Parenting in ordinary families

Diversity, complexity and change

Andrea Waylen and Sarah Stewart-Brown

Parenting during early and middle childhood and how it changes over time.

Health and social service workers often have to decide whether parenting is appropriate. Similarly, policy-makers planning services for families need information about parenting norms and detrimental parenting.

This report is intended to provide support for such decision-making, so as both to reduce the risks to children and avoid inappropriate censuring of parents. It examines parenting in Britain during early and middle childhood within different social and cultural groups. It also looks at how parenting develops and changes over time.

- **Part 1** reviews research from the last ten years, highlighting the important themes which emerge;

- **Part 2** describes specific aspects of parenting within these themes in early childhood using data from a sample based in and around Bristol.

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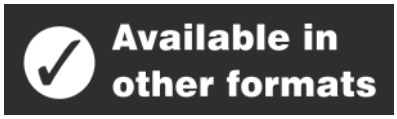

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Introduction

The way in which parents raise their children is becoming an increasingly popular topic in the media. Parents are blamed for their children's wrongdoings (BBC News, 2007a) and also the varied adverse outcomes from which they suffer, including obesity and poor achievement (BBC News, 2007b). As a result there is a growing interest in and support for formal parenting classes which promise to 'help create better parents' (BBC News, 2007c). Parenting is also a topic which is of interest to researchers: scientific studies have, over a period of years, shown that there are associations between the quality of parenting and socio-economic factors which affect the family such as poverty, the presence or absence of social support and maternal mental health (Hart and Ridely, 1995; Brown *et al.*, 1998; Belsky *et al.*, 2007). However, much of this research is either cross-sectional (taking a snapshot of parenting and outcomes at one point in time) or retrospective (asking adults with poor health about the parenting they received when they were children). While such studies have highlighted important findings with respect to child outcomes and established the importance of parenting research, there is a place for prospective research which measures parenting as it happens and then examines the way that it develops and changes over time in conjunction with changes in contextual factors.

This report was commissioned in order to examine parenting in Britain during early and middle childhood within different social and cultural groups, and also to examine changes in parenting across time. It is often the case that practitioners in health and social services have to decide whether parenting is 'good enough'. Similarly, policy-makers require information about parenting norms and detrimental parenting, as well as information about the proportion of families requiring parenting support in order to plan services for families. By providing a description of the parenting which takes place in different social and economic groups, this report is intended to provide support for decision-making and so reduce the chances of child exposure to unacceptable parenting and avoid inappropriate censuring of parents.

The report consists of two main parts: Chapter 1 comprises a review of previous research (carried out mainly during the last ten years) in order to set a context for parenting and issues relevant to it. Parenting research has developed around themes of warmth and support, control and rejection. More specifically, the parenting undertaken by both mothers and fathers may manifest itself in the attachment relationships that develop between parent and child and the practice of different styles of parenting, as well as via attitudes towards and the use of physical punishment. There is also evidence of associations between parenting and contextual factors such as poverty, marital conflict and health. By drawing on

previous research, important themes and aspects of parenting were highlighted and used to inform the original research described in the second part of the report.

In Chapter 2, we describe specific aspects of parenting within these themes in early childhood using data from a British population sample based in and around Bristol (in the south-west of England). As well as providing a snapshot of the parenting provided when children were both 8 and 33 months of age, we examine parenting in association with the age of the mother when the study child was born, her level of education at this time and also her ethnic group. We also examine how parenting changes between 8 and 33 months and whether changes in health, financial security and social support during the same period of time influence the parenting which occurs.

1 Review of existing parenting research

Methodology

Papers were critically selected for inclusion in this review based upon the age of the children involved (no adolescent-only studies were included as this review is concerned with children in early childhood) and the health status of the families: papers reporting parenting within families with physical or mental disorders were generally excluded although this rule was waived in the section concerned with the effects of poor health and disability on parenting. Papers were also selected with special regard to individual characteristics of parent and child, family relationships, adverse circumstances (including socio-economic factors and health) and cultural differences. In addition, studies of differences in parenting style according to the gender of the parent were examined where appropriate.

The review was carried out by searching electronic databases: Web of Knowledge, PubMed and BIDS (using Psychlit specifically). Search terms included individual and combined use of parent*, parenting, parent–child relationship*, health, disability, mental health, corporal punishment, physical punishment, discipline, socio-economic status, adversity, poverty, cultural differences and ethnicity.[1]

We also decided to focus upon studies which had been published during the past ten years in order to keep the review current, but reference has been made to research undertaken before this time where it has had a consistent and recurring impact. The final selection (N=141) includes qualitative studies as well as cross-sectional and longitudinal (retrospective or prospective) quantitative research although this has not been highlighted in the text unless particularly relevant to the results and conclusions.

Results of the literature review

In its widest sense, parenting or child rearing is an activity that begins with pregnancy and can continue, without a break, for the rest of a parent's life. Within the context of this report, 'parenting' refers to a process or group of activities (sometimes labelled as socialisation) (Maccoby, 1992), the ultimate aim of which is to help children develop into happy, well-adjusted, competent, productive, caring members

of society (Bradley and Wildman, 2002), able to establish and maintain healthy relationships with others.

Parenting that is warm and supportive facilitates the development of strong and secure relationships between parent and child and it can also act as a buffer, ameliorating associations between adverse influences such as family breakdown or financial stress and undesirable child outcomes. Conversely, parenting which is harsh and neglecting increases the risk of poor child outcomes. Previous research has shown that differences in parenting can account for between 20 and 50 per cent of the differences in some child outcomes (Elder *et al.*, 1984).

The ability to parent well is not necessarily intuitive – an individual's parenting style is influenced by aspects of his or her own history together with characteristics of the child such as age or temperament (Bronfenbrenner, 1979; Bradley and Wildman, 2002). Parenting is also shaped by class, culture and neighbourhood or community (Bronfenbrenner, 1979; Holden and Miller, 1999) and the era into which the child is born (Hardyment, 1983, 1995; Utting and Pugh, 2004). These influences can be illustrated with the aid of Bronfenbrenner's (1979) ecological model of human development. This systems-based model places parent–child relationships in the context of a microsystem consisting of the family (e.g., mother–child, father–child, mother–father relationships), the microsystem is placed within a mesosystem of connections between family and community and this, in turn, is placed within even larger abstract systems (macrosystems) including cultural values and customs (Bronfenbrenner, 1979). Each of these systems or contexts exerts its influence both within its own level and by interacting with other systems. This means that there are many factors which not only influence but can also be influenced by parenting and parent–child relationships.

Approaches to the measurement of parenting

Many different groups of academics have endeavoured to classify and measure aspects of the complex and lengthy process that is parenting. Key aspects of parenting that have stood the test of time include the mother's (or primary carer's) sensitivity towards and attunement to the needs of the child in infancy (known as 'attachment'), parenting styles, behaviour management or discipline and aspects of the parent–child relationship like rejection, hostility, warmth and support.

Attachment relationships

Very early parent–child relationships have been researched in the context of studies that examine the attachment bond between parent and child. This early relationship gives the child a framework by which to interpret other relationships and events and is consequently related to the child's functioning across the life span (Belsky *et al.*, 2006). This bond is established during the first year (Bowlby, 1958; Ainsworth *et al.*, 1971; Ainsworth *et al.*, 1978) but it may undergo changes across time (Belsky *et al.*, 2006) so that individuals may move from one attachment category to another dependent upon their relationship experiences.

Attachment relationships are generally classified into one of four categories: 'secure', 'anxious-avoidant', 'anxious-resistant' (Ainsworth *et al.*, 1971) and 'disorganised' (Belsky *et al.*, 2006), as described below. Children with different attachment styles vary in their behaviour and reactions in the presence of the mother/caregiver, during her absence and when she returns (Ainsworth *et al.*, 1971; Ainsworth *et al.*, 1978; Aguilar *et al.*, 2000; Cole and Cole, 2001; Moss *et al.*, 2005). Securely attached infants use the mother as a base to explore from and they react positively to strangers if the mother is present; however, they become upset when the mother leaves and are unlikely to be consoled by a stranger. When she reappears, these children calm down quickly. Children who are anxious-avoidant are often indifferent to the mother and may or may not cry when she leaves the room, avoiding her on her return rather than seeking comfort. Those children with an anxious-resistant attachment style stay close to the mother and become very upset when she leaves; they are not comforted by her return and seek physical contact while continuing to cry (Ainsworth *et al.*, 1971; Ainsworth *et al.*, 1978). Children with a disorganised attachment style have no clear attachment strategy and may be contradictory or disoriented (Belsky *et al.*, 2006). Each style is associated with different outcomes for the child.

The approximate prevalence of secure and anxious attachments is shown in Table 1.

Table 1 Prevalence of attachment styles

	Secure (%)	Anxious-avoidant (%)	Anxious-resistant (%)
Middle-class*	65	23	12
High-risk*	55	22	23

* These labels are those used in the original papers – no relationship is assumed between the different labels.
Sources: Egeland and Farber, 1984; Cole and Cole, 2001.

According to Moss *et al.* (2005), 11 to 19 per cent of children are estimated to have disorganised attachments, but these are probably children classified in other studies as either 'avoidant' or 'resistant'. It can be seen that the prevalence (frequency at any one time) of each attachment style varies as a function of the population being observed (Aguilar *et al.*, 2000; Cole and Cole, 2001): there are fewer securely attached children in high-risk populations.

Mothers of securely attached infants are reported to be more sensitive, co-operative and available (but less intrusive) than mothers of anxiously attached children. They also encourage more reciprocal interaction with their child (see also Susman-Stillman *et al.*, 1996). Mothers of anxious-avoidant children are more rejecting of and avoid physical contact with the child; they are less responsive and less effective in responding to crying whereas mothers of anxious-resistant children appear to have less understanding of their children and of the parent–child relationship (Main and Solomon, 1990). These differences in maternal behaviour contribute to differences in child behaviour (Main and Solomon, 1990; Belsky *et al.*, 2006): anxiously attached children tend to cry more often and for longer, they smile less, are less positive when being cuddled and more negative when put down than securely attached children; those who are anxious-resistant develop more slowly, are less alert and less active and also less socially engaging. Children with disorganised attachment patterns are at increased risk of psychopathology (e.g., conduct, hyperactive or emotional disorders) as they get older (Belsky *et al.*, 2006). Attachment styles can change (for better or worse) with concomitant changes in the quality of caregiving and the occurrence of life events (Main and Solomon, 1990; Belsky *et al.*, 2006), for instance changes in reciprocity, maternal engagement and hostility or conflict, marital conflict, parental hospitalisation or a death in the family. As an example, insecure children who are less easy to care for and require more sensitive caretaking have fewer disadvantageous outcomes normally associated with anxious attachment styles if they are exposed to parenting which improves over time (Belsky *et al.*, 2006).

Requirements of parenting

Babies and young children require consistent and unconditional love together with food, warmth and security (Parker *et al.*, 1995; Hoghughi and Speight, 1998; van IJzendoorn *et al.*, 1999). They need support to establish physiological regulation (good sleeping and feeding habits, together with the ability to control distress) and to form trusting relationships with others. As children get older, they benefit most from parenting which encourages them to manage impulsive behaviour, establish autonomy and internalise social norms and standards (Allhusen *et al.*, 2004); at this stage parenting should provide consistent limit-setting (Hoghughi and Speight, 1998)

and social, moral and ethical guidance (Holden and Miller, 1999). Critical tasks which facilitate child development and well-being are the provision of:

1. sustenance (nutrition, shelter and protection);

2. stimulation (to engage attention and provide information);

3. support (to help the child adapt to and fit into the environment);

4. structure (the organisation and control of objects and events);

5. surveillance (supervision and monitoring of hazardous and risky situations). (Bradley and Caldwell, 1995)

If these needs are not met by a sensitive and consistent caregiver, the child is at heightened risk of developing mental and behavioural disorders as noted above (Main and Solomon, 1990; Marshall and Watt, 1999; van IJzendoorn *et al.*, 1999; Aguilar *et al.*, 2000; Belsky *et al.*, 2006).

Most parents report that parenting is rewarding and enlightening but also that it is a demanding task, involving an extended commitment to provide for and nurture the child (Coleman and Karraker, 1998; Nystrom and Ohrling, 2004). The early period of infancy can be extraordinarily difficult as parents learn to interpret the different emotional states of their child and respond appropriately (Maccoby, 1992). At the same time, infants must learn to respond to their parents' facial expressions and the tone of their voices (Ekman, 1994). Only when this emotional connection is fully developed can the more verbal aspects of socialisation take place, but the need to be able to interpret non-verbal emotions and mood states never disappears from the parent–child relationship.

Parenting styles

There are a variety of ways in which to classify the activities associated with parenting, and robust themes have persisted across time: Barber and colleagues (2005) provide a comprehensive review. In 1947, Baldwin classified parenting as being concerned with control, democracy and activity. By the 1960s this conceptualisation had been expanded to include emotions, parental acceptance versus rejection and also parental control. Subsequently, in the 1970s Baumrind classified parenting behaviours as being either authoritarian, authoritative or permissive (Baumrind, 1971). More recently, researchers have focused on the effects

of more general concepts such as parental support and parental control (Thompson *et al.*, 2002). A category of uninvolved parenting has emerged where parents are lax and non-controlling either because they reject their children or because they are preoccupied with their own stresses and problems (Paquette *et al.*, 2000) (and are therefore differentiated from Baumrind's warm but non-controlling permissive parents).

Warm, supportive parent–child relationships are associated with positive cognitive, behavioural and emotional child outcomes (Bradley and Caldwell, 1995; Atzaba-Poria and Pike, 2005; Barber *et al.*, 2005; Dallaire and Weinraub, 2005; Seaman *et al.*, 2005), whereas those relationships which are cold, unsupportive or neglectful increase the risk of emotional and behavioural problems in both childhood and adolescence (Repetti *et al.*, 2002). Similarly, psychological control (love withdrawal, the expression of disappointment or shame, guilt induction and excessive protectiveness/possessiveness) and behavioural control (supervision, monitoring and family management) are associated with variations in child outcomes. Psychological control and *harsh* behavioural control are associated with both internalising (anxiety and depressive) and externalising (conduct and hyperactive) disorders (Repetti *et al.*, 2002; Thompson *et al.*, 2002; Kanoy *et al.*, 2003; Thompson *et al.*, 2003; Atzaba-Poria and Pike, 2005; Aunola and Nurmi, 2005; Casas *et al.*, 2006), whereas appropriate behavioural control is associated with positive outcomes such as self-regulation and compliance (Aunola and Nurmi, 2005).

