC’s continuing goal is to make science more accessible—bridging the traditional gaps between researchers and practitioners—so we can generate discussion within the field and help foster change based on good research.

## WHAT IS A META-ANALYSIS AND HOW DID THIS ONE WORK?

Meta-analysis allows researchers to examine a body of literature and draw quantitative conclusions about what it says. CDC researchers wanted to look at current parent training programs and their respective evaluations and draw conclusions as to which of their aspects (or components) are associated with better outcomes for children and parents. The meta-analysis process allowed researchers to take many different evaluations and aggregate all of their findings.

The researchers began with thousands of peer-reviewed articles published in English from 1990–2002 that evaluated training programs for parents of children ages 0 to 7 years old. After eliminating those that did not meet the inclusion criteria, a resulting pool of 77 evaluations were included in the meta-analysis.

Each evaluation was treated like one “case.” Researchers then took the information and broke it down, coding each program’s individual content and delivery components so that different aspects could be examined separately. Essentially, they *disassembled* packaged programs into individual components to see which ones consistently appeared to work well across different programs (See “Components” Table, Page 3).

The statistics from the meta-analysis are not included in this document, but they can be found with other details in the Journal of Abnormal Child Psychology, Volume 36, entitled *A meta-analytic review of components associated with parent training program effectiveness*. In this document, we refer to “effect sizes” when describing whether a particular program component is associated with positive or negative outcomes. Each “effect size” represents the difference between treatment and comparison groups. So, larger effect sizes mean that there were greater differences on outcome measures between parents who participated in a training program and those who did not. Smaller effect sizes mean there were little or no differences between parents who participated in a program and those who did not.

## ABOUT PARENT TRAINING PROGRAMS

For this meta-analysis, parent training was defined as a program in which parents *actively acquire* parenting skills through mechanisms such as homework, modeling, or practicing skills. The analysis did not include parent education programs that only provide information through lectures, videos, etc. This definition was based on decades of research showing that active learning approaches are superior to passive approaches (e.g., Arthur et al. 1998; Joyce & Showers 2002; Salas & Cannon-Bowers 2001; Swanson & Hoskyn 2001). Therefore, parent education programs that seek to presumably change behavior but do *not* use an *active skills* acquisition mechanism were not included in this meta-analysis.

## PROGRAM COMPONENTS EXAMINED

Tables 1 and 2 list the components of parent training programs examined in the meta-analysis and provide a description of each one. Some components describe program content, whereas others describe how the program was delivered. Using the meta-analytic technique allowed researchers to look at the effectiveness of each content and delivery component. Each component was coded as being present when the evaluation mentioned that this component was included in the parenting program or absent if it was not mentioned.

Table 1. Description of Content Components Included in Meta-Analysis

Content Components	Description
Child Development Knowledge and Care	Providing developmentally-appropriate physical care and environment (e.g., feeding, diapering, home safety); learning about typical child development and behavior; fostering children’s positive emotional development (e.g., self-esteem, providing stimulating environment)
Positive Interactions with Child	Learning the importance of positive, non-disciplinary interactions with children; using skills that promote positive parent-child interactions (e.g., demonstrating enthusiasm, following child’s interests, offering appropriate recreational options); providing positive attention
Responsiveness, Sensitivity, and Nurturing	Responding sensitively to child’s emotional and psychological needs (e.g., soothing); providing developmentally-appropriate physical contact and affection
Emotional Communication	Using relationship-building communication skills (e.g., active listening); helping children identify and appropriately express emotions
Disciplinary Communication	Giving clear and developmentally- appropriate directions; setting limits and rules; stating behavioral expectations and consequences
Discipline and Behavior Management	Coded into specific variables: A. Attitudes about discipline strategies B. Attributions about child misbehaviors C. Monitoring and supervision practices D. Specific reinforcement and punishment techniques, e.g., planned ignoring, positive reinforcement, time out E. Problem solving about child behaviors F. Consistent responding or generalization
Promoting Children’s Social Skills or Prosocial Behavior	Educating parents to teach children to share and cooperate, use good manners, and get along with peers, siblings, or adults
Promoting Children’s Cognitive or Academic Skills	Using incidental teaching; fostering children’s language or literacy development; enhancing child’s school readiness

