

The costs of child poverty for individuals and society

A literature review

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Child poverty has serious consequences for individuals and wider social implications. These include losses to the economy through reduced productivity, lower educational attainment and poor health. While there is a growing body of evidence on child poverty, comparatively few studies have attached a financial cost to these consequences.

This report reviews evidence on the impacts of child poverty in industrialised, OECD countries. It explores the short-, medium- and long-term consequences for individuals, families, neighbourhoods, society and the economy in the following areas:

- health: physical and mental health, public health issues;
- education: including low educational attainment and skill levels;
- employment: low status and precarious employment, worklessness and low levels of employability;
- behaviour: inhibiting and anti-social behaviour including crime, smoking, substance misuse and suicide;
- financial: income, assets and material hardship;
- family and personal relationships: including family difficulties, child abuse, local authority care, friendships and social isolation, future relationships and family formation;
- subjective well-being: shame, stigma, lack of autonomy and low self-esteem.

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Executive summary

This report reviews evidence on the impacts of poverty for individuals growing up in industrialised, OECD countries. It uses a conceptual framework to explore how child poverty has short, medium and long term consequences for individuals, families, neighbourhoods and society/the economy. These consequences relate to health, education, employment, behaviour, finance, relationships and subjective well-being.

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Health

Children born into low-income households are more likely to experience health problems from birth and accumulate health risks as they grow older. People in lower socioeconomic groups are also less likely to access healthcare. The relationship between poverty and ill-health is bidirectional: poverty contributes to ill-health and ill-health contributes to poverty.

Managing on a low income has a negative impact on maternal health and health-related behaviours. Infant mortality is higher amongst children born into poverty, who are more likely to be born early and have low birth weight. After birth, poverty is associated with postnatal depression and lower rates of breastfeeding.

Children from low-income households are more likely to experience problems with nutrition, which can have a negative influence on the mental well-being of children and over the longer-term can lead to childhood obesity. Poverty is also associated with anaemia, diabetes, asthma,

cancer, lead-poisoning, neuro-developmental problems and poor dental health in childhood.

Low-income families are more likely to live in poor housing and children have fewer safe places to play. Poor housing is associated with a host of childhood health problems. Many studies connect growing up in low-income households with poor mental health. There is also evidence that poverty impacts on cognitive development.

Short-term health and developmental outcomes have longer-term implications. Those growing up in the poorest households are more likely to suffer poor physical and mental health in adulthood and are at increased risk of severe, long-term and life-limiting illness.

As well as healthcare spending, poor health creates costs for the economy through sickness absence and lower productivity.

Education

A large body of evidence links childhood poverty with poor educational outcomes. Family background is the most important predictor of academic success. Children from low-income households have lower educational aspirations and are more likely to require remedial help or special educational needs assistance than their better-off peers.

Difficulties of access and expense limit participation in pre-school education amongst lower-income families. Young people from low-income households end up leaving school

earlier and are around six times more likely to leave without qualifications than those from higher-income households. Children of non-manual workers are over twice as likely to go to university as those of manual workers. Educational outcomes are mediated by the home environment and parental influence.

Basic skills and formal qualifications are important for entry and progression in the labour market. Leaving education aged 16 into NEET status (not in education, employment or training) has been linked to later criminal activity, early parenthood, long-term unemployment and substance misuse. Moreover, educational disadvantage is likely to be transmitted to the next generation, with the children of low-skilled parents vulnerable to low educational attainment.

A work-force with lower skill levels, lower educational attainment and limited aspirations reduces productivity, economic growth and a country's capacity to compete in a global economy.

Employment

Given current policy priorities, one of the most significant outcomes of child poverty is the negative impact on later employment. The literature shows a strong relationship between growing up in a low-income household and labour market participation and progression in adulthood.

Young people who have grown up in low-income households are more likely than their more affluent peers to be unemployed, work in low or unskilled jobs and be poorly paid in adult life. The relationship between employment and childhood poverty persists even when educational outcomes and background are controlled for.

There is debate as to why worklessness appears to be passed from one generation to the next. Some see the poverty experience at the heart of this cycle, while others propose that negative employment outcomes stem from the model parents set for children.

Having a significant proportion of the population out of work is detrimental to the economy, reducing both productivity and competitiveness. NEET young people are costly in terms of benefits and lost taxes.

Behaviour

There is ongoing debate as to the impact of growing up in poverty on later behaviour. This review does not assume the correctness of one viewpoint over another.

An association between childhood poverty and behavioural outcomes is evident from an early age. Those growing up in low-income households have a greater likelihood of parent-reported behaviour problems than their more affluent counterparts. They are also more likely to be excluded from school. Later outcomes include risk-taking behaviour, aggression, involvement in crime, poor health-related behaviours and suicide.

There remains disagreement over whether crime can be considered a product of childhood poverty. Context may be important in this respect, with US studies more likely to identify a direct relationship and UK research highlighting the complexity of the association. Most children raised in poverty do not become involved in crime, but there are higher victim and fear of crime rates in disadvantaged areas.

The relationship between childhood poverty and other behaviours such as smoking, drinking and drug use is also contested. The relationship between poverty and suicide is more firmly established, being closely associated with the higher incidence of mental health problems amongst those growing up in poverty.

Being involved in criminal activity whilst young has been shown to have a negative impact on later life chances. Furthermore, the children of young offenders are more likely to live in poverty themselves, reinforcing the 'cycle of poverty'. High crime and fear of crime rates also have a negative impact on communities.

The social impacts of crime are substantial and far-reaching. They include considerable financial, emotional and time costs to victims. Economic costs of youth anti-social and criminal behaviour include the youth justice system, pupil referral units and other school-related services.

Finance

Intergenerational transmission of poverty means that a childhood spent in poverty increases the likelihood of being poor in later life. Most people remain in the same quarter of the income distribution as their parents. This effect remains even when other influential factors are accounted for. It is, however, difficult to establish causality in the intergenerational transmission of poverty.

Only a small number of studies have produced estimates of the overall cost of child poverty in OECD countries. Where they have, figures for the UK are around £40 billion a year. From an economic perspective, reducing child poverty is a fiscal investment; producing higher GDP, reducing expenditure on crime and healthcare and lowering the costs borne by victims of crime and those in poor health.

Family and personal relationships

The association between childhood poverty and family relationships is complex, being interpreted in some studies as an outcome and in others as a mediator; good relationships buffering children from the negative impacts of poverty, bad ones reinforcing or even creating negative impacts of their own.

Living on a low income can affect the quality of parent-child relationships, but the relationship between poverty and parenting is often misunderstood. While there is evidence that poverty affects parents' ability to manage stressful events, associations between poverty and physically punitive parenting are still contested. A correlation has been identified between family income and children being removed from their parents' care.

The interaction of the numerous outcomes of poverty outlined here make it difficult to disaggregate their effect on parenting. Evidence about parenting and poverty is, at times, contradictory. What is clear is that parents themselves feel that poverty affects their ability to care for their children.

Forming and maintaining friendships can be difficult for children living in low-income households. Problems with social contact may be reinforced where children live in an area

with few accessible, safe places to meet and inexpensive leisure facilities. Difficulties with peer relationships limit the development of social capital, an important driver of adult social inclusion.

Growing up in poverty is also linked to lone parenthood and adolescent pregnancy. Having a child early in life can have a negative impact on the mother's health and life chances, as well as those of her child.

Poverty can limit a family's ability to become integrated into the local community and form social networks. Limited financial resources and low availability of safe, attractive areas may prevent neighbours meeting and socialising.

It is difficult to place even an approximate figure on what poverty might add to the cost of services for children and their families, but what should be considered in any calculation is the three billion pounds spent by local authorities each year on social services directed at children. Wider social costs associated with lower levels of community cohesion are impossible to quantify at present.

Subjective well-being

Subjective well-being is defined here as self-esteem and life-satisfaction. This has not been subject to the same level of research attention as the other areas discussed.

Poverty is known to affect children's self-confidence and their relationships with other children. Young people living in low-income households report a stigma attached their circumstances, which impacts on school and community involvement. Children growing up in poverty are more likely to suffer from low self-esteem. In the longer-term, longitudinal datasets show a clear association between having been poor in childhood and reporting low levels of satisfaction with adult life.

The stigma identified by individuals can also be an issue for entire neighbourhoods. This is problematic because community relationships have an impact on the quality of people's everyday experiences and extend beyond those living in disadvantaged communities to impact on wider society.

Introduction

There is a vast international literature on the nature and extent of child poverty and a growing body of evidence on the consequences of child poverty, but comparatively few studies have sought to attach a financial cost to these consequences. This synthesis report reviews evidence on the personal, social and economic impacts of poverty for individuals growing up in industrialised, OECD countries. Where estimates of the fiscal costs of child poverty are included in the literature these have been brought forward into the review. However, the estimates are generally (if unavoidably) based on a number of assumptions, and in some cases use statistical estimates that are measures of correlation rather than causality and lack comprehensive controls. They should therefore be treated, as they are generally intended, as guidelines and not definitive results.

Findings from research conducted outside the UK have been included in this synthesis in order to add breadth to the report. It is important to remember, however, that both the extent and nature of poverty differ considerably across OECD states and that policy differences will mediate poverty impacts. This is particularly pertinent for domains such as health, where the UK, unlike many other countries, operates a free at point of use, tax-funded system.