Physical discipline

One aspect of parenting that has been extensively studied, possibly because of conflicting views about the practice, is physical discipline. The use and acceptance of corporal punishment or physical discipline vary considerably both within and between context and culture (Gershoff, 2002; and see the section on 'Culture and ethnicity' below). It takes various forms, including hitting with the hand or another object, slapping, smacking or other types of punitive physical contact (Magnuson and Waldfogel, 2005). There is evidence from a variety of sources that corporal punishment is expected and accepted in communities where its use is normative (Gershoff, 2002; Simons *et al.*, 2002) and in communities which are unsafe or disadvantaged by economic or job stresses (Gershoff, 2002; Magnuson and Waldfogel, 2005). In a study of parents of preschool children in the UK, fewer than 25 per cent of parents said they supported the use of smacking as a form of punishment but 63 per cent reported that they had actually smacked their child during the previous week (Thompson and Pearce, 2001). This highlights an ongoing debate about physical punishment: those against argue that it is unlawful to hit another adult

and that the same human rights should be afforded to children. Others, who do not want physical discipline outlawed, believe that discipline will be less effective without corporal punishment and that standards of behaviour will drop. There is evidence that increases in the use of corporal punishment are associated with increases in aggressive, delinquent and anti-social behaviour and poorer mental health in both children and adults (Gershoff, 2002; Deater-Deckard *et al*., 2003; Jaffee *et al*., 2004) but there is also some indication that, if used relatively rarely (i.e., as a back-up for other types of discipline), there may be some beneficial effects (Larzelere *et al*., 1998). Difficulties arise because there are no clear thresholds or criteria which differentiate between 'non-abusive' corporal punishment and other behaviours which are 'cruel, unlawful, excessive or unreasonable, severe, inhuman or extreme' or which result in physical injury or death (Gershoff, 2002, p. 540).

Table 2 shows the reported prevalence of physical punishment in the UK as a function of the age of the child (Nobes and Smith, 2000).

Table 2 Prevalence of physical punishment per week

1 year olds (%)	4 year olds (%)	7 year olds (%)	11 year olds (%)
52	48	35	11

The use of corporal punishment varies between parents with regard to the frequency and force with which it is administered, the techniques used and the level of emotional arousal required, and consequences vary accordingly. In families where there is an increased use of corporal punishment, it is less likely that child-centred activities such as reading to, playing with and hugging the child will take place (Gershoff, 2002); parents who use corporal punishment are less likely to talk to their children and less likely to use verbal control as a form of discipline (Straus and Paschall, 1998). In such instances, the use of corporal punishment might be considered to be yet another symptom of poor parenting rather than a cause of it.

Individual characteristics of the child influence the likelihood of corporal punishment: children who are aversive, either because of their appearance or their behaviour, are at greater risk of physical punishment as are those who demand considerable economic or time resources because they are aggressive, hyperactive or poorly regulated or are sick or disabled (Gershoff, 2002; Bugental and Happaney, 2004; Jaffee *et al*., 2004).

Mothers and fathers

Parenting is influenced by characteristics of both father and mother (employment, beliefs and well-being) (Appelbaum *et al.*, 2000; Sanderson and Thompson, 2002; Flouri and Buchanan, 2003), the parental relationship (marital support and intimacy), the child (sex, temperament and age) (Doherty *et al.*, 1998; Appelbaum *et al.*, 2000; Flouri and Buchanan, 2003) and contextual/sociodemographic factors (income and ethnicity) (Elder *et al.*, 1984; Conger *et al.*, 1994; Appelbaum *et al.*, 2000; King *et al.*, 2004), but the majority of research has been based on maternal attitudes and behaviours as mothers are generally more involved in the day-to-day care of the child. Mothers have generally been considered as the 'main carer', and fathers have either been ignored by researchers or considered only in relation to the ways in which their parenting differs from that of the mother (Doherty *et al.*, 1998; Michalcio and Solomon, 2002; Matta and Knudson-Martin, 2006). Where research on fathers does exist, much of it concerns either white middle-class families or, alternatively, fathers who are divorced or non-resident, stepfathers, young fathers (and teenage mothers) or fathers in violent or neglecting families (Marsiglio *et al.*, 2000). However, it is important to consider the parenting provided by fathers as parenting styles and practices vary according to whether maternal or paternal parenting is being examined (Harach and Kuczynski, 2005). Differences in parenting behaviour also occur as a function of observing the behaviour in either a dyad (mother *or* father and child) or triad (mother *and* father and child): the quality of interaction with the child varies as a function of whether the other parent is present or not (Johnson, 2001). Mothers are generally rated as being more sensitive, responsive and involved than fathers (Pelchat *et al.*, 2003b) and there is evidence that father–child relationships are less enduring and more strongly influenced by context (Thornberry *et al.*, 2003). Amato (1994) says: 'It is likely … that families in which fathers are highly involved are also those in which mothers are especially competent, caring and encouraging of their husband's participation in child care' (in Barber *et al.*, 2005, p. 1033).

Various models of 'fathering' exist. Lamb and colleagues (1985) introduced concepts of paternal engagement (caregiving, leisure and play), accessibility (availability to the child) and responsibility (interpreting and responding to the needs of the child), and suggested that optimal fathering would occur with a father who is highly motivated, has adequate parenting skills, receives social support and is not undermined by work and other institutions (Bonney *et al.*, 1999). Doherty *et al.* (1998) have developed a model of 'responsible' fathering which applies across all social classes and racial groups. Responsible fathers (whether resident or not) (a) control their fertility, (b) establish legal paternity, and (c) actively share the social and physical care of the child and also the financial support of the child with its mother (Doherty *et al.*, 1998).

Paternal involvement is positively related to child outcomes (Flouri and Buchanan, 2003) but the role is, by necessity, more flexible than that of the maternal role: a father's presence in his child's life cannot be taken for granted. Children are born within single-parent families and marriages break up – in each case, the children are more likely to live with their mother so that, by implication, she has a gatekeeper's role. Non-marital fathering may have a detrimental effect on the father–child bond (King *et al.*, 2004): cohabiting couples are more likely to break up, but if they do marry, there is an increased risk of divorce. Children who grow up apart from their fathers are more likely to have poor psychological adjustment and to be involved in health-compromising behaviours, are less likely to remain in education or secure employment, and are more likely to have lower earnings and to experience marital instability as adults (King *et al.*, 2004). However, it is also the case that many of these relationships disappear once the effects of poverty (another potential consequence of single-parent families) are accounted for. With respect to levels of father involvement after divorce, the evidence is inconclusive: non-residential fathers invest less time and money in their children's welfare, resulting in less parental guidance, time and attention, and this loss is unlikely to be compensated for by other adult men in the child's life. However, when non-residential fathers do maintain the ties with their children the children appear to benefit (Sobolewski and King, 2005).

Paternal involvement in childcare is influenced by beliefs about appropriate roles for men and women: mothers and fathers in families which do not conform to traditional male/female roles are more likely to believe that fathers can be capable caregivers than those where traditional roles are maintained (Bonney *et al.*, 1999; Matta and Knudson-Martin, 2006); fathers following non-traditional roles are more involved with their children regardless of their racial background (McLoyd *et al.*, 2000). The quality of father–child interactions is also associated with the father's perceptions of success as a breadwinner based upon income and occupational opportunities (Elder *et al.*, 1984; Conger *et al.*, 1992; Whitbeck *et al.*, 1997; McLoyd, 1998; National Institute of Child Health and Human Development Early Child Care Research Network, 2005; and see section on 'Poverty' below). As suggested above, the existing literature clearly identifies the importance of the fathering role but there are still considerable gaps in the research which need to be investigated. Only then will it be possible to make robust conclusions about similarities and differences regarding the role of mother as opposed to father and about interactions between the roles.

Individual characteristics of parents and children

Parenting is influenced by the personalities of both parent and child. Parents with a high sense of their own efficacy are more likely to display competent and positive parenting practices, strategies and behaviours and they are more likely to provide good role models for their children. These parents are more likely to view difficult child behaviour as a challenge, whereas parents who doubt their self-efficacy are likely to consider it a threat, giving up quickly when they meet with adversity and providing parenting which is inconsistent (Coleman and Karraker, 2003; Barakat *et al*., 2005). An exaggerated sense of control or responsibility within the parent–child relationship can be detrimental: overprotective parenting (inappropriate warmth, intrusiveness and restrictiveness) is associated with childhood internalising disorders (Rubin *et al*., 2002). Parental constraint and agreeableness are also important (Kochanska, 1997): mothers who score highly on measures of constraint are more sensitive to their children's needs and those who are more agreeable are sensitive and respond appropriately, facilitating secure attachment and mother–child co-operation.

However, the influence of personality on parenting is bidirectional (Collins *et al*., 2000; Lengua and Kovacs, 2005): while the parent's own personality influences parenting, child characteristics such as agreeableness, sociability and irritability also affect the parent–child relationship. Agreeable, compliant children have stronger relationships with their parents than those who are disagreeable and they are at less risk of developing externalising behaviours (Collins *et al.*, 2000; Harach and Kuczynski, 2005). Irritable or difficult children prompt and receive more inconsistent parenting and are more likely to display both internalising and externalising disorders (Aguilar *et al.*, 2000; Collins *et al.*, 2000; Ghate and Hazel, 2004; Lengua and Kovacs, 2005). However, this situation is not irredeemable: infants who became less irritable and showed less negative emotion between the ages of 3 and 9 months had mothers who reported higher levels of self-esteem and marital satisfaction (Belsky, 1991, cited in Pauli-Pott *et al*., 2004).

Parental age is an important factor. While the parenting of older mothers and fathers may be restricted to a greater or lesser extent by fatigue, physical ailments, competing work/home demands and a resistance to change to more current methods of parenting (Conger *et al*., 1984; Holden and Miller, 1999), being a teenage parent has its own tensions involving conflict between the developmental needs of the teenage parent and the needs of the infant (Conger *et al.*, 1984; Coren *et al*., 2003). While there is some evidence that the children of teenage mothers have poorer outcomes (Coren *et al.*, 2003), other work contradicts this, reporting that associations which exist are weak and influenced by socio-economic status and the

teenage parent's own exposure to punitive parenting, the number of siblings and maternal education etc. (Marshall and Watt, 1999).

Adversity

Parenting does not occur in a vacuum (Kotchick and Forehand, 2002). At least in part, parenting practices are determined by the resources which are (or are not) available to the family: when resources – economic, social or individual – are lacking, deleterious effects can be observed in the interactions between parent and child.

Poverty

Insufficient personal resources and poor community resources result in deprivation and an inability to provide for one's children. Economic deprivation may be due to low income or unemployment and can result in poor housing and restricted access to training/job opportunities and other services. While the effects of poverty on parenting can be reliably demonstrated at group level, it should be noted that many families living in deprived circumstances still provide positive parenting (Barnes *et al.*, 2005; Katz *et al.*, 2007).

The children of single, unmarried mothers are at especially high risk of living in poverty, the children of divorced mothers have the next highest risk of poverty and those who live in two-parent families are at least risk (Doherty *et al.*, 1998). Persistent poverty is more detrimental (two to three times greater) than that which is transitory, but children exposed to either type do less well than those who are never poor (Korenman *et al.*, 1995; McLoyd, 1998; National Institute of Child Health and Human Development Early Child Care Research Network, 2005). Families who live in chronic poverty are more likely to have less stimulating home environments whereas those exposed to transient poverty manage to maintain adequate levels of stimulation and support despite restricted resources (McLoyd, 1998; National Institute of Child Health and Human Development Early Child Care Research Network, 2005).

Economic hardship is associated with increased feelings of pressure within families and may increase parental emotional distress (Elder *et al.*, 1984; Conger *et al.*, 1992; Whitbeck *et al.*, 1997). This impacts on the parent–child relationship and is likely to result in disrupted parenting and increased behavioural problems in both boys and girls (McLoyd, 1998; National Institute of Child Health and Human Development Early Child Care Research Network, 2005). This family stress model

is based upon Berkowitz's 1989 frustration/aggression hypothesis: increases in stress and frustration are associated with increased emotional arousal and negative affect (depression, despondency, anger, criticism, insensitivity and withdrawal) and, consequently, less nurturing behaviour from parents (Prevatt, 2003). Working conditions and job complexity can have a comparable effect: mothers with more mundane and less flexible occupations provide less appropriate and less stimulating home environments than those whose work is more complex; similarly, fathers whose work is more autonomous and self-directing are more likely to practise a more adaptive, flexible and authoritative parenting style, encouraging more autonomy and self-control in their adolescent children (Whitbeck *et al.*, 1997). However, there is a fine line between the benefits of a more involved work environment and the adversities: other studies have shown that fathers with careers and high incomes have less time to spend at home whereas those with less demanding jobs are more involved in childcare (Bonney *et al.*, 1999; Appelbaum *et al.*, 2000; Sanderson and Thompson, 2002; Flouri and Buchanan, 2003).

Poverty also has effects on child health, physical growth and development and child mortality. Children are more likely to have poor health in families with low income and those from homes with inadequate incomes are more likely to have been hospitalised than those whose families have sufficient financial resources (Seguin *et al.*, 2003). Some of these effects may be mediated by the parenting process: poor health is independently predicted by maternal education and maternal warmth even after socio-economic factors have been accounted for (Belsky *et al.*, 2007; Waylen, 2008).

Aspects of the physical environment also affect caregiving behaviour. Crowding and the number of people coming and going in the home, together with the noise level, may all have adverse effects on parenting behaviour and child development via a reduction in the level of maternal involvement with the child, the amount of verbal stimulation provided and a reduced level of maternal responsivity (Wachs and Camli, 1991; Kotchick and Forehand, 2002). Neighbourhood or community effects are also important but parental control appears to be effective only when social influences are modest. In deprived communities where shared experiences and proximity determine social relationships, parenting behaviours such as physical punishment have less impact: parents have a tendency to take on parenting behaviours and styles which are most commonly practised within their social group (Sellstrom *et al.*, 2000; Simons *et al.*, 2002).

