

Parenting and outcomes for children



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Parenting and outcomes for children

Thomas G. O'Connor and Stephen B.C. Scott



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1 Introduction

The various ways that parents shape their children's development have been a regular source of theorising by scientists, philosophers and, centre stage, by parents themselves. Within the scientific perspective, much of the empirical work linking parental behaviour to developmental outcomes in children has been produced by those working in psychology, sociology and criminology. But other disciplines have contributed both theories and methods including historians, anthropologists and biological sciences. For example, findings from ethology have demonstrated the biological basis and evolutionary significance of the child's attachment to the parent, while research in physiology, endocrinology and genetics has influenced considerably our understanding of parenting and its effects on offspring.

However, there are also more pressing and practical motivations driving current interest in this topic. Chief among these is growing concern about the sizeable and perhaps growing proportion of children with substantial educational, social and health problems, coupled with a belief that modifying the family environment may be a potent means of improving children's lives and life chances.

Structure and scope of this review

We open with a brief review of the historical and contemporary contexts in which parenting and parenting research were and are viewed. We then outline some of the major theories and models that dominate research on parent-child relationships and child outcomes. The third chapter reviews core methodological considerations to examine the link between how information is obtained and what findings are generated from it. We then review empirical work on the link between parent-child relationship quality and child outcomes. Chapter 5 considers how strong the evidence is to support the claim that parent-child relationship quality has a *causal* impact on children's behaviour.

We go on to consider the generalisability of the research findings, including the extent to which cultural and subcultural constraints limit the applicability of findings. It is in this context that we also consider parenting as a 'public health' concern, and the extent to which current policy trends are responsive to the impact of parenting in the health and well-being of the nation. Finally, we consider particular advantages, concerns and directions for further research.

We have not attempted to provide an encyclopaedic review of the available literature. Instead, we have sought to discern key lessons from available research and, where possible, to illustrate those points with examples. We place particular emphasis on the leading debates in our understanding of parenting and outcomes for children because they are equally important to theoreticians and policymakers (although, perhaps, for different reasons).

It should be noted that we generally refer to ‘parent–child’ relationships rather than ‘mother–child’ or ‘father–child’ relationships in particular. Differences in how mothers and fathers approach and fulfil the parenting role have, of course, been noted (Cabrera *et al.*, 2000) and authors have lamented the tendency for research to include mothers and neglect fathers (Phares and Compas, 1992). However, there is no strong indication that optimal parent–child relationships take a different form for mothers or fathers and it seems that the core processes linking parent–child relationships to child outcome are broadly similar for parents of either sex. Accordingly, we distinguish mothers and fathers only where major differences in roles and functions have been consistently found. Moreover, we do not consider other kinds or sources of parenting, including grandparents, other forms of kinship care, or parent surrogates, such as daycare providers and teachers. It should also be noted that we have considered only those psychological, educational, social and health outcomes for which there is a sound and robust body of research. It may, of course, be the case that subsequent research will identify other areas as a focus for clinical and policy attention.

Terminology and definitions

Throughout this review we use the term ‘parent–child relationships’ rather than ‘parenting’ because the latter term implies, for some, the notion that the effects of parents on their children are a ‘top-down’, unidirectional process and that parenting is a trait-like phenomenon; neither of these assumptions is correct. The term ‘parent–child relationship’, although more cumbersome, connotes a more mutual, dynamic, interactive process that describes the processes of mechanisms of influence.

2 Key concepts in understanding parenting research

Current thinking about parent–child relationship quality and child development is dominated by concern for:

- *cause*, or the determination of how parent–child relationships directly or indirectly influence children’s well-being
- *context*, or the degree of generalisability of findings across diverse populations and settings
- *convertibility*, or the degree to which, and the processes by which, findings from research can be converted to interventions at the individual family or community level.

Causation

The case for parent–child relationship quality *as a causal influence* on children’s psychological, social and cognitive outcomes remains controversial. That this is so, despite half a century of research on parent–child relationships (e.g. Sears *et al.*, 1957), does not mean that little has been learned during this period. In fact, we have learned a great deal about the nature of parent–child relationships and child development, including one of the most important general lessons of all: that the links between parent–child relationship quality and children’s well-being are neither simple nor direct. For example, it was once customary to infer from a correlation between parent–child conflict and child aggression that the former caused the latter. Contemporary research takes this well-replicated observation as no more than a starting point for questioning, with the help of experimental and quasi-experimental designs, whether the relationship really is causal and in which direction the causation occurs. Could it be, for example, that having a child who is genetically more aggressive causes his parents to be harsher in their attempts to control him? Does the association hold up for most children and under most circumstances? Does the association necessarily imply that decreases in parental harshness brought about by an intervention will lead to corresponding decreases in child aggression?

Context

One of the most important trends in parenting research over the past decade has been towards a greater contextualised understanding of the origins of parent–child relationships, the meaning they have to parents and children, and the effects they have on an array of outcomes in children. There are diverse examples of how ‘context’ has been used in research, denoting anything from an individual’s culture (e.g. African Caribbean) to a social setting (e.g. neighbourhood with a high rate of violence). No clear consensus has yet emerged on which demarcation(s) of context may be most relevant or useful. To complicate matters, several definitions of context are confounded (such as that between ethnicity and income). As a result, the concept of ‘context’ has sometimes been criticised because of the vagaries and uncertainties in how it is operationalised. Nevertheless, we now have substantial evidence that at least some associations between parent–child relationship quality and child well-being differ reliably across sub-populations and social settings.

Convertibility

Research on parenting interventions that asks, ‘does it work?’ is increasingly common, but some studies now go further by asking important questions such as: ‘for whom does the intervention work?’ and ‘by what mechanisms?’ Interest in this latter question follows directly from the consistent observation that, even for the most ‘evidence-based’ interventions, there is wide variation in response among those who participate. Another important background influence is the findings from some major initiatives that were intended to deliver important gains for children, but have proved to be complete or qualified failures (e.g. Barkley *et al.*, 2000). As a result, it is no longer assumed that a successful intervention can be abstracted merely from the findings from naturalistic (i.e. non-intervention) studies.

3 Theories concerning the links between parent–child relationships and child outcomes

Several theories have been proposed to explain the psychological significance of parent–child relationships and why they are strongly linked with children’s well-being (see, for example, Sears *et al.*, 1957; Maccoby and Martin, 1983; Maccoby, 1992). In the first half of the twentieth century, research on these broad theoretical positions was patchy, but did not inhibit strong views being advanced about the ways that parents should approach the task of parenting. Much contemporary research on parent–child relationships can be traced to three dominant perspectives:

- social learning theory
- attachment theory
- parenting styles.