Table 2. Description of Program Delivery Components Included in Meta-Analysis

Program Delivery Components	Description
Curriculum or Manual	Using an established course of parent training as evidenced by authors' report of a curriculum or manual
Modeling	Presenting live or recorded demonstrations of parenting behaviors
Homework	Written, verbal, or behavioral assignments to complete between sessions
Rehearsal, Role Playing, or Practice	In-session practice of skills through rehearsal and role-playing situations, <i>coded more specifically when possible</i> : A. Role playing with the parent trainer or a peer B. Practicing parenting skills with own child
Separate Child Instruction	Child participated in behavioral skills training separately from the parent
Ancillary Services	Program included supplementary content beyond that specific to parenting skills as part of the parenting program. For example, mental health or substance abuse services, case management or referrals, social support, stress and anger management, educational assistance

## RESEARCH FINDINGS

### TWO OUTCOMES EXAMINED

This meta-analysis focused on two outcomes: 1) Acquiring Parenting Skills and Behaviors (e.g., increased use of effective discipline, nurturing behavior) and 2) Decreases in Children's Externalizing Behavior (e.g., aggressive behavior). Researchers analyzed the content and program delivery components (summarized in Tables 1 and 2) to determine those consistently associated with better program outcomes.

#### ***Outcome 1. Acquiring Parenting Skills and Behaviors***

The meta-analysis found that three components (two content and one program delivery) were related to better parent outcomes. That is, these components would more likely be found in successful programs—those that showed greater differences between parents who received the program and parents who did not.

- **Teaching parents emotional communication skills**

This component covers the using of communication skills that enhance the parent-child relationship. This includes teaching parents active listening skills, such as reflecting back what the child is saying. This component also teaches parents to help children recognize their feelings, label and identify emotions, and appropriately express and deal with emotions. Emotional communication skills may also involve teaching parents to reduce negative communication patterns, such as sarcasm and criticism, and allowing children to feel like they are part of the conversation, equal contributors to the communication process.



- **Teaching parents positive parent-child interaction skills**

This includes teaching parents to interact with their child in non-disciplinary situations (e.g., every day activities) and engaging in a child's selected and directed play activities. This might also include showing parents how to demonstrate enthusiasm and provide positive attention for appropriate child behavior and choices. Additionally, parents may be taught to offer appropriate recreational options and choices for their child that encourages positive play and interaction, such as activities that are creative and free flowing.

- **Requiring parents to practice with their child during program sessions**

Having parents practice with their own child during training sessions was consistently associated with more effective programs. This is in contrast to training programs where no practice takes place or where parents are asked to role play with another parent or the group leader.

### ***Why These Components Are Important For Parents And Children***

Teaching emotional communication skills to parents that target relationship building should improve the parent-child bond and increase child compliance to parental requests. Parents who learn positive interaction skills can help to develop their child's self-esteem, providing attention and demonstrating approval for what they are doing. Requiring parents to practice with their own child during program sessions is helpful due to the complicated nature of the skills being taught. This type of practice allows the training facilitator to provide immediate reinforcement and corrective feedback to ensure parents' mastery of the skills. These results on parental practice are also consistent with the educational literature, which suggests that learning in context is more effective (Hattie et al. 1996).

## ***Outcome 2. Decreases in Children's Externalizing Behaviors***

This program outcome indicated lower levels of children's aggressive, noncompliant, or hyperactive behavior. Four components (three content and one program delivery) were related to better child externalizing outcomes. That is, these components would more likely be found in more successful programs--those that showed greater differences in child behavior between the group of parents who received the program and the group of parents who did not.

- **Teaching parents the correct use of time out**

This component covers the correct application of time out, such as using it as an alternative to physical discipline, removing all forms of attention or reinforcement, and using a designated location when possible. Parents are taught that time out reduces the need for other forms of discipline when used correctly and consistently.

- **Teaching parents to respond consistently to their child**

Within this aspect of the disciplinary component, parents are taught the importance of consistent responses to child behavior. Parents learn to use consistent rules across settings. For example, if there is a "no hitting" rule, that rule should be constant whether the child is at home, at school, at the playground, etc. Ideally, family members and other caregivers learn to apply the same rules and consequences when caring for the child.

