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The costs and benefits of educating children in care

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THE COSTS AND BENEFITS OF EDUCATING CHILDREN IN CARE

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EXECUTIVE SUMMARY

Chapter 1: INTRODUCTION

- The objective of this report is to provide information on the costs of current arrangements for the education of looked after children (LAC) and the benefits of improving their educational outcomes and other life chances

- The report brings together evidence from published sources, research on the education of children in care and outcomes from care, findings from the British Birth Cohort Studies and theoretical and empirical work on the wider benefits of learning

- The low attainment of LAC is well documented. Two parallel lines of research are identified: one emphasizes the disadvantaged status of LAC pre-care, the other highlights deficiencies in the care and education systems

- The estimates in Chapter 3 take account of both points of view by providing upper and lower bound estimates of potential savings in public expenditure

- There is a lack of evidence on what works in raising educational standards for LAC because they are not seen as a discrete group within the education system and outcome data have only been collected for two years

- Government targets for increasing the proportion of children with qualifications and higher-level GCSE passes are unlikely to be met without radical changes in the care and

education systems. The gap between LAC and average attainment remains extremely large.

- Education costs fall into a number of different categories. It has only been possible to estimate some of these as no national data are available.

- Reasons for the low attainment of LAC have been clearly identified by researchers and inspectors. They include failures in corporate parenting, low expectations, placement instability, care environments unhelpful to education, exclusion or diversion from mainstream schooling, discrimination, and neglect of basic skills

- Higher levels of education are strongly associated with many positive outcomes, such as good health, lifelong learning, regular employment, less involvement in crime, better parenting, active ageing and civic engagement.

Chapter 2: ESTIMATING PUBLIC EXPENDITURE ON THE CARE AND EDUCATION OF LOOKED AFTER CHILDREN

- The annual cost of care for LAC is £1,340m

- The average estimated lifetime duration of care for LAC is approximately 4 years.

- LAC are not identified within published education statistics, especially about how much looked after children use special education services (e.g. pupil referral units/education

psychology services/therapeutic services/facilities) relative to all children.

- LAC are not identified within published education statistics

- LAC are more likely to use special education services – 26% of LAC have a statement of special education need compared with 3% of non-looked after children, 8% of LAC use pupil referral units (PRUs) compared with 0.1% of non-LAC (estimate).

- LAC are more likely to have behavioural problems – 1.5% of LAC have been previously excluded from school compared with 0.1% of non-LAC.

- Only 1% of LAC go on to higher education compared with 33% (estimate) of non-looked after children

- The annual public expenditure on educating LAC in 2000-01 is estimated as £251.0m. However a substantial part of this would have been spent on the education of these children if they had not been in care at any stage of their lives. The additional public expenditure on the education of children because they are LAC is estimated as £77m. This includes further and higher education, in which LAC participate far less than other young people. Therefore public expenditure on FE and HE for LAC is much less than on an equivalent number of non-LAC.

- If we consider only nursery and compulsory schooling then the additional public expenditure on children due to their being LAC is £114m.

- The higher costs for LAC are due to their failure to progress normally through the education process and therefore their greater incidence in more expensive forms of provision. Although statistics are not collated on the use of these services for LAC, findings from research studies have been used to estimate rates of use.

- Intensive short-term support or individual tuition that would enable a higher proportion of LAC to function successfully in mainstream schools could result in substantial savings.

Chapter 3: THE COSTS AND BENEFITS OF IMPROVING LIFE COURSE OUTCOMES FOR LOOKED AFTER CHILDREN

- This analysis has shown robust effects of being LAC on adult outcomes.

- Many of these negative outcomes have large social and economic costs as well as personal costs for the LAC themselves and those with whom they form relationships.

- Two methods of calculating these costs were adopted. The first method was to estimate effects of LAC status on particular outcomes for which information is available and to model the implications of negative outcomes in these areas where reliable cost information is readily available. These availability constraints have meant that the survey of outcomes considered is limited to crime, health and worklessness.

- The second method is to use available work on the costs of being 'NEET' (not in education, employment or training) (SPRU, 2002) and match in the effects of LAC on

being NEET. This uses more robust and wide-ranging cost data but under-estimates the LAC effect which is greater than that of being NEET.

- The included and excluded costs from these two methods and the results obtained are summarised in Table 3.5.

