CHAPTER 37
Parenting programs

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Introduction

A parenting program is a specific intervention designed to improve the overall quality of parenting that a child receives. Parenting programs aim to help the way mothers and fathers relate to their child: primarily by changing their behavior in moment-to-moment interchanges throughout the day, although they also address parental beliefs and feelings. Change is achieved through the training of specific skills such as collaborative play, selective attention and praise to promote sociable behavior, and clear rules backed by consistently applied consequences to reduce misbehavior. There is a structured sequence of sessions that build up each of the competencies. This approach to intervention, in which the emphasis is usually on understanding the parent’s views and giving them nondirective general support, but not coaching them, is distinct from counseling (Chapter 40); it differs from psycho-education in which a parent is informed about the nature of the child’s disorder and given advice on management but not trained. In family therapy, the therapist typically addresses the whole family system, often with a primary emphasis on a deeper understanding of interpersonal processes and meanings; it is the change in understanding, rather than skills, that should lead to changes in relationships (Chapter 40).

Parenting programs often aim to improve child symptoms as well as improving the quality of the relationship, but this is not inevitable. Thus where neglectful or abusive parenting has been uncovered, the goal may be to improve positive parental engagement with the child and reduce harsh emotional and physical practices, whether or not the child is displaying problems (Chapter 29). Moreover, where there are child-specific emotional or behavioral problems, parenting programs may help, whether or not suboptimal parenting has contributed to causing the problem. Thus programs can help parents to better manage children with problems that are mainly genetically influenced, such as autistic spectrum disorders (Chapter 51) or children with obsessive-compulsive disorder (Chapter 61) although parenting quality is satisfactory at the outset. Furthermore, where there are child symptoms and parenting is less than optimal, this does not necessarily mean that the parenting caused the child’s problems. Parent–child relationships are bidirectional and more difficult child behavior can elicit harsher parenting. Several lines of evidence show this, from the classic experiment in which parents with relatively well-behaved children were asked to look after children with behavioral problems and became harsher and more critical (Anderson et al., 1986), to experiments showing that where disruptive child behavior such as ADHD is reduced by medication, parenting quality improves (Schachar et al., 1987). Two areas of child functioning where parenting has been strongly implicated as causing difficulties are conduct problems and insecure attachment; we concentrate on these domains in this chapter, but refer to others.

Styles of parenting addressed by parenting programs

As there are many different theories of what constitutes good parenting, there are many different approaches incorporated in intervention programs. We focus here on those dimensions that are well empirically supported and that have led to proven intervention programs.

Dimensions of parenting addressed in interventions derived from social learning theory

Social learning theory evolved from general learning theory and behaviorism (Bandura, 1977). The notion is that children’s real-life experiences and exposures directly or indirectly shape behavior; processes underlying this learning can be diverse. In interventions, there has historically been a near-exclusive focus on externally observable behavior rather than children’s inner mental states (Patterson, 1982). Operant behavioral principles of reinforcement and (noncoercive) consequences are applied
immediately after the child has acted/responded; there is less emphasis on classical, stimulus-controlled conditioning (Scott, 2008). Moment-to-moment exchanges are crucial: if a child receives an immediate reward for their behavior, such as getting parental attention or approval, then they are more likely to repeat the behavior, whereas if they are ignored or an unwelcome sanction is applied, they are then less likely to do it again.

Patterson (1982) showed how children's aggressive behaviors were learned from and reinforced by parallel negative behaviors by parents. A negative parenting style appears to have a causal role in leading to conduct problems, even after allowing for child effects. The association has been repeatedly found in (i) large-scale epidemiological investigations, such as those in New Zealand and UK (e.g., Isle of Wight); (ii) intensive clinical investigations such as Patterson's work mentioned earlier; and (iii) numerous naturalistic studies of diverse samples using a mixture of methods (e.g., Gardner et al., 1999; Denham et al., 2000). The parenting behaviors identified are high criticism and hostility, harsh punishment, inconsistent discipline, low warmth, involvement and encouragement, and poor supervision.

A further important dimension is supervision of child activity, and monitoring their whereabouts and activities outside the home. Careful monitoring has greater effects in neighborhoods where there are many risks such as drugs and violence (Pettit et al., 1999). Monitoring is not just a matter of parents being good "policemen," as knowing where a child is, in part, depends on the child having a good enough relationship to tell the parent what they are doing (Racz & McMahon, 2011). Therefore, enabling parents to impose effective discipline depends on their also developing a positive relationship, skills addressed in most modern programs. These elements promote child positive behavior and affect and provide a more positive relationship context for parental disciplinary interventions. They improve child behavior (Gardner, 1987) and attachment (Scott et al., 2011).

More recently, social learning models have increasingly considered inner cognitive or "mindful" processes such as attributions and expectations that underlie parents' behavior (Snarr et al., 2009). More negative attributions about a child predict poorer child outcomes over and above observed parental behavior (Doolan, 2006), and addressing them in interventions leads to better child outcomes (Sanders et al., 2004). Beliefs can vary considerably across cultures, with more traditional societies showing more authoritarian views, particularly among fathers. Parenting programs based on "Western" values need to address different cultural beliefs regarding how best to bring up a child, but if they do this, they can be equally effective in improving parenting in ethnic minority groups (Reid et al., 2001; Scott et al., 2010a).