Social learning theory

This is one of the most influential models of parent–child relationships, and closely associated with the ideas and findings of Bandura (e.g. Bandura, 1977). The conceptual basis for social learning approaches as applied to parenting is most closely associated with the work of Gerald Patterson (1969), founder of the Oregon Social Learning Centre. Also influential was Constance Hanf (1969), who developed play therapy based on rewarding child behaviour through attention. Latter-day interventions, notably the programmes of Carolyn Webster-Stratton (1981), Rex Forehand and Robert McMahon (1981), Sheila Eyberg (1988) and Marian Forgatch (Forgatch and DeGarmo, 1999), directly incorporate social learning principles. Several leading practitioners have expanded the social learning model to incorporate consideration of the parents’ social setting that may contribute to poor parenting, including Robert Wahler (1965) whose programme recognised the particular needs of isolated mothers. He was instrumental in showing that ‘insular’ mothers were harsher to their children on days when the few adults with whom they had contact – such as local officials or their own mothers – had been rejective of them.

Broadly put, social learning theory argues that children's real-life experiences and exposures directly or indirectly shape behaviour. For Patterson (1969, 1996) and many others there is a focus on traditional behavioural principles of reinforcement and conditioning. The fundamental tenet is that moment-to-moment exchanges are crucial; if a child receives an immediate reward for his/her behaviour, such as getting parental attention or approval, then he/she is likely to do the behaviour again, whereas if she/he is ignored (or punished) then she/he is less likely to do it again. Other advocates have expanded this focus to consider the cognitive or 'mindful' processes that underlie the parent's behaviour (e.g. Bugenthal *et al.*, 1989; Dix, 1992) and its effects on children (e.g. Dodge *et al.*, 1995). Whether the assessment and conceptual focus is on behaviour or cognitions, the model suggests that children learn strategies about managing their emotions, resolving disputes and engaging with others not only from their experiences, but also from the way their own reactions were responded to. For younger children especially, the primary source of these experiences is in the context of the parent-child relationship and the family environment.

Given its historical emphasis on altering negative, aggressive behaviour in children, models of parenting based on social learning theory have tended to emphasise parental conflict, coercion and consistent discipline. But more theorists have incorporated positive dimensions of parenting as a way of promoting child positive behaviour and affect, improving the pleasurable nature of parents' and children's interactions with one another (e.g. Gardner, 1989).

Attachment theory

Attachment theorists have developed a model of parent-child relationships from a broad theoretical base that includes ethology, cognitive psychology and control systems (Bowlby, 1969/1982, 1973, 1980, 1988; Ainsworth *et al.*, 1978; Cassidy and Shaver, 1999). John Bowlby was particularly interested in identifying the nature, significance and function of a child's tie to his/her parent. Although the theory had its roots in clinical observations of children who experienced severely compromised, disrupted or deprived caregiving arrangements, it has been applied as a model for normal and abnormal development. Attachment theory is concerned with fundamental issues of safety and protection; in psychological terms, it focuses on the extent to which the relationship provides the child with protection against harm and with a sense of emotional security.

The theory proposes that the quality of care provided to the child, particularly sensitivity and responsiveness, leads to a 'secure' (optimal) or 'insecure' (non-optimal) attachment. Attachment theorists use the term 'pathway' to make explicit that early attachment experiences do not shape subsequent development in a deterministic manner (Bowlby, 1988). Insecure attachment is not synonymous with disturbance and a secure attachment does not guarantee against disturbance. We know, however, that a particular form of insecure attachment in infants and young children termed 'insecure-disorganised' is strongly related to risk for psychopathology and is a marker of particular risk in the caregiving environment (e.g. Lyons-Ruth, 1996; Greenberg, 1999). Attachment relationships are internalised and carried forward to influence expectations for other important relationships. A history of consistent and sensitive care with the parent is therefore expected to lead to the child developing a model of self and others as loveable and loving/helpful. Effective attachment-based interventions have been developed and validated for a range of clinical problems (Cicchetti *et al.*, 2000; Bakermans-Kranenburg *et al.*, 2003).

Parenting styles

The dominant model in research on parent–child relationships is most loosely associated with the early work of Diana Baumrind in the 1960s (e.g. Baumrind, 1991) and has been elaborated on by several subsequent teams of investigators (Maccoby and Martin, 1983; Steinberg *et al.*, 1994b; Hetherington *et al.*, 1999). Baumrind, in her naturalistic study of interactions between parents and young children, described important dimensions of parenting. These were warmth (as opposed to conflict or neglect) and control strategies. Parenting typologies were, thus, constructed from a cross of warmth, conflict and control: 'authoritative' (high warmth, positive/assertive control and in adolescence high expectations), 'authoritarian' (low warmth, high conflict and coercive, punitive control attempts), 'permissive' (high warmth coupled with low control attempts) and 'neglectful/disengaged' (low warmth and low control). These four typologies have been repeatedly associated with child outcomes. Children and adolescents of authoritative parents are consistently described as most prosocial, academically and socially competent, and least symptomatic. Children whose parents are described as authoritarian, permissive and disengaged show significantly worse outcomes, with children of authoritarian parents showing typically the most disturbed adjustment of the four parenting types.

Even a cursory examination of the studies described in this chapter is enough to demonstrate how the mechanisms proposed from different theoretical positions overlap. Regrettably, one of the limitations of current studies is that there has been

little cross-fertilisation of ideas and testing competing models against one another. For example, research on parent–child relationships based on social learning theory has remained essentially independent of research on attachment theory – even though each line of research is concerned with the same basic question of how parent–child relationships influence the child’s development and how parent–child relationships might be improved. Yet research has made substantial progress in knowing how best to assess the quality of parent–child relationships – as will be seen in the next chapter.

4 An overview of research linking parent–child relationship quality and child outcomes

It would not be possible for this relatively short paper to review exhaustively the studies that have considered the link between parent–child relationships and child outcomes.¹ In this chapter, we briefly highlight key points from lines of research that have proved to be robust; that is, those whose findings generalise across samples and methods. Our focus at this stage is on demonstrating how parent–child relationship quality has been associated with a wide variety of child outcomes. We do this by examining individual differences – for example, the extent to which parents who exhibit elevated rates of conflicted, harsh parenting behaviours have children who exhibit elevated rates of delinquent or antisocial behaviours. However, it should be noted from the outset that one limitation in drawing conclusions from this research is the tendency for different sorts of problems to cluster within individuals. For example, children’s behavioural and emotional problems often co-occur. Those who exhibit high rates of aggression, truancy and oppositional behaviour also tend to experience higher levels of depression and anxiety, as well as educational underachievement and reading difficulties.