- We note that a whole range of potential benefits is excluded by method 1 because of a shortage of evidence or time. Primary amongst these are foregone earnings and benefits due to unemployment, wider benefit costs including the benefit costs of teenage parenthood, peer effects in schools and communities, costs in terms of personal well-being and inter-generational effects.

- Despite these omissions, we believe that these figures give a good indication of the kind of savings that are feasible.

- Overall, by method 1 we find a benefit in terms of reduced crime, better health and reduced worklessness of between £9 billion and £16 billion per annum if the outcomes for the ex-care population in the community can be made like those of those who have never been in care. This saving is overwhelmingly (more than 9/10) made up of effects on criminality, for which LAC show very high propensity not explained by their prior circumstances and which carry a very high cost. Health and worklessness costs are much smaller but nonetheless extremely substantial given the kinds of expenditures involved.

- Method 2 suggests current costs from the yearly flow into NEET from LAC are between £43.2 million and £60.5 million per annum. These are the savings that could be achieved

if LAC could be helped to attain the same outcomes as the non-NEET population. The resulting, discounted lifetime costs are between £388 million and £543.2 million.

- The two methods give very different results, since the second method is based on the benefits for the flow out of LAC status whereas the first method necessarily considers cost effects of the numbers of ex-care people in the community. The first method obtains a better estimate of the likely cost of crime and the savings that would result from its reduction.

Chapter 4: CONCLUSION

- Our conclusion is that longstanding neglect of the education of children and young people in care has had an extremely negative effect on their life chances and involved enormous costs to them and to society as a whole. Reversing these effects will require substantial investment and fundamental changes in attitudes.

- Recognising that some of the factors associated with educational difficulties cannot be changed does not mean accepting under-performance as inevitable. It does mean creating conditions which make it possible for looked after children to do as well as other children, not least by employing carers who understand that education is an integral part of care and have the skills and motivation to help young people realize their potential.

- It was not part of our remit to itemise the ways in which that might be done, but we have tried to show in this preliminary analysis that a successful programme designed to raise

their educational attainment would be likely to achieve large savings in public expenditure even in the short term, rising to billions of pounds a year over a period of ten or twenty years.

Chapter 1: INTRODUCTION

This report was commissioned by the Social Exclusion Unit in March 2002 to complement the consultation exercise carried out during 2001 on raising the educational attainment of children in care.

The main objective is to provide information on the costs of current arrangements for the education of looked after children and the benefits of improving their educational outcomes and other life chances.

The three key questions set out in the project specification are:

1) what is current direct expenditure on children in care and their education?
2) what would be the impact on overall public expenditure if the difference between life outcomes for children in care and other children was reduced or eliminated?
3) what would be the saving in overall public expenditure if the difference between life outcomes for children in care and other children was reduced or eliminated?

In order to attempt to answer these questions we draw on information from four bodies of knowledge:

- published statistics from a number of different sources;
- research on the education of children in care and outcomes from care;
- findings from the British birth cohort studies on adult outcomes for people who have been in care as children compared with those who have not; and,
- theoretical and empirical work on the wider benefits of learning.

Questions (1) and (2) are addressed in Chapter 2 of this report and Question (3) mainly in Chapter 3. Much relevant data is not available. Where we have had to make assumptions we have tried to make clear on what basis and we have also specified our sources of information for each section of the report.

1.1: BACKGROUND

It has been known since 1976 that the educational performance of children who had been in care was below average and that they were more likely than home-based children to exhibit behaviour problems (Essen *et al,* 1976; Lambert *et al,* 1977). Statistical analysis indicated that most of these effects could be explained by the fact that the children were drawn from a highly disadvantaged population rather than being the result of their care status.

The first suggestion that neglect of their educational needs might be a major factor in their poor performance was made in a position paper commissioned by the Social Science Research Council, forerunner of the Economic and Social Research Council, in 1982 (Jackson, 1983). The paper, which combined a literature review and small-scale original research, was not published at the time but was used by the ESRC as the basis for a call for research proposals.

1.1.1: Research approaches

The ESRC programme resulted in two substantial bodies of work, by a group of researchers in Oxford, led by the sociologist Anthony Heath, and by the National Foundation for Educational Research. The Oxford study looked at the educational progress of a group of 49 children aged between 9 and 13 at the start of the research in stable long-term foster care.