**Dimensions of parenting addressed in interventions derived from attachment theory**

Attachment theory (Bowlby, 1969/1982; Chapter 6) focuses on the extent to which the relationship provides the child with protection against harm and a sense of emotional security, resulting in a "secure base" for exploration. The theory proposes that the quality of parental care, particularly sensitivity and responsiveness to the child's emotional needs ("sensitive responding"), promotes a relationship characterized by warm, expressive to-and-fro interchanges ("mutuality"), leading to secure attachment. Evidence shows that sensitive responding is important in promoting attachment security, but less than theorized (De Wolff & van Ijzendoorn, 1997; Chapter 6). Longitudinal studies confirm that attachment security does not shape subsequent development deterministically but interacts with child and family factors to influence outcome (Sroufe et al., 2010). A particularly harmful parenting style is frightening and abusive parenting, which is associated with "disorganised" attachment patterns—meta-analyses confirm a strong association with maltreatment (Cyr et al., 2010). Disorganization is associated with many forms of child psychopathology, especially conduct problems (Fearon et al., 2010), although it is important to note that it occurs in 15% or more of normal populations.

Over time, attachment relationships are internalized and carried forward to influence expectations for other important relationships, by an "internal working model." In the last decade, progress has been made in measuring internal working models, in childhood using doll-play story-stems (Green et al., 2007) and in adolescence using semi-structured interviews (Shmueli-Goetz et al., 2008). These measures have shown that attachment insecurity continues to be associated with higher levels of psychopathology in middle childhood (Green et al., 2007; Futh et al., 2008) and adolescence (Scott et al., 2011), and with less sensitive parenting in both periods (Scott et al., 2011; Matias et al., 2013). Some aspects of parenting, however, are not emphasized in attachment accounts of parenting, such as cognitive stimulation or consistent discipline; yet studies of child (Matias et al., 2013) and adolescent (Scott et al., 2011) security found that consistent discipline independently predicted secure attachment, beyond sensitive responding. Intervention programs designed to increase attachment security could beneficially target limit-setting as well as sensitive responding (O'Connor et al., 2013).

**Biological effects of parenting**

Besides affecting children's psychological processes, parenting influences a wide array of biological processes. Physiologically, harsh and abusive parenting often leads to altered stress hormone levels, with chronically elevated cortisol and much greater secretion in response to threat or stress, with slower rates of return to normal levels (Chapters 23, 29). Moreover, inflammatory responses are elevated in those who are abused and depressed (Chapters 29, 30), and harsh parenting is associated with structural brain changes (Chapters 23, 29). Finally, a series of elegant studies in rats led by Meaney and in chimpanzees by Suomi have shown that changes in parenting lead to epigenetic changes (notably acetylation and methylation) in sections of genes that control protein synthesis (Chapter 25).
The implications of these biological findings for parenting interventions are not yet clear. The physiological changes may be partly reversible by intervention, thus children taken away from abusive parenting into foster care show improved cortisol secretion patterns (Fisher et al., 2006). Whether improving the parenting environment leads to measurable epigenetic or brain changes is uncertain at present. Even if biological changes are alterable, they may contribute to behavioral traits that reduce susceptibility to improved parenting, a subject we now address.

**Child characteristics that may affect susceptibility to the effects of parenting**
Some child disorders and traits have high heritability, for example, ADHD, autism, and callous-unemotional traits, leading some to assume that they are less susceptible to intervention efforts. However, as we shall see, this is not always the case.

**Inherited characteristics and behavioral phenotypes**
The effects of parenting can differ according to the characteristics of children. Adoption studies are one way of investigating this (Chapter 24). In a large follow-up study, Bohman (1996) divided early adopted infants into those whose birth parents had been criminal or alcoholic, representing higher congenital (genetic plus early environmental) risk, versus those who were not. Adopting parents were categorized the same way, to index more and less favorable child-rearing conditions. Police contact by age 17 was 3% versus 12% for children with low versus high congenital risk favorably reared, suggesting a substantial inherited component under good conditions. For those raised under unfavorable conditions, the rates were 7% and 40% respectively. This study, replicated since, shows that some children have a much greater liability to poorer outcomes under stressful rearing conditions, a so-called diathesis-stress model. An implication is that higher congenital risk does not necessarily condemn a child to poor outcomes, indeed improving parenting may have larger effects with such individuals. Moreover, better parenting can help mitigate congenital risk through attachment security. Bergman et al. (2010) showed that mothers who had higher amniotic fluid cortisol levels had infants with poorer cognitive development at 17 months, but this effect disappeared if the infant was securely attached.

Longitudinal observational studies suggest that children with different characteristics may need different parenting styles. Kochanska (1997) reported that, for temperamentally fearful children, gentle parental control was associated with optimal behavioral/emotional regulation whereas temperamentally more aggressive (“fearless”) children required firmer control to achieve the same positive results, a finding that has been replicated for children with difficult/irritable temperament, who fare better under conditions of firmer control (Bates et al., 1998).