In families exposed to poverty, the presence of a supportive partner, good mental health and successful financial management (as opposed to adequate income) can reduce the effects of adversity (Middlemiss, 2003; Ghate and Hazel, 2004) and supportive and warm parent–child relationships can buffer at least some of

the adverse influences on outcomes for children of growing up in poverty (McLoyd, 1998). A strong sense of parenting self-efficacy and consistent, age-appropriate discipline are also protective and promote resiliency (McLoyd, 1998). In families where some or all of these protective factors are present, the adverse effects of low socio-economic status are likely to be reduced.

Marital conflict and family structure

In intact marriages, good marital quality is associated with sensitive and responsive parenting (Coiro and Emery, 1998), whereas in families exposed to marital conflict the amount and intensity of conflict are associated with both internalising and externalising childhood disorders (Marshall and Watt, 1999; Jenkins *et al.*, 2005; Cummings *et al.*, 2006). The presence of one type of relationship abuse within a family increases the odds that another type will also occur (Appel, 1998, cited in Slep and O'Leary, 2005). Child physical abuse and partner abuse occur together in 40 per cent of abusive families perhaps because of a 'spillover' effect (a direct transfer of mood, affect or behaviour from one setting to another) within parent–child relationships in situations where there is conflict within the marital relationship (Erel and Burman, 1995; Owen and Cox, 1997; Coiro and Emery, 1998; Kanoy *et al.*, 2003).

The bond between parents is important not only in terms of marital quality but also with regard to the emotional support provided for the child (Erel and Burman, 1995) – with an increased tendency towards diversity in family structure, the stability of marital (and therefore parent–child) bonds cannot be taken for granted. There is general agreement that children from divorced/single-parent families tend to have poorer social, psychological and academic outcomes than those who live with both of their biological parents (Bronstein *et al.*, 1993) but, as noted above, such relationships are confounded by, for example, the independent effects of poverty. Dunn and colleagues (2000) provide a brief review of the effects of adverse relationships and family structure on parenting styles and child outcomes, summarised as follows: parenting style is influenced by exposure to early adversities – the age at which girls leave home, their peer relationships at that time, the number of partner relationships and the age at which they have their first child are all associated first with their own experiences of being parented and also with the parenting style they develop with their own children. Exposure to serious disadvantage early in life also increases the likelihood that individuals will choose partners who are similarly disadvantaged. Where divorce and remarriage have occurred, the duration of the subsequent relationships is important – in families where step relationships are maintained over the long term, parent–child

relationships become increasingly like those in biological families (Dunn *et al.*, 2000; O'Connor, 2001).

It is likely that children exposed to marital discord will consider it from the perspective of their own emotional security and respond accordingly, becoming more vigilant, fearful and preoccupied if they perceive their security to be threatened. While these responses may help children cope in the short term (by allowing them to access some sort of reassurance and security), they increase the risk of adjustment problems in the long term as the individual becomes less flexible, less open and less skilled in social relationships (Dunn *et al.*, 2000).

Health

Illness and disability within a family can have many and varied consequences for parenting, ranging from psychological to economic. The risk of poor childhood adjustment is affected by the following dimensions of illness (whether in parent or child):

(a) onset (either acute or chronic);

(b) course (episodic or constant);

(c) outcome and prognosis;

(d) the type of incapacity associated with the illness (Pelchat *et al.*, 2003a);

(e) the extent to which the individual is dependent on others (Wallander and Varni, 1998).

Many families cope well with illness, as family environment, competent parenting, child temperament and social support can provide protection and promote resilience within the family (Wallander and Varni, 1998; Barakat *et al.*, 2005), but there are others who experience feelings of hopelessness and social isolation (Woolfson, 2004).

Social, cultural and political influences shape associations between physical illness or disability and parenting – family, friends and strangers rarely provide a neutral response to women with visible difficulties who are caring for a child (Carty, 1998). Mothers who are disabled report two major concerns with respect to childcare: first, their ability to look after their own and their child's health and, second, their ability to

care physically for the child (Carty, 1998; Alexander *et al.*, 2002; Prilletensky, 2004). However, those who have become parents generally report that they have adapted well to and feel competent within a role which they find gratifying. They also often note the beneficial effects on the development of their children who may be more adaptable, displaying increased self-sufficiency and an increased sensitivity to the needs of others (Alexander *et al.*, 2002).

The children of sick parents are at increased risk of poor general adjustment, lack of motivation, increased delinquency, poor social skills and increased somatic complaints. These outcomes are similar regardless of whether the parent is physically or mentally ill (Hirsh, 1985, in Armistead *et al.*, 1995). Poor parental health and disability influence the amount of support, reinforcement, discipline and organisation available to the child (Frank, 1989; Armistead *et al.*, 1995). Displays of physical affection may be restricted and the associated psychological distress may impede the development of a healthy emotional relationship; similarly, daily tasks such as the provision of meals, transportation and supervision may be impeded (Fagan, 2003; Evans *et al.*, 2005). Parents with poor health may experience guilt, anger and depression due not only to their pain and its limitations but also because of their compromised social identity.

With regard to poor mental health, depressed mothers show two main patterns of interaction with their infants and are likely to be either unresponsive and withdrawn or hostile, intrusive and over-stimulating (Campbell *et al.*, 2004; Prilletensky, 2004; Anthony *et al.*, 2005). Those who are not depressed are more likely to have high energy levels, to be stimulating, warm and supportive and to have good relationships with their children (Mantymaa *et al.*, 2004). Children with depressed mothers are at increased risk of developmental delay and both externalising and internalising disorders (Campbell *et al.*, 2004; Kahn *et al.*, 2004), and male infants seem to be particularly vulnerable (Sharp *et al.*, 1995; Weinberg *et al.*, 2006). Such consequences may be particularly likely during the early preschool years when young children rely on their mother for stimulation, nurturance and guidance, but results are inconclusive: the children of mothers who are depressed but nevertheless remain sensitive and responsive are at no more risk of poor parent–child relationships than those whose mothers were never depressed (Campbell *et al.*, 2004). The mental health of the child's father can be protective: where fathers increase their caretaking role and the amount of support provided to mothers with depression, mothers report, in turn, that their children have fewer behavioural and emotional problems (Kahn *et al.*, 2004). However, if both parents have poor mental health then the child (especially if it is a boy) has a greater risk of poor outcomes. Poor paternal mental health has been associated with poor cognitive development and there is some tentative evidence that paternal psychopathology is associated with an increased risk of childhood behavioural problems (Mantymaa *et al.*, 2004).

Poor health in a child can affect the whole family: family functioning is affected by increased demands on parental time, particularly in the provision of emotional support (Svavarsdottir, 2005), and healthy siblings (and partners) may lose out on parental time and attention as the needs of the sick child are catered for. In addition, the main task of childhood (to develop into autonomous, healthy and well-functioning adults) can be seriously compromised by either a child's own or a parent's ill health (Wallander and Varni, 1998). Infants and children who display signs of emotional disorders (impulsivity, irritability and general negative affect) are at greater risk of behavioural problems as they get older (Allhusen *et al.*, 2004), but these characteristics may influence parenting by interacting with the parenting style: the relationship may be reciprocal (O'Connor and Scott, 2007).

As far as child disability is concerned, between 10 and 20 per cent of children in the Western developed world have a chronic disability and about 10 per cent of these have conditions which can be classified as severe (Wallander and Varni, 1998). Parents may perceive this as a tragedy and feel that they need to protect the child from demanding situations (Woolfson, 2004); consequently, disabled children find it more difficult to achieve autonomy and independence, particularly if their parents have low expectations with respect to the child's potential (Wallander and Varni, 1998). In families where the positive identity of the disabled child is the focus, parenting is likely to be as effective as it is in those where there is no disability (Svavarsdottir, 2005). Mothers and fathers of disabled children report more health complaints and higher levels of stress, anxiety and emotional distress than the parents of non-disabled children although the impact is greater for mothers (Pelchat *et al.*, 1999; Woolfson, 2004; Raina *et al.*, 2005; Svavarsdottir, 2005).

While a large proportion of disease and illness (as opposed to disability) can be attributed to pathological processes, there is increasing evidence that early mother–child relationships can also contribute to ill health in both children and adults (Luecken and Lemery, 2004; Waylen *et al.*, 2008). Early relationships which are hostile and coercive or lacking in warmth and support are associated with poor general health and cardiovascular disease in adults (Luecken and Lemery, 2004), and poor mother–child interaction in infancy has been associated with poor physical health in 2 year olds (Mantymaa *et al.*, 2003). These relationships have been postulated to be due to either (1) an impaired ability to regulate physiological responses due to prolonged exposure to cortisol (a hormone released in stressful situations) and consequent pathology in body or brain, or (2) impaired immune responses and gastrointestinal tract functioning (Barreau and Fioramonti-Ferrier, 2004).

Culture and ethnicity

Although parenting varies in ways which are appropriate for specific cultural profiles and goals (Huang *et al.*, 2005; Keller *et al.*, 2005; Keller *et al.*, 2006), certain core parenting constructs are relevant across all cultures. These include parental sensitivity, the child's attachment to the primary caregiver and socialisation of the child to cultural norms (Bernstein *et al.*, 2005). Mothers are also aware of the need for autonomy as their children get older and that they need to become independent in skills such as toileting, feeding, walking, talking etc. (Liu *et al.*, 2005).

In general, research into cross-cultural parenting styles categorises cultural groups either as 'collectivist' (interdependent groups which raise children to be sensitive to others, obedient, dutiful, co-operative and honest) or 'individualistic' (children are encouraged to be self-reliant, assertive, independent, to achieve academically, develop extra-familial relationships and be economically self-sufficient) (Bernstein *et al.*, 2005; Cote and Bornstein, 2005; Keller *et al.*, 2005). This accords approximately with a division between Asian (and to a lesser extent, African) and Western European/American families but, of course, differences can also be observed within these broad groupings (Hsu and Lavelli, 2005; Keller *et al.*, 2005). While it is inappropriate to apply a single paradigm to cross-cultural parenting (such a measure is likely to be culturally specific) (Bernstein *et al.*, 2005), generic parenting styles such as those described by Baumrind may be relevant in both collectivist and individualistic societies (Sorkhabi, 2005). An authoritative style is flexible and encourages reciprocity, co-operation and a concern for others (collectivist values), but it can also promote more individualistic values such as self-reliance and self-assertion. Similarly, while an authoritarian style may not be considered as rejecting and lacking in warmth in collectivist terms (although it is in individualistic societies), it may still have adverse child outcomes (Sorkhabi, 2005).

Consistent cross-cultural relationships have been recorded between three aspects of parenting and child outcomes. Parental stimulation and responsiveness are consistently associated with child adaptation and well-being across cultures (Bernstein *et al.*, 2005; Bradley and Corwyn, 2005). Punishment has been associated with compliance (Bernstein *et al.*, 2005) but this relationship is less reliable, in part because of variations in the frequency with which punishment is used and the situations in which it is deemed appropriate (Bradley and Caldwell, 1995; Bradley and Corwyn, 2005). However, Phoenix and Husain (2007) question the universal applicability of such styles and conclude that, in the USA, African- and Asian-American and Latino parents have parenting styles which differ from those of standardised white, European parenting (Phoenix and Husain, 2007). They note that physical discipline predicts higher levels of aggressive behaviour in the children

of white European-American parents than in the children of African-American parents. Authoritative parenting is not associated with good academic performance for African- and Asian-American children and some studies suggest that, instead, authoritarian parenting may be beneficial. Immigrant Chinese mothers are more authoritarian than their American counterparts (Liu *et al.*, 2005) but they consider their parenting to provide clear, concrete guidelines for child behaviour rather than it being controlling and authoritarian (Chao, 1994). There are no ethnic differences relating to the consequences of lax and inconsistent parenting: in each case, there is an increased risk of problem behaviour (McLoyd *et al.*, 2000).

The process of emigration has considerable stresses attached to it which are likely to have an influence on parenting: immigrant families have left a familiar culture and must adapt to new surroundings, language and culture, and they may be exposed to prejudice and discrimination and a real or perceived lack of social support. Consequently, the children of immigrant families may have more adjustment problems (Nelson *et al.*, 2006). In the UK, the children of Indian immigrants have been shown to display higher levels of internalising problems than their English peers, but Atzaba-Poria (2005) suggests that this is an effect of poor social support for immigrant families impacting on parental mental health and, consequently, parental availability, rather than being the result of parenting practices per se (Atzaba-Poria and Pike, 2005).

While there is evidence that child-rearing practices vary between ethnic groups, there is no clear consensus on exactly how and why they differ. In part this is due to a lack of rigorous research but it may also be a function of the wide diversity of parenting within as well as between groups (McLoyd *et al.*, 2000). McLoyd and colleagues (2000, p. 1082) conclude that differences in parenting between ethnic groups may be ‘more in the eye of the beholder’.

Implications of the literature review

The introduction to this report has focused on and discussed various aspects of parenting and their associated outcomes. While the literature on this topic is considerable, much of it is either cross-sectional or based on cohorts from countries other than the United Kingdom. Therefore, we concluded that it was pertinent to investigate parenting within a British-based cohort in order to (a) provide a snapshot of parenting during a specific time period and (b) use prospective longitudinal data to examine how parenting changes over time and as a function of changes in context.

Having reported evidence that parenting is affected by individual characteristics of both child and parent and also by culture and context, a logical conclusion is that parents need to modify their behaviour in response to context and changes in the child. Thomas and Chess (1977, cited in Holden, 1999) state that it is 'insufficient and inaccurate to characterise a parent in an overall, diffuse way as "rejecting", "overprotective" … a parent may be overprotective and restrictive of some of the child's activities but not of others' (pp. 78–9), and Darling and Steinberg (1993, cited in Dallaire and Weinraub, 2005) add to this: 'We know little about such important questions as the stability of parenting style across time' (p. 495). This means that care needs to be taken when considering the similarity or stability of parenting. The aim of the next chapter of this report is to do exactly that: to determine how parenting varies as a function of social and cultural differences and to investigate whether, and if so how, parenting changes as a function of changes in sociodemographic context.

Summary and conclusions

- Parenting is a process or group of activities, the aim of which is to facilitate the development of newborns into well-adjusted and healthy individuals.

- These processes need to provide the child with sustenance, stimulation, support, structure and surveillance in order to be effective (Bradley and Caldwell, 1995).

- Parenting attitudes and behaviours are influenced by characteristics of the parents themselves and the child as well as by family and social characteristics.

- Key aspects of parenting which predict child outcomes include sensitivity and attunement in infancy, parenting styles (including authoritative, authoritarian, neglectful and permissive parenting), the management of child behaviour and more general descriptors of parent–child relationships such as warmth, rejection, hostility and support.