- **Teaching parents to interact positively with their child**

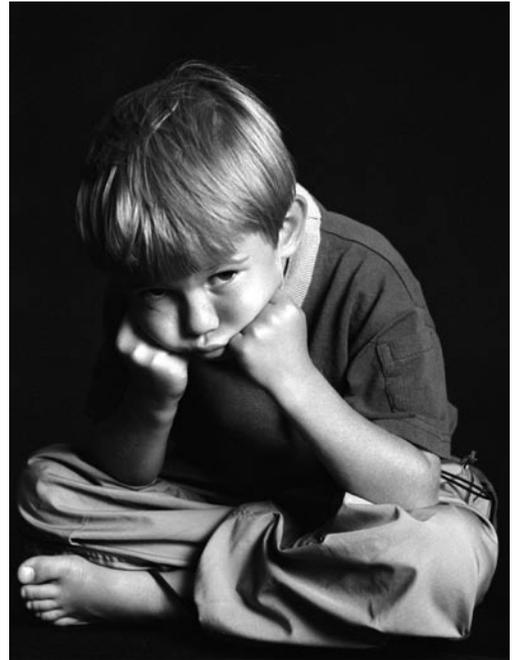
This component was also related to better parent outcomes. See previous section for a detailed description.

- **Requiring parents to practice with their child during program sessions**

This component was also related to better parent outcomes. See previous section for a detailed description.

### ***Why These Components Are Important For Parents And Children***

Teaching parents disciplinary skills such as the correct use of time out and consistent responses is helpful not only for the current interactions with their children, but for the future as well. When parents learn to use time out correctly, they allow themselves and the child a moment to calm down. In addition to calming down, children learn what is desirable and undesirable behavior. Similarly, consistent responding



eventually takes strain off of the parent because they no longer have to negotiate each infraction with the child. The rules and discipline techniques should change and be more age appropriate as the child matures. As discussed above in the section on parent outcomes, enhancing parental skills in emotional communications and positive interactions should improve parent child relationships and children's compliance with parental requests.

## LESS EFFECTIVE PROGRAM COMPONENTS

Some program components examined in the meta-analysis were related to smaller program effects. Programs with these components tended to be less successful in achieving the outcomes of interest.

Three components were likely to be found in programs that were less effective in changing parenting behaviors and skills:

- Teaching parents how to problem solve about child behaviors
- Teaching parents how to promote children's academic and cognitive skills
- Including ancillary services as part of the parenting program

One component was most often found in less effective programs for changing children's externalizing behaviors: that was teaching parents how to promote children's social skills.

Note that these components appear to be less effective because they did not contribute positively to parenting skills or child externalizing behavior outcomes in these evaluations of training programs for parents of children ages 0 to 7 years old. Based only on this meta-analysis, we are unable to determine if these components have other benefits. For example, the less effective components found here may simply be less relevant to families of children ages 0 to 7. In addition, these components may be positively associated with outcomes that were not examined in this meta-analysis, or they could be necessary precursors to other outcomes.

Providing parents with ancillary services as part of the parent training program was also associated with smaller program effects, a result found in other meta-analyses (Crosby & Perkins 2004; Lundahl et al. 2006; Serketich & Dumas 1996). The focus on other objectives may divert providers' and parents' attention from the acquisition of new parenting skills and behaviors. Although there is strong support in the field for addressing the wide-ranging problems and needs of at-risk families, further research is needed to examine the circumstances (e.g., timing of services, types of families, services, and problems addressed) under which ancillary services are beneficial to parent training programs.

## IMPLICATIONS FOR PRACTICE

This meta-analysis marks a distinct departure from the commonly conducted, “best practice” approach to recommending effective programs. Although best practice recommendations provide useful information for those considering adoption of a packaged program, any particular program might not be the best possible combination of components to produce maximum results.

Given the current climate of decreasing resources and increasing accountability for results, practitioners must pay careful attention to optimize returns on expenditures. Instead of considering each program as a separate entity, this meta-analysis allowed for them to be broken up into specific parenting skills and methods used to teach them. Results from the component analyses conducted here not only help in developing or selecting a parent training program, but they can also assist in critically appraising and improving programs already labeled effective or efficacious.