More recently, the possibility has been explored that rather than just confer liability to poorer outcomes under stressful rearing, some child characteristics may also confer liability to better outcomes under benign conditions, the so-called differential susceptibility hypothesis (Ellis et al., 2011), whereby some children are relatively impermeable to their surroundings while others are more sensitive. Experimentally, Scott and O’Connor (2012) found that antisocial children who were more emotionally dysregulated (tantrums and anger outbursts) showed a greater response to improved parenting than those who were disobedient in a more controlled way. However, while differential susceptibility is an exciting theory, more replication of findings is necessary to characterize the scope and size of its impact.

These findings have implications for parenting programs. Firstly, intervention effects are likely to vary according to child characteristics, for example, children with autistic traits may change less, whereas those with irritable temperaments may change more. Secondly, parenting programs should not follow a “one size fits all” rigid approach, but rather the content should be varied according to child characteristics.

**Specific genotypes**

In a classic paper, Caspi et al. (2002) found that a variant of a gene coding for an enzyme regulating the level of the CNS neurotransmitter Monoamine Oxidase (MAOA) conferred worse antisocial outcomes in the presence of harsh parenting. The effect has been confirmed in meta-analyses, but it is small. Furthermore, emerging studies identify genotypes that confer differential susceptibility to interventions. However, the field is beset by failure to replicate findings and if found, we will need to know the specific mechanism of action through which such genes exert their effect.

**Programs for children with conduct problems**
These are almost exclusively based on social learning theory. Characteristics of some of the more widely used programs are given in Table 37.1, the basic content of a typical program in Table 37.2 and pros and cons of a group-based versus individual-based delivery in Table 37.3.

**Effectiveness**

**Outcomes**

Programs based on social learning theory have evolved over 50 years and there is a larger evidence base for this intervention than any other intervention in child mental health. The National Institute for Health and Care Excellence for England and Wales (NICE) conducted a meta-analysis of 54 randomized controlled trials (RCTs) of parenting programs for prevention or treatment of conduct problems/disorders in 4150 children aged 3–10 years against any control (43 studies vs. waiting list or no treatment controls, 11 vs. management as usual) (NICE, 2013). The result was a moderate effect size of 0.54 sd on parent-rated outcomes, 0.40 sd by independent observation, and 0.69 sd by independent researcher evaluation. Follow-up 1 year later showed persistent effects but a halving of their magnitude. Interestingly,
Table 37.1 Characteristics of some widely used programs.

<table>
<thead>
<tr>
<th>Name</th>
<th>Target population</th>
<th>Levels and delivery modes</th>
<th>Evidence</th>
<th>Comments, website, dissemination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incredible years</td>
<td>A series of parent group programs from babyhood to age 12</td>
<td>Universal: 6 weeks, Indicated: 4 weeks, Treatment: 18–24 weeks</td>
<td>50 RCTs, 10 by developer, 40 independent replications confirm effects</td>
<td>Developer: Carolyn Webster-Stratton. One of the most intensive programs in clinical process and supervision. <a href="http://www.incredibleyears.com">www.incredibleyears.com</a></td>
</tr>
<tr>
<td>Triple P</td>
<td>A range of programs at all levels and ages</td>
<td>Universal: On line, broadcast media, Selective: short one off sessions up to 4 weeks, Indicated 6–8 weeks</td>
<td>Over 50 RCTs by developer, 3 independent replications, some failing to show effects</td>
<td>Developer: Matt Sanders. Comprehensive range of levels www1.triplep.net/</td>
</tr>
<tr>
<td>Parent-child interaction therapy</td>
<td>child disruptive and parenting difficulties including maltreatment</td>
<td>Parent/child dyad is live coached by therapist over 12–20 sessions</td>
<td>Several RCTs by developer and independent evaluators show effects</td>
<td>Developed by Sheila Eyberg. <a href="http://www.pct.org/">www.pct.org/</a></td>
</tr>
<tr>
<td>Parent management training Oregon</td>
<td>Behavioral problems 4–12; parents with mental health problems or separating</td>
<td>Individual program: 19–30 sessions, Group 14 sessions</td>
<td>RCTs by program developer and independents show effects</td>
<td>Developer: Marion Forgatch.</td>
</tr>
<tr>
<td>Strengthening families (10–14)</td>
<td>Universal preventive program for age 10–14</td>
<td>Seven 2 h sessions which include whole family and separate parent and child groups.</td>
<td>Two RCTs by program developer show some effects</td>
<td>Developer: Karol Kumpfer. Well developed across many countries <a href="http://www.strengtheningfamiliesprogram.org/">www.strengtheningfamiliesprogram.org/</a></td>
</tr>
<tr>
<td>Nurse family partnership</td>
<td>Preventive for young, disadvantaged first time mothers</td>
<td>Trained nurses visit mother at home during pregnancy and first 24 months of child's life</td>
<td>Three RCTs have shown varied and long-lasting effects</td>
<td>Developer: David Olds. <a href="http://www.nursefamilypartnership.org">www.nursefamilypartnership.org</a></td>
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</table>

Table 37.2 Content of a typical social learning program.

**Part 1: Promoting a child-centered approach**

*Play* is covered in the first 2–3 sessions. Instead of giving directions, teaching, and asking questions during play, parents are instructed simply to give a running commentary on their child’s actions. Parents are asked to practice these techniques for 10 min every day.