This review began with an initial scoping exercise which involved the compilation of an annotated bibliography; this served as a quality control exercise with only articles and

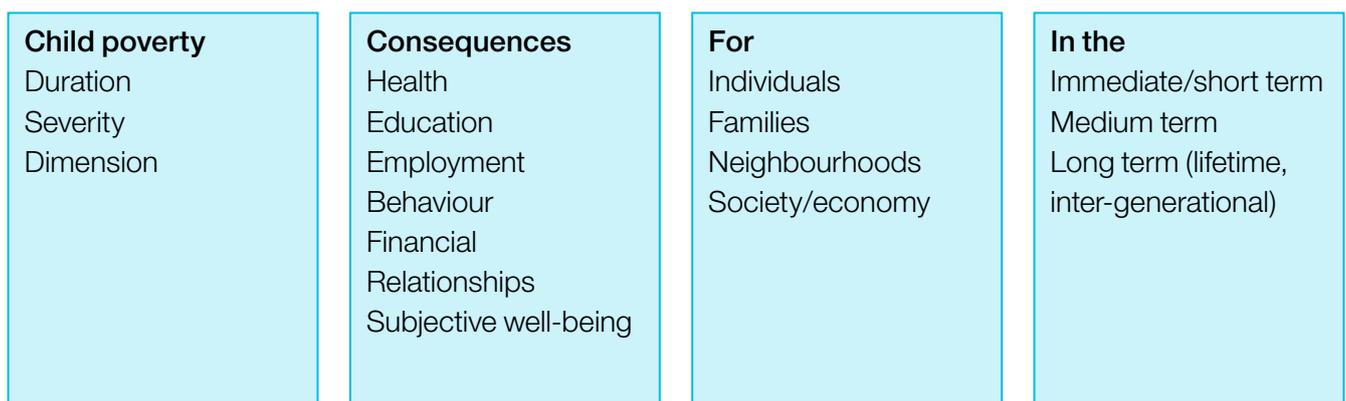
reports deemed to be of good quality being taken forward into the synthesis. Where evidence is mixed or contested, the key debates have been outlined in the review.

Another important aspect of the planning of this synthesis was the construction of a conceptual framework; this was designed to guide the literature search and add structure to the annotated bibliography. While no simple framework can do full justice to the complexity of the consequences of child poverty, the outline presented in Figure 1 offers some conceptual clarity. This framework has been used to organise the literature review.

Thus the consequences of poverty and dimensions of ill-being explored here include:

- health: physical and mental health, public health issues;
- education: including low educational attainment and skill levels;
- employment: low status and precarious employment, worklessness and low levels of employability consequent upon poverty in childhood;
- behaviour: inhibiting and anti-social behaviour including crime, smoking, substance misuse and suicide;
- financial: income, assets and material hardship;

Figure 1 Conceptual framework



- family and personal relationships: including family difficulties, child abuse, local authority care, friendships and social isolation, future relationships and family formation;
- subjective well-being: shame, stigma, lack of autonomy and low self-esteem.

Within these domains, the framework distinguishes the different consequences of child poverty as variously manifested for:

- individuals experiencing poverty as children;
- their family (broadly defined);
- their neighbourhood, conceptualised both as the area in which people live and the people (and families) that live in the area;
- society and/or economy.

The framework also discriminates between consequences apparent in:

- the immediate or short term;
- the medium term, for example, those occurring within a life stage; and
- the longer term, when the focus is on life time and inter-generational outcomes.

A nuanced account of the costs of poverty would also discriminate between poverty of different durations, sequences and severity and also between the different dimensions of poverty including income poverty, material deprivation and psycho-social stress. Unfortunately, comparatively few studies distinguish between different durations, levels or types of poverty but, where they do, this information is included in the synthesis. Thus the paper employs a broad definition of poverty (income, material deprivation and social exclusion), in order to maximise available evidence. Moreover, where low social class is presented in the literature as synonymous with low income, this information has also been included.

The relationship between poverty and health inequality has been clearly established and well documented (Hirsch, 2005; Roberts, 2002). Children born into low-income households are more likely to experience developmental and health problems from birth, and to accumulate health risks as they grow older (Roberts, 2002). Although many researchers have highlighted the links between poverty and poor health (mortality and morbidity), it is important to recognise the bidirectionality of this relationship, as Wagstaff (2002) argues, 'poverty breeds ill-health, ill-health maintains poverty' (Wagstaff 2002, p. 97).

It is also important to be aware of differences in access to health services along socio-economic lines. There is much evidence that, relative to their needs, people in lower socioeconomic groups are less likely to use healthcare than their higher-income counterparts, and that they are more likely to delay seeking treatment (Le Grand in Hirsch, 2006). These differences may impact on children's health even before birth, with antenatal services and maternity care less accessible to women with very low incomes (Bamfield, 2007; Huston, 1991). Inequalities have also been identified in terms of access to mental health services, with children from low-income households in the US facing significant barriers to obtaining help with mental health problems (Gonzalez, 2005).

Individual outcomes

Health during the antenatal period, birth and infancy

The antenatal period is important for determining later life chances, foetal development being of particular significance as a predictor of later health, cognitive development and ability (Bamfield, 2007).¹ Poverty and managing on a low income have a negative impact on maternal health and health-related behaviours (i.e. smoking during pregnancy) and therefore on foetal development (Bamfield, 2007). A study by Kramer *et al.* (2000) demonstrates that women from a manual

background are a third more likely to smoke during pregnancy than those from a non-manual background, with smoking having long been linked to problems during the perinatal period. Furthermore, poverty can result in elevated stress levels and for some expectant mothers contributes to mental health problems, both factors associated with poor pregnancy outcomes (Bamfield, 2007). Maternal stress and anxiety during the antenatal period are connected with foetal growth problems (as a result of lower uterine blood flow) and elevated cortisol levels, a consequence of high stress levels, are associated with higher rates of disease later in a child's life (O'Connor *et al.*, 2002, in Bamfield, 2007) as well as an increased likelihood that children will develop emotional and behavioural problems in early childhood (Hart, 1971, in Bamfield, 2007).

Children born into poverty are more likely to be born early² and have a low birth weight³ (Bradshaw, 2002; Duncan and Brooks-Gunn, 2000; HM Treasury, 2004). In turn, premature and low birth weight babies are at greater risk of encountering problems with psychological and intellectual development, for example: 'one study found that at age three only 12 per cent of premature babies living in high-risk situations (poverty) functioned at the normal cognitive level' (Aber *et al.*, 1997, p. 473). Others (Bradley *et al.*, 1994) demonstrate that low birth weight children growing up in poverty struggle to function within normal health and developmental ranges throughout childhood (Aber *et al.*, 1997).

Infant mortality rates are also comparatively high amongst children born into poverty⁴ (Aber *et al.*, 1997; Duncan and Brooks-Gunn, 2000; HM Treasury, 2004); a gap that appears to be increasing over time (Howard *et al.*, 2001). Again this disparity is strongly associated with the larger proportion of low birth weight infants born to low-income parents. Huston (1991) also identifies a higher incidence of sudden infant death syndrome in low-income households⁵ and the shorter gestation periods seen amongst low-income women as causal factors. These factors are, in turn, connected to:

- low maternal weight gain;
- obstetrical complications;
- infections;
- poor health-related behaviour (i.e. smoking);
- maternal depression; and
- a lack of adequate antenatal care (a product of difficulties with access to timely, good quality antenatal care).

Further problems for infants identified in studies of health inequality are lower rates of breastfeeding and higher rates of postnatal depression amongst low-income mothers. Breastfeeding has long been linked to improved immunity, digestive health and (more recently) better neurological development. However, a number of studies demonstrate that infants born into low-income households are less likely to be breastfed⁶ (Mayhew and Bradshaw, 2005; Nelson, 2000; Prince *et al.*, 2006). The association identified between poverty and postnatal depression⁷ (Mayhew and Bradshaw, 2005), may, in turn, impact on a new mother's relationship with her child and ability to manage the demands of new motherhood (Fabian Society, 2006; Mayhew and Bradshaw, 2005).

Health during childhood

Low socio-economic status is strongly correlated with numerous poor child health outcomes, as well as low maternal rating of child's health (Dowling *et al.*, 2003; HM Treasury 2004; HM Treasury, 2008; Spencer, 2000) and lower self-reporting of very good or good health (HM Treasury, 2004; HM Treasury, 2008). Children living in poverty are more likely to be absent from school due to illness⁸, to be hospitalised⁹, to report a long-standing illness (HM Treasury, 2004; HM Treasury, 2008) and spend more days ill in bed (Dowling *et al.*, 2003).

Children from low-income households are more likely to follow a poor, 'unhealthy' (high sugar, high sodium) diet and experience associated problems with nutrition (Bamfield, 2007; Bradshaw, 2002; Gill and Sharma, 2004; Nelson, 2000). This unhealthy diet has impacts of its own. For example,

poor nutrition can have a negative influence on the mental well-being of children (Gill and Sharma, 2004) and over the longer-term can lead to childhood obesity (Bradshaw, 2002). Indeed the relationship between poverty and childhood obesity is well established; children living in disadvantaged neighbourhoods being significantly more likely to be obese than peers living in more affluent areas. The results of one study show that at age 10/11 obesity is 10 percentage points higher in the most deprived local authorities than in the least (HM Treasury, 2008). Obesity is a particular problem during childhood as it often persists into adulthood and increases the likelihood of future health problems (see 'long-term impacts').