Aggression and delinquency

The finding that parent–child relationship quality is associated with aggressive behaviour and delinquency is one of the most widely reported findings in the literature. Large-scale epidemiological investigations, such as the Isle of Wight study in the UK and the Dunedin and Christchurch studies in New Zealand, have concurred with intensive clinical investigations, such as the work of Patterson and colleagues (e.g. Patterson, 1996), as well as numerous naturalistic studies of diverse samples using a mixture of methods (Greenberg *et al.*, 1983; Steinberg *et al.*, 1994a; Dodge *et al.*, 1995; Lyons-Ruth, 1996; Dunn *et al.*, 1998; Gardner *et al.*, 1999; Hetherington *et al.*, 1999; Denham *et al.*, 2000; Kilgore *et al.*, 2000). It is, however, notable that aggression and delinquency have been defined in a number of different ways, including antisocial acts during an observational period; teacher reports of aggressive, disruptive behaviour in school and parent reports of similar behaviour at home; police records of criminality; and peer reports that the child gets into fights or is a bully. Each of these definitions of aggression or the more generic term ‘externalising’ behaviour is *differently* important, but there is little doubt that each is associated with the quality of parent–child relationships.

One unresolved question that has emerged is whether aggressive behaviour is more strongly predicted by conflict than by other parenting dimensions, such as measures of warmth or control or monitoring. Also, in many cases, it has been observed that several different dimensions of parent–child relationships are independently associated with disturbance (Kerr and Stattin, 2000; Fletcher *et al.*, 2004). The message here is surely that we will almost certainly never be able to boil down the origins of externalising behaviour to a single component of the parent–child relationship – just as we could not describe a particular parent–child relationship by using just one dimension of behaviour. It is also important to note that the connection between parent–child relationships and externalising problems applies to variations within the normal range of children’s behaviour as well as clinically rated disturbance. This is true of both parenting and the outcomes for children (Patterson and Bank, 1989; Lansford *et al.*, 2002). In the Dunedin Health and Development study, for example, poor parenting in early life was associated with a two-fold increase in delinquent behaviour and was an especially important predictor of delinquent behaviour among children judged to have an irritable temperament (Henry *et al.*, 1996). There is, therefore, an implicit assumption, at least in most research, of a ‘dose-response’ connection between poor parenting environment and antisocial-related outcomes: the more extreme the parenting environment, the worse the child outcome and/or the likelihood of clinical disturbance.

Depression, anxiety and ‘internalising’ problems

Evidence supporting a link between quality of parent–child relationships and depression, anxiety and other ‘internalising’ problems (such as somatic complaints and social withdrawal) is almost as strong and just as robust as that found for externalising outcomes. The association is obtained from large-scale epidemiological investigations as well as clinical and normative developmental studies, and is evident in a range of samples and according to diverse methods (Dadds *et al.*, 1996; Garber *et al.*, 1998; Wood *et al.*, 2003). Moreover, the association holds regardless of whether the outcome is normal variation in ‘symptoms’ or clinical disturbance.

Just as with externalising symptoms, there is mounting evidence that individual variation in internalising symptoms is not specifically associated with a single dimension of the parent–child relationship. Warmth and conflict are both reliably linked with depression and anxiety; however, the influence of control strategies is generally found to be much weaker. In addition, several groups (e.g. Hudson and Rapee, 2002) have suggested that internalising behaviours in children may be linked with parenting styles that might not have traditionally been assessed, such as overprotectiveness.

Cognitive and educational outcome

Several cognitive theorists (Rogoff and Lave, 1984) have proposed that the parent–child relationship is an essential environmental context in which structuring or ‘scaffolding’ of the child’s emerging cognitive abilities takes place. Those parents who are sensitively tuned to the child’s cognitive ability can be expected to provide an optimal environment for the child to learn, which can be further fuelled by the child’s own motivation. In older children and adolescents, parents are also thought to shape aspirations and motivation by acting as role models, providing and selecting opportunities for the children, and setting expectations and definitions of success (Mortimer and Kumka, 1982; Bell *et al.*, 1996; Gutman and Eccles, 1999; Jodl *et al.*, 2001).

The research base linking parent–child relationship quality with cognitive or academic outcomes is substantial. Many researchers have reported that authoritative parenting is associated with higher school achievement than the other parenting styles (e.g. Glasgow *et al.*, 1997; see also Stevenson and Lee, 1990). From a complementary attachment perspective, positive links have also been found between a secure (optimal) attachment in childhood and academic achievement in secondary school (Feldman *et al.*, 1998). Several groups have also shown that children who are read to by parents become better readers. More recent research has shown that children’s reading ability is associated with the reading environment they receive, independent of parental intelligence or education (Desforges and Abouchaar, 2003; Scott *et al.*, submitted). There is also a branch of research showing that parental involvement with the child’s school is associated with the child’s achievement (see Booth and Dunn, 1996). That finding has prompted a movement to improve home–school links as a way of improving children’s educational outcomes. The parental dimensions emphasised in this research are involvement and monitoring.

Social competence and peer relationships

The evidence here is derived from several distinct theoretical perspectives (Parke *et al.*, 1989) and has most commonly been studied within peer relationships. Several studies demonstrate that the quality of child–parent attachment in infancy and early childhood predicts relationship quality with peers concurrently and longitudinally (Cassidy *et al.*, 1996; Moss *et al.*, 1998; Sroufe *et al.*, 1999). In general, they show that, compared to children who were judged to have an insecure attachment with their parents, children with a secure attachment are more likely to be rated as popular by their peers and as having more prosocial skills (Greenberg *et al.*,

1983; Lieberman *et al.*, 1999). Research using a social learning approach has also established linkages (Putallaz, 1987; Pettit *et al.*, 1988; Dishion, 1990; Vuchinich *et al.*, 1992).

The connection between parenting and peer relationships is believed to be mediated by social cognitions and behavioural strategies learned from interacting with parents. Social learning researchers have also emphasised the importance of parental monitoring and control in preventing the child from developing affiliations with deviant peers (e.g. Brown *et al.*, 1993). A related approach proposes that social-cognitive capacities, such as emotional understanding, perspective taking and emotional regulation, are developed in the context of the early parent–child relationship and carried forward to later social relationships, including those with peers (Parke *et al.*, 1989; Dekovic and Janssens, 1992; Dunn, 1992; Carson and Parke, 1996).

There has long been empirical support for the role of peer relationships in children’s social and personality development and psychopathology (Sullivan, 1953; Cowen *et al.*, 1973; Hartup, 1979; Parke *et al.*, 1989; Cicchetti and Bukowski, 1995; Sroufe *et al.*, 1999). Taken together, the relevant findings provide substantial evidence for plausible causal links between the quality of parent–child and peer relationships. There is some uncertainty as to which theoretical position is strongest or which dimensions of the parent–child relationship are most relevant. But the existing models of parent–child relationships converge in expecting that optimal parent–child relationships would be strongly linked with social competence and positive peer relationships, and that multiple components, including warmth, conflict, and control and monitoring, play an important role.