**Part 2: Increasing acceptable child behavior**

*Praise and Rewards.* The parent is required to praise their child for lots of simple, desirable everyday behaviors such as playing quietly on their own, eating nicely, getting dressed the first time they are asked, and so on. Later sessions go through the use of reward charts.

**Part 3: Setting clear expectations**

*Clear Commands.* Parents are taught to reduce the number of commands, but to make them much more authoritative. The manner should be forceful (not sitting down, timidly requesting from the other end of the room; instead, standing over the child, fixing him in the eye, and in a clear firm voice giving the instruction). Commands should specify what the parent does want the child to do, not what he or she should stop doing (“please speak quietly” rather than “stop shouting”).

**Part 4: Reducing unacceptable child behavior**

*Consequences* for unacceptable behavior should be applied as soon as possible. They must always be followed through and simple logical consequences are encouraged: if water is splashed out of the bath, the bath will end; if a child refuses to eat dinner, there will be no pudding, etc. Ignoring this sounds easy but is a hard skill to teach parents. Whining, arguing, swearing, and tantrums are not dangerous and can usually safely be ignored. The technique is very effective. Time Out from positive reinforcement remains the final “big one” as a sanction for unacceptable behavior. The child is put in some boring place for a previously agreed reason (hitting, breaking things, etc.—not minor infringements) for a short time (say 5 min). However, the child must be quiet for the last minute.

There was no generalization to the school setting—overall, for all programs, teacher ratings showed no change. No adverse effects or harms were recorded. However, it may be that modest changes in teacher-rated behavior occur with some more intensive programs—for example, a recent meta-analysis (Menting et al., 2013) of 50 trials of Incredible Years found a small but significant effect on classroom behavior (0.13 sd). Similar findings for parent-reported outcomes were reported in other meta-analyses, for example, by Cochrane Collaboration (Furlong et al., 2012). The latter also analyzed impacts on
Table 37.3 Pros and cons of delivering parenting programs in individual versus group format.

<table>
<thead>
<tr>
<th>Individual</th>
<th>Group</th>
</tr>
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<tbody>
<tr>
<td><strong>Case selection</strong></td>
<td>Can take on a variety of cases, can be hard to stop some parents falling behind.</td>
</tr>
<tr>
<td>Can take on special cases unsuitable for groups: shy parents, failed group parenting programs, high risk/abusive parents</td>
<td>Less detailed due to time constraints and exposure to other parents</td>
</tr>
<tr>
<td><strong>Depth of work</strong></td>
<td>Restricted to parents' accounts of what goes on with the child.</td>
</tr>
<tr>
<td>Therapist can go into greater depth of skills that need to be taught</td>
<td>Flexible—e.g., Limit-setting and time-out have to wait till end</td>
</tr>
<tr>
<td>Can observe parent interacting with child and pick up styles they are unaware of</td>
<td>Fixed order—for example, Limit-setting and time-out have to wait till end</td>
</tr>
<tr>
<td>Can adapt the program for particular child needs for example, attachment problems, autistic tendencies, learning disabilities, ADHD etc</td>
<td>Groups held at a fixed time when parent may be busy</td>
</tr>
<tr>
<td><strong>Flexibility</strong></td>
<td>Parents have to come to clinic or community venue</td>
</tr>
<tr>
<td>Flexible order of delivery of program, for example, time out can be given early</td>
<td>May need to set up a creche</td>
</tr>
<tr>
<td>Flexible timing to attend to suit parent</td>
<td>Other parents can provide validation for their efforts; normalize having a child with problems; enable parents to learn from and support each other</td>
</tr>
<tr>
<td>Can easily be delivered in the home context, no need to set up a creche for child</td>
<td>Requires a second group leader plus group management skills</td>
</tr>
<tr>
<td><strong>Support from other parents</strong></td>
<td>No support from other parents</td>
</tr>
<tr>
<td>No support from other parents</td>
<td>No support from other parents</td>
</tr>
<tr>
<td><strong>Therapists skills and support</strong></td>
<td><strong>Duration and cost-effectiveness</strong></td>
</tr>
<tr>
<td>Can work as a solo therapist</td>
<td>Typical program takes around 8 sessions, more complex 10-12</td>
</tr>
</tbody>
</table>
| Duration and cost-effectiveness | |}

Parental mental health and found it improved by 0.36 sd. Positive parenting and harsh practices improved, assessed by both parent report and independent observation. It is less clear how the effects are sustainable in the long term: many trials have used waiting list control groups that are offered the intervention 6 months later. As a result, no long-term randomized comparison can be made (e.g., Gardner et al., 2006; Bywater et al., 2009). A small number of trials based on selective prevention samples have retained their randomized control group and show good long-term outcomes (Forgatch et al., 2009). In summary, there is convincing evidence that parenting programs substantially improve parenting practices, parental mental health, and child antisocial behavior, and importantly that behavior change is reported both by parent report and independent observations. The evidence for longer-term effects is less conclusive.