Connections have also been identified between poverty and other childhood health conditions: anaemia; insulin-dependent diabetes (Bradshaw, 2002); asthma (Aber *et al.*, 1997); cancer; lead-poisoning¹⁰ (Duncan and Brooks-Gunn, 2000) and neuro-developmental problems (Singer, 2003). Poor dental health is also more prevalent amongst children in low-income groups (Bradshaw, 2002; Hirsch, 2006). The 2003 Survey of Children's Dental Health showed that: 'children in deprived schools have about 50 per cent more tooth decay than children in non-deprived schools' (Hirsch, 2006, p.14).

Like infant mortality, the child mortality rate is higher amongst children living in poverty. Poor children have a higher rate of accidents and accidental death¹¹ (Bradshaw, 2000; Bradshaw, 2001; Bradshaw, 2002; Fabian Society, 2006; HM Treasury, 2008; London Child Poverty Commission, 2008) and in US-based studies have been shown to be at greater risk of physical abuse or neglect from family members (Aber *et al.*, 1997; Huston, 2001) (discussed in more detail in the 'relationships' section).

The impact of poor housing conditions on health

Part of the reason accidents are higher among children from low-income families is that they are more likely to live in poor housing and have fewer safe places to play (HM Treasury, 2004; HM Treasury, 2008). However, accidents are not the only negative outcome associated with deprived housing and overcrowding (HM Treasury,

2004; HM Treasury, 2008); poor housing is also connected to a whole host of childhood health problems: diminished resistance to respiratory infection; asthma (Bamfield, 2007; TUC, 2007); hypothermia (HM Treasury, 2004; HM Treasury, 2008); developmental delay; skin conditions; diarrhoea and vomiting; immune system problems; depression and stress (TUC, 2007).

Overcrowding and living in a noisy environment have been associated with poor sleep patterns (Fabian Society, 2006). Moreover, children living in disadvantaged communities are more likely to be exposed to environmental hazards, such as crime, violence and drug misuse; demonstrated to have an adverse impact on child development (Aber *et al.*, 1997). Disadvantaged communities are more likely to lack safe places for children to play outdoors, thus promoting inactivity and adding to the obesity problem, as well as reducing the opportunity to build peer relationships (see 'subjective well-being'). Homelessness, frequent moves and poor housing also contribute to poor mental health (Costello *et al.*, 2001).

Mental health, cognitive and emotional development

A large number of studies connect growing up in a low-income household to poor mental health (Bradshaw, 2001; Costello *et al.*, 2001; DCSF, 2007; Fabian Society, 2006; HM Treasury, 2008; Huston, 1991; Mayer, 2002). One such study demonstrates that children living in low-income households are nearly three times as likely to suffer mental health problems than their more affluent peers (Meltzer *et al.*, 2000). Children's mental health may also be put at risk by more punitive/physically aggressive parenting (also related to the poverty experience) (Aber *et al.*, 1997; Costello *et al.*, 2001; McLloyd, 1998).

There is also definitive evidence that poverty impacts on children's cognitive development (Aber *et al.*, 1997; Danziger and Danziger, 1995). Associations have been identified between a child's IQ and the poverty experience (see Aber *et al.*, 1997 and Potter, 2007) with low birth weight seemingly mediating this relationship (HM Treasury, 2008). Likewise, Potter (2007) highlights a connection between disadvantage and both cognitive and language delay (this in turn is connected to literacy)

(also discussed in Flores, 2004). Furthermore, there is evidence that this impact increases with the duration of the poverty experience. McLloyd (1998), for example, finds that the effect of poverty and economic stress on socio-emotional problems is heightened in cases of long-term and severe poverty. Brooks-Gunn and Duncan (1997) also report that, 'the effects of long-term poverty on measures of children's cognitive ability were significantly greater than the effects of short-term poverty' (Corcoran and Chaudry 1997, p. 61).

Long-term impacts on health

Many of the short-term health and developmental outcomes discussed above have longer-term implications. For example, low birth weight babies often experience ongoing health problems, and may be more vulnerable to cardio-vascular (Osmond, Barker and Winter, 1993) and lung disease (Wadsworth and Kuh, 1997). Slower cognitive and language development have repercussions for a child's educational experience and attainment and thus ultimately employment opportunities and labour market progression (HM Treasury, 2008). Health-related behaviours such as smoking (Bradshaw, 2002), drinking (HM Treasury, 2008; Singer, 2003) and drug use are associated with growing up in a low-income household, and may have serious consequences later in life. It has been estimated that the differences in the incidence of cancer and heart disease along socio-economic boundaries would be reduced by 50 per cent 'if smoking rates among social class V were the same as those in social class I' (HM Treasury, 2008, p.28).

Lung disease in adulthood may also be the result of prolonged exposure to air pollution and cigarette smoke, as well as recurrent respiratory infections during childhood (Strachan, 2007). Childhood obesity has a number of long-term health implications with high blood pressure, sleep apnoea and type II diabetes all associated with having been very overweight as a child (BBC, 2004).

Thus poverty creates a '*long shadow forward*', those growing up in the poorest households being more likely to suffer poor physical and mental health at age 33 (Sigle-Rushton, 2004 in Bradshaw, 2004) and being at increased risk of severe, long-term and life-limiting illness (Dowling

et al., 2003; Power *et al.*, 2000). Furthermore there is evidence of a cross-generational link, with the children of parents who had themselves grown up in poverty demonstrating lower early-age cognitive abilities (Vleminckx and Smeeding, 2003).

Costs for society and the economy

The negative impact growing up in poverty has on health (more hospital admissions, low birth weight babies, higher accident rate and higher incidence of chronic conditions) has clear implications for healthcare spending, thus public finances and the economy as a whole. Some studies offer estimates of this fiscal impact. For example, Holzer and colleagues (2007) include health in their estimate of the fiscal cost of child poverty to the USA and establish that increased health expenditure and reduced value of health¹² amounts to more than \$150 billion or 1.2 per cent of GDP each year. In the UK, Donald Hirsch (2006b) estimates additional primary healthcare expenditure that occurs as a direct result of child poverty to be approximately £500 million¹³. Hirsch (2006b) also argues that rather than lower levels of access leading to reductions in spending, delay seeking medical help has a compounding effect on already poor health, ultimately leading to higher service costs.

Poor health also has costs for the economy as a result of sickness absence and lower productivity (HM Treasury, 2008). Additionally it appears these costs may be rising, for example: 'it is estimated that obese and overweight individuals currently cost the NHS £4.2 billion, and that this will double by 2050' (HM Treasury, 2008, pp. 28–9).

Alongside these estimates there has also been some investigation of what the eradication of child poverty would mean for the health of those growing up in poverty. A report by the Joseph Rowntree Foundation estimated that 'some 1,400 lives would be saved per year among those under 15 if child poverty was eradicated' (Mitchell *et al.* 2000, p. 1).

A large body of evidence links child poverty with poor educational outcomes (Ansalone, 2001; Blanden and Gregg, 2004; HM Treasury, 2008). This relationship is, in part, a result of the developmental and cognitive difficulties that growing up in poverty creates for low-income children discussed in the previous section (Harker, 2006 in HM Treasury, 2008). However, other factors, such as limited access to good quality pre-school education as well as poor schooling in disadvantaged areas also have an important role to play. The following section provides a synthesis of what is known about the relationship between poverty and education, exploring children's school experience, academic achievement and the social and economic costs of negative educational impacts for the UK.

Individual outcomes

The educational experience and attainment

Family background has consistently been shown to be the most important predictor of later academic success (Ansalone, 2001). Differences in educational outcomes by income and background are apparent from a young age;¹⁴ these inequalities start early and get wider (HM Treasury, 2008; TUC, 2007):

Studies that assess children's ability over time show that those children who scored highly on tests aged 22 months, but were from low socio-economic groups, were overtaken by children from high socio-economic groups in tests when they reached primary school.

(HM Treasury, 2008, p.26)

Children from low-income households both expect to receive lower quality schooling and anticipate worse educational outcomes (Horgan, 2007). Their aspirations for educational achievement appear to be influenced by the poverty experience (Attree, 2006). Many children living in low-income households miss out on

opportunities (both educational and social) because their parents are unable to meet the costs of trips, uniforms, musical instruments and after-school clubs (Horgan, 2007). Students growing up in low-income households have also been shown to be more likely to require remedial help or special educational needs assistance than their better-off peers (Hirsch, 2005).

Children from lower-income families spend shorter periods of time in pre-school education (Prentice, 2007), partly owing to difficulties of access and partly to expense. These lower participation rates have a knock-on effect on later academic attainment (Prentice, 2007). Children attending disadvantaged schools (those where 35 per cent or more pupils are entitled to free school meals) are less than half as likely as those attending more affluent schools to reach expected literacy standards at age 11 (Palmer *et al.*, 2003 in Hirsch, 2005).

