Parent Training Interventions for Preschool-Age Children

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(Published online May 16, 2006)

**Topic**

**Parenting skills**

**Introduction**

There is a substantial and growing body of evidence concerning the important role that familial risk factors play in facilitating young children’s entry and progression along the “early-starter” pathway of conduct problems. This pathway is characterized by three elements: the onset of conduct problems (such as developmentally excessive levels of aggression, noncompliance, and other oppositional behaviour) in the preschool and early school-age years; a high degree of continuity throughout childhood and into adolescence and adulthood; and a poor prognosis.\(^1\,2\) The most comprehensive family-based formulation for the early-starter pathway has been the coercion model developed by Patterson and his colleagues.\(^3\,4\) The model describes a process of “basic training” in conduct-problem behaviours that occur in the context of an escalating cycle of coercive parent-child interactions in the home, beginning prior to school entry. The proximal cause for entry into the coercive cycle is thought to be ineffective parental management strategies, particularly in regard to child compliance with parental directives during the preschool period. Types of parenting practices that have been closely associated with the development of child conduct problems include inconsistent discipline, irritable explosive discipline, low supervision and involvement, and inflexible rigid discipline.\(^5\) As this process of ineffective parent management continues over long periods, significant increases in the rate and intensity of child coercive behaviours occur as family members are reinforced by engaging in aggressive behaviours. Other family risk factors that may have direct or indirect effects on parenting practices include maladaptive social cognitions, personal (e.g., antisocial behaviour, substance use, maternal depression) and interparental (e.g., marital problems) distress, and greater social isolation (e.g., insularity).\(^1\)

**Subject**

Parent Training (PT) can be defined as an approach to treating child behaviour problems by using “procedures in which parents are trained to alter their child’s behaviour in the home. The parents meet with a therapist or trainer who teaches them to use specific procedures to alter interactions with their child, to promote prosocial behaviour, and to
decrease deviant behaviour.” PT has been applied to a broad array of child problems and populations, but it has been primarily employed in the treatment of preadolescent (i.e., preschool- to school-age) children who exhibit overt conduct-problem behaviours such as temper tantrums, aggression, and excessive noncompliance, and it is in this area that PT has the greatest empirical support. This article will focus on PT interventions for preschool-age (three to five years old) children who engage in excessive levels of overt conduct problems.

The underlying assumption of social learning–based PT models is that some sort of parenting skills deficit has been at least partly responsible for the development and/or maintenance of the conduct-problem behaviours. The core elements of the PT model include the following approaches: First, intervention is conducted primarily with the parents, with relatively less therapist-child contact. Second, therapists refocus parents’ attention away from conduct-problem behaviour toward prosocial goals. Third, the content of these programs typically includes instruction in the social learning principles underlying the parenting techniques. Parents are trained in defining, monitoring, and tracking child behaviour; in positive reinforcement procedures, including praise and other forms of positive parent attention and token or point systems; in extinction and mild punishment procedures, such as ignoring, response cost, and time out in lieu of physical punishment; in giving clear instructions or commands; and in problem solving. Finally, in the PT approach, therapists make extensive use of didactic instruction, modelling, role playing, behavioural rehearsal, and structured homework exercises to promote effective parenting.

Problems
Despite the increasing emphasis on the use of evidence-based practice in this area, the overwhelming majority of commercially available family-based interventions have never been evaluated in a systematic and rigorous manner. Yet these programs are widely used, and their numbers increase each year.

The picture is more positive with respect to social learning–based PT interventions. However, although the short-term efficacy of PT in producing changes in both parent and child behaviours has been demonstrated repeatedly (see below), PT is not effective with all families. First, as with other types of treatment for children, dropouts occur, with average rates approximating 28 per cent. Second, for families that do stay engaged, PT interventions have demonstrated their generalizability (e.g., to the home, over time, to other children in the family) and social validity (i.e., whether therapeutic changes are “clinically or socially important” for the client; to varying degrees — some quite impressively, others to a moderate degree, and others not at all).