Self-esteem and identity

One further area of social-psychological development that has received attention in the parenting literature can be loosely described as self-esteem and identity. The notion that experiences in the parent–child relationship would influence what some researchers refer to as the ‘self-system’ (e.g. Cicchetti, 1988) has been a particular focus of attachment theory. Children’s internalisation of attachment experiences is seen as shaping the way that they view others and expect others to behave towards them. Research testing this hypothesis is limited, but there is some suggestion that even pre-school-age children’s view of themselves is linked with attachment experiences (Toth *et al.*, 2000). There is rather more evidence concerning a broader set of cognitive ‘biases’ (positive or negative) that may constitute building blocks of the sense of self (Cassidy *et al.*, 1996; Laible and Thompson, 1998). Supporting

these findings is a large dataset (Harter and Pike, 1984) showing that children who experience warm, supportive, non-conflicted, authoritative relationships report more positive self-concept in the areas of academics, social relationships, romantic relationships, athletics and most other areas or domains investigated to date (Steinberg *et al.*, 1994b; Hetherington *et al.*, 1999; Reiss *et al.*, 2000).

The development of a positive self-view or identity has long been viewed as a critical developmental task (Erickson, 1968). Research into this issue is limited, however, not least because of ongoing uncertainty about how best to define and measure identity, self-esteem and related concepts (Emler, 2001). Nevertheless, a child's view of him or herself does appear to be consistently linked with the quality of parent-child relationships. (e.g. Grotevant and Cooper, 1985).

General health and biological development

A number of studies have found robust associations between quality of parent-child relationships and high-risk health behaviours, such as smoking, illicit drug use, alcohol use and sexually risky behaviours. For example, several large-scale paediatric surveys have shown that parents who smoke are more likely to have children who smoke (e.g. Green *et al.*, 1990). Ample evidence also now exists that use of alcohol and other substances runs in families (Hicks *et al.*, 2004). Quite what contribution parent-child relationships make in this transmission is not always clear because many of the studies did not assess them in sufficient detail. However, it is widely accepted that parenting is associated with substance use, perhaps through parents modelling inappropriate drug-using behaviour (Steinglass, 1981) or creating a psychological environment in which children become more susceptible to substance use (Steinberg, 1987).

A separate strand of research shows that parenting quality and the home environment are strongly linked with the likelihood of physical injury or accidents. Schwebel *et al.* (2004) found a strong and significant association between positive parenting and fewer injuries requiring medical attention, and Bijur *et al.* (1991) reported that parent-child conflict was associated with injury in adolescents. Many other studies also found that parenting and family environment are connected with serious injuries, accidents and burns in children (Matheny, 1986; O'Connor *et al.*, 2000a).

Other studies have suggested that the transmission of obesity within families may have something to do with parenting environment, in addition to genetic and other

factors (Lake *et al.*, 1997; Faith *et al.*, 2004; Jebb *et al.*, 2004). These studies are important in showing that the effects of parent–child relationship quality may extend well beyond social, educational and psychological measures. Understanding the impact of parenting on health outcomes is a promising arena for further study and, like the research on parenting and delinquency, is one that can and should be viewed in terms of health economics, a topic addressed in more detail below.

In summary, there is considerable consistency across studies about the basic connection between parent–child relationship quality and child outcomes. Meta-analysis and conceptual reviews of the literature (e.g. Collins *et al.*, 2000) have reached a similar view. Consensus on a magnitude of association is somewhat less clear, and depends on how the data were collected and the kind of sample assessed. A question of ‘specificity’ arises in relation to the extent that there are specific connections between different dimensions of parenting and particular outcomes. As seen, there are indications that certain dimensions may play an especially important role in some outcomes, such as overprotective parenting for anxiety or monitoring/control for delinquency. However, evidence of strong specificity is rare. The implication for future research is that neither naturalistic nor intervention research studies should adopt a single dimension of parenting as their main focus of study.

Another important theme we would emphasise from the literature is that parent–child relationship quality is associated with an impressive array of different child outcomes. Behavioural/emotional outcomes have attracted much of the attention, but there is also strong evidence concerning multiple aspects of psychological, social, educational, intellectual and physical health. The implication here is that it may be profitable for basic and applied research to invest in assessing a range of outcomes, and to consider the extent to which some of those outcomes may be viewed in terms of health economics and public health.

5 Change and continuity in relationship quality and child outcomes

Changes in parent–child relationships

There are substantial changes in optimal parent–child relationships from infancy to late adolescence, many of which are allied closely with maturational changes in children. For example, the nature of the attachment relationship changes fundamentally as children begin to be able to negotiate with their parents and show a capacity to understand and empathise (however immaturely) with them. Another transformation that has attracted considerable attention is the reorganisation in parent–child relationships around puberty as young people move towards greater autonomy (Steinberg, 1981; Smetana and Asquith, 1994; Allen and Land, 1999).

Certain dimensions of the parent–child relationship appear important in children of almost any age, notably warmth/support and conflict and hostility. By contrast, some qualities of the parent–child relationship are thought to alter in structure and function during development. One of the most important may be monitoring and control. Several research groups (Dishion and McMahon, 1998; Ary *et al.*, 1999) have suggested a model in which positive parental control in early and mid-childhood is important for preventing late disruptive behaviour. However, in adolescence, monitoring – and not control – is most closely associated with positive behavioural adjustment.

Developmental timing of parenting

In most circumstances, there is considerable stability of parent–child relationship quality, even over extended periods and according to multiple methods of assessment (Conger *et al.*, 1994; Allen *et al.*, 1996; Loeber *et al.*, 2000). Interestingly, several studies (e.g. Waters *et al.*, 2000) have reported that child–parent attachment in infancy is significantly, though modestly, associated with young adult representations of attachment to their parents derived from semi-structured interview. This stability is most marked for secure attachment relationships. However, although some studies show long-term links between infant and adult measures, they are unable to show that attachment in infancy was specifically predictive of adult

outcomes. In fact, we know from many studies that quality of child–parent attachment tends to be stable and it may well have been the accumulation of security-promoting experiences throughout childhood that were important for explaining adult outcomes. Similarly, studies of maltreated children have had difficulty showing that *when* the maltreatment occurred was important (e.g. Bolger and Patterson, 2001). This is because most children who experience maltreatment experience many other kinds of persisting risk (such as poverty, parental mental illness or substance use).