Differences identified at primary level persist into adolescence: 'only 35.5 per cent of children eligible for Free School Meals achieve five good GCSEs compared to 62.8 per cent of other children' (HM Treasury, 2008, p. 26). Young people from low-income households leave school earlier, and are approximately six times more likely to leave without qualifications than those from higher-income households (twelve per cent and two per cent respectively) (Bynner *et al.*, 2002). These differences are also reflected in post-16 education participation rates, children of non-manual workers being over two and a half times more likely to go to university than children of manual workers (Hirsch, 2007). This naturally translates into lower levels of degree attainment; young people from low-income households are approximately three times less likely to gain a degree (or other degree-level qualification) and have lower levels of qualifications as young adults (Bynner *et al.*, 2002).

There is some evidence that chronic (severe, long-term) poverty has a more pronounced impact than less severe, short-term experiences on a number of education-related outcomes including maths and reading achievement, vocabulary and

verbal memory (Danziger and Danziger, 1995). Studies of the relationship between poverty and education also demonstrate that children feel poverty has an effect on school life socially and academically, limiting their involvement in school activities and the local community (Fortier, 2006).

The impact of the home and family on education

Educational development and attainment are mediated by the home environment and parental interest in education (Mayer, 1997; Duncan and Brooks-Gunn, 2000), the second of these factors proving a powerful influence on children's later educational success (Blanden, 2006). When household finances are limited, parents have greater difficulty providing their children with an intellectually stimulating environment and educational toys and books (Aber *et al.*, 1997; HM Treasury, 2008), and are less able to meet the expense of good quality day-care or preschool education (Prentice, 2007). Children from low-income households, who more frequently live in overcrowded housing than their higher-income peers, are less likely to have somewhere quiet and comfortable to study (HM Treasury, 2008).

Long-term impacts (education and opportunity)

Basic skills and formal qualifications are important for entry and progression in the labour market, with low skill and education levels being strongly associated with worklessness: 'half of those with no qualifications are in employment, compared to 90 per cent of those with a degree' (HM Treasury, 2008, p. 20), and also with low pay¹⁵. Non-cognitive (social and emotional) skills, important for later employment and earnings (HM Treasury, 2008), have been shown to develop less effectively in individuals growing up in poverty. Job stability and progression are also affected by poor skills, impacting on a person's earnings capacity, in-work training being heavily directed towards higher-skilled employees. Low-skilled workers are five times less likely to receive in-work training than their highly-skilled counterparts (HM Treasury, 2008).

Leaving education aged 16 into NEET status (not in education, employment or training) has been linked to later criminal activity, early parenthood,

long-term unemployment and substance misuse (TUC, 2007). Moreover, educational disadvantage is likely to be transmitted to the next generation, with the children of low-skilled parents also vulnerable to low educational attainment.

Costs for society and the economy

A work-force with lower skill levels, lower educational attainment and limited aspirations reduces productivity, economic growth and a country's capacity to compete in a global economy (HM Treasury, 2008). A skilled workforce produces more new ideas, technologies and innovations, increasingly important in a global market (HM Treasury, 2008). At the same time, expanding competition and technological advances are increasing the demand for higher skilled employees (HM Treasury, 2008), leaving those with few qualifications or skills with reduced employment opportunities.

Low levels of participation in post-16 education coupled with low employment rates at ages 16–18 also generate costs for the public purse (HM Treasury, 2008). Additional lifetime costs of NEET youth are estimated to be in the region of £15 billion (£7 billion in resource costs and £8.1 billion in public finance expenses). These costs include educational underachievement, unemployment, crime, health and substance misuse (DfES, 2002). Other costs within the education domain attributable to poverty include spending on children with special educational needs (social, emotional and behavioural difficulties): an estimated £3.6 billion a year (Hirsch, 2006a).

Perhaps one of the most significant outcomes of childhood poverty, particularly given current policy priorities, is the negative impact on later employment prospects. There is a considerable and robust literature which explores the strong relationship between growing up in a low-income (and/or workless) household and labour market participation and progression in adulthood. This literature forms the basis of the following section.

Individual impacts

Young people who have grown up in low-income households are more likely than their more affluent peers to be unemployed¹⁶, working in low or unskilled jobs and to be poorly paid in adult life (Brooks-Gunn and Duncan, 1997; Bynner *et al.*, 2002; Dowling *et al.*, 2003; Fabian Society, 2006; HM Treasury, 2008; Hobcraft, 1998; TUC, 2007). The narrowing of different routes into the labour market (specifically the focus on academic qualifications to the detriment of youth training schemes) has had a negative impact on opportunities for poorly-qualified low-income youth (Bynner *et al.*, 2002). However, the relationship between employment and childhood poverty persists even when educational outcomes and background are controlled for (Bynner *et al.*, 2002; Gregg, Harkness and Machin, 1999). Research by Bynner *et al.* (2002).¹⁷ This demonstrates that the 'employment penalty' (greater likelihood of unemployment for those growing up in a low-income household) has become more prominent over time. The same study also identified an 'earnings penalty', which could not be accounted for by differences in educational attainment for young people born in 1970.

Alongside this relationship is a generational one, worklessness seemingly being reproduced from one generation to the next: 'most young people from families classified as 'no work/unclassified' are not in education, employment or training when they are 16' (TUC, 2007, p. 5). The cause of this intergenerational reproduction is widely

debated. Whilst some see the poverty experience at the heart of this cycle, others (primarily those working in the US) adopt a 'role model' perspective, proposing that negative employment outcomes stem from the model parents are setting for their children: 'communicating [un]favourable cultural norms' (Mayer, 1997; Bradbury, 2003). Mayer (1997) for example, argues that exposure to the behaviour of parents who lack the desired qualities and skills necessary for active involvement in the labour market creates children who are predisposed to worklessness.

Costs for society and the economy

Unemployment is inefficient; to have a significant proportion of the population out of work is detrimental to the country's economy, reducing both productivity and competitiveness (HM Treasury, 2008; Prince's Trust, 2007). Moreover, young people who are not in employment or education (NEET) are costly to the economy in the form of worklessness benefit expenditure (also see 'Education'). UK-based research (Hirsch, 2006a) highlights the knock-on effects of lost taxes and additional benefit payments for those growing up in poverty and suffering the corresponding employment disadvantage:

The fiscal costs of labour market outcomes for those who are not in education, employment or training aged 16–18 are estimated at above £10 billion over the lifetime of a two-year cohort. (Hirsch, 2006a, p. 24).

Other UK-based research estimates the cost of unemployment at upwards of £90 million a week (Prince's Trust). Whilst a study conducted in the US (Holzer *et al.*, 2007) estimates lost productivity and reduced economic output (as a direct result of child poverty) at 1.3 per cent GDP, or approximately \$170 billion per year.

The following section focuses on the relationship between childhood poverty and behavioural outcomes, paying particular attention to participation in (youth) crime and health-related behaviours. Whilst this is an area where much has been written, no doubt as a result of its policy significance and high social costs associated with behaviours (particularly crime), there is ongoing debate as to the 'true' impact of growing up in poverty on later behaviour. Although these debates are synthesised below, this review does not assume the correctness of one viewpoint over another.

Individual outcomes

There is a large body of literature exploring the associations between childhood poverty and a number of negative behavioural outcomes. These outcomes affect individuals at various life stages, pre-school to adulthood (as well as inter-generationally).

Problems have been identified in very young (pre-school) children¹⁸, those growing up in low-income households having a considerably greater likelihood of parent-reported behaviour problems than their more affluent counterparts (Duncan and Brooks-Gunn, 2000). Behavioural difficulties are also more likely to occur in school-age children living in poverty (Danziger and Danziger, 1995; Singer, 2003), with these children being of greater likelihood of being excluded from school (Bradshaw, 2002). Risk-taking behaviour is also higher amongst children growing up in a poor household (London Child Poverty Commission, 2008), as is aggressive behaviour, particularly amongst girls (Chase-Lansdale, Kiernan and Friedman, 2004). Later (adolescent/adult) outcomes include involvement in crime (Brooks-Gunn and Duncan, 1997), health-related behaviours and suicide (Exeter and Boyle, 2007).

There is, however, much debate over whether (youth) crime can be considered a product of childhood poverty with authors such as Bradshaw finding no causal association between

the two factors¹⁹ and others, Brook-Gunn and Duncan (1997) for example, identifying a strong relationship.²⁰ Here it appears that context may be important, with US-based studies being more likely to identify a direct relationship between poverty and crime and UK-based research highlighting the complexity of the association.

Poverty can lead to an increased risk of being a perpetrator of crime and antisocial behaviour. However, it is not a direct link; other factors associated with being a perpetrator, such as parental depression and family conflict, can mediate the effects. (HM Treasury, 2008, p. 29)

Whilst the 'causality' debate is ongoing, it is important to recognise that most children raised in poverty do not become involved in crime (HM Treasury, 2008). However, there are certainly higher victim²¹ and fear of crime rates among those living in disadvantaged areas. The perpetrators of crime have also been shown to be more likely to be the victims of crime (HM Treasury, 2004, HM Treasury, 2008).