Third, although there are some data about various child and family characteristics that predict outcome (e.g., severity of child behaviour, coercive and inconsistent parenting behaviour, parental adjustment problems), there has been a relative dearth of attention paid to a) the actual processes of change that are induced by PT and b) whether there are certain subgroups (e.g., based on child gender or minority status or family socioeconomic status) for whom PT is more or less effective.
Research Context
In the past 35 years, hundreds of studies focusing on PT with children with conduct problems have appeared. Study designs have ranged from case descriptions, single-case designs, and simple pre- to post-treatment evaluations to large-scale, randomized clinical trials with various control and alternative treatment comparison conditions. In general, the methodological sophistication of many of these evaluations is quite high.

Key Research Questions
1. What is the evidence for the efficacy, generalization, and social validity of PT interventions with young children?
2. What are the mechanisms by which changes in child behaviour are achieved?
3. Is PT differentially efficacious a) for various subgroups of children, parents, or families and b) as a function of the form and type of the PT intervention itself? If not, are subgroup-specific interventions needed to improve the intervention?
4. What is the best way to disseminate evidence-based PT interventions to the broader community so that they are employed with reasonable fidelity but with allowance for necessary site-specific adaptations?

Recent Research Results
Efficacy, generalization, and social validity
PT interventions with preadolescent (including those age five years and younger) children have been the focus of the largest and most sophisticated body of intervention research with children with conduct problems, and present the most promising results. PT interventions have been successfully utilized in the clinic and home settings, have been implemented with individual families or with groups of families, and have involved some or all of the instructional techniques listed above. Self-administered PT interventions can be effective with certain families, although other families may require more intensive interventions. Immediate treatment outcome has been quantified by changes in parental behaviour (e.g., less directive, controlling, and critical, and more positive), child behaviour (e.g., less physically and verbally aggressive, more compliant, and less destructive), and parental perceptions of the children’s adjustment. Recent reviews have identified a number of PT interventions that have a strong evidence base for improving conduct-problem behaviour in preschool-age children, including Helping the Noncompliant Child, the Incredible Years, Parent-Child Interaction Therapy, Parent Management Training-Oregon, and Triple P (Positive Parenting Program).

Generalization of positive intervention effects to the home, over significant follow-up periods (up to six years post-treatment and longer), to untreated siblings, and to untreated behaviours has been demonstrated for many of these interventions as well. The social validity (e.g., consumer satisfaction, improvement to the normative range) of these effects has also been documented. For example, in their meta-analytic review of parent training, Serketich and Dumas reported that 17 of 19 intervention groups dropped below the clinical range after treatment on at least one measure, and 14 groups did so on all measures. Furthermore, each of the five PT programs noted above has been positively evaluated in comparison with no-treatment/waiting-list control conditions, as well as with family systems therapies and available community mental health services.
Mechanisms
Changes in parenting behaviour\textsuperscript{23-26} have now been shown in several studies to mediate the effects of PT with young children with conduct problems. This is a critical finding that goes to the core of PT, as improvement in parenting behaviour is hypothesized to be the central mechanism by which change in child behaviour occurs.