The research included standardized tests of reading, vocabulary and mathematics and a questionnaire to carers and teachers. The control group consisted of 58 children of the same age whose families were receiving help from the social services department but had not been in care.

Even compared with this disadvantaged group the foster children were found to be performing poorly. Tested again two years later, the study children were found to have made progress, but not enough to catch up with their age group. The foster families were considered by the researchers to have provided good quality care and were described as 'mainly middle class', though this description could be contested. The two children who made better than average progress in reading (though less in mathematics) were both in the families where the father was a graduate. The groups who made least progress were those who came into care as a result of neglect or abuse.

It is interesting to note that in the first report of the study the emphasis was on the finding that the children's low attainment could be attributed mainly to the social background of their birth families (Heath, Colton and Aldgate, 1989*)*). The second report also concluded that children's early histories before entry to care have a profound effect on their educational attainment, but responded to criticism that no account was taken of the failure of the care or education systems to compensate for the children's earlier disadvantage. The paper, entitled 'Failure to Escape' comments that

> when "average" educational inputs are given to children with "above average" educational needs they fail to make "greater than average" educational progress. Given their low starting point, greater than average educational progress would have been

> needed for these children to have caught up with the national average (Heath, Colton and Aldgate, 1994, p.57)

The NFER report took a very different approach, consisting of a study of local authorities and their policies, with an emphasis on social work practice (Fletcher-Campbell & Hall, 1990). The authors also interviewed a number of children and young people about their experience of education. Their conclusion, in line with the ESRC report (Jackson , 1987) was that the educational problems of children in care were caused more by the failure of social services and education to work together and by social workers' ignorance and neglect of educational matters than by any characteristics of the children themselves. The report comments that even when joint training was arranged for teachers and social workers (an uncommon event in any case), the agenda was that of social services, usually focusing on child abuse. Promoting children's educational attainment was not considered an issue since expectations were minimal.

These two streams of research represent two different ways of conceptualising the educational failure of looked after children and set the tone for the sparse literature on the subject throughout the 1990s, until the launch of Quality Protects in 1998. One line of thinking argues that most children who come into the care system are so damaged by their previous experience that it is unrealistic to expect them to achieve at anything like average levels. The other side of the argument is that provision for the education of looked after children has been so deficient in the past that we can have no idea what they might achieve if local authorities as corporate parents put the same kind of effort into educating their children as do well-informed and adequately resourced parents in the community.

1.1.2: Effects of early disadvantage

In this report we acknowledge that there is some truth in the first proposition. Increasingly children are only accommodated when they are at serious risk of neglect or abuse in their own homes. The number of children who enter care as a result of drug or alcohol abuse by their parents is rising rapidly. There is a large body of evidence from the United States that substance misuse in pregnancy can affect the child's ability to learn (Barth *et al*., 2000; Harbin & Murphy, 2000). Neurobiological research has shown that neglect and under-stimulation in the early weeks and months of life can have long-lasting effects.

Our estimates in Chapter 3 of the benefits that might be expected from bringing outcomes for LAC into line with the average for the population take account of the probability that looked after children will have suffered many adversities before they come into care. However we suggest that this is an argument for intensifying remedial efforts and support mechanisms rather than lowering expectations. Indeed the finding that children who begin to be looked after early do better in primary school but fail to make predicted progress at the secondary level (Evans, 2000) suggests that it is something about the care system itself rather than the characteristics of the children that results in the enormous gap in attainment by the time they reach Year 11.

In order to take account of both points of view we have included in our calculations of benefits upper bound estimates which make no allowance for the fact that looked after children are an atypical population and compare them with the average child in the community, and lower bound estimates which compare them with children from other disadvantaged families. The higher estimates represent what might be attainable as the result of a generously funded national initiative pursued by all local authorities with commitment

and determination. The lower ones take more account of the difficulty of overcoming earlier adversities, especially for those who come into care as teenagers.

1.2: EDUCATIONAL OUTCOMES FOR LOOKED AFTER CHILDREN

Under the previous government there was resistance to the idea of obtaining or publishing information on the educational attainment of LAC on the grounds that it would be too discouraging for them (or too critical of their carers). There was also a misconception that the majority of LAC have learning difficulties and could not be expected to achieve at average levels. In fact the proportion of LAC who have a severe learning disability due to congenital or organic causes is not very much higher than in the general population – 3 per cent as against 2 per cent. Mittler (2000) has argued that social and economic disadvantage is the main determinant of moderate and mild learning difficulties. This would agree with research previously cited that suggests that children are already behind their peers at the point when they enter care, due to the highly disadvantaged population from which they originate (Bebbington & Miles, 1989). We do not yet know how far this is remediable, though Mittler and colleagues suggest that a commitment to inclusivity could produce much better results than in the past (Mittler, Jackson & Sebba, 2001).