Other behavioural impacts have also been associated with the experience of childhood poverty, for example, smoking, drinking and drug use (Hirsch, 2006b; Singer, 2003) (see 'Health'). Again this relationship is contested, with Bradshaw (2002) arguing that 'alcohol consumption... and use of drugs are not associated with poverty' (p. 136). The relationship between poverty and suicide, however, is not subject to the same debate (Bradshaw, 2002; Bradshaw, 2001; Bradshaw, 2000; Exeter and Boyle, 2007) and is closely associated with the higher incidence of mental health problems amongst those growing up in poverty (see 'Health' for a discussion of this relationship).

Long-term impacts of involvement in crime

Being involved in criminal activity whilst young has been shown to have a negative impact on later life chances. Young offenders are less likely to achieve educationally, their employment

prospects are lower and young women more likely to have a teenage birth (all factors connected with child poverty, thus involvement in crime can produce a cumulative effect) (The Prince's Trust, 2007). Furthermore, the children of young offenders are more likely to live in poverty themselves, reinforcing the 'cycle of poverty' (HM Treasury, 2008; The Prince's Trust, 2007).

Community outcomes

Residents of disadvantaged communities are both more likely to be exposed to crime and to be a victim of it. In 2006–07 the percentage of adults who had witnessed a crime was 9 per cent higher (29 per cent) among those living in disadvantaged neighbourhoods than their counterparts living in less-disadvantaged areas (HM Treasury, 2008). High crime and fear of crime rates have a negative impact on residents' feelings about the area they live, reduce trust, and limit community activity (Brooks-Gunn *et al.*, 1997). Additionally, children who are exposed to crime are more likely to experience emotional and behavioural difficulties as a direct result of this exposure (HM Treasury, 2008).

Costs for society and the economy

The social impacts of crime are substantial and far-reaching. Victims face considerable costs, their property having been stolen, destroyed or damaged; time costs are incurred in dealing with its practical, physical and emotional impacts:

In addition, protecting against crime can incur costs such as defensive expenditure or measures to reduce the consequences of being a victim, such as insurance. (HM Treasury, 2008, pp. 29–30)

The direct financial costs of youth anti-social and criminal behaviour include: the youth justice system, with those convicted and sentenced costing between approximately £6,000 (non-custodial) and £21,000 (custodial) for a six month sentence²²; pupil referral units and other school-related services, costing an average

of £10,000 per student per year (three times the cost of educating an average student) and substance misuse services (Hirsch, 2006b).

The National Treatment Outcome Research Study has produced estimates that among a group of 500 people being treated for drug misuse over a four-year period, treatment costs an average of about £15,000 each. By far the biggest component of the estimated economic effect of this treatment was the saving of £54,000 per participant in reduced crime, including the averted costs to victims. (Hirsch, 2006b, p. 16)

Other estimates of the costs of crime to the economy have also been proposed. In Britain, the Prince's Trust (2007) approximate these costs²³ (focusing specifically on youth crime) at one billion pounds each year. In the US, Holzer and his colleagues (2007) estimate the additional costs of crime created by child poverty²⁴ to be in the region of \$170 billion per year or 1.3 per cent GDP.

The following section is concerned with the intergenerational transmission of poverty; the likelihood that the children of poor parents will themselves grow up to be poor adults, irrespective of other factors such as educational attainment. Although there has been considerable research interest in this area, many studies have been conducted using US data, which may not be applicable in the UK, thus UK studies have been prioritised.

The second subsection, 'Costs for society and the economy' moves away from this focus on the intergenerational transmission of poverty, the impacts of which are primarily individual (although undoubtedly impact on the productivity and economic well-being of the country as a whole), to focus on the overall cost of childhood poverty.

Individual outcomes

Long-term impacts: the intergenerational transmission of poverty

The impact of a childhood spent in poverty, such as the detrimental effect on health and educational attainment, increases the likelihood that, like their parents, children will face poverty and material deprivation later in life (HM Treasury, 2008). Indeed 'most people remain in the same quarter of the income distribution as their parents' (CPAG, 2002, p. 18). Men in manual occupations are significantly less likely to move up the 'occupational ladder' than their non-manual counterparts (Such and Walker, 2002). Childhood poverty is also related to low earnings in adulthood (see 'Employment'): 'men and women with at least one poverty indicator during childhood are more likely to have low earnings at age 30 than their counterparts with less evidence of child poverty (odds 1.48:1 for men and 1.41:1 for women)' (Sigle-Rushton, 2004, p. 38). Earnings and income deficits appear to increase with the duration of the poverty experience (Brooks-Gunn and Duncan, 1997).

Living in a financially constrained environment as a child has been shown to lower the likelihood

of financial success in adulthood (Vleminckx and Smeeding, 2003). This relationship remains even when other potentially influential factors are accounted for (Jenkins and Siedler, 2007). Causality, however, is far more difficult to establish, with some studies indicating generational determinism and others finding no causal link (Jenkins and Siedler, 2007). A review by Such and Walker (2002) also highlights difficulties encountered unpacking the processes that underlie the intergeneration transmission of poverty, concluding that although: 'repeated patterns of deprivation are found in successive generations', this does not occur 'to the extent that causal observation might suggest' (p. 190).

A relationship has also been identified between childhood poverty and living in social housing as an adult, with studies by Hobcraft and Kiernan (2001) and Sigle-Rushton (2004) both demonstrating a strong link between these two factors:

Relative to their counterparts with less evidence of poverty, women with at least one poverty indicator have an odds ratio of 1.50:1. For men, the odds ratio associated with at least one low household income observation during childhood is 2.02:1. (Sigle-Rushton, 2004, p. 47)

Costs for society and the economy

The estimates of the cost of child poverty have been discussed by domain in the sections above. Here they are brought together as a total cost for the economy. It should be remembered that individual estimates vary according to their source (and, of course, the country under discussion). It is also important to be aware that these estimates are subject to various assumptions and may be based on impact estimates that do not take full account of all possible explanatory variables.

Only a very small number of studies have produced estimates of the overall cost of child poverty in OECD countries. The TUC (2007) produced one such figure for the UK, estimating

that the impacts of childhood poverty cost the country in the region of £40 billion a year (£640 per capita, or more than £2,500 a year for a family of four). This estimate includes £13 billion for reduced productivity and economic output, £13 billion for the higher costs of crime and £12 billion for the costs of poorer health (TUC, 2007). Hirsch (2008) estimates the extra cost of services associated with child poverty in Scotland to be (very broadly) in the range £0.5–0.75 billion:

The overall cost of NEETs could add up to roughly a further £1bn a year, although not all of this phenomenon can be attributed to child poverty. Conversely, to reduce child poverty using income transfers would in the first instance cost roughly £4000 to £5000 per child – the equivalent of £1 billion for all Scottish children in poverty. (Hirsch, 2008, p. 1)

Holzer and colleagues (2007) estimate the cost of child poverty to the USA to be in the region of \$500 billion a year or 4 per cent of GDP. This estimate includes: reduced productivity and economic output amounting to 1.3 per cent GDP; raised costs of crime of 1.3 per cent GDP and raised health expenditure and reduced value of health of 1.2 per cent GDP. As Holzer asserts, when viewed from an economic perspective, expenditures targeted at reducing child poverty can be viewed as a fiscal investment, producing returns for society 'in the form of higher real gross domestic product (GDP), reduced expenditures on crime or health care problems, reduced costs borne by crime victims or those in poor health, and improvements in everyone's quality of life' (Holzer *et al.*, 2007).

Family and personal relationships

The association between childhood poverty and family relationships is complex, being interpreted in some studies as an outcome and in others as a mediator; good relationships buffering children from the negative impacts of poverty, bad ones reinforcing or even creating negative impacts of their own. Both these perspectives are included in this section, which includes a synthesis of the literature concerned with children's relationships outside their own family as well as in adult life.

Individual and family outcomes

Living on a low income makes good family functioning more difficult and can affect the quality of parent-child relationships (Barnardo's, 2004; Fabian Society, 2006; Hirsch, 2005; Russell *et al.*, 2008). Although much has been written on the relationship between poverty and stress and mental health as well as the impact of these problems on parenting (Aber *et al.*, 1997; Duncan and Brooks-Gunn, 2000; Fabian Society, 2006; Russell *et al.*, 2008), the connection between poverty and parenting is complex and often misunderstood (Katz *et al.*, 2007).

Whilst there is consistent evidence that poverty can impact on parents' ability to manage stressful events (Fabian Society, 2006), more contested associations have been made between poverty and physically punitive parenting practices (see Aber *et al.*, 1997; Costello *et al.*, 2001; Mayer, 2002; McLloyd, 1998) and higher rates of child abuse and neglect²⁵ (Aber *et al.*, 1997; Besharov and Laumann, 1997; Bradshaw, 2001; Bradshaw, 2000; Duncan and Brooks-Gunn, 2000; Huston, 1991; McGuinness and Schneider, 2007). Much of this literature relates to the US context (Bradshaw being an important exception).

Research results suggest that owing to the chronic stress of poverty, parents are more likely to display punitive behaviors such as shouting,

*yelling, and slapping, and less likely to display love and warmth through cuddling and hugging. This is especially true when poor parents themselves feel they receive little social support. (Aber *et al.*, 1997, p. 476)*

There has also been considerable research interest in the relationship between poverty and contact with child protection services and the placement of children away from their parents (Barth *et al.*, 2006; Besharov and Laumann, 1997; McGuinness and Schneider, 2007; Moraes *et al.*, 2006). A correlation has been identified between children being removed from their parents' care and the family's income (Barth *et al.*, 2006), those living in 'unsafe' housing in urban areas (Moraes *et al.*, 2006) and the very young being the most at risk of being taken into care (Barth *et al.*, 2006).