More generally, stability makes it difficult for studies to examine the notion that the quality of parenting in infancy is somehow ‘more important’ than the quality of parenting later in development. Persisting effects of early adverse experiences have, in some cases, been demonstrated, as with a study of children adopted into the UK following institutional rearing in Romania (O’Connor *et al.*, 2000b; Rutter *et al.*, 2004). However, the early experiences of the children were notably severe during their institutionalisation before they were ‘rescued’ and placed in largely middle-class and low-risk caregiving environments. Experimental animal research shows timing effects (O’Connor and Cameron, 2006) to a degree that is not found (and arguably is not obtainable) in most human studies. But how well animal findings extend to humans in this context is simply not known.

Effects on later partner relationships

A further question concerns how far the quality of parent–child relationships in childhood and adolescence predicts outcomes for young people such as adult partner relationships. Analysing the 1958 British Birth Cohort, Flouri and Buchanan (2002) found that adolescent reports on the quality of relationships with their parents at age 16 years predicted self-reports of conflict with their partners at age 33 years (after controlling for socio-economic status and other key covariates). Other studies tackling the same question report similar findings. One of the most compelling examples found observer reports of warm, nurturing parenting of adolescents were significantly linked to observer reports of the same young people showing elevated levels of warmth towards romantic partners eight years later (Conger *et al.*, 2000). In similar vein, other investigators have found that the quality of parent–child/infant relationships corresponds with the quality of peer and romantic relationships assessed many years later (e.g. Carlson *et al.*, 2004). These findings may help explain observations from family demography and sociology, such as the intergenerational continuity of divorce (Amato, 1996). On the other hand, as previously noted, these studies cannot show that the caregiving environment experienced during one phase is more important than any other. Indeed, it may well be that cumulative experience is what predicts later well-being.

6 Some challenges to causal claims concerning parent–child relationships

There is increasing government interest in promoting parent-based initiatives to improve the well-being of children. The assumption underlying this movement is that there is a causal link between the two – improving parenting will lead to improvements in children’s well-being. Yet, much of the existing research on parenting and child outcomes is not centrally concerned with identifying causal mechanisms or establishing causal connections. It is, instead, correlational, concerned with the existence of associations. There is, moreover, a substantial set of publications that call into question the view that the quality of parent–child relationships is causally linked with child outcomes. For example, the developmental psychologist Sandra Scarr has asserted that, for most children, parenting had little influence on their outcomes (Scarr, 1992). She argues that, apart from abusive parenting, most of the variability in children’s outcomes is due to genetic factors, implying that, so long as parenting is ‘good enough’, differences in children’s developmental trajectories will be due to inherent factors. This and many of the more serious challenges to causal claims about parent–child influence are evidence-based. In other words, there are findings that reject a causal model – or at least the kind of simple causation that has been implicit in much of the thinking about parental effects.

This chapter considers three main challenges to the hypothesis that parent–child relationship quality is causally linked with child outcomes.

Challenge 1: parent–child relationship quality and child outcomes are partly genetically mediated

One of the most striking criticisms concerning parent–child relationship quality and child outcomes comes from behavioural genetics. Researchers have commonly studied groups of individuals with different degrees of biological relatedness to infer whether a degree of genetic influence exists. For example, if monozygotic (MZ, identical) twins, whose genetic make-up is identical, are more similar on a measure such as ‘sadness’ than dizygotic (DZ, fraternal) twins, who on average have only half their genes in common, then one plausible explanation is that this is due to greater genetic resemblance. Behavioural genetic designs such as twin or adoption studies can also be used to test environmental hypotheses. For example, Duyme and

colleagues (1999) conducted a unique 'cross-fostering' study in which parents of both high and low socio-economic status (SES) adopted children who had been born into high and low SES families. They found that low SES children adopted into high SES families exhibited a higher IQ than children who were adopted into low SES families. Thus, by taking a behavioural genetic approach, the researchers provided some of the strongest evidence that the home environment may have a causal link with children's intellectual ability.

Other designs have also been used to test hypotheses of genetic mediation – for example, the stepfamily design in which comparisons are made between full, half and/or unrelated siblings, brought together by repartnering (O'Connor *et al.*, 1995; Cleveland *et al.*, 2000; Deater-Deckard *et al.*, 2002). It, too, has limitations, such as the likelihood that any sample of stepfamilies will include wide variation in the length of time stepsiblings shared a household. Nevertheless, there is nothing about quantitative genetic assumptions that would make the stepfamily design less valid than a twin or adoption design. Furthermore, given the high rates of divorce and remarriage, the stepfamily design may be more accessible to family researchers wishing to test behavioural genetic hypotheses.

Behavioural genetic studies commonly report estimates of heritability, which is the proportion of individual differences ('phenotypic variance') attributable to genetics. Estimates of heritability may be useful guideposts for understanding how important genetic factors are likely to be, but the meaning of any estimate requires some caveats. For example, there is no 'true' heritability estimate and heritability is not a fixed characteristic. Nor is it necessarily the case that strongly heritable forms of psychopathology do not respond to environmental influences. Thus, there is not necessarily a relationship between genetic influence and psychosocial susceptibility – such as response to psychosocial interventions – although remarkably few studies have examined this issue directly.

The thrust of recent psychological research using behavioural genetic methodology has been to examine *how* genetic factors may be involved in mediating psychosocial adjustment and psychosocial risk. This signals a move away from asking if there is *any* role of genetic factors, or assuming that there is *only* a role for environmental processes to a more developmentally sophisticated model. Yet, in spite of the growing acceptance that genetic and environmental factors are both important in developmental processes, it has proved difficult to develop adequate conceptual models and analytic strategies for integrating genetic and psychosocial hypotheses. One sign of progress in conceptualising the interplay between genes and environments is reflected in the emergence of research assessing genotype–environment correlations. These come in a variety of forms and require different

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research designs to test their magnitude and influence (Plomin *et al.*, 1977). ‘Passive’ correlations arise because parents provide both genes and environments for their children. The correlation is ‘passive’ in the sense that children play no direct role in creating the overlap of genetic and environmental factors. Such correlations raise substantial doubts about the interpretability of environmental effects in studies that rely solely on samples of biologically related parents and children, where it is not possible to disentangle the fact that parents provide both genes and environments. However, in adoptive families, the ordinarily strong association between adoptive parent characteristics (e.g. depression) or behaviour (e.g. parental insensitivity) does not hold. So, if the association between parent–child relationship quality and child outcomes is weaker in adoptive families than in biologically related families, then some degree of genetic mediation is suggested. In fact, associations between parenting and child adjustment are generally greater in biological families than in adoptive families. This implies that studies that fail to consider the genetic hypotheses are likely to overestimate environmental influences, such as parenting, on children’s adjustment.