It is important to know the precise size of the gap in attainment between LAC and other children in order to estimate what would need to be done to begin to close it. The targets set by Quality Protects (finalised in 1999) were:

- Increase to 50% by 2000/1 the proportion of children leaving care aged 16 and over with

a GCSE or GNVQ qualification and to 75% by 2002/3.

- Increase to 15% by 2003/4 the proportion of children leaving care aged 16 and over with 5 GCSEs at grade A*-C.

The percentage of young people leaving care with at least one GCSE at grade G or above is an indicator as part of the Performance Assessment Framework.

The targets have been criticized both for being too low and for laying too much emphasis on examination results. The first criticism has some validity but, starting from a position where 70-80 per cent of care leavers have no qualifications at all the target does at least offer a starting point. The second criticism is a variant of the argument about discouragement. Examination results at the end of compulsory schooling are the best single measure of educational attainment and the key to further education and employment. Children who leave school and care without qualifications are at high risk of becoming 'NEET', (not in education, employment or training), as we show in Chapter 3.

As for targets, the slight improvement, from 30% to 37% in the proportion of young people who obtained at least one GCSE or GNVQ in the year ending March 2001 suggests that they are having a positive effect, or at least leading to more awareness and better reporting, as well as revealing wide variations between local authorities. In 10 authorities fewer than 20% of children leaving care at 16 or above attained even this minimum level (Department of Health (Statistical Bulletin 24), 2001c).

The more ambitious target of 15% gaining 5 Grade A-C passes by 2003/4 looks most unlikely to be achieved. This figure has stuck obstinately at or below 5% for many years,

compared with just over half in the general population, as the Table 1.1 shows.

Table 1.1: Educational attainment of LAC compared with population.

Qualifications	LAC %	All children %
None	73	6
No GCSEs	64	5
5 GCSEs A-C	4	50
Education post 16	12-17	67
Higher education	<1%	37

Source: Answer to Parliamentary question by Jacqui Smith, Minister of State for Health, February 2002.

These figures show that the comment in the preamble to the Department of Health Statistical Bulletin quoted earlier that 'on average looked after children do less well in school than other children' is a serious understatement. The table illustrates the size of the gap that needs to be bridged to bring their attainment as a group up to the average of the population. In reading the estimates in Chapter 3 it has to be borne in mind that this is not likely to be achieved quickly or easily. The seeds of success or failure in GCSE are sown at least four years earlier so that any measures put in place now are unlikely to change the figures significantly for the group of children currently in school years 10 and 11. Since many looked after children are starting from a long way back there is an argument for setting intermediate targets designed to improve basic skills such as literacy and numeracy, which may have more future benefits than one or two low-grade passes in GCSE

It also has to be noted that even if the average educational level achieved by LAC were the same as that of children in their own families this would not automatically lead to their obtaining employment at the level which would currently be expected for that qualification.

Other obstacles, such as lack of social skills, discrimination and the absence of a supportive network are still likely to put them at a disadvantage in the job market. However, as compared with other care leavers, those with recognised educational qualifications are in a much better position to obtain and keep employment with all the benefits that brings.

1.2.1: Lack of quantifiable data

One problem in compiling this report has been the serious lack of reliable evidence on school progress and educational attainment of looked after children. Estimates, for example, of the proportion of LAC who go on to further education vary between 12% and 19% (Biehal *et al*, 1995; Broad, 1998). Even official statistics are not always consistent. For example the answer to the Parliamentary question in Table 1.1 gives 4% of LAC obtaining 5 good GCSEs whereas the Bulletin of Education Statistics for the same year gives 5%.

Education statistics, as we show in Chapter 2, do not include LAC as an identified group either in information on use of different kinds of educational provision or in cost data.

Local authorities have only been required to collect information and submit returns on test and examination results for LAC since April 1999 (so the first returns are for 2000) years. Although there are now numerous local initiatives to address some of the deficiencies identified by earlier research, we have been able to find no outcome data on their effectiveness.