Mayer (1997) argues that parenting and parental characteristics are a greater influence on later child outcomes than the poverty experience, placing considerable emphasis on the importance of parents as role models. Brooks-Gunn and Duncan (1997) highlight the importance of parenting and the home environment for mediating the effects of poverty on children growing up in the US. However, comparatively little is known about the relationship between parenting and poverty in the UK and despite the message of some of the US-based research there is considerable debate as to the extent and direction of the effect of parenting in the child poverty-outcomes relationship (Katz *et al.*, 2007).

Thus evidence about parenting in poverty is complex, and at times, contradictory. It is unclear to what degree parenting difficulties are a consequence of poverty and/or a contributory factor in children's poorer outcomes and it is difficult to know how to separate them. As Katz *et al.* (2007) explain, parents living in poverty are more likely to suffer from:

Low levels of education and few qualifications, lack of access to jobs and services, isolation, mental and physical ill health and domestic violence. These factors may act independently of each other but are also likely to interact, so that disaggregating their effect on parenting – and on outcomes for children – is extremely challenging. (Katz et al., 2007, p. 1).

What is clear, however, is that parents themselves feel that poverty affects their ability to care for their children:

Parents uniformly identified poverty as the primary barrier to their capacity to provide adequate care for their children... Parents accepted personal responsibility for their economic and parental failings, equating no income with bad parenting. Depression and despair associated with poverty were acknowledged to impair parenting and increase self-doubt about parenting capacity. (Russell, 2008, p. 83)

Individual outcomes

Personal relationships

Forming friendships can prove more difficult for children living in low-income households; partly as a result of the stigma they feel stems from their income status (HM Treasury, 2008). Likewise, maintaining friendships can prove challenging because limited family resources mean that it is more difficult to entertain children's peers in the family home, limiting opportunities for social contact (Barnardo's, 2004). Moreover, problems with social contact may be reinforced if the child lives in an area with few accessible, safe 'informal spaces' to meet or inexpensive leisure facilities (Wager et al., 2007). Difficulties with peer relationships are highly problematic as they not only impact on a child's well-being in the short term (Hirsch, 2005) – friendships being an integral protective factor in helping children manage negative experiences (HM Treasury, 2009) – but limit the development of social capital, an important driver of adult social inclusion.

Long-term impacts

Aber et al. (1997) highlight the importance of a stable home environment for children's development and mental well-being, suggesting that if punitive/ aggressive parenting persists over time it will have a negative influence on the emotional attachment of the child to the parent, and that this, in turn, may result in problems with behaviour; aspirations (goal orientation); self-confidence and social competence. The importance of parent-child interaction for child development, and parental interest in education for future academic attainment (Blanden, 2006), mean parenting has a strong impact on medium and long-term outcomes for individuals.

Associations have also been identified between the timing of, and preferences surrounding, family formation and family income. For example, growing up in poverty has been linked to lone parenthood²⁶ (Blanden and Gibbons, 2006; Gregg et al., 1999; Sigle-Rushton, 2004), and disinclination towards marriage (Ermisch et al., 2001). Moreover, the experience of childhood poverty is connected to a substantially raised likelihood of adolescent pregnancy and childbearing (Hobcraft and Kiernan, 2001; Sigle-Rushton, 2004). This association is especially strong for those living in a workless household between the ages of 11 and 15 (HM Treasury, 2008). Both Hobcraft and Kiernan (2001) and Sigle-Rushton (2004) have conducted good quality quantitative studies which explore this relationship. Both studies produce similar results, demonstrating that women growing up in poverty are approximately 60 per cent more likely to have a child whilst still a teenager. Additionally, Hobcraft and Kiernan (2001) found that 'the greater the level of poverty experienced during childhood the more likely was the woman to have become a teenage mother' (p. 500).

The relationship between poverty and young motherhood is important because an early birth can have a negative impact on the mother's health and life chances, as well as those of her child, the children of teenage parents being considerably more likely to experience poverty as adults (HM Treasury, 2008).

Community outcomes

Poverty can limit a family's ability to become integrated into the local community and form social networks. This may occur because limited financial resources prevent individuals and their families from joining local groups/clubs and attending events as well as entertaining (potential) friends. Additionally limited availability of safe, attractive areas within a neighbourhood may prevent neighbours meeting and socialising (HM Treasury, 2008) and children from spending time with their peers (Wager *et al.*, 2007). The high incidence of social isolation in disadvantaged neighbourhoods (Brooks-Gunn and Duncan, 1997), partly a result of these factors, reduces the sense of community, social cohesion and community action (HM Treasury, 2008).

Costs for society and the economy

There are considerable fiscal costs associated with providing formal family support services for those who need them, particularly when residential care is required. It is important to remember that although far from all low-income families are in contact with social services, and only a small number of children are taken into care (poor and non-poor), there is certainly a bias towards low-income families involved with these services (Barth *et al.*, 2006; Besharov and Laumann, 1997; Hirsch, 2005; McGuinness and Schneider, 2007; Moraes *et al.*, 2006).

It is very difficult to place even an approximate figure on what poverty might add to cost of services for children and their families, but what should be considered in any calculation is the three billion pounds spent by local authorities each year on social services directed at children (more than one billion pounds of this is spent on residential provision) (Hirsch, 2006a). Also impossible to quantify at present are the wider social costs associated with lower levels of community cohesion created by poverty and inequality.

Subjective well-being

Subjective well-being (defined here as self-esteem and life-satisfaction) has not been subject to the same level of research attention as previous domains in this synthesis. This section considers what little we do know about the impact of poverty on different measures of well-being and includes discussion of children's perception of isolation, stigma and self-worth.

and extend beyond those living in disadvantaged communities to impact on wider society.

Individual outcomes

Poverty impacts on children's self-confidence and their relationships with other children (Ansalone, 2001). Young people living in low-income households report a stigma attached their circumstances, and feel at risk from exclusion and bullying (HM Treasury, 2008), which, in turn, impacts on school and community involvement. Some children feel embarrassed about their impoverished circumstances, particularly when a lack of money means they are unable to participate in social activities (Attree, 2006). Furthermore, children growing up in poverty are more likely to suffer from low self-esteem, to feel that they are 'useless' or 'a failure' (Ermisch *et al.*, 2001, p. 30) and to be socially isolated (Brooks-Gunn and Duncan, 1997). In the longer-term, research involving longitudinal datasets shows a clear association between having been 'clearly or fairly poor' in childhood and reporting low levels of satisfaction with life at age 33 (Hobcraft and Kiernan, 2001).

Community outcomes

The stigma identified by individuals can also be an issue for entire neighbourhoods. Stigma is detrimental to community relationships and can reinforce inequality (HM Treasury, 2008). This is highly problematic because community relationships have an impact on the quality of people's everyday experiences (HM Treasury, 2008)

Conclusions

This synthesis demonstrates that the consequences of child poverty are serious, far-reaching and multi-faceted. Low income, material deprivation, poor housing, disadvantaged neighbourhoods and schools, parental stress and social exclusion, all recognised attributes of poverty, seem individually and possibly cumulatively negatively to shape the lives of children with short and long-term consequences. Child poverty also takes its toll on communities, the cumulative effects of disadvantage and inequality, reducing social cohesion (HM Treasury, 2008). The severity, duration, timing and nature of poverty also matter, for example, Brooks-Gunn and Duncan (1997) highlight the significant impacts of long-term poverty on development and later earnings.

Review findings indicate that as well as increasing the risk of poor outcomes for individuals and their families there are wider social implications of doing nothing about the 2.9 million²⁷ children in our society growing up in poverty. These wider impacts, including losses to the economy through reduced productivity, lower educational attainment, poor health and low skills, mean stunted economic growth and limited ability to compete in global markets (HM Treasury, 2008). They also place an additional burden on the costs of public services (i.e. health care and children's services) that has implications for all taxpayers, and arguably impact on everyone's, 'day to day experiences of safety and well-being' (HM Treasury, 2008, p. 6).

Although it is unlikely that we will ever be able to precisely calculate the full cost of child poverty to individuals, society and the economy, current research on the substantive impact of poverty together with more sophisticated ways of assessing cost will certainly enable better estimates to be produced. Existing approximations offer a useful marker of the economic cost associated with not ending child poverty (£40 billion per year according to TUC 2007 figures) and are of great importance in light of evidence that the UK population continues to underestimate the extent, severity and the structural basis of child poverty, and so

fails to appreciate its true personal and social cost (HM Treasury, 2008; Fabian Society, 2005).