- Warm, supportive parenting aids child development and is associated with positive child outcomes – it helps the child to regulate his or her behaviour and emotions and so develop into a healthy, socially competent and caring adult. This type of parenting can also act as a buffer in adverse situations.

- Children learn that they can rely on the emotional security and physical safety provided by responsive and sensitive parents, even in families exposed to risk and adversity, if they develop a secure attachment relationship with the primary caregiver, have a positive parent–child relationship and are exposed to age-

appropriate and consistent disciplinary practices (Repetti *et al.*, 2002). However, such relationships may change over time and become more or less secure.

- High levels of family stress (whether due to poverty, conflict or ill health) are associated with hostile, rejecting parenting which may be manifest in authoritarian parenting styles, negative parent–child interactions and adverse outcomes for children, parents and the parent–child relationship (Crnic *et al.*, 2005). However, this type of parenting can be moderated by marital or social support and child temperament.

- There is much literature concerning physical punishment but a debate remains about whether or not it should be banned. There is evidence that increases in physical discipline are associated with increases in child anti-social behaviour but there is also conflicting evidence that, where such discipline is normal, it is both expected and accepted. Child perceptions regarding the use of physical punishment are important with regard to the effects of discipline on the child.

- There is much more research on maternal parenting than on the parenting undertaken by fathers. While the maternal role of gatekeeper between father and child is acknowledged, it is also the case that there is a positive association between paternal involvement and child outcomes.

- While some aspects of parenting style vary across culture, there are many similarities including the importance of attachment to the main carer, the carer's sensitivity towards the child's needs, the importance of socialisation towards cultural norms and an awareness of the child's increasing need for autonomy. The outcomes associated with different parenting styles seem to be more or less consistent regardless of culture.

- Although the literature on parenting is comprehensive, much of it is cross-sectional. There is, therefore, a gap in the literature which can be filled by prospective research on parenting.

2 Variations in parenting among families in the Avon Longitudinal Study of Parents and Children

The aim of this part of the study was to examine how parenting varies among different social and cultural groups and among families with different health needs. We examined variations in parenting during the first four years of childhood and the extent to which any changes which occur are driven by changes in health and social circumstances.

The cohort

The Avon Longitudinal Study of Parents and Children (ALSPAC: see www.alspac.bris.ac.uk) (Golding *et al*., 2001) is a geographically representative, population-based study investigating social, environmental, biological and genetic influences on the health and development of children. All pregnant women in the former Avon Health Authority (UK) who had an expected delivery date between 1 April 1991 and 31 December 1992 were invited to take part in the study. Recruitment took place via the media (local radio and television), interviews with midwives and posters displayed locally. Approximately 85 per cent of the eligible population enrolled, resulting in a cohort of 14,541 pregnancies: 13,988 infants survived to their first birthday. Since enrolment, detailed self-report information has been collected from the mothers both antenatally (at 8, 18 and 32 weeks' gestation) and postnatally on an annual basis. In addition, mothers (or main carers) continue to complete a biannual questionnaire about the health, behaviour and development of the study child. Data is also collected annually from the mother's current partner (who may or may not be the child's biological father) in families where the mother has given consent to do so. Mothers consented to join the study at recruitment and they consent to return each questionnaire. All aspects of the study conform to the ethical regulations of both the ALSPAC Law and Ethics Committee and local research and ethics committees.

Measures of parenting

This study was based on parents' reports of attitudes, feelings and behaviours recorded in response to 19 specific questions relating to parenting. Questions were included in this study only if they were administered in exactly the same format at least twice during the first four years of life. Data reported here was collected from questionnaires administered during pregnancy (32 weeks) and when the child was 8, 18, 21, 33 and 42 months of age. Differences across time were examined in response to all 15 questions posed to mothers and four questions posed to their partners. We were able to examine differences in parenting as a function of health and social circumstances at 8 and 33 months as the wording of items measuring these variables was constant at both time points.

The parenting measures correspond to many, but not all, aspects of parenting identified as important in the literature (warmth, support, rejection, control, discipline), but they are not necessarily the same as measures used in previous research. Parenting is a sensitive topic and cohort studies like ALSPAC, which are highly dependent on continuing participation, take great pains not to alienate study members by asking questions which may cause offence and/or prompt families to leave the study. The questions were therefore phrased with the aim of assessing the theoretical concepts and constructs of parenting. They should be regarded as indicators rather than precise measures of parenting.

Table 3 provides details of individual questions and the time points when data was collected (see Appendix Tables 2.1.1–2.1.5 for response frequencies). Table 3 also indicates how each specific parenting variable maps on to the aspects of parenting discussed in the literature review.

Table 3 Parenting measures and data collection time points

	Respondent	Pregnancy	8 months	33 (21*) months	Concept
1. It is important to talk to babies of all ages[a]	Mother	✓	✓		Warmth
2. Cuddling a baby is very important[a]	Mother	✓	✓		Warmth
3. I really enjoy this child[b]	Mother		✓	✓	Warmth
4. I feel confident with my child[b]	Mother		✓	✓	Support
5. It is a great pleasure to watch my child develop[b]	Mother Partner		✓ ✓	✓ ✓	Support
6. Having this child makes me feel fulfilled[b]	Mother		✓	✓	Warmth
7. I try to teach the child[c]	Mother		✓	✓	Support
8. I would have preferred that we had not had this baby/child when we did[b]	Mother Partner		✓ ✓	✓ ✓	Rejection
9. I can't bear hearing the child cry[b]	Mother Partner		✓ ✓	✓ ✓	Control
10. I dislike/hate the mess that surrounds the child[b]	Mother Partner		✓ ✓	✓ ✓	Control
11. I feel I have no time to myself[b]	Mother		✓	✓	Rejection
12. I ignore the child's tantrums[d]	Mother		18 months	30 months	Discipline
13. I send the child to his room during tantrums[d]	Mother		18 months	30 months	Discipline
14. I shout at the child during tantrums[d]	Mother		18 months	42 months	Discipline
15. I smack the child during tantrums[d]	Mother		18 months	42 months	Discipline

Response categories: (a) Agree, probably agree, probably disagree, disagree; (b) Feel exactly, often feel, sometimes feel, never feel; (c) No – child is too young, no – no time, yes, sometimes, yes, often; (d) Often, sometimes, never.
* Partner data collected at 8 and 21 months.

Analytical methods

Development of an overall measure of parenting

We have assessed the way in which parenting changes (a) across time and (b) as a function of changes in social circumstances and health using eight questions asked of mothers at both 8 and 33 months. These items were combined to develop an overall measure of parenting which was available at each time point. The individual questions cover parental warmth and support (enjoyment, confidence, pleasure and fulfilment with respect to caring for the child: items 3–6 in Table 3) and rejection and control (preferring not to have had the child at that time, dislike of the child's crying and surrounding mess, lack of time for oneself: items 8–11 in Table 3). Responses to most questions reflected warm, supportive parenting.

It is important to note that some of the ALSPAC questions relating to parenting in Table 3 are excluded from the overall parenting measure because the times when they were administered did not correspond to the times when questions were asked about relevant social and health circumstances (see Table 3). We also excluded questions about ignoring the child's tantrums, sending the child to his or her room and teaching the child. Even though these items were asked within the relevant time period we were not persuaded that they could easily be classified as either appropriate or inappropriate for the ages they were asked at and so were unable to determine a suitable way to score them.

Validation of the aggregated parenting measure

In order to be certain that this overall score was a valid measure of parenting, we tested both its reliability and validity in several stages. Details of this process can be found in the Technical Appendix, included in the Appendices accompanying this document.

In summary, this process showed that our aggregated parenting measure predicted child outcomes known, from other studies, to be associated with parenting. The Goodman Strengths and Difficulties Questionnaire (SDQ: Goodman, 1999, 2001) measures child behaviour in a variety of different domains and gives an overall total SDQ score. This validation process showed that, for every point increase in the aggregated parenting score, there is a reduction in the total SDQ score of around half a point. In other words, as the parenting score increases there is a reduction in child behavioural and emotional problems. This suggests that our derived measure of parenting is a valid measure.

Assessing changes in parenting score over time

To assess changes in parenting over time we subtracted the parenting score at 8 months from the score at 33 months, giving a normally distributed score ranging from –17 to +17. A score of zero means that parenting has remained absolutely stable (no change) between the two time points, a negative score indicates that parenting score has decreased over time and a positive score that it has increased. These three categories were used in the univariable analyses to examine changes in parenting score by individual sociodemographic and health variables. Any positive score was included as an increase and any negative score as a reduction. The categories 'increased' and 'decreased' thus included families in which changes had been minimal as well as those with greater change. To assess the extent to which results depended on these minimal changes we also analysed the data so that the 'stable' category included scores from –1 to +1 (50 per cent of the distribution) and from –2 to +2 (70 per cent of the distribution). There were no differences at all in the overall pattern of results as a function of these changes in criteria. In other words, even minimal increases and decreases in parenting score can be seen to have, respectively, positive or negative influences on parenting behaviours. Results are presented here for the initial analyses in which the stable group are those in which there was, literally, no change in parenting score between the two time periods. The statistical significance of the associations between differences in parenting and differences in sociodemographic and health variables were assessed with χ^2 tests.

Caveats

When interpreting the results of the analyses reported here, it is important to bear in mind that they are based on self-report rather than objective measures or independent observation. Self-report items can provide an assessment of parenting over long periods of time whereas objective measures are limited to short periods, usually in artificial circumstances. Self-report measures can also assess attitudes and feelings that may be undetectable to an objective observer. However, unlike objective measures, self-report items may be influenced by 'social desirability' so that respondents report what they believe to be desirable attitudes, beliefs and behaviours in an attempt to provide a good impression. In this regard it is possible that more weight should be attached to responses that conflict with social desirability – for example, mothers who report that they wish they had not had their baby when they did may be more reliable witnesses than those who report great enjoyment of their child.

Fathers

As noted above in Chapter 1 in the section 'Mothers and fathers', the literature about fathers and the fathering role is less robust and less conclusive than that concerning mothers. One reason for this is that it is often much more difficult to collect data from fathers, perhaps because of time restrictions and less direct involvement in research activities. With respect to ALSPAC data, a smaller proportion of fathers than mothers respond to questionnaires and less father data is available for analysis. This means that our analyses on the father data are less comprehensive than those for mothers. In this report, results for fathers have been restricted to families where the mother has recorded consistently that she was still living with her first husband/ partner (N=6,732). At each data collection point, questionnaires were completed by the mother's 'current partner or husband' who may or may not have been the child's father. We believed it was important to restrict the partner sample to those where we could be sure responses were provided by the same partner across all time points and where the partner was more likely to be the child's biological father. Partner data is derived from responses to four questions administered at 8 and 21 months (items 5 and 8–10 in Table 3 above):

- I take pleasure in watching this child develop.
- I would have preferred not to have had this baby when we did.
- I can't bear hearing the child cry.
- I dislike the mess surrounding the child.

The families: their social circumstances and health

Factors incapable of change

We examined the ways in which parenting varies with health and social circumstances by looking first at 'immutable factors', i.e. variables which do not change throughout the child's life: ethnic group and parents' age and educational qualifications at the time of the child's birth. The frequency distributions of these variables are shown for mothers and fathers in Tables 4 and 5 below.

Table 4 Parental age and education level at the birth of the child: N (%)

		Mother		Father	
Age group	<20	656	(4.7)	76	(1.0)
	20–29	8,146	(57.9)	3,348	(39.6)
	30–39	5,110	(36.3)	3,859	(45.7)
	>40	170	(1.2)	1,166	(13.8)
Education level	CSE	2,522	(20.2)	1,527	(16.5)
	Vocational	1,228	(9.8)	817	(8.8)
	O level	4,323	(34.6)	2,224	(24.0)
	A level	2,803	(22.5)	2,772	(29.9)
	Degree	1,607	(12.9)	1,931	(20.8)

Column percentages may not add to 100% due to rounding.

It can be seen that the majority of mothers were aged between 20 and 29 when their child was born and a third were educated to A level or higher. The majority of fathers were aged 30 to 39 and half were educated to at least A level standard.

Table 5 Ethnic composition of the cohort: N (%)

	Mother		Father	
White	12,068	(97.4)	11,658	(96.1)
Black Caribbean	76	(0.6)	189	(1.6)
Black African	11	(0.1)	18	(0.2)
Black other	44	(0.4)	33	(0.3)
Indian	53	(0.4)	67	(0.6)
Pakistani	22	(0.2)	28	(0.2)
Bangladeshi	7	(0.1)	7	(0.1)
Chinese	30	(0.2)	28	(0.2)
Other	81	(0.7)	110	(0.9)

At recruitment the cohort was broadly representative of the UK population as a whole: the majority of parents were white and the majority of the non-white population were black with smaller proportions of families having originated on the Indian and Chinese subcontinents. When compared with 1991 British national census data relating to mothers with infants, the cohort had slightly fewer mothers who were single, living with (rather than married to) a partner or living in rented accommodation. There were also slightly fewer mothers without a car and fewer families from minority ethnic groups.

Response frequencies by age and education at the time of the child's birth and also ethnic group (for both mothers and fathers) are reported in Appendices 3–5 (mothers) and 3–5 (fathers).

Factors capable of change

We have also examined the way in which parenting changes in association with a variety of social and health factors that may change over the course of the child's life. These were financial difficulties, housing tenure, marital status, social support or parental health (mental and physical). The analyses were restricted to variables where the same item was administered at more than one point in time, meaning that we were unable to analyse the parenting undertaken by fathers in this way. Although the appropriate variables were available in the questionnaires, they were either measured only once or the administration of parenting and social variables was not concurrent. We were also unable to analyse parenting responses to the child's tantrums as these items were also asked at time points which did not coincide with the measurement of social and health factors.

Financial difficulties and housing tenure

Financial difficulties were assessed in response to a question asking whether families had difficulty affording a list of five categories of items: food, clothing, rent (or mortgage), heating or items for the baby. Frequencies are shown in Table 6.

Table 6 Financial difficulties and housing tenure before the child's birth

	Level	N (%)
Financial difficulties	None	4,360 (35.9)
	Difficulty in affording <60% of items	3,883 (32.0)
	Difficulty in affording >60% of items	3,310 (27.2)
	Difficulty in affording all items	599 (4.9)
Housing tenure	Owned/mortgaged	9,872 (73.4)
	Rented: council/housing authority	2,153 (16.0)
	Rented: private	960 (7.1)
	Other	463 (3.4)

Column percentages may not add to 100% due to rounding.