Moderation
In general, there has been a dearth of attention paid to the extent to which PT may be differentially efficacious with different subgroups of children, parents, and families, or as a function of different aspects of PT (e.g., treatment delivery mode). Candidates as possible moderators of efficacy include child characteristics such as severity of the child’s conduct-problem behaviour, extent of comorbid problems (e.g., ADHD, anxiety/depression), age, gender, and minority status. Examples of parent and family characteristics that might serve as potential moderators include personal and marital adjustment, single-parent status, and family socioeconomic status. A recent meta-analytic study that examined moderators of PT found that more severe child conduct problems, single-parent status, economic disadvantage (i.e., low socioeconomic status), and group-administered (as opposed to individually-administered) PT resulted in poorer child behaviour outcomes in PT.\textsuperscript{13} In addition, economic disadvantage and PT alone (as opposed to multicomponent interventions that included PT) were also associated with poorer parent behaviour and parental perception outcomes. Interestingly, child age was not a significant moderator. Lundahl et al.\textsuperscript{13} reported that among disadvantaged families, individual PT was associated with more positive child and parent behavioural outcomes than group PT. Other researchers have identified adult attachment status\textsuperscript{27} and marital distress\textsuperscript{28} as moderators of PT outcome. Child gender does not appear to moderate PT outcomes, although the research is limited. Beauchaine et al.\textsuperscript{23} reported that child comorbid anxiety/depression (but not ADHD or child gender), maternal depression, parental history of substance abuse, marital satisfaction, and single-parent status moderated the effects of their PT intervention (in contrast to interventions that did not include a PT component).

Effectiveness/dissemination
Large-scale effectiveness trials of PT as well as cross-cultural dissemination studies are becoming more common. These research efforts provide essential information on the feasibility of utilizing PT interventions with diverse populations and transporting these interventions to real-world settings. For example, cross-cultural effectiveness trials of the Incredible Years, Triple P, and Parent Management Training-Oregon programs have been conducted or are underway in the U.K.,\textsuperscript{29} Canada,\textsuperscript{22,30} Hong Kong,\textsuperscript{31} Norway,\textsuperscript{32} and Australia.\textsuperscript{33}

Conclusions
A PT approach to intervention for young children with conduct problems is arguably the intervention of choice, given the substantial empirical support for efficacy, generalization, and social validity. There is also increasing empirical support for the premise that change in parental behaviour is a key mechanism in producing child behaviour change. Meta-analytic research suggests that the efficacy of PT for child behaviour change is less for economically disadvantaged and single-parent families;
greater when administered to children with more severe conduct problems and to individual families rather than in groups; and is comparable in efficacy for boys and girls and for majority and minority samples. Large-scale effectiveness and dissemination trials, many of them in international settings, are providing important information concerning the feasibility of implementing PT interventions in the real world.

**Implications**

As a first step, it is critical that policy-makers choose PT programs that have an adequate empirical base. Reference to key reviews and lists of “best practices” can be useful starting points for the identification of potential PT interventions.

With respect to delivery systems, group-based PT can be a cost-effective alternative to working with individual families in some instances, although PT with individual families may be more efficacious, especially with economically disadvantaged families. In some cases, self-administered PT may be sufficient. Guidelines for the selection of particular modes of PT are needed.

Interest in interventions for the prevention of conduct problems has burgeoned over the past 15 years, stimulated partly by increased knowledge about the early-starter pathway of conduct problems. PT may have significant preventive effects, especially if it is applied during the preschool period, or is a component of broader preventive interventions for school-age children at risk for conduct problems. If PT can play a role in the prevention of conduct problems, then that will have important implications for reducing the need for ongoing interventions throughout the developmental period and adulthood.

Perhaps the most compelling reason for the utilization of PT on a large scale is its potential cost-effectiveness. The empirical support for PT, the availability of manuals (which assists in standardized use and dissemination) for many PT programs and multiple-level delivery systems, and its potential for preventive effects are all conducive to cost-effectiveness. An economic analysis of the costs and benefits of several intervention strategies indicated that PT was more cost-effective in preventing later crime than home visiting plus day care or supervision of delinquents.

Despite this very positive evaluation of PT as an intervention for young children with conduct problems, there are a number of areas that warrant continued and increased attention. These include: a) development of treatment selection guidelines; b) continued emphasis on identification and elaboration of the processes of family engagement and change in PT; c) examination of how outcome and generalization of effects can be enhanced, especially with respect to underserved groups, such as the economically-disadvantaged; d) the role of PT as a preventive intervention; and e) greater attention to the conceptual, empirical, and pragmatic issues that are involved in large-scale dissemination.
REFERENCES


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