Reductions in child poverty will benefit everyone: more children will fulfil their potential, more families and communities will prosper and the UK will succeed. This is why it is in everyone's interests to play their role in eradicating child poverty. (HM Treasury, 2008, p. 32)

Notes

1. Barker's (1992) 'fetal programming hypothesis' asserts that cells are 'programmed' before birth and during infancy, but the resulting health impacts (increased illness and premature death) are not apparent until adulthood. However, this hypothesis is not universally accepted.
2. A UK-based study of very pre-term infants showed a large difference in incidence by social background; 16.4 infants per 1000 born to the most deprived 10 per cent being very pre-term compared to 8.5 in the least deprived 10 per cent (Smith *et al.*, 2007).
3. Infants born to parents living in the most deprived areas have an average 200g lower birth weight than those born to parents living in the most affluent neighbourhoods (Spencer *et al.*, 1999).
4. US research shows that poor children are 1.7 times more likely to be classified as low birth weight and 1.7 times more likely to die during infancy than non-poor children (Duncan and Brooks-Gunn, 2000).
5. Children born into poverty are ten times more likely to die suddenly during infancy than those born to more affluent households (Fleming *et al.*, 2000).
6. One such study demonstrated that 91 per cent of mothers in social class I breastfed compared to just 57 per cent of those in social class V (Hamlyn *et al.*, 2001).
7. Despite a higher likelihood of suffering post-natal depression young and low-income women have less chance of being identified. Thus are less likely to be able to access the help they need (Fabian Society, 2006).
8. School absences have a knock-on effect for educational outcomes.
9. A poor child is twice as likely to have a short hospital stay as a non-poor child (Duncan and Brooks-Gunn, 2000).
10. Poor children are 3.5 times more likely to suffer from lead poisoning than their more affluent peers (US research) (Duncan and Brooks-Gunn, 2000).
11. Research from the audit commission demonstrates that children from poorer backgrounds are 13 times more likely to die from unintentional injury, and 37 times more likely to die in a fire (HM Treasury, 2008).
12. 'The value of lost quantity and quality of life associated with early mortality and morbidity' (Holzer *et al.*, 2007, p. 19).
13. £150 extra spent on each child in poverty by GPs (see Hirsch, 2006 for further details)
14. 'By the time they start school... poor children who were ahead when they were two years old are already being overtaken by middle class children' (TUC, 2007, p. 4).
15. 'Wage returns to academic qualifications, such as A-levels and GCSEs, are in the order of 15 per cent and 25 per cent respectively' (HM Treasury, 2008, p. 20).
16. Males growing up in poverty (with at least two out of three poverty indicators) are 2.97 times more likely to be unemployed than men with less evidence of poverty (Sigle-Rushton, 2004).
17. Those who had been living in a low-income household aged 16 are considerably more likely to be unemployed (or economically inactive) in their early 20s than their higher income peers. This difference cannot be explained by variations in academic attainment (Bynner *et al.*, 2002).

18. Differences in behaviour problems by social background emerge early and are well-established by age 3 (Spencer and Coe, 2003).
19. Parental depression and family conflict have been shown mediate the effects of poverty on involvement in crime (HM Treasury, 2008).
20. A review by the US Children's Defence Fund (2007) found that income had an impact on, 'youth participation in serious criminal activity (such as stealing with a weapon or use of force, stealing a car, assault or selling hard drugs)' (p. 3).
21. Poor children are 2.2 times more likely than non-poor children to experience violent crime (Duncan and Brooks-Gunn, 2000).
22. Alternative estimates are available; the cost of a year in a Young Offenders Institution being estimated at £41,000 and a Secure Training Unit, £130,000 (Prince's Trust, 2007).
23. Figures were calculated by multiplying the average cost per crime by the number of recorded convictions (see Prince's Trust, 2007, pp 29–31).
24. Estimates include costs to the victims of crime, 'as well as the extra expenditures (both public and private) and reduced safety and well-being due to crime' (Holzer *et al.*, 2007, p. 4). Calculations involved establishing the annual costs of crime per 'unit' to the US economy caused by childhood poverty and multiplying by crime rates.
25. The risk for poor relative to non-poor children is 6.8 times as high for reported cases of child abuse and neglect (Duncan and Brooks-Gunn, 2000).
26. A woman growing up in a low-income household has odds of lone motherhood 1.72 times those of women with less evidence of disadvantage (Sigle-Rushton, 2004).
27. On the UK government's official definition of child poverty.

References

- Aber, J. L., Bennett, N., Conley, D. and Li, J. (1997) 'The Effects of Poverty on Child Health and Development', *Annual Review of Public Health*, Vol.18, pp. 463–483
- Ansalone, G. (2001) 'Schooling, Tracking and Inequality', *Journal of Children and Poverty*, Vol. 7, No.1, pp. 33–47
- Attree, P (2006) 'The Social Costs of Child Poverty: A systematic review of the qualitative evidence', *Children and Society*, Vol. 20. pp. 54–66
- Bamfield, L. (2007) *Born Unequal: Why we need a progressive pre-birth agenda*. London: Fabian Society
- Barker, D. (ed) (1992) *Fetal and Infant Origins of Adult Disease*. BMJ Publications
- Barth, R., Wildfire, J. and Green, R. (2006) 'Placement into Foster Care and the Interplay of Urbanicity, Child Behavior Problems, and Poverty', *American Journal of Orthopsychiatry*, Vol. 76, No. 3, pp. 358–366
- Blanden, J. and Gibbons, S. (2006) *The Persistence of Poverty across Generations: A view from two British cohorts*. York: JRF
- BBC website (2004) *Obesity*. See <http://www.bbc.co.uk/science/hottopics/obesity/children.shtml>
- Blanden, J. (2006), *Bucking the trend: What enables those who are disadvantaged in childhood to succeed later in life? Working Paper No. 31*, Corporate Document Services. Leeds: Department for Work and Pensions
- Bradley, R., Whiteside, L., Mundfrom, D., Casey, P., Kehheher, K. and Pope S. (1994) 'Early Indications of Resilience and their Relation to Experiences in the Home Environments of Low Birthweight, Premature Children Living in Poverty', *Child Development*, Vol. 65, pp. 346–366
- Bradshaw, J. (2000) 'Poverty: The outcomes for children', *ESRC Children 5-16 Research Briefing*, No. 18
- Bradshaw, J. (ed.) (2001) *Poverty: The outcomes for children*, London: Family Policy studies Centre
- Bradshaw, J. (2002) 'Child Poverty and Child Outcomes', *Children and Society*, Vol. 16, pp. 131–140
- Bradshaw, J., Hoelscher, P. and Richardson, D. (2006) *An Index of Child Well-being in the European Union*. York: University of York, Social Policy Research Unit. Available at <http://eprints.whiterose.ac.uk/1644/1/childEU.pdf>
- Brewer, M., Goodman, A., Muriel, A. and Sibieta, L. (2007) 'Poverty and Inequality in the UK: 2007', *Institute for Fiscal Studies (IFS) Briefing Note*, No. 73. Available at <http://www.ifs.org.uk/bns/bn73.pdf>
- Brooks-Gunn, J. and Duncan, G. (1997) 'The Effects of Poverty on Children', *The Future of Children*, Vol. 7, No. 2, pp. 55–71
- Brooks-Gunn, J., Duncan, G. and Aber, L. (eds) (1997) *Neighbourhood Poverty* (Volumes I and II). New York: Russell Sage Foundation
- Bynner, J., Elias, P., McKnight, A., Pan, H. and Pierre, G. (2002) *Young People's Changing Routes to Independence*. York: JRF
- CPAG (2002) 'Research Review: The persistence of poverty over time', *Poverty*, 112: 18

- Corcoran, M. (1995) 'Rags to rags: Poverty and mobility in the United States', *Annual Review of Sociology*, Vol. 21, pp. 237–267
- Corcoran, M. and Chaudry, A. (1997) 'The Dynamics of Childhood Poverty', *Children and Poverty*, Vol. 7, No. 2, pp. 40–54
- Danziger, S. K. and Danziger, S. (1995) 'Child Poverty, Public Policy and Welfare Reform', *Children and Youth Services Review*, Vol. 17, No. 112, pp. 1–10
- Department for Children, Schools and Families (2007) *Children and Young People Today: Evidence to support the development of the Children's Plan*. Department for Children, Schools and Families (DCSF). <http://www.dcsf.gov.uk/publications/childrensplan/downloads/7343-DCSF-Young%20People%20Today.pdf>
- Dowling, S., Joughin, C., Logan, S., Laing, G. and Roberts, H. (2003) *Financial Benefits and Child Health*. London: City University
- Duncan, G. and Brooks-Gunn, J. (2000) 'Family Poverty, Welfare Reform, and Child Development', *Child Development*, Vol. 71, No. 1, pp. 188–196
- Ermisch, J., Francesconi, M. and Pevalin, D. (2001) *Outcomes for children of poverty*. Department for Work and Pensions (DWP). Available at <http://www.dwp.gov.uk/asd/asd5/rrep158.pdf>
- Exeter, D. and Boyle, P. (2007) 'Does Young Adult Suicide Cluster Geographically in Scotland?' *Journal of Epidemiology and Community Health*, Vol. 61, pp. 731–736
- Fabian Society (2005) *Why Life Chances Matter: The interim report of the Fabian Commission on Life Chances and Child Poverty*. London: Fabian Society
- Fabian Society (2006) *Narrowing the Gap: The final report of the Fabian Commission on Life Chances and Child Poverty*. London: Fabian Society
- Feinstein, L. and Bynner, J. (2004) 'The Importance of Development Trajectories in Mid-childhood: Effects on adult outcomes in the UK 1970 Birth Cohort', *Child Development*, Vol. 75, No. 5
- Fleming, P., Blair, P., Bacon, C. and Berry, J. (2000) *Sudden Unexpected Deaths in Infancy: The CESDI SUDI studies 1993-9*. London: The Stationery Office.
- Flores, R. (2004) 'The Effect of Poverty on Young Children's Ability to Organize Everyday Events', *Journal of Children and Poverty*, Vol. 10, No. 2, pp. 99–118
- Gill, O. and Sharma, N. (2004) *Food Poverty in the School Holidays*. Barnardo's. Available at <http://www.barnardos.org.uk/foodpovertyreportv3.qxd.pdf>
- Godfrey, C., Hutton, S., Bradshaw, J., Coles., B., Craig, G. and Johnson, J. (2002) *Estimating the Cost of being "Not in Education, Employment or Training" at Age 16-18*. Department for Education and Skills (DFES) Research Report RR346. Norwich: Her Majesty's Stationery Office
- Gregg, P., Harkness, S. and Machin, S. (1999) *Child Poverty and its Consequences*. York: JRF
- Hamlyn, B., Brooker, S., Oleinikova, K. and Wands, S. (2001) *Infant Feeding 2000*. London: The Stationery Office
- Hirsch, D. (2006a) *What will it Take to End Child Poverty? Firing on all cylinders*. York: JRF
- Hirsch, D. (2006b) *The Cost of Not Ending Child Poverty: How we can think about it, how it might be measured, and some evidence*. York: JRF.