Comparison with nonbehavioral programs

There have been rather few head-to-head comparisons of social learning theory parenting programs with nonbehavioral, humanistic approaches. For children with severe conduct problems, the classic paper by Bank et al. (1991) found that behavioral parent management training was effective whereas usual family therapy was ineffective on objective measures, despite favorable reports from parents. Most other studies have found that the humanistic approach usually had no effect whereas the more behavioral programs changed child outcomes (Scott, 2008). A trial of a parenting program based primarily on emotional communication (the Parenting Puzzle) for mild-to-moderate antisocial behavior found no effects (Simkiss et al., 2013). It would appear that for child behavior problems, programs with a practical slant and strong focus on parental behavior change are more effective.

Programs for infants

Most programs draw on attachment theory and in the last 20 years or so, several interventions have been developed and validated (Chapter 6). The more effective interventions for infants typically last 8–20 sessions and videotape parent–infant interactions and then replay them to the parent. The great strength of this approach is that (i) it allows parents to get an accurate picture of what is actually happening (rather than just talking about their perception of their relationship with their infant, as in traditional parent–infant psychotherapies); (ii) it enables them to observe for themselves that when they change their behavior, this impacts on their infant (iii) it allows simultaneous exploration of the mother’s mental state, so that mental blocks to more sensitive responding can be explored and often overcome. The Leiden group has tested video feedback programs in RCTs (Velderman et al., 2006).
The Attachment and Biobehavioral Catch-up (Dozier et al., 2012) is another well-proven intervention. It targets three issues known to affect children’s attachment and self-regulation. First, parents are helped to behave in nurturing ways when children are distressed. Second, similarly to social learning approaches, parents are helped to follow children’s lead, to enable children to better regulate their emotions. Third, parents are helped to reduce frightening behavior as it is associated with disorganized attachment. These issues are targeted through 10 sessions implemented in families’ homes with parents and children present. Other attachment-based programs are discussed in Chapter 6.

Some interventions for infants do not use video-feedback. They include more lengthy and intensive psychodynamic ones, for example, Slade et al. (2005). Olds (2006), By contrast, developed a home visiting program delivered by nurses (Nurse Family Partnership), based not on attachment theory but on systematic evaluation of, and evidence-based interventions for, risk factors from pregnancy to age 2 years. Thus parents are encouraged to reduce smoking and alcohol in pregnancy through understanding the effects on their babies; once the baby is born, parent–child interaction is coached, including how to stimulate the baby appropriately, and wider issues such as partner violence and general education for the mother are addressed.

Effectiveness
A meta-analysis by Bakermans-Kranenburg et al. (2003) found 81 studies, with over 7000 parent–infant pairs. Overall, they improved parental sensitivity by 0.33 sd and attachment security by 0.20 sd. The most effective interventions were relatively short (under 26 sessions) and started later (after the infant was 6 months). Both of these findings go against cherished notions that early intervention must be better, and that more effort should lead to more change (mean effect size for long interventions was −0.03). Recently, an RCT of the ABC intervention showed that as well as enhancing child attachment security, it improved diurnal cortisol production, executive functioning, and emotional regulation (Chapter 6).

For programs that do not rely on attachment theory, those that focus on specified risk factors appear to fare better. Thus the Nurse–Family Partnership approach has been evaluated in three RCTs involving over 1000 mother–infant pairs. This has shown benefits for the child in terms of improved cognitive and emotional development and fewer accidents and injuries, and for the mothers in terms of less harmful health behaviors (e.g., smoking) and higher take-up of further education, less use of public handouts, and a longer interval until subsequent pregnancy (Olds, 2006). By contrast, programs that draw upon a more general notion that if the parents are supported, then they in turn will relate better to their infants appear less effective. For example, in a trial of a home visiting program with 97 h face-to-face contact with mothers, none of the many mothers or child variables measured changed (Barnes et al., 2006); a similar lack of effectiveness was found for the Oxfordshire Home Visiting project (Barlow et al., 2007).

Father involvement in parenting programs
Most literature refers to "parenting" as if it made no difference whether fathers or mothers were involved. While in the great majority of cultures it is more often mothers who spend most time looking after younger children, fathers have a particular role, which often increases as children become older (Lamb, 2004). When it comes to parenting programs, it should not necessarily be assumed that evidence about effectiveness applies equally to mothers and fathers. In practice, however, it is mainly mothers who attend parenting programs and participate in research evaluations. The under-representation of fathers in these interventions is perhaps surprising, given that in many countries their role now reflects greater equality of gender roles and increased sharing of parenting (Maughan & Gardner, 2010). Furthermore, there is considerable research suggesting that amount and quality of father involvement in parenting is beneficial to children’s mental health and development, over and above the level of the mother's involvement (Lamb, 2004; Ramchandani et al., 2013). A systematic review by Lundahl et al. (2008) suggested that if intervention trials involve fathers, they produce stronger effects on child behavior. Some interventions have been designed to engage couples and fathers, with improved outcomes when couples attend (Cowan et al., 2009). However, as it would be very difficult to randomize to one versus two parents attending a program (but see Besnard et al., 2013), it is unclear if father attendance per se causes these changes, or whether outcomes are better in families with two parents (as found by Gardner et al., 2009), and in families where the couple relationship is healthier (Cowan et al., 2009), so fathers are more likely to attend. Irrespective of trial data, it is highly desirable that interventions should involve both parents. Studies of fathers views (Stahlschmidt et al., 2013) suggest a number of barriers (and potential solutions), including time of day of the intervention, and that many interventions are run by women, who may find it easier to communicate with mothers than fathers. This effect can be pronounced in group-based interventions where fathers may feel out of place if they are in a minority.