The majority of families (68 per cent) reported no or few financial difficulties with regard to being able to afford a range of necessities. With respect to housing tenure, 73 per cent of families were buying their own home or owned it outright.

Marital status and social support

Before the birth of the study child, 19 per cent of mothers reported that they were single and had never been married, 68 per cent reported that this was their first marriage and 6 per cent were either divorced or separated. Seven per cent of mothers reported that this was their second or subsequent marriage and 0.1 per cent that they had been widowed.

Both mothers and fathers were asked to report on the amount of emotional, financial and practical support available to them from their partner, family, friends or the state. Forty-seven per cent of mothers and 71 per cent of fathers felt that social support was often or always available, 48 per cent and 28 per cent respectively felt that some support was available most of the time and 5 per cent of mothers and 1 per cent of fathers reported that little or no social support was available for them.

Parental health (physical and mental)

Physical health was assessed by a question relating to the generic health status of mother and partner at various stages in the child's life. In response to this question during pregnancy 28 per cent of mothers reported that they were always well, 48 per cent that they were usually well and 25 per cent that they were never or only sometimes well. Forty-seven per cent of fathers reported that they were always well, 49 per cent that they were usually well and 4 per cent that they were never or only sometimes well.

Mental health was assessed during pregnancy and subsequently using the Edinburgh Postnatal Depression Scale (EPDS) (although described as a postnatal scale, the EPDS is used to measure depression at other times in both males and females: Matthey *et al.*, 2001). Fifteen per cent of mothers and 4 per cent of fathers rated themselves as being depressed during the pregnancy.

Differences in parenting

In this section we describe the way in which parenting varied according to mutable and immutable sociodemographic factors and health for both mothers and partners at 8 and 33 months. Cross tabulations are provided for individual variables in Appendix Tables 2.1.1–2.1.5. Differences are highlighted in the text if they are sizeable and if they are also statistically significant. We then describe differences in parenting as a function of changes in social circumstances and health across time.

Individual parenting variables

Factors incapable of change

It is important to talk to babies of all ages (Appendix Tables 3.1.1, 4.1.1 and 5.1.1)

When study mothers were asked about the importance of talking to babies of all ages, 99.3 per cent of mothers agreed completely with this statement, and there were few differences in responses as a function of maternal age, education or ethnic group at either 8 or 33 months.

Cuddling a baby is very important (Appendix Tables 3.1.2, 4.1.2 and 5.1.2)

Study mothers were also asked how important they believed cuddling to be. The great majority of mothers agreed completely with this statement at 8 months and responses did not vary as a function of ethnic group, maternal age or education although there were differences as a function of ethnic group in responses offered during pregnancy (Table 5.1.2). At this time, a small minority (3.3 per cent) of Chinese mothers and 2.4 per cent of black (other) mothers reported that they did not agree that it was important to cuddle babies whereas all mothers from almost every other ethnic group agreed with this statement.

I would have preferred not to have had this baby when we did (Appendix Tables 3.1.3 and 3.2.1; 4.1.3 and 4.2.1; 5.1.3 and 5.2.1)

Mothers were asked whether they regretted the timing of their child's arrival. At 8 months 88.3 per cent of all cohort mothers disagreed with this statement but, at both 8 and 33 months, mothers aged 19 or less were more likely to affirm it (6.8 per cent compared to 3.7 per cent of mothers aged 40 or over and fewer than 2 per cent of mothers aged 20–39). At 8 months only, a similar but weaker trend was observed as a function of maternal education: 3 per cent of mothers with CSEs or less affirmed this statement compared to less than 2 per cent of mothers with vocational qualifications or higher. When the child was around 8 months of age 3.6 per cent of black (Caribbean) mothers and 2.6 per cent of Indian mothers affirmed this statement; at 33 months, 3 per cent of white mothers and 6.9 per cent of black (Caribbean) mothers regretted the timing of the child's arrival.

I enjoy this child (Appendix Tables 3.1.4, 4.1.4 and 5.1.4)

Within the whole cohort, 71.9 per cent of mothers reported that they enjoyed their child and there were very few differences in response to this item at either 8 or 33 months as a function of maternal age or education. A greater proportion of white (3.1 per cent and 3.8 per cent), Caribbean (3.6 per cent and 2.3 per cent) and other black (2.7 per cent and 12.5 per cent) mothers reported that they only sometimes or never enjoyed their child at 8 and 33 months respectively compared to mothers from all other ethnic groups.

I feel confident with this child (Appendix Tables 3.1.5, 4.1.5 and 5.1.5)

On average, 82.4 per cent of mothers in the cohort reported that they felt confident with their child at 8 months and this was true regardless of age or education. At this age Chinese mothers were less likely to feel confident (42.9 per cent). By 33 months there were no differences as a function of ethnic group, but there were differences as a function of maternal age: 5 per cent of mothers in the youngest age group felt confident either never or only sometimes compared to fewer than 4 per cent in all other age groups. Similarly, mothers with fewer educational qualifications felt less confident at 33 months: 4.9 per cent of those with CSEs or less and 4.4 per cent of those with vocational qualifications compared to around 3 per cent of mothers with O levels or higher.

I take pleasure in watching the child develop (Appendix Tables 3.1.6, 4.1.6 and 5.1.6)

When mothers were asked whether they took pleasure in seeing their child develop, 92.8 per cent of mothers within the whole cohort reported that they agreed with this statement and there were few differences in responses as a function of maternal age, education or ethnic group at either 8 or 33 months.

Having this child makes me feel fulfilled (Appendix Tables 3.1.7, 4.1.7 and 5.1.7)

At 8 months, 47.6 per cent of cohort mothers reported that they felt fulfilled by having the child. Responses varied linearly as a function of maternal age and education at both 8 and 33 months. They also varied as a function of ethnic group at 33 months. At 8 months, 8.3 per cent of mothers aged 40 or over never felt fulfilled by the child compared to only 4.6 per cent of those aged 19 or less. By 33 months the trend was the same although the proportion of unfulfilled mothers was smaller: 6.3 per cent of mothers aged 40 or over compared to 3.2 per cent of those aged 19 or less. Differences as a function of maternal education were smaller at both ages but there

were differences in fulfilment between ethnic groups: 13.9 per cent of black (other) mothers and 9.5 per cent of Chinese mothers reported that they were never fulfilled by the child at 8 months. Although these proportions fell to 8.3 per cent and 5.6 per cent respectively at 33 months, these mothers still perceived less fulfilment than mothers from most other ethnic groups.

I try to teach my toddler (Appendix Tables 3.1.8, 4.1.8 and 5.1.8)

Maternal attempts to teach their children did not vary as a function of maternal age at 18 months but there were differences associated with the level of the mother's education. Thirty-two per cent of mothers with CSEs or less believed that the child was too young to be taught at this age compared to fewer than 28 per cent of mothers with more qualifications. Among black (other) mothers 86.7 per cent taught their child at least sometimes by 18 months compared to around 70 per cent of mothers from other ethnic groups. By 30 months virtually all mothers taught their child at least sometimes.

I can't bear hearing the child cry (Appendix Tables 3.1.9 and 3.2.4; 4.1.9 and 4.2.4; 5.1.9 and 5.2.4)

Of the mothers in the cohort 3.7 per cent reported that they could not bear to hear the child cry. Older mothers were more likely to affirm this statement at both 8 and 33 months (13.6 per cent aged 40 or older compared to 8.7 per cent aged 19 or less at 8 months) and the same tendency was observed for fathers at 8 months. The more education parents (both mothers and fathers) had received the more likely they were to agree with this statement at both time points. There were some differences in response to this question by ethnic group at 8 months only but no consistent patterns emerged.

I dislike the mess surrounding the child (Appendix Tables 3.1.10 and 3.2.3; 4.1.10 and 4.2.3; 5.1.10 and 5.2.3)

Parents were asked whether they objected to the mess surrounding the child (which is generally intrinsic to early childhood). At 8 months 64.8 per cent of mothers disagreed completely with this statement, but both mothers and fathers were more likely to affirm it as their child got older, when the majority felt like this to some degree. The more educational qualifications parents had the more likely they were to affirm the statement.

I feel I have no time for myself (Appendix Tables 3.1.11, 4.1.11 and 5.1.11)

At 8 months, 19.5 per cent of the mothers in the cohort reported that they disagreed with the statement 'I feel I have no time for myself' but at both 8 and 33 months, maternal responses varied as a function of their age and education. More than 20 per cent of mothers aged 30 or over often felt like this or felt exactly like this compared to 16.8 per cent of those aged 20–29 and 10.6 per cent of mothers in the youngest age group. While more mothers in all age groups affirmed this statement at 33 months, there was still a difference between those aged 29 or under (18.8 per cent or less) compared to those aged 30 or more (22.9 per cent or more). A linear trend was also observed as a function of maternal education at 8 (and 33) months: 15.1 per cent (17.5 per cent) of mothers with CSEs or less often felt like this compared to 17.9 per cent (19.9 per cent) of mothers with O levels and 28.4 per cent (29 per cent) of mothers with a degree. Only 10.8 per cent of mothers who recorded their ethnic group as black (other) affirmed this statement at 8 months.

I ignore the child's tantrums (Appendix Tables 3.1.12, 4.1.12 and 5.1.12)[1]

Older mothers (46.3 per cent and 38.0 per cent) were less likely to report that they often ignored the child's tantrums compared to those in the youngest age group (56.8 per cent and 47.2 per cent) at 18 and 30 months respectively. Similarly, the proportion of mothers who ignored the child's tantrums declined as their education level increased (48 per cent and 43.4 per cent) for those with CSEs compared to 42.8 per cent and 37.8 per cent of those with a degree at each time point. A greater proportion of white and black (other) mothers reported that they often ignored tantrums at both 18 and 30 months.

I send the child away during tantrums (Appendix Tables 3.1.13, 4.1.13 and 5.1.13)

Similarly, a greater proportion of younger mothers sent the child away when he or she was having a tantrum (35.9 per cent at 18 months) compared to those who were older (23.1 per cent or less), but the proportion had increased across all age groups by the time the child was 30 months (78.6 per cent of mothers aged 19 or younger compared to 65.4 per cent or less for those aged 20 or older).

I smack the child during tantrums (Appendix Tables 3.1.14, 4.1.14 and 5.1.14)

While the majority of mothers reported that they never smacked their child, the largest proportion of those who did were aged 19 or under (36.6 per cent compared to 19.7 per cent of mothers aged 30–39 and 24.6 per cent of those aged 40 or over).

Similarly, mothers with few educational qualifications were more likely to smack than those with a degree (27.9 per cent compared to 15.4 per cent respectively). Among Chinese mothers 46.7 per cent reported that they smacked the child compared to fewer than 36 per cent in all other ethnic groups.

I shout at the child during tantrums (Appendix Tables 3.1.15, 4.1.15 and 5.1.15)

The great majority of mothers in all age groups shouted at their children at least sometimes but, as above, the largest proportion was to be found in mothers aged 19 or less (69.2 per cent compared to less than 62 per cent of mothers in other age groups). The majority of mothers with a degree reported that they never shouted at their child (53.3 per cent) whereas 63.7 per cent of those with CSEs or less shouted at least sometimes.

Factors capable of change

It is important to talk to babies of all ages (Appendix Table 6.1.1)

This variable showed little variation among families regardless of financial or health circumstances – the majority believed that it was important to talk to babies of all ages.

Cuddling a baby is very important (Appendix Table 6.1.2)

Slightly fewer mothers with low social support (98.5 per cent) and those living in rented accommodation (98.6 per cent) completely agreed that it was important to cuddle babies compared to those with high levels of social support or those who owned their own homes (99.4 per cent), but there were no differences according to financial circumstances.

I would have preferred not to have had this baby when we did (Appendix Table 6.1.3)

Only 71.3 per cent of mothers with low social support reported no regret over the timing of their child's arrival compared to 89.8 per cent of those with high levels of support. Compared to 89.1 per cent and 90.8 per cent (respectively) of those in good physical and mental health, 73.5 per cent of mothers in poor physical health and 69.1 per cent of those with poor mental health regretted the timing of their child's arrival. The corresponding proportions for those with and without financial difficulties are 80.9 per cent and 89.0 per cent respectively.

I enjoy this child (Appendix Table 6.1.4)

At 8 months, 75.1 per cent of mothers with good mental health reported that they enjoyed their child but only 46.7 per cent of those with poor mental health reported the same. The corresponding figures for good and poor physical health were 73.1 per cent and 52.1 per cent respectively; for high and low social support respectively they were 72.9 per cent and 53.4 per cent. There were also differences according to financial circumstances, but these were less marked: 72.9 per cent of mothers without financial difficulties reported that they enjoyed their child compared to 61.7 per cent of those experiencing financial adversity.

I feel confident with the child (Appendix Table 6.1.5)

Maternal reports of how confident they felt with their child at 8 months also showed differences in magnitude according to context. A similar proportion of mothers with good mental and physical health and high levels of social support reported that they felt confident (84.8 per cent, 83.2 per cent and 83.3 per cent respectively) but of those with poor mental or physical health, or low social support, only 64.8 per cent, 68.4 per cent and 68.7 per cent respectively reported feeling confident with the child. The proportion of mothers with no financial difficulties who reported confidence was 82.8 per cent compared to 78.7 per cent of those with financial difficulties.

I take pleasure in watching this child develop (Appendix Table 6.1.6)

The proportion of mothers who agreed that they took pleasure in watching their child develop varied with exposure to adversity: 93.7 per cent of mothers with high levels of social support agreed compared to 79.6 per cent of those with little support; 93.4 per cent of mothers in good physical health and 94.3 per cent of those in good mental health agreed compared to 68.4 per cent and 64.8 per cent (respectively) of those in poor physical and mental health. With respect to financial difficulties, 93.2 per cent of mothers with no or few difficulties affirmed this statement compared to 88.3 per cent of those with many financial issues.

Having this child makes me feel fulfilled (Appendix Table 6.1.7)

For mothers with good mental or physical health and high levels of social support, 50.1 per cent, 48.6 per cent and 48.1 per cent respectively felt fulfilled by their child. For those with poor mental or physical health or low levels of social support, the corresponding figures were 28.2 per cent, 30.4 per cent and 31.2 per cent. Among mothers with financial difficulties 43.7 per cent were fulfilled by their child compared to 48.0 per cent of mothers without.