A second type of genotype–environment correlation is ‘evocative’ or ‘active’. This is based on the general finding that individuals are active agents in seeking out and evoking experiences and reactions from their environment. Consequently, environments and experiences are not randomly distributed in the population, but indelibly linked. Environments and experiences are not only correlated with individual characteristics, but also develop and sustain individual differences through dynamic interactions between people and their environments (Bell and Harper, 1977; Anderson *et al.*, 1986). From this perspective, there is convergence in the ways that both behavioural geneticists and child developmentalists conceptualise children as possessing their own strong sense of agency. However, the concept of active/evocative genotype–environment correlations goes a step further in suggesting that individual characteristics that correlate with experiences are in part genetically mediated.

A great deal of research seeks to understand why some individuals are effective parents whereas others have more difficulty. Much of the research on statistical predictors of parent–child relationship quality has focused on psychosocial risks affecting parents, such as economic adversity, marital strain, family stress and mental health problems (Capaldi and Patterson, 1991; Hetherington and Clingempeel, 1992; Conger *et al.*, 1994). Life-course and intergenerational risks for poor parenting have also been identified (Quinton *et al.*, 1984; Elder *et al.*, 1986; Waters *et al.*, 2000; Jaffee *et al.*, 2001).

It is tempting to conclude from the wealth of data on the links between social stress and poor parenting that the former produces the latter. But another explanation, supported by mounting evidence, suggests that poor parenting behaviour is part of a larger, characteristic way of relating to others that may not be independent of genetically influenced personality and individual qualities. In other words, parenting behaviour is not a role individuals play that is detached from their other roles or behavioural styles, but rather the expression of a common set of individual qualities. Results from several samples and methods indicate possible genetic mediation of parenting behaviour (Perusse *et al.*, 1994; Kendler, 1996; Losoya *et al.*, 1997; Spinath and O'Connor, 2003; Neiderhiser *et al.*, 2004). One general finding that has been replicated points to some degree of genetic influence on parent behaviour towards their children. For example, parents who are identical (MZ) twins report engaging in patterns of child rearing with their children that are more similar than parents who are non-identical (DZ) twins. What has not yet been replicated is a *particular* finding, even when the same measure has been used. For example, in the studies cited above, there is not a good deal of consistency in findings.

Several carefully conducted observational studies provide the strongest current evidence for genetic mediation of parent–child relationship quality (Lytton, 1977; O'Connor *et al.*, 1995; Deater-Deckard and O'Connor, 2000). For example, Deater-Deckard and O'Connor (2000) found a high degree of replication in two different samples of pre-school children. This included finding substantial genetic mediation of parent–child 'mutuality' – a quality describing the degree of sensitive give and take in relationships – in both a twin sample in the UK and a sample of adoptive and biological siblings in the United States. Observational studies are particularly interesting because they demonstrate that dynamic, moment-to-moment interchanges in the parent–child relationship are no less likely to be genetically mediated than more general reported accounts of parent–child interactions, such as those derived from questionnaires (Rowe, 1981; Plomin *et al.*, 1994).

Robust studies also show that the *links* between parent–child relationship quality and children's psychological adjustment are in part genetically mediated. One example concerns the connection between parent–child relationship quality and child adjustment in adoptive and biological families. McGue *et al.* (1996) compared the correlation between parent-reported measures of family functioning and adolescent self-reports of behavioural problems in adopted and biologically related families. Across a number of measures, the authors found that the association between family environment and child outcome was consistently, although not invariably, greater for biologically related parent–child dyads than for adoptive dyads. The implication is that genetic factors mediated some of the effect attributed to family relationships; and that being genetically related enhances the strength of the link between parent–child relationship quality and child behavioural outcomes.

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Another study, based on a normal-risk adoption sample, found that adopted children who had a biological mother with a history of mild antisocial behaviour were more likely to evoke negative, coercive parenting from their adoptive parents when compared with adoptees whose biological mothers were not antisocial (O'Connor *et al.*, 1998). This is not to say that negative parenting might not also have led to antisocial behaviour by the child. But it does show that parenting is more than something simply 'done' to children. In findings similar to those reported by Ge *et al.* (1996), the authors concluded that the association between genetic risk and more coercive parent–child relationships was mediated by children's aggressive behaviour.

One consistent exception to the findings of moderate to large genetic mediation of the parent–child relationship quality is attachment. The largest study of attachment in twins (110 pairs or 220 individuals), based on a sample of pre-school children in the UK, found that the similarity in attachment security was comparable in identical (MZ) and fraternal (DZ) twins (O'Connor and Croft, 2001). A recent study of infant twins in Leiden and London found nearly identical results (Bokhorst *et al.*, 2003). The findings are remarkably similar to what has been reported in studies of full siblings, which were not able to test the genetic hypothesis (van IJzendoorn *et al.*, 2000). Further evidence of non-genetic effect has been reported from a sample of children in foster care (Dozier *et al.*, 2001). Why it should be that the apparent role of genetic factors in attachment security is less than for other aspects of parent–child relationship quality is not readily apparent, but it is a robust finding.

Challenge 2: the effects of parent–child relationship quality are confounded with other influences in the broader social context

A separate and equally compelling challenge to claims of a direct causal link between the quality of parent–child relationships and child outcomes derives from developmental research that considers the multiple layers of the environment and their interconnectedness. This is sometimes referred to as an 'ecological' model, and has its roots in Bronfenbrenner's (1979) writings. The basic premise is that the effect of parenting is embedded in the myriad social factors affecting child development. These range from other family influences, such as marital and sibling relationships, to broader environmental factors, such as neighbourhood violence or family poverty. Some authors have used this perspective to argue that it may be more useful to consider the ecological *niche* in which a child lives – that is, the mixture of environmental experiences and exposures from the micro- to the macro-environment (Super and Harkness, 1986). Support for this viewpoint is widespread. Proponents

point to a potentially inexorable covariation of risk factors in a child's environment, such as marital discord, lack of money and poor schools. This suggests, at the very least, that studies that fail to account for competing covarying environmental risks are liable to misspecify the nature of the link between parent–child relationship quality and child outcomes.

Other viewpoints emphasise that the effect of any environmental experience such as parenting will have a different impact, depending on the wider social context. Thus, if causal claims were supported at all, they would have to be prescribed for individual children in particular circumstances. Several studies now support the notion that the 'effects' of parenting are unlikely to be sample- or population-wide. For example, Pettit *et al.* (1999) reported that parental monitoring played a particularly important role in preventing delinquency in adolescents living in violent and high-risk neighbourhoods. The effect of similar levels of monitoring in low-risk environments was less pronounced – presumably because of the lower level of ambient risk, exposure to delinquent peers and reduced opportunities for delinquency. Other research has emphasised the importance of varying contexts of parenting in demonstrating that a 'one style fits all children' approach is not optimal. Kochanska (1997) found that, for temperamentally fearful children, gentle parental control was associated with optimal behavioural/emotional regulation, whereas temperamentally more aggressive ('fearless') children required firmer control to achieve the same positive results. Other studies have, similarly, shown that children with difficult or irritable temperaments may be less likely to develop behavioural problems under conditions of firm control (Bates *et al.*, 1998). Belsky (1997) has taken this view further in suggesting that children who are more irritable may be more susceptible to rearing influence; for other children, parents may be comparatively *unable* to exert a particularly strong impact on their child's development.