Available at <http://www.jrf.org.uk/bookshop/eBooks/9781859355060.pdf>

Hirsch, D. (2007) *Chicken and Egg: Child poverty and educational inequalities*. London: Child Poverty Action Group

Hirsch, D. (2008) *Estimating the Cost of Child Poverty in Scotland – Approaches and Evidence*. Edinburgh: Scottish Government Social Research

HM Treasury (2004) *Child Poverty Review*. London: The Stationery Office

HM Treasury (2008) *Ending Child Poverty: Everybody's Business*. London: Crown. Available at http://www.hm-treasury.gov.uk/media/3/F/bud08_childpoverty_1310.pdf

Hobcraft, J. and Kiernan, K. (2001) 'Childhood Poverty, Early Motherhood and Adult Social Exclusion', *British Journal of Sociology*, Vol. 52, No. 3, pp. 495–517

Holzer, H., Schanzenbach, D., Duncan, G. and Ludwig, J. (2007) *The Economic Cost of Poverty in the United States: Subsequent effects of children growing up poor*. Washington: Center for American Progress

Horgan, G. (2007) *The Impact of Poverty on Young Children's Experience of School*, York: JRF. Available at <http://www.jrf.org.uk/bookshop/eBooks/2098-poverty-children-school.pdf>

Howard, M., Garnham, A., Fimister, G. and Viet-Wilson, J. (2001) *Poverty: The facts*. London: Child Poverty Action Group

Huston, A. (ed.) (1991) *Children in Poverty: Child development and public policy*. Cambridge: Cambridge University Press

Jenkins, S. and Siedler, T. (2007) *The Intergenerational Transmission of Poverty in*

Industrialized Countries. Colchester: Institute for Social and Economic Research, University of Essex. Available at [http://www.chronicpoverty.org/pdfs/75Jenkins_\(Siedler\).pdf](http://www.chronicpoverty.org/pdfs/75Jenkins_(Siedler).pdf)

Kramer, M., Seguin, L., Lydon, J. and Goulet, L. (2000) 'Socio-economic disparities in Pregnancy Outcome: Why do the poor fare so poorly?', *Paediatric and Perinatal Epidemiology*, Vol. 14, pp. 194–210

London Child Poverty Commission (2008) *Capital Gains: London Child Poverty Commission Final Report*. London: London Child Poverty Commission

Mayhew, E. and Bradshaw, J. (2005) 'Mothers, Babies and the Risks of Poverty', *Poverty*, 121: 13-16. Available at <http://www.cpag.org.uk/info/Povertyarticles/Poverty121/mothers-babies-poverty.pdf>

McGuinness, T. and Schneider, K. (2007) 'Poverty, Child Maltreatment, and Foster Care', *Journal of the American Psychiatric Nurses Association*, Vol. 13, No. 5, pp. 296–303

McLloyd, V. (1998) 'Socioeconomic Disadvantage and Child Development', *American Psychologist*, Vol. 53, pp. 185–204

Meltzer, H., Gatward, R., Goodman, R. and Ford, T. (2000) *The Mental Health of Children and Adolescents in Great Britain*. London: The Stationery Office

Moraes, S., Durrant, J., Brownridge, D. and Reid, G. (2006) 'Professionals' Decision-making in Cases of Physical Punishment Reported to Child Welfare Authorities: Does family poverty matter?' *Child and Family Social Work*, Vol. 11, pp. 157–169

Nelson, M. (2000) 'Childhood Nutrition and Poverty', *Proceedings of the Nutrition Society*, Vol. 59, pp. 307–315

- Osmond, C., Barker, D. and Winter, P. (1993) 'Early Growth and Death from Cardio-vascular Disease in Women', *British Medical Journal*, Vol. 307, pp. 1519–1524
- Potter, C. (2007) 'Developments in UK Early Years Policy and Practice: Can they improve outcomes for disadvantaged children?', *International Journal of Early Years Education*, Vol. 15, No. 2, pp. 171–180
- Power, C., Li, L. and Manor, O. (2000) 'A Prospective Study of Limiting Longstanding Illness in Early Adulthood', *International Journal of Epidemiology*, Vol. 29, pp. 131–39
- Prentice, S. (2007) 'Less Access, Worse Quality: New evidence about poor children and regulated child care in Canada', *Journal of Children and Poverty*, Vol. 13, No. 1, pp. 57–73
- Prince, D., Pepper, K. and Brocato, K. (2006) 'The Importance of Making the Well- being of Children in Poverty a Priority', *Early Childhood Education Journal*, Vol. 34, No. 1, pp. 21–28
- Prince's Trust (2007) *The Cost of Exclusion: Counting the cost of youth disadvantage in the UK*. London: The Prince's Trust
- Russell, M., Harris, B. and Gockel, A. (2008) 'Parenting in Poverty: Perspectives of high-risk parents', *Journal of Children and Poverty*, Vol. 14, No. 1, pp. 83–98
- Singer, R. (2003) *The Impact of Poverty on the Health of Children and Youth*. Toronto: Campaign 2000
- Sigle-Rushton, W. (2004) 'Intergenerational and Life-Course Transmission of Social Exclusion in the 1970 British Cohort Study', *CASE paper*, No. 78. Available at <http://sticerd.lse.ac.uk/dps/case/cp/CASEpaper78.pdf>
- Smith, L., Draper, E., Manktelow, B., Dorling, J. and Field, D. (2007) 'Socio-economic Inequalities in very Pre-term Birth Rates', *Archives of Disease in Childhood Fetal and Neonatal Edition*, Vol. 92, pp. 11-14
- Spencer, N. (2000) *Poverty and Child Health (2nd edition)*. Oxford: Radcliffe Medical Press
- Spencer, N., Bambang, S., Logan, S. and Gill, L. (1999) 'Socio-economic Status and Birthweight: Comparison of an area-based measure with the Registrar General's social class', *Journal of Epidemiology and Community Health*, Vol. 53, pp. 495–498
- Spencer, N. and Coe, C. (2003) 'Social Patterning and Prediction of Parent-reported Behaviour Problems at Three Years in a Cohort Study', *Child Care Health and Development*, Vol. 29, pp. 329–336
- Strachan, D. (1997) 'Respiratory and Allergic Diseases', in D. Kuh and Y. Ben-Shlomo (eds), *A Life Course Approach to Chronic Disease Epidemiology*. Oxford: Oxford University Press
- Such, E. and Walker R. (2002) 'Falling behind? Research on transmitted deprivation', *Benefits*, Vol. 35, No.10, pp.185–192
- TUC (2007) *Cutting the Cost of Child Poverty*. TUC. Available at <http://www.tuc.org.uk/publications/viewPub.cfm?frmPubID=525>
- Zuberi, D. (2006) *Differences that Matter: Social policy and the working poor in the United States and Canada*. Ithaca and London: Cornell University Press
- Vleminckx, K. and Smeeding, T. (eds) (2003) *Child Well-being, Child Poverty and Child Policy in Modern Nations: What do we know?* (Revised 2nd edition). Bristol: Policy Press

Wadsworth, M. and Kuh, D. (1997) 'Childhood Influences on Adult Health: A review of recent work from the British 1946 national birth cohort study, the MRC National Survey of Health and Development', *Pediatric and Perinatal Epidemiology*, Vol. 11, pp. 2–20

Wager, F., Bailey, N., Day, R., Hamilton, D., Hill, M. and King, C. (2007) *Serving Children? The impact of poverty on children's experiences of services*. Glasgow: Glasgow Centre for the Child and Society, Save the Children UK and Scottish Centre for Research on Social Justice. Available at <http://www.savethechildren.org.uk/en/docs/serving-children.pdf>

Wagstaff, A. (2002) 'Poverty and health sector inequalities', *Bulletin of the World Health Organisation*, Vol. 80, No. 2, pp. 97–105

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