I can't bear hearing the child cry (Appendix Table 6.1.8)

Only a small proportion of mothers with good mental health (3.3 per cent), good physical health (3.4 per cent), high levels of social support (3.5 per cent) and no financial difficulties reported that they could not bear to hear their child cry. However, 8.3 per cent of mothers with poor mental health, 9.1 per cent of those with poor physical health, 8.2 per cent of those with low levels of social support and 4.4 per cent of those with financial difficulties reported the same.

I dislike the mess surrounding the child (Appendix Table 6.1.9)

At 8 months most mothers with good physical health (65.4 per cent), good mental health (66.7 per cent) and few financial difficulties (65.3 per cent) disagreed with this statement completely. However, the mess surrounding the child was much more of an issue for mothers with poor physical health (53.4 per cent disagreed with the statement), poor mental health (50.2 per cent disagreed) and to a lesser extent many financial difficulties (59.3 per cent).

I feel I have no time for myself (Appendix Table 6.1.10)

For mothers with good mental or physical health, high levels of social support or few financial difficulties, 20.8 per cent, 20.1 per cent, 19.0 per cent and 19.9 per cent respectively disagreed with this statement and reported that they felt they had enough time to themselves. In contrast, only 8.6 per cent of mothers with poor mental health, 9.0 per cent of those with poor physical health, 14.3 per cent of those with poor social support and 14.2 per cent of those with financial difficulties disagreed with this statement (i.e., believed that they had enough time for themselves).

There were also differences associated with specific responses to each of these items at 33 months (Appendix Tables 6.2.1–6.2.8). In each instance, the magnitudes of difference between those exposed to adversity or not were similar to those described above – greater differences are observed for mothers with and without poor mental or physical health or social support than for those with and without financial difficulties.

Parenting scores

As described above in the section on analytical methods, eight parenting items were combined to give an overall parenting score measured at both 8 and 33 months. This variable had a range of possible scores from 8 (hostile, rejecting parenting) to 32 (warm, supportive parenting). A score of 16 or below indicates that mothers 'probably disagreed' or 'disagreed' with each of the four positive items which comprised the overall variable and 'agreed' or 'probably agreed' with the four negative items. At 8 months the mean parenting score was 28.2 (SD=2.8) with a median of 29 and scores ranged from 10 to 32. At 33 months, the mean score was slightly, but significantly ($p<.001$), lower: 27.7 (SD=2.9) with a median of 28 and a range of 10 to 32.

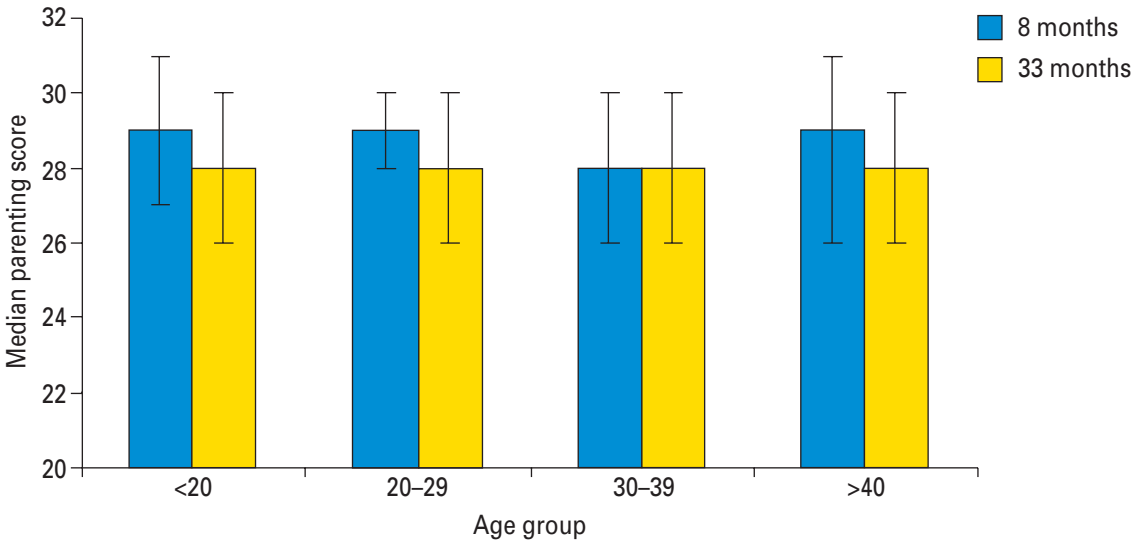
Changes in parenting scores over time

Parenting as a function of risk factors incapable of change

Maternal age

Figure 1 shows the median parenting scores for mothers in different age groups at both 8 and 33 months. At both time points (as can be seen in the Appendices), the mean parenting scores for mothers aged 30 or over were slightly lower (less positive) than those for younger mothers. Differences were attributable to small differences in responses to specific questions asking about confidence with the child, fulfilment, distress about the child's crying and time for themselves.

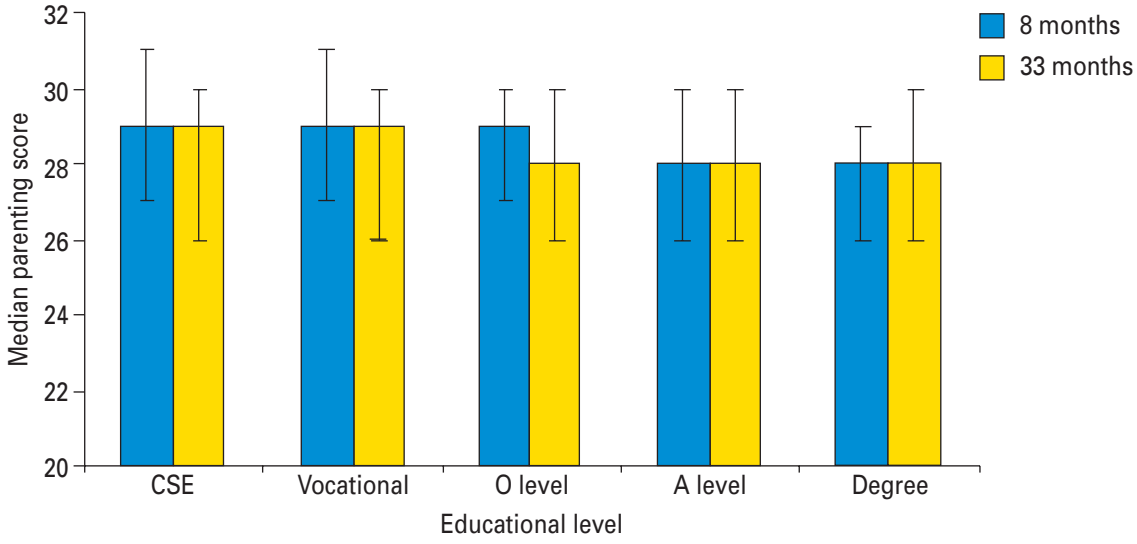
Figure 1 Median parenting scores as a function of maternal age (with inter-quartile range)



Maternal education

Parenting scores declined somewhat as the level of maternal educational qualifications increased (Figure 2). The biggest drop in mean parenting scores across time (see Appendices) was observed for mothers with fewer qualifications.

Figure 2 Median parenting scores as a function of maternal education (with inter-quartile range)

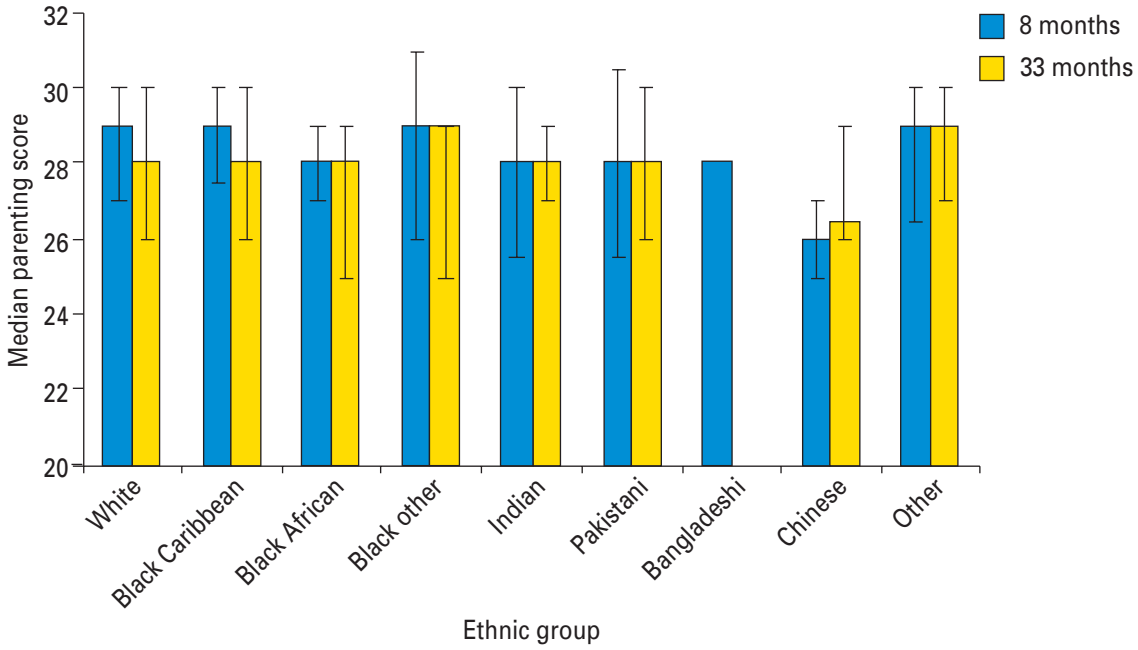


As with maternal age, differences in the mean parenting score (see Appendices) as a function of education were attributable to small differences in responses to some questions (confidence with the child, distress when the child cries and concern about the mess surrounding the child).

Ethnic group

Bearing in mind that it is difficult to draw any conclusions about the influences of ethnic group because many of the subgroups in this sample are relatively small, some differences are notable (Figure 3).

Figure 3 Median parenting scores as a function of maternal ethnic group (with inter-quartile range)



The most notable difference was in the low scores of Chinese mothers at both ages. Differences in Chinese mothers' scores were attributable to differences in enjoyment of the child, confidence with the child, enjoying seeing the child develop, fulfilment and concern about mess.

Parenting as a function of risk factors capable of change

Table 7 shows the average parenting score at 8 months. It is important to note that mothers with low social support, many financial difficulties or poor physical and mental health have parenting scores which are significantly lower than mothers living in more favourable health and social contexts. The difference in parenting scores for mothers with and without financial difficulties is smaller than that for mothers with and without poor physical and mental health.

Table 7 Average parenting score at 8 months

		Parenting score		Inter-quartile range		p
		Mean	Median	25th	75th	
Marital status	Married	28.2	29	27	30	.08
	Single, divorced or separated	28.4	29	27	30	
Social support	High	28.3	29	27	30	<.001
	Low	26.2	27	24	29	
Financial difficulties	None/few	28.3	29	27	30	<.001
	Many	27.2	28	25	30	
Housing tenure	Homeowner	28.1	29	27	30	<.001
	Renting	28.4	29	27	31	
Physical health	Good	28.3	29	27	30	<.001
	Poor	25.9	26	24	29	
Mental health	Good	28.5	29	27	30	<.001
	Poor	25.7	26	24	28	

An examination of the individual items which comprise this aggregated score shows that mothers with poor mental and physical health (and, to a lesser extent, poor social support) derive less enjoyment and fulfilment from their child, are less confident about their care, are more distressed by the child's crying, are less tolerant of the mess surrounding the child and also perceive less time for themselves than the cohort as a whole. Although mothers exposed to financial difficulties report the same trends, the differences are much smaller.

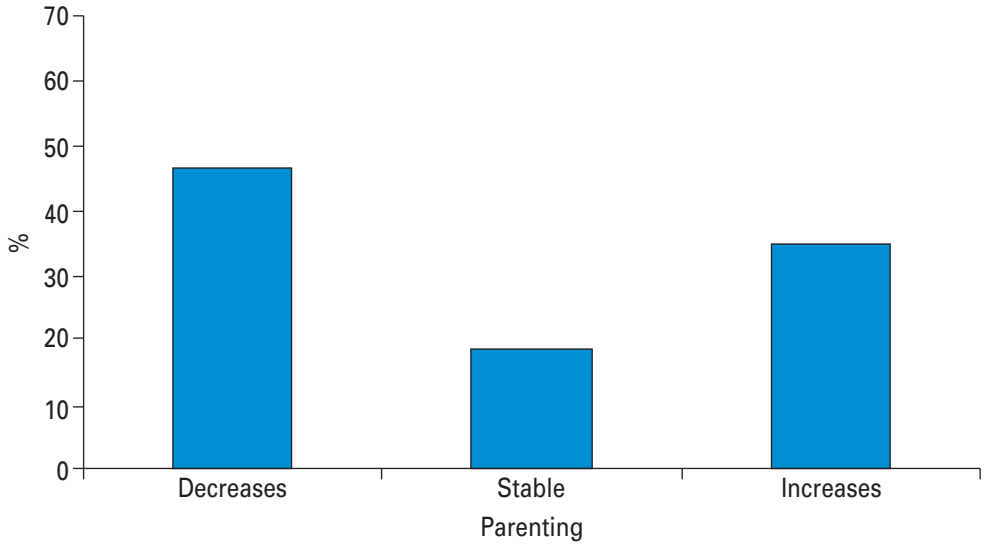
Differences at 33 months (Table 8) largely mirror those at 8 months. Mothers reporting little or no social support, many financial difficulties and poor physical or mental health all have parenting scores which are significantly lower than for those mothers not exposed to these adverse contexts, and the differences in parenting scores associated with financial difficulties are smaller than those which are associated with differences in physical and mental health. No significant differences are observed for marital status or housing tenure.