Carefully evaluating any program modification is critical; however, it would seem logical to add components associated with larger effect sizes to improve program outcomes. Similarly, omitting or changing components associated with smaller or negative effect sizes may improve overall program outcomes or allow more time to focus on the resources for components associated with larger effect sizes. A component-oriented approach to program improvement is much less resource intensive than switching programs entirely and, thus, may be more easily adopted (Barth et al. 2005).

Specifically, these results suggest that if the intended outcomes are improving parenting skills and decreasing children’s externalizing behaviors, resources might need to be redirected. Strategies that are consistently associated with smaller effects (problem solving; teaching parents to promote children’s cognitive, academic, or social skills; and providing an array of other services) should shift toward strategies that are consistently associated with larger effects. These include increasing positive parent-child interactions and emotional communication; teaching time out and the importance of parenting consistency; and requiring parents to practice new skills with their children during training.

## LIMITATIONS

As is true in all meta-analyses, these results must be interpreted as correlational. Meta-analysts have no experimental control over the studies they include, and must take the field of study “as is.” Thus, it would be inappropriate to claim, based on this meta-analysis, that particular components or strategies caused program success, or that the inclusion of other components led to less optimal outcomes. The results speak only to the extent to which certain components were consistently associated with greater differences between treatment and control or comparison groups on parenting skills, child externalizing behavior or both, across a range of program content, delivery, and evaluation methodologies.

A second limitation pertains to the completeness of reporting within individual studies. For some variables, the extent of missing data was unknown. These missing data limited the researcher’s ability to conduct analyses of great interest such as intervention dosage, study refusal and attrition, participant characteristics, intervention location, and facilitator/provider qualifications. Other variables not mentioned in the article, especially those related to program components and strategies, were coded as a lack of use. The extent to which program characteristics were not reported is, of course, unknown, as are the effects of such under-reporting on the results.

## REFERENCES

- Arthur W Jr, Bennett W, Jr, Stanush PL, McNelly TL. Factors that influence skill decay and retention: a quantitative review and analysis. *Hum Perform* 1998;11:57-101.
- Barth RP, Landsverk J, Chamberlain P, Reid JB, Rolls JA, Hurlburt MS, et al. Parent-training programs in child welfare services: Planning for a more evidence-based approach to serving biological parents. *Res Soc Work Pract*;15:353-71.
- Crosby J, Perkins S. The effectiveness of behavioral parent training in the treatment of conduct problems in children and adolescents [poster session presented at the 38<sup>th</sup> Annual Convention of the Association for Advancement of Behavior Therapy]. New Orleans (LA): 2004.
- Hattie J, Biggs J, Purdie N. Effects of learning skills interventions on student learning: a meta-analysis. *Rev Educ Res* 1996;66:99-136.
- Joyce B, Showers B. Student achievement through staff development. 3rd ed. Alexandria (VA): Association for Supervision and Curriculum Development; 2002.
- Lundahl BW, Risser HJ, Lovejoy MC. A meta-analysis of parent training: moderators and follow-up effects. *Clin Psychol Rev* 2006; 26:86-104.
- Salas E, Cannon-Bowers JA. The science of training: a decade of progress. *Annu Rev Psychol* 2001;52:471-99.
- Serketich WJ, Dumas JE. The effectiveness of behavioral parent training to modify antisocial behavior in children: a meta-analysis. *Behav Ther* 1996;27:171-86.
- Swanson HL, Hoskyn M. A meta-analysis of intervention research for adolescent students with learning disabilities. *Learn Disabil Res Pract* 2001;16:109-19.

## ADDITIONAL RESOURCE

Kaminski JW, Valle LA, Filene JH, Boyle CL. A meta-analytic review of components associated with parent training program effectiveness. *J Abnorm Child Psychol* 2008; 26:567–89.

### ACKNOWLEDGEMENTS

This publication was produced with the assistance and collaboration of the following people:

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Teresa Rafael, National Alliance of Children’s Trust and Prevention Funds

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