Challenge 3: the direction of effects between parent–child relationship quality and child outcome is bidirectional

A third challenge to the causal claims of parenting research is raised by those who point out that effects in parent–child relationships can often be bidirectional rather than unidirectional. That is, children influence the parenting they receive, and this may be as important as the effect that parents have on children's behaviour. The notion that there are 'child effects' on parenting behaviour is hardly new. Indeed, Bell and Harper's (1977) book summarised numerous studies of several types showing the myriad ways in which children's characteristics shape the parenting they receive. Key child characteristics included gender, age, temperament and presence of physical, or intellectual or behavioural disability.

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In one classic study, Anderson *et al.* (1986) crossed children with and without antisocial behaviour with parents of children with or without antisocial behaviour. Observations of parent–child interactions across the mixed pairings demonstrated that the parents of non-antisocial children exhibited increased negativity towards the antisocial child. In other words, it appeared to be children’s behaviour that was driving the interaction and not the parent. Another study used a longitudinal follow-up of adopted children (Croft *et al.*, 2001). When the parent–child interactions were observed at age four, the researchers found that child developmental status, indexed by lower cognitive ability, was associated with lower levels of parental positive interactions and higher levels of parental negative behaviour. Two years later, many of the children had shown significant improvements in cognitive ability. However, this developmental catch-up was not predicted by earlier parenting. Instead, gains in the children’s cognitive ability predicted positive changes in the parents’ behaviour between assessments. A third example was reported by Barkley (1988) and others, and replicated by several other groups. These studies demonstrated the expected association between parenting and attention deficit hyperactivity disorder (ADHD) in children. Compared with parents of non-ADHD children, parents of ADHD children exhibited more negative control and less warmth. But a less expected key finding from these studies was that positive changes in the parental behaviour of parents with ADHD children could be made by giving children medication for ADHD.

A fourth set of studies demonstrates that a bidirectional model in research is important not only for adolescents, whose ‘power’ in the parent–child relationship could hardly be doubted, but also for infants. Indeed, studies of infants show that child characteristics in infancy or even the neonatal period may influence the parenting they receive. One set of studies has shown that children who may be described as socially unresponsive (for reasons of temperament or disability) are at increased risk of maternal stress and perhaps maltreatment (e.g. Bugental and Happaney, 2004).

Given the emphasis on dynamic, bidirectional models in research on parent–child relationships (e.g. Kuczynski, 2003), it might be assumed that they are well integrated in contemporary research. But, in reality, there continues to be a disjunction in the way that parent–child relationship research is conducted, with many studies simply assuming a parent–child effect when it has not actually been demonstrated. Thus an overarching conclusion from this chapter is that neither clinicians nor policymakers can afford to operate independently of the scientific enterprise of parenting research. Despite the accumulated evidence, many of the important findings about parent–child relationships and their effects on the child have not yet been adequately communicated to a wider audience of policymakers and consumers.

7 Generalisability of findings and concepts across populations

One of the unresolved issues in research on parent–child relationships and child outcomes is the concept of generalisation: are the findings obtained in one sample of families relevant to all families or just to certain sub-populations of families? Our aim in this chapter is to consider some of the specific ways in which research has begun to show how findings may or may not generalise, and what the boundaries of this generalisation might be.

Parent–child relationships in different groups

Several types of subclassifications have been proposed in the parenting literature. The most obvious is a distinction according to racial/ethnic group – for example, African Caribbean, Asian, Hispanic or white/Caucasian. In addition to considering differences in parenting behaviour across racial/ethnic groups, research has examined differences in the structural arrangements of parenting or childcare across ethnic/racial groups, such as the involvement of three-generation families in the same household or lone-parent families.

Other distinctions that have been researched include the quality of parent–child relationships in stepfamilies and non-stepfamilies or biological families. One of the most consistent findings is that step-parent–child relationships are less affectively intense than biologically related parent–child relationships. For example, in a large sample of biological, stepfamilies and single-mother families selected from a community sample in the UK, O'Connor *et al.* (2006) found that mother–child relationships involving step-parents were both less positive and less negative than parent–child relationships between biologically related dyads. Interestingly, this held true across family types (that is, for some of the children in the study, the researchers were able to compare biological mother–child relationships in families headed by two biological parents or a biological mother and stepfather). Similar findings were reported in a parallel US study conducted by Hetherington and colleagues (1999).

The growing number of families created through ‘reproductive technology’ has led some researchers to enquire whether parent–child relationships created via assisted reproduction techniques such as in vitro fertilisation (IVF) come under particular stress and strain. Almost without exception, these studies have found no significant differences compared with other families (Colpin *et al.*, 1995; Golombok *et al.*,

2002, 2004). These findings parallel much of the available research on parent–child relationships in families with gay/lesbian parents, which are striking for the *lack* of group differences that are found (Wainwright *et al.*, 2004).

By contrast, empirical data suggest that foster families and those that adopt ‘high-risk’ children do experience significant parent–child relationship difficulties. Research groups in the UK (Rushton *et al.*, 1995; Dance *et al.*, 2002) have found that foster parent–child relationships are at risk in terms of the increased conflict and lower levels of positive engagement. Not uncommonly, these disturbances are so severe as to lead to a complete breakdown in the relationship. The reasons why foster parent–child relationships are so potentially difficult are complex, but there is little doubt that they deserve to be a particular source of clinical and policy concern. One of the major unanswered questions is whether traditional or modified parenting interventions are better able to promote foster child outcomes. This is currently an active area of research (Chamberlain *et al.*, 2007).

A further group of parent–child relationships that is currently attracting public and policymaking attention is families of children adopted from abroad – typically from situations that are far from ideal for healthy child development. Clinical and development studies have found severe difficulties in a sizeable minority of these families. Probably the most compelling and worrisome complaint from some parents is that they do not feel a sense of connection with their adopted child even after several years of parenting the child (O’Connor *et al.*, 2000b). These parent–child relationships can be especially disturbed and much of this is due to the child’s difficulty in developing a selective attachment with the parent after a history of caregiving deprivation.