Table 8 Average parenting score at 33 months

		Parenting score		Inter-quartile range		p
		Mean	Median	25th	75th	
Marital status	Married	27.7	28	26	30	0.09
	Single, divorced or separated	27.5	28	26	30	
Social support	High	27.8	28	26	30	<.001
	Low	25.2	26	23	28	
Financial difficulties	None/few	27.8	28	26	30	<.001
	Many	26.7	27	25	29	
Housing tenure	Homeowner	27.7	28	26	30	0.71
	Renting	27.7	28	26	30	
Physical health	Good	27.8	28	26	30	<.001
	Poor	26.0	27	24	29	
Mental health	Good	28.1	29	27	30	<.001
	Poor	25.7	26	23	28	

Between 8 and 33 months parenting scores were classified either as 'increased' (parenting scores were higher or more positive at 33 months), 'stable' (there was no change in parenting between the two time points) or 'decreased' (parenting scores were lower or less positive at 33 months than at 8 months). This classification is sensitive to very small changes (see the section 'Assessing changes in parenting score over time') and it is therefore not surprising that scores remained stable (identical) for only a minority of parents (Figure 4). As expected from the overall change in parenting scores across time the proportion in which scores decreased (46.8 per cent) was greater than that in which scores increased (34.7 per cent).

Figure 4 Changes in parenting between 8 and 33 months

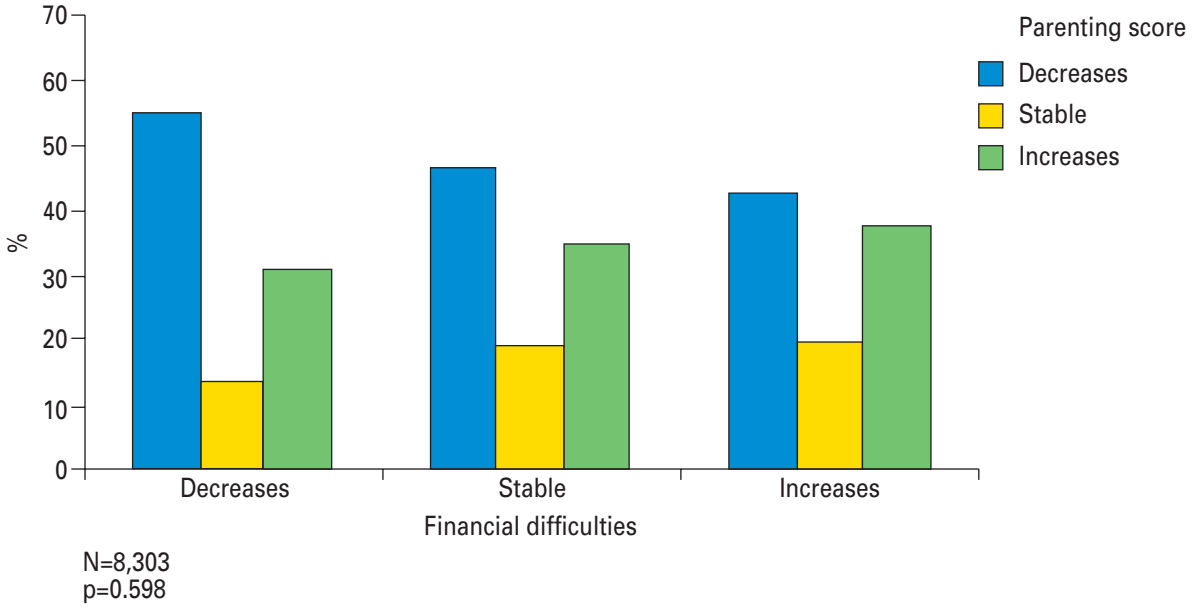


In order to examine changes in parenting as a function of changes in financial difficulties, housing tenure, marital status, social support and physical and mental health, these variables were also classified as having (a) remained stable during the period between 8 and 33 months, (b) deteriorated over time, or (c) improved. At both time points, each variable was split into two groups so that (a) mothers either found it difficult to afford all or most items or they did not; (b) they owned their own homes or they did not; (c) they were married or not; (d) they perceived little or no social support or not; (e) mothers rated themselves as being always or mostly well or not; and (f) mothers scored higher than the threshold for depression on the EPDS or not. By subtracting the classification for these variables at 33 months from that at 8 months, we could determine whether social and health circumstances had changed over time: a score of 0 reflected no changes, –1 indicated that the situation had worsened and 1 that the situation had improved.

Changes in parenting associated with changes in socio-economic factors across time

Figure 5 shows how these changes in parenting score relate to changes in financial circumstances.

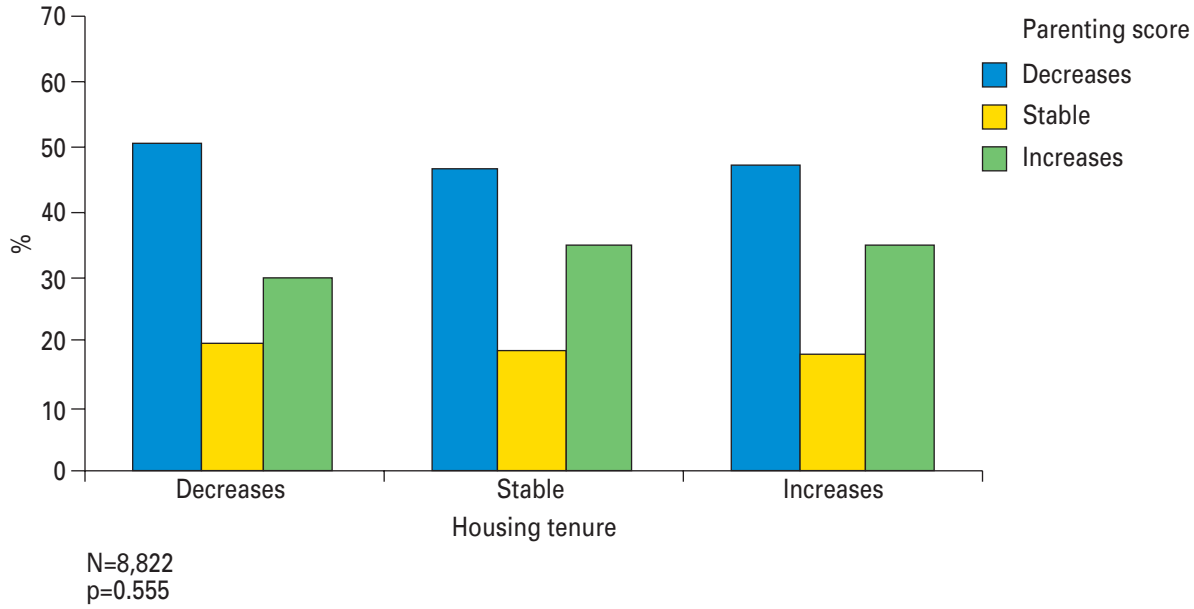
Figure 5 Changes in financial difficulties and associated changes in parenting



Where financial circumstances worsened over time, parenting score decreased for 54.9 per cent of mothers and increased for 31.2 per cent. Where financial difficulties improved (i.e. reduced) over time, parenting score increased for 37.7 per cent of mothers but decreased for 42.7 per cent. Where there was no change in financial context, parenting score decreased among 46.6 per cent of mothers. These results suggest no simple relationship between financial circumstances and parenting, with an overall trend towards lower scores as circumstances deteriorated, but no overall trend to increased scores as circumstances improved. It may be that this is due to the fact that worsening financial circumstances might have an immediate but indirect effect on parenting by, for example, affecting mental health (increasing anxiety or depression about worsening financial resources) whereas the effects of an improving financial situation have a less immediate effect so that the impact on parenting is weaker.

A similar pattern emerged for changes in housing tenure (Figure 6), with the difference that parenting score was no more likely to increase if housing tenure 'improved' than if it remained stable, but there was some evidence of a decrease if housing tenure deteriorated.

Figure 6 Changes in housing tenure and associated changes in parenting



Parenting score was least likely to fall and most likely to increase among families whose marital status was stable (Figure 7). Changes in either direction (separation or remarriage, new partner) increased the chances of a lower score and reduced those of higher parenting scores.

Figure 7 Changes in marital status and associated changes in parenting

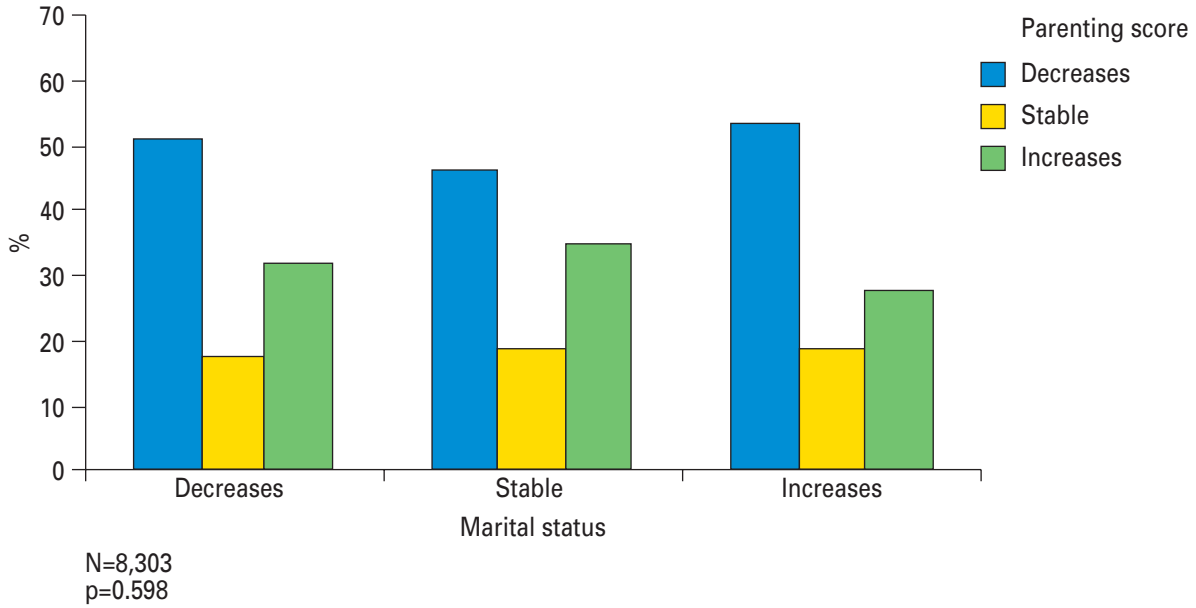
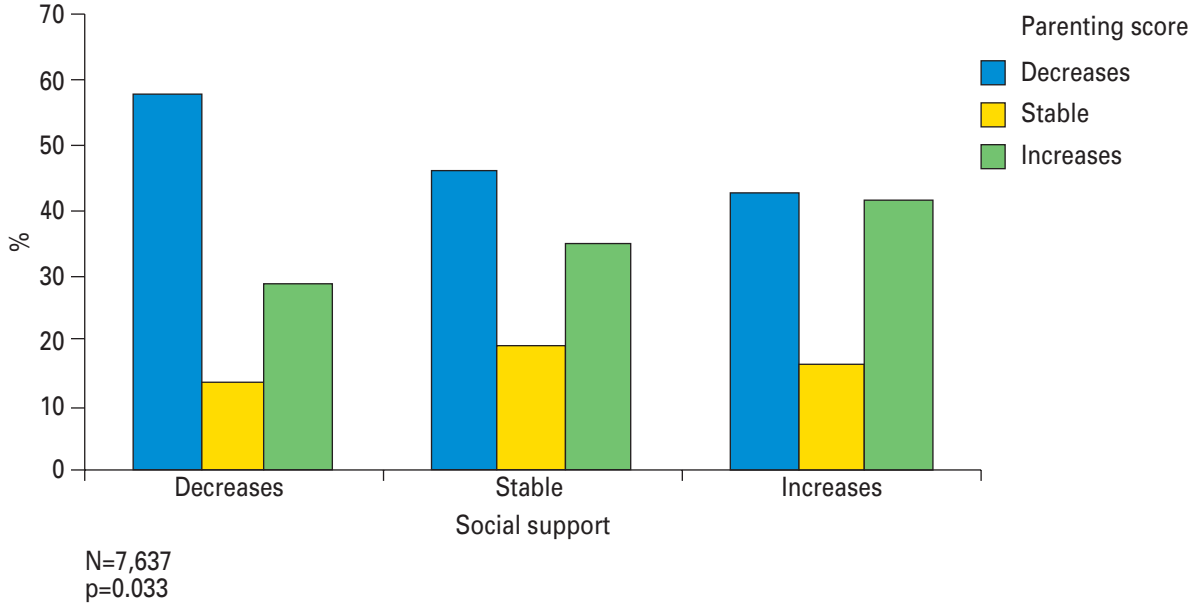


Figure 8 suggests that changes in social support (emotional, financial and practical support from partner, family, friends or the state) had a greater influence on parenting than changes in financial circumstances, housing tenure or marital status. Parenting score was much more likely to fall if social support deteriorated than it was if financial circumstances deteriorated and conversely more likely to increase if social circumstances improved.

Figure 8 Changes in social support and associated changes in parenting



Changes in parenting related to health across time

Figures 9 and 10 suggest that the influence of parental health on parenting was greater still than that of social support. The only situation in which parenting score was more likely to increase than decrease was when maternal health improved. Both physical and mental health had a major influence, but that of mental heath was slightly more marked. In both situations, deterioration in health was associated with a marked changed in parenting score.