Application of programs to specific populations
Although designed for conduct problems, these programs can improve other clinical outcomes, even when unadapted; they can reduce children’s anxiety disorders (Cartwright-Hatton et al., 2011), ADHD (Jones et al., 2008; Charach et al., 2013); obesity (Brotman et al., 2012), and parental depression (Hutchings...
et al., 2007; Barlow et al., 2012). However, adaptation and extension of these parenting programs is now increasingly occurring for a range of child psychiatric problems and parental contexts.

Programs for particular child issues and contexts

Depression, anxiety, and other emotional problems
Evidence supporting a link between quality of parent–child relationships and depression, anxiety, and other emotional problems (e.g., somatic complaints and social withdrawal) is clear, although smaller than that found for disruptive outcomes (Dadds et al., 1996; Wood et al., 2003). Low warmth and conflict are both linked with depression and anxiety; however, the influence of control strategies is generally much weaker. Additionally, emotional symptoms in children are linked with over-protectiveness (e.g., Dadds et al., 1996). The elements of parenting programs aimed primarily at conduct problems are likely to be helpful for children showing emotional symptoms, but generally an individual-based intervention should probably be added, although Cartwright-Hatton et al. (2011) tested the effects of a group-based parenting program for diagnosed clinically anxious children (aged 3–9) and found strong effects on reducing anxiety disorders. The majority of sessions focused on components of traditional social learning theory-based parent management skills (e.g., child-centered play, rewards, and limit setting), with about one third of the sessions focusing on components specifically aimed at dealing with anxious children (e.g., anxiety education; fear hierarchies).

ADHD
A number of parenting programs designed for conduct problems have shown improvements in ADHD symptoms as well (Scott et al., 2001, 2010b; Webster-Stratton, 2011; Charach et al., 2013). Additionally, parenting interventions have been developed and specifically for children with ADHD, for example, The New Forest program in the UK, which showed good effects on ADHD symptoms in preschoolers in a clinic-based trial, but not in routine services (Sonuga-Barke et al., 2001). Recent systematic reviews conclude that behavioral parenting interventions are effective for younger children with ADHD, more so than methylphenidate (Charach et al., 2013), and are probably effective for older children (Zwi et al., 2011). European and UK (NICE) guidelines, both recommend parenting programs as the first line treatment for ADHD. However, Sonuga-Barke et al. (2013) found that while effects were good on parent-report, they were negligible using direct observation.

Callous unemotional traits
Despite the common belief that children with conduct problems who also show callous unemotional traits are insensitive to parenting, and to parenting interventions, Waller et al. (2013) found little evidence to support this belief, either from longitudinal studies or from randomized trials. Nevertheless, specific programs are being developed for them (Dadds et al., 2013).

Programs for particular parent issues and contexts

Specific parental issues and contexts
There is some promising evidence that social learning theory-based programs, with some adaptation and extension, can be effective for parents who maltreat their children (MacMillan et al., 2009; Ch 30). For drug misusing parents, the program “Parents under Pressure” has shown promising results (Dawe & Harnett, 2007). For children in the foster care system, some trials suggest that parenting interventions aimed at foster-caregivers, can be effective in reducing problem behavior in this often very troubled group of young people (Briskman & Scott, 2013), although other trials have been more disappointing (MacDonald & Turner, 2005; Turner et al., 2007), perhaps where the interventions have been less intensive.

Transportability of parenting programs to different cultures and countries
Parenting programs appear to transport well across cultures, despite different parenting norms and values. A systematic review of programs developed in the USA and Australia found comparable effect sizes in recipient countries, including Europe and Asia (Gardner et al., 2013). Surprisingly perhaps, in many cases, “imported” programs were more effective in culturally very different settings (for example, Hong Kong). These findings are consistent with studies of effects in ethnic minority groups within one country. For example, Reid et al. (2001), in a large study of low income families in the USA found no ethnic differences in outcomes, engagement, or satisfaction across four ethnic groups, and Scott et al. (2010a) found a similar lack of ethnic differences in outcomes in London.

Given the high levels of international concern about youth crime and violence in developing countries (WHO, 2013), and the loss of children's developmental potential due to poverty and conflict, it is important to know if parenting programs work in low and middle-income countries (LAMICs). A recent systematic review (Knerr et al., 2013) found promising evidence from randomized trials that parenting programs can be effective in LAMICs for improving harsh parenting, and potentially for reducing conduct problems. Broader parenting interventions that also target early cognitive stimulation can also be effective for improving parenting skills and children's developmental potential (Engle et al., 2007; Rahman et al., 2009). WHO (2013) have begun an important initiative to develop, adapt, and test through RCTs programs in LAMICs, where home-based parenting interventions have already shown good results for infants (Cooper et al., 2009; Knerr et al., 2013). There are many other examples of promising practice in developing countries, but very few have been tested in rigorous trials (Knerr...
et al., 2013), as recommended by WHO, and sustainability will be challenging.

What makes parenting programs work?