Evidence of non-generalisability

The search for commonalities or universals in parent–child relationships has a long history in psychology as well as in anthropology (e.g. LeVine *et al.*, 1988) and remains a matter of some controversy that has engaged researchers from virtually all theoretical perspectives (Posada *et al.*, 2004). Several research groups have found that corporal punishment may have different meanings and correlates in African-Caribbean children than in white children. Perhaps the most striking example is that reported by Lansford *et al.* (2004). In a large sample of over 400 ethnically diverse, high- to medium-risk families, they found that corporal punishment was positively associated with behavioural problems in white children but negatively associated with behavioural problems in Afro-Caribbean children. The finding that there was the

opposite effect in these two groups (in each case a modest effect size) is particularly noteworthy. The authors suggest that the association of corporal punishment with aggressive behaviour in white children may be because it reinforces aggressive behaviour, or because it is a response to it. In contrast, corporal punishment is seen by both parents and children in African-Caribbean families as acceptable, and even necessary, to prevent children from engaging in delinquent behaviour. There is further speculation that African-Caribbean parents believe they need to apply firmer limits to prevent 'bad behaviour' in order to counteract biases against minority children.

The claim that corporal punishment may be a positive means of controlling or managing behaviour remains controversial and politically 'hot', particularly to those who see corporal punishment as inherently destructive (Phoenix and Husain, 2007). Beyond the public debate, however, the research on this aspect of parenting behaviour offers a clear example of our central conclusion that the meaning and effect of particular types of parenting behaviour may not generalise across contexts in a simple way. In fact, there are few researchers or clinicians who would suggest that there is some sort of 'one-size-fits-all' model of parent-child relationships and child outcomes. There is, however, a spectrum of views extending between those who argue that research should focus on relationship properties that are almost universal and those who suggest that each sub-population has its own properties that ought to be studied and understood. Findings reported to date do not allow firm conclusions about where the line can be drawn between these extremes, neither of which seems entirely sensible to us.

8 Conclusions

The research findings reviewed in this paper demonstrate that parenting and parenting intervention programmes are rightly seen as a public health matter. Improving the quality of parent–child relationships can be expected to have positive effects on the individual and family (e.g. in terms of distress) and on the society as a whole (e.g. in terms of social and economic costs of incarcerating delinquent youths). The current policy context seems to reflect the value of parenting as a public health issue. On the other hand, and inevitably, there have been problems in the translation of parenting as a public health concern into practice. It remains to be seen how the lessons learned from recent policy initiatives can be incorporated into subsequent initiatives.

Further directions for research

Throughout the review, we have noted certain areas for further research attention. Here we briefly note some additional areas, focusing particularly on practical and policy considerations in translating research findings into practice.

- 1 *Quantifiable measures of parenting suitable for multiple contexts, including clinical practice:* although there is no shortage of identified parenting dimensions, there remains a lack of carry-over of measures across samples. Moreover, there is considerable evidence that much of the progress in measuring parent–child relationships has not yet filtered into clinical practice. The need for a greater consensus measure of parenting will only become more important as there is greater application of parenting interventions and greater attention to how to measure and document positive change.
- 2 *Natural experiments in the changing policy context:* ambitious efforts to improve children’s life chances have come in many forms, including major policy changes concerned with decreasing child poverty. These legislative changes may provide the kind of natural experiment in which alterations in financial standing may be linked with improvements in parenting and child outcomes.
- 3 *The limits versus extensiveness of parenting interventions:* the wide range of outcomes linked with parent–child relationship quality need to be reflected in how parenting interventions are assessed. Particularly important will be studies that assess the effectiveness of parenting interventions that may improve health

outcomes with well-documented personal and financial costs such as injury and health behaviours (from obesity to substance use).

- 4 *Accessing parents who most need intervention:* we know little about why parents decide to engage in treatment or decline. Before efforts to ‘universalise’ parenting interventions can be successful, we need to know more about how to access parents, particularly the most high-need parents who tend to be less likely to engage in interventions.
- 5 *Disseminating information on parenting:* with the exception of Sanders in Australia and New Zealand (see the Bibliography section at the end of this report for some examples), there are few attempts to disseminate parenting advice and lessons to a wide audience using the media. Efforts of this sort may be useful for intervention or for improving conceptions of parenting interventions so that higher levels of enrolment are attained.
- 6 *Cost bases of developing and implementing parenting interventions:* one of the next steps before rolling out parenting programmes is documenting the cost of programme implementation; that is, the recruitment, training and supervision of those who deliver the programme. We still know little about the background, training and experiences that make for effective programme leaders. Research that focuses on those delivering a parenting intervention may tell us just as much about how to improve outcomes as research on the parents taking part. Improving knowledge about the cost basis of parenting interventions will likely strengthen the case for disseminating effective programmes to the widest possible audience of parents.

We believe the time has come for initiatives addressing these questions. The results could be delivered in a reasonably short time period, and could lead to a major impact on the health and happiness of children throughout the nation.

Key findings for policy and practice

We would summarise the key policy and practice findings from this review as follows.

- 1 Parent–child relationship quality is associated with:
 - aggressive behaviour and delinquency (the more extreme the parenting environment, the worse the child outcome and/or the likelihood of clinical disturbance)

- depression, anxiety and other internalising problems (e.g. somatic complaints, social withdrawal)
 - high-risk health behaviours, such as smoking, illicit drug use, alcohol use, sexually risky behaviours
 - a child's own view of him/herself
 - social competence – most commonly studied within peer relationships
 - cognitive or academic outcomes
 - parenting quality, and the home environment more broadly, are strongly linked with the likelihood of physical injury or accident of the child.
- 2 Parent–child relationship quality appears to have carry-over effects into adulthood for comparable social and behavioural outcomes, although there are far fewer long-term studies.
 - 3 Certain dimensions of the parent–child relationship appear important in children of almost any age, notably warmth/support and conflict and hostility.
 - 4 Differences in child temperament, among other factors, demonstrate that a ‘one-parenting-style-fits-all’ approach is not optimal.
 - 5 At least some associations between parent–child relationship quality – particularly corporal punishment – to child well-being differ across sub-populations and social settings. This needs to be noted when devising ‘universal’ interventions.
 - 6 Genetic factors are an important influence on individual differences in parent–child relationships. There is some degree of genetic influence on parent reports of their behaviour towards their children. The *links* between parent–child relationship quality and children’s psychological adjustment are also partly genetically mediated.
 - 7 In most circumstances, there is considerable stability of parent–child relationship quality, even over extended periods and according to multiple methods of assessment, especially when there is secure attachment.

Note

Chapter 4

- 1 The question of what the association between parent–child relationships and child outcomes is has been extensively reviewed, conceptually and empirically – for example, through meta-analysis (Rothbaum and Weisz, 1994).

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