Figure 9 Changes in physical health and associated changes in parenting

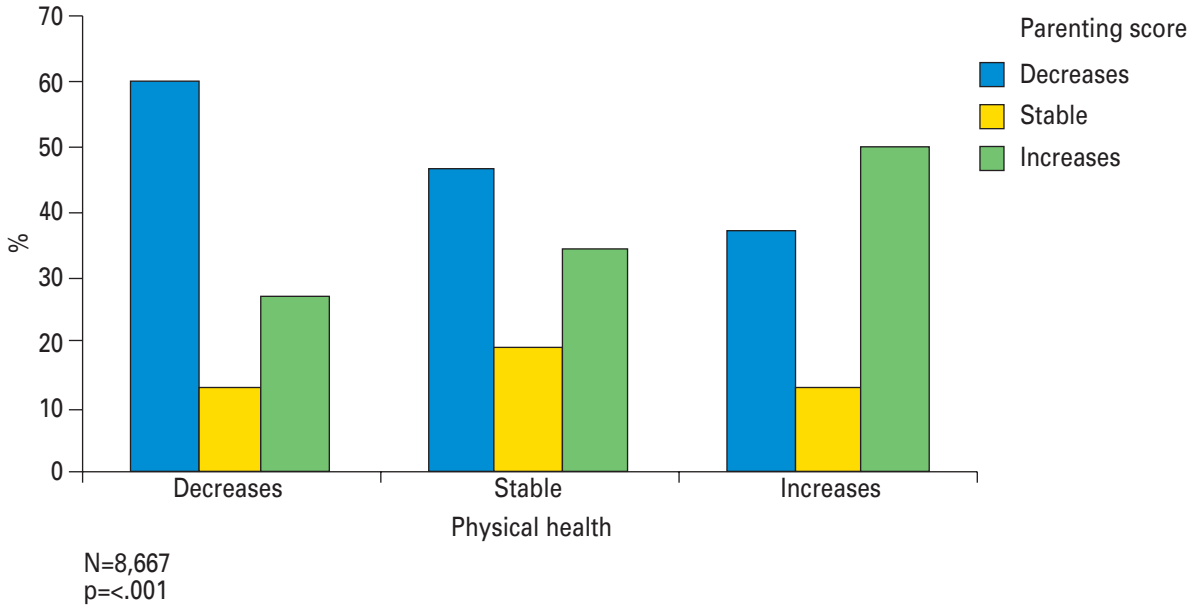
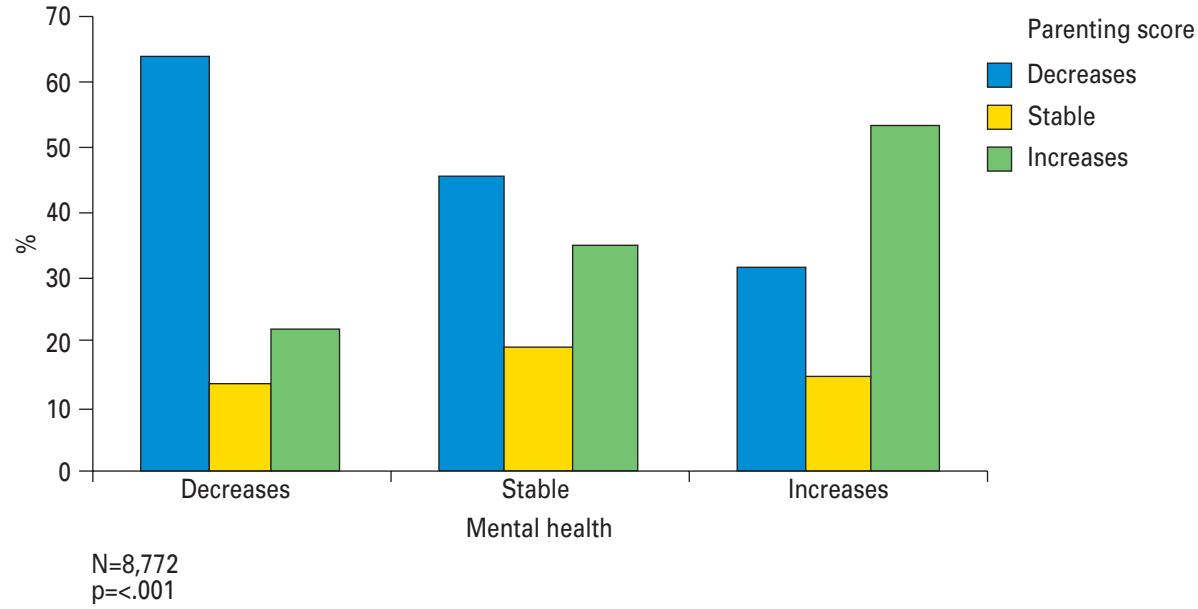


Figure 10 Changes in mental health and associated changes in parenting



In this section, we have highlighted instances where parenting varies as a function of maternal (and sometimes paternal) age, education and ethnic group. We have also shown that changes in parenting occur as a function of changes in social circumstances and health and that, in most instances, parenting scores fall as adversity increases. The strongest effects are seen for the reduced score in parenting associated with deteriorating physical and mental health and the increased parenting score associated with improvements in both these aspects of health. A perceived worsening of social support is associated with lower parenting scores similar in magnitude to those of health but there is no parallel with perceived improvements in social support. While parenting score does fall as a function of a worsening financial situation, the magnitude of effects is considerably smaller than for either health or social support and there is no concomitant effect of improving financial circumstances.

Overall influences on parenting

Deterioration in mental and physical health is very likely to be associated with deterioration in financial circumstances and possibly also with changes in social support and marital status. It is important therefore to assess which of these factors is most important in determining change.

In order to identify the independent influences of each variable, multivariate linear analyses were carried out to assess change in parenting as a function of changes in maternal physical and mental health, financial difficulties and social support. These were examined in relation to individual parenting scores from 8 months to 33 months.[2]

Table 9 shows the extent to which changes in mental and physical health, social support and financial circumstances predicted changes in parenting when the effects of these variables were considered together. The coefficients given in each table indicate the difference in parenting score one would expect compared to mothers whose financial status, health or support remained stable between 8 and 33 months. A negative coefficient means that parenting score had fallen across time whereas a positive coefficient indicates that parenting score had increased. Both improvements and deteriorations in mental health predicted significant changes in parenting (in the direction expected) as did improvements in physical health. Deterioration in financial circumstances predicted lower parenting scores but there was no increase with improvement in financial circumstances. The same was true for social support. The extent of change in parenting was greater for physical and mental health than for changes in financial circumstances.

Table 9 Predictors of change in parenting score at 33 months (unadjusted) (SE)

	Overall parenting score		
	Coeff.	SE	p
Poor mental health at time 2 only (deteriorating)	–.28	.04	<.001
Poor mental health at time 1 only (improving)	.34	.05	<.001
Poor social support at time 2 only (deteriorating)	–16	.08	.05
Poor social support at time 2 only (improving)	.07	.07	.30
Poor physical health at time 2 only (deteriorating)	–.07	.06	.21
Poor physical health at time 1 only (improving)	.21	.05	<.001
Poor financial circumstances at time 2 only (deteriorating)	–.14	.05	.009
Poor financial circumstances at time 2 only (improving)	.02	.05	.62

We have shown in the analyses reported above that maternal age, education and ethnic group are associated with different aspects of parenting. In order to determine whether they should all be entered in the adjusted analysis, univariable analyses were carried out to determine whether changes in each of these immutable factors actually *predicted* changes in parenting or whether the relationship was simply one of association. Both maternal age and education predicted changes in parenting (ethnic group did not and so it was excluded from these final analyses). Parenting at 8 months was also adjusted for as there is a strong correlation between the parenting scores at 8 and at 33 months (Appendix Table 1.1.2). Table 10 shows that adjustment for previous parenting and maternal age and education made very little difference to the results of this multivariable analysis.

Table 10 Predictors of parenting score at 33 months (adjusting for parenting at 8 months and maternal age and education) (SE)

	Overall parenting score		
	Coeff.	SE	p
Poor mental health at time 2 only (deteriorating)	–.28	.04	<.001
Poor mental health at time 1 only (improving)	.34	.05	<.001
Poor social support at time 2 only (deteriorating)	–.14	.09	.09
Poor social support at time 2 only (improving)	.07	.07	.30
Poor physical health at time 2 only (deteriorating)	–.07	.06	.24
Poor physical health at time 1 only (improving)	.22	.05	<.001
Poor financial circumstances at time 2 only (deteriorating)	–.13	.05	.02
Poor financial circumstances at time 2 only (improving)	.03	.05	.57

3 Overview and conclusions

This report contains a review of the research literature relevant to parenting and reports the results of analyses of data from the ALSPAC cohort. Parenting is a lifelong process, the aim of which is to facilitate the development of newborns into healthy, well-adjusted individuals. Research into cultural differences and similarities in parenting indicates that aspects of parenting relevant to all cultures include parental sensitivity to the child's needs, socialisation towards cultural norms and support for the child's need for autonomy across time. The parenting to which a child is exposed may act as a buffer against adversity if it is warm and supportive or, alternatively, it may increase the risk of poor child outcomes if it is hostile or rejecting. An individual's parenting styles and behaviour are influenced by a variety of characteristics including their own experiences of being parented, individual characteristics and characteristics of the child as well as immediate and more distant social and economic influences including the presence or absence of social support, employment demands and cultural norms.

Within the literature, a variety of parenting themes have emerged but those which recur consistently include sensitivity towards the needs of the child, management of the child's behaviour and qualities of the parent–child relationship, including warmth and support, hostility and rejection. This is not to say that debate is not ongoing: one example is the debate about the effects of physical punishment. There is evidence that childhood anti-social behaviour increases in conjunction with increases in physical punishment but another school of thought proposes that, as long as its use is rare and only backs up other types of discipline, the effects of physical punishment may be beneficial. Unfortunately we were unable, in this report, to add to the literature with regard to physical punishment – although we had data about physical punishment from the ALSPAC cohort, we were unable to determine a satisfactory way to code the data with respect to the age of the child (see section on 'Development of an overall measure of parenting').

Much of the literature has focused on the parenting undertaken by mothers but it is important that paternal parenting is also examined: while it is accepted that mothers are likely to exert at least some control over the relationship between father and child, there is evidence that paternal involvement is associated with desirable child outcomes.

In order to examine parenting within a systems-based model (Bronfenbrenner, 1979), we examined parenting within a British-based, longitudinal birth cohort: ALSPAC. Using the literature review as our starting point, we examined parenting within the

context of a variety of factors including maternal age and education, marital status, poverty and ethnic group, both independently and in conjunction with each other. Our aim was to examine the diversity and complexity of parenting and changes in parenting across time.

On the whole, mothers report parenting which is mainly positive: most mothers believe that talking to babies and cuddling them is important, and most report that they enjoy the child, feel fulfilled by it, take pleasure in seeing it develop and feel confident in caring for the child. However, it is also the case that more negative aspects of parenting are also reported quite frequently in this cohort: at least a third of mothers report that, sometimes at least, they dislike the mess surrounding the child, that they have no time for themselves, that they shout at or smack the child when it is having a tantrum or that they send the child to his or her room.

Although there were some aspects of parenting which were affected by factors which are immutable (maternal age, education and ethnic group), these were few and far between. Younger parents were more likely to be ambivalent about the timing of the child's arrival but older mothers were more likely to report that they felt less fulfilled and that they had less time for themselves. Mothers who had spent fewer years in formal education reported that, on the whole, they felt less confident in caring for the child and they were less likely to report that they spent time teaching the child. It is difficult to draw any firm conclusions with respect to the effects of ethnic group on parenting: although the ALSPAC cohort comprises a diversity of ethnic groups, numbers for minority ethnic groups are very small. That said, in these analyses Chinese mothers had lower parenting scores than those from other cultures but, at least in part, this may be due to the small sample size. In general, our investigation into the diversity of parenting concludes that parenting varies little by ethnic group, maternal age or education and that on the whole parenting is warm and supportive in all groups.

The current report also contains an examination of the effects of socio-economic factors on parenting which were highlighted in the literature review. These include financial adversity, housing tenure, social support, marital status and both physical and mental health, and we were able to investigate whether changes in socio-economic context were associated with concurrent changes in parenting. Differences or changes in parenting may be a function of ageing, change in marital satisfaction, changes in a variety of stressors (work, mood, competing demands) or new information about child rearing. In general, within the ALSPAC cohort there was a large amount of variation in parenting across time: parenting remained stable for fewer than one in five families (18.5 per cent). In part, this is likely to be a function of the increasing age of the child: at 8 months of age children are still infants, relatively

immobile, often asleep and still very much dependent upon their carers for all things. By 33 months the child is in a period anecdotally labelled 'the terrible twos' where they are mobile, relatively independent and increasingly concerned with their own autonomy. It may, therefore, not be surprising that parents increasingly lack confidence with the child, perceive a lack of time for self and dislike the mess during this time period. Had measurements been available in the primary school period it is likely that we would have seen scores on these measures increase again.

While financial adversity was associated with parenting, with increased parenting scores evident in better financial circumstances, the differences were small. Most importantly, while deterioration in financial circumstances was independently predictive of a modest reduction in parenting score, improvements were not associated with an increase in parenting score. The same seems to be true of social support.

The factors which had the most influence regarding changes in parenting score were mother's mental and physical health. Deteriorations in health were associated with reduced parenting scores and, in contrast to all other variables, improvements in health predicted increased scores. It is likely that had we been able to include father's health in our analyses it would have had a similar effect, but the lack of available data limited our analyses to mother's health.

One important message to take away from this report is that parenting does appear to take place within a system where both parent and child influence, and are influenced by, each other. When a variety of social and economic factors are examined together for their impact on parenting, we see that several factors (physical and mental health, social support and financial difficulties) have independent and unique effects. This means that while deterioration in one factor may have a limited effect, the effect of all factors deteriorating together is likely to be much greater.

There are some limitations to this study which need to be considered. We were restricted with respect to the items available for investigation because one remit of this report was to examine changes in parenting over time.

While we were able to describe some aspects of parenting by fathers and father figures, these analyses were restricted. The ALSPAC data does not allow the distinction of different partners/husbands from one data sweep to the next and in order to ensure that the same person was the subject at different times we needed to restrict the analysis to stable partners. As the partner parenting variables were gathered at different time points from the mother variables and from the socio-economic and health variables we used, we could not undertake analysis of changes

in paternal parenting. The composite measure of parenting we developed is therefore concerned only with maternal parenting. This is an important gap, but not one which can be addressed with the data we were using.

Finally, the number of families in the cohort in some ethnic groups is quite small owing both to demographics and to differential attrition from the cohort. Overall we were not able to detect any important differences in parenting between different ethnic groups, with the possible exception of Chinese families.

Given the numbers of families affected by changes in parenting as a function of changes in health and socio-economic circumstances, this report concludes that there are large numbers of children being exposed to deteriorations in parenting which might be preventable.

While much of the political focus on parenting has been to try to improve the financial status of families with schemes such as tax credits and the encouragement of mothers back to work, results of the current study indicate that it is inappropriate to expect that moving families out of poverty, while a highly desirable goal from a variety of perspectives, will *of itself* achieve improvements in parenting. The same can probably be concluded about social support for families. On the basis of our findings, we can conclude that social support is protective against deteriorations in parenting but improving social support on its own is unlikely to improve parenting.

In general our findings suggest that a greater benefit will be observed if parenting policy emphasises initiatives which can promote mothers', and possibly fathers', mental and physical health alongside generic measures to improve parenting.

Notes

Chapter 1

1. The asterisk represents a ‘wildcard’ search.

Chapter 2

1. At 33 months, 11.3 per cent of mothers reported that their child never had tantrums.

2. As neither marital status nor housing tenure was associated with the variable measuring change in parenting they were excluded from this multivariable analysis.

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