Predictors and moderators of outcome

In a controlled trial, if a characteristic of the participants (e.g., child age or symptom severity) predicts outcome in both the intervention and control groups, then it is a predictor. If, however, there is an interaction with treatment, so that one subgroup (say younger children) does better than another (older children) in the intervention group only, then the characteristic is operating as a moderator. Until recently, analyses have mainly been at the level of predictors only, with one or two exceptions. It is crucial that treatment and policy decisions are based on evidence from moderator, rather than predictor analyses. Without these comparisons between intervention and control group, it is not possible to tell if a group that appears to benefit to a greater extent from treatment (e.g., girls or younger children), would not have done equally well untreated.

Child age and gender

Clinicians often gain the impression that boys and older children, especially adolescents, perform worse, and Bank et al. (1991) found a smaller effect size with adolescents than with younger children at the same institution. However, meta-analyses of interventions for antisocial behavior are mixed. For example, the Cochrane reviews of parenting interventions for antisocial behavior found an effect size of 0.56SD in teenagers (Woolfenden et al., 2001), 0.53SD in middle childhood (Furlong et al., 2012) and 0.25SD in early childhood (Barlow et al., 2010), thus showing smaller effects in younger children. Within the middle childhood age range, Furlong et al. (2012) found no effect of age on outcome. Teenagers may appear less tractable for a number of reasons. Firstly, many studies on adolescents include the most severe cases (Lipsey, 2003; Leijten et al., 2013). Often, when severity is controlled for, there is no age effect—across a wide age range (2–16 years), Ruma et al. (1996) found that the adolescent group did slightly less well, but the difference disappeared after taking into account initial severity. Within prepubertal children, there also do not appear to be age effects when using direct observation (Dishion & Patterson, 1992; Beauchaine et al., 2005). By contrast, the meta-analysis by Serkelitch and Dumas (1996) found that across (not within) 36 studies ranging from 3 to 10 years of effectiveness was greater in older children. In summary, it appears that age is not a clear determinant of outcome. Likewise, boys are as likely to improve as girls (e.g., see Beauchaine et al., 2005; Scott, 2005). Therefore, there is room for some optimism when treating adolescents.

Child psychopathology

The meta-analysis by Reyno and McGrath (2006) found that more severe initial antisocial behavior predicted (not moderated) less change, but this was a bivariate association with no controlling for other factors. By contrast, taking other factors into account, Scott (2005) found the opposite, namely that higher initial levels of antisocial behavior predicted more change. Most recent reviews and meta-analyses tend to concur. Although Furlong et al.’s (2012) Cochrane review found no difference by conduct problem severity (coded at the trial level), Shelley & Shaw’s (2013) narrative review, and meta-analyses by Lundahl et al. (2006) and Leijten et al. (2013) found larger effect sizes with higher initial severity. Future studies need to address this issue using multivariate statistics and larger pooled samples. Child ADHD predicts a less good response in some studies (MTA, 1999; Scott, 2005) but not others (Beauchaine et al., 2005; Ollendick et al., 2008). In the MTA study, direct observations in the psychological treatment-only arm showed that parents had changed their behavior, whereas child ADHD symptoms had not (Wells et al., 2006). This suggests that it is the characteristics of the children with ADHD that make them less sensitive to change, rather than parents not implementing more effective parenting practices. By contrast, when studied, comorbid anxiety appears to predict better treatment response for children with behavior problems (Beauchaine et al., 2005). A broad review by Ollendick et al. (2008) concluded that for conduct problem interventions, comorbidity did not affect outcomes.

Family factors

Demographic predictors of outcome such as single parenthood, lower maternal education, poverty, and larger family size have traditionally been found in meta-analyses to have a small but negative effect on outcomes (Lundahl et al., 2006; Reyno & McGrath, 2006). However, a recent systematic review (Leijten et al., 2013) that controlled for confounders, especially initial child problem severity, found no diminished effects of parenting interventions in low SES families, consistent with moderator analyses in recent trials of more flexible interventions (Dishion et al., 2008; Gardner et al., 2009, 2010).

Similarly, reviews have traditionally found that parental psychopathology, especially maternal depression, predicts worse outcomes, as do life events and harsher initial parenting practices (Reyno & McGrath, 2006). However, Gardner et al. (2010) found larger child improvement with depressed parents. For mothers with the most negative beliefs about their children, Doolan (2006) found no change in child behavior at all. Overall, these conflicting subgroup findings from small trials suggest that the field would benefit from pooling individual patient-level data from multiple randomized trials (Brown et al., 2013).

Mediators of change

In recent years, researchers have begun to investigate what mediates outcome, as recommended by Rutter (2005). To mediate treatment outcome, the treatment has to (i) change outcome (ii) change the mediator (iii) the mediator has to correlate with outcome, and (iv) the effect of treatment on outcome has to reduce or disappear after controlling for the mediator (Kraemer.
Therapist performance can be divided into three elements. (i) Therapist effects. et al. implemented (Fixsen et al., 2006, 2010; Dishion et al., 2008). Gardner et al. (2006) tested competing mediators, finding that it was change in positive parenting skill, rather than confidence in parenting, that predicted change in child problem behavior. In adolescents, Eddy and Chamberlain (2000) found for parenting, quality of supervision and discipline, and a positive adult–youth relationship all mediated change, as did time spent with deviant peers and the degree of their influence. Taken together, these four factors accounted for a substantial 32% of variance in subsequent antisocial behavior. Similarly, Huey et al. (2000) in a trial of MultiSystemic Therapy for delinquency showed that a positive relationship and firm discipline mediated outcome and good supervision mediated deviant peer association which in turn mediated subsequent antisocial behavior. These studies indicate which variables need to change for a good outcome and have led to changes in programs, for example, there is now a much stronger emphasis on preventing deviant peer association—the OSLC Treatment Fostercare program penalizes youth for every minute that they cannot verifiably account for their whereabouts.

**Implementation and dissemination**

**Implementation**

Most of the trials cited earlier were carried out using (i) specially recruited cases rather than clinical referrals, (ii) specially trained research therapists rather than regular clinicians (iii) university rather than clinical settings; indeed Weisz’s studies show that fewer than 5% of psychosocial child mental health trials meet all three “real-life” criteria (Chapter 36). There is therefore considerable concern whether the good effects seen in trials will be replicated in everyday life, where cases have a high degree of comorbid conditions and most therapists do not use evidence-based approaches and do not get skill-specific supervision. Trials that compared evidence-based approaches in real-life with usual services nonetheless get a clear advantage, by 0.3 SDs (Chapter 36). The challenge is therefore to disseminate best practice more widely and to ensure that it is well implemented (Fixsen et al., 2011)

**Therapist effects**

Therapist performance can be divided into three elements. (i) the alliance, which includes how well client and therapist get on together and agree shared goals. A meta-analysis of youth studies of the alliance found it contributed on average an effect size of 0.21 sd to outcome (Shirk & Karver, 2003). (ii) fidelity or adherence to specific components of a model that concerns the extent to which the therapist follows the actions prescribed in the manual. In a large real-life study of the implementation of a family program for antisocial youths, Sexton and Turner (2011) found that therapists who were highly adherent to the model obtained good results, with a larger effect size on more severe cases, whereas low adherent therapists actually obtained poorer results than the control group, implying that they might have perpetrated harm. (iii) the skill or competence with which the therapist carries out the tasks, that is, how well the therapist performs the actions. Skill can include aspects of the alliance and fidelity. Both Forgatch et al. (2005) and Eames et al. (2009) found that therapist skill significantly predicted change in independently observed parenting. In summary, there is good evidence that therapist variables make a crucial difference to parenting programs for antisocial behavior.

**Dissemination**

Although formal surveys are lacking in most countries, from the paucity of professionals trained in evidence-based programs, we can conclude that the vast majority of children with conduct problems or insecure attachment are not offered proven approaches. There are examples of initiatives to address this. Norway has set up a national training center to roll-out and support a portfolio of parenting programs. In England, the National Academy for Parenting Practitioners was set up in 2007 and by 2010 had trained 4000 practitioners in a small number of carefully chosen evidence-based programs, estimated to have benefited 150,000 children (Scott, 2010). This was accompanied by a sizeable research program and a detailed evaluation of over 100 parenting programs, with the results posted on a searchable site for parents and commissioners (www.education.gov.uk/commissioning-toolkit). For clinically referred cases, the Children and Young People’s Increasing Access to Psychological Therapies (CYP-IAPT) initiative is training up 5 staff from each local health authority in England in either parent training for conduct problems or cognitive behavioral therapy (CBT) for depression and anxiety. The training is intense, 3 days a week over a year, with close supervision of skills. A further element likely to lead to effectiveness is insistence on session-by-session outcome monitoring (http://www.iapt.nhs.uk/cyp-iapt). More is now known about how to achieve successful dissemination, including training managers as well as clinicians, educating both that regular supervision is necessary, and making the case for the cost-effectiveness of parenting programs.

**Prevention**

In an ideal public health preventive strategy, all parents would learn effective parenting skills, which would help to improve
parent–child relationships and child well-being, and reduce the population rate of harsh and abusive parenting. There would be a tiered set of interventions available in primary and then in increasingly specialist levels of care, to help those with continuing difficulties. This vision has been well articulated by Sanders (1999) and appropriate programs developed by his group for each level. It is clear that we have good evidence for the effectiveness of parenting interventions for selective and indicated prevention and for treatment of conduct problems. However, it is less clear whether universal prevention parenting programs work: there have been many successful trials, but also many unsuccessful ones (Malti et al., 2011; Simkiss et al., 2013). Further studies need to understand under which conditions and using which delivery mechanisms, universal parenting programs can be helpful; if they are not, then the conclusion might be that targeted programs are more useful. Prevention is covered in more detail in Chapter 17.

Conclusions

Parenting programs have developed considerably in recent years. Findings from scores of randomized trials present a positive view of their effectiveness, with widespread implementation in many countries. Recent moderator analyses suggest that for many groups considered as hard-to-treat, for reasons of social disadvantage or psychopathology, parenting interventions can improve child behavior. For families with very complex needs, such as those in the child protection system, the evidence is promising. Future developments need to include evaluation of the long-term effects of programs and the mechanisms that mediate changes in parenting behavior. As parenting programs tend to have small effects on children’s behavior in school, further evidence on school-based programs is warranted. Finally, future studies need to investigate which families can improve with minimal intervention such as computer-based self-instruction.

References


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