Cost data specifically relating to the education of LAC is even harder to find. The fact that no cost information is published illustrates the continuing invisibility of this group of children within the education system. The cost of their education can only be calculated by combining

and reanalysing statistical information on children in care with educational cost data for all children.

1.2.2: Types of education costs

We identified seven different types of educational costs for children in care in addition to the ordinary costs of educating children living with their parents on the one hand and the cost of substitute care on the other. Some of these costs would also apply to some home-based children, but as we show in Chapter 2, to a much lesser extent, and others would be borne by parents.

The different categories of cost are:

1) Standard costs associated with underachievement or behavioural problems: pupil referral units, learning support assistants, educational psychologists' time, home tuition for excluded children.
2) Costs associated with placement instability: for example, taxi transport to avoid a change of school.
3) Costs associated with equipment for learning: books, stationery, project materials, computers, Internet access.
4) Costs associated with 'corporate parenting': for instance, leisure activities, music lessons, sports equipment and school trips.
5) Costs associated with residential care: training for care workers on supporting education, employment of teachers for school liaison or homework support, building modifications to create study space.
6) Costs associated with foster care: educational support and training for foster carers, teachers employed to visit foster homes.

7) Miscellaneous costs such as school uniform.

In addition to these direct costs there are large indirect costs at operational level related to educational difficulties. Placement breakdown is strongly associated with problems of school attendance whatever their cause (Jackson, 2000, Francis, 2000). Dealing with formal and informal exclusions and negotiating for alternative education placements takes up a great deal of teacher and social work time. It would be an interesting exercise to estimate the extent of these largely hidden costs, but beyond the scope of this report. The last resort when a child with significant educational difficulties cannot be placed in a school or local alternative provision is an out-of-authority placement in an independent residential home or school. In this case the cost for a single child can be as high as £150,000 a year. One authority in 2001 was reported to be spending over £500,000 per annum for 8 children placed outside the borough for educational reasons (Walker, 2002).

There are also costs at policy level, such as setting up systems for interagency/interdepartmental collaboration as well as managerial costs, but we have not attempted to include them, although they would certainly form an important part of any programme to raise attainment.

It was possible to make some estimates of costs in Category (1) by extrapolation from published sources and these are set out in Chapter 2, Table 2.9. None of the other information is available except directly from local authorities. The time scale for the project did not allow for a systematic survey of local authorities but we have used what data we could obtain from informal enquiries. We also have some information on 'corporate parent' type expenditure on higher education from the 'By Degrees' project. These costs are very low because of the

small number of ex-care young people who go to university at present, but would be expected to rise if the project to raise attainment is successful and as more local authorities recognise their responsibilities under the Children (Leaving Care) Act 2000.

1.3: EXPLAINING THE LOW ATTAINMENT OF LAC

We do not propose to include a detailed literature review on the reasons for the persistently low educational achievement of children in the care system since this has already been done by Borland *et al* (1998), by Jackson and Sachdev (2001), and comprehensively by the Social Exclusion Unit. A review of the literature relating to longer-term outcomes for LAC is included in Chapter 3. Here we summarise the main findings from previous reviews on factors other than birth family background that present obstacles to educational attainment for LAC. Of course there are many examples of good practice in local authorities and in voluntary and independent agencies, but these tend to be patchy and depend too much on individuals rather than being embedded in standard practice. There is evidence of greater awareness at managerial level of the importance of education for LAC but it appears to be slow to filter down to the field.

Among the most significant adverse factors to be identified in the research reviews are:

- The failure of corporate parenting at policy and individual levels.
- Low expectations.
- Placement instability.
- The care environment.
- Exclusion of looked after children from mainstream schooling.

- Bullying and discrimination in the school setting.
- Insufficient emphasis on basic skills such as literacy at the point of admission and during the period in care.

1.3.1: Corporate parenting

Education and social services departments still find it difficult to work together and share information (Firth & Fletcher, 2001). Children in care are seen as mainly the concern of social services despite the emphasis in the Children Act 1989 on the responsibility of the whole local authority for LAC.

No one person has an overview of the child's developmental progress, and implementation of the Looking after Children system has had a limited impact, especially in relation to education (Ward, 1995; Skuse & Evans, 2001). Turnover of social workers often results in failure to implement plans or take remedial action until a crisis arises.

1.3.2: Low expectations

LAC are not expected to do well at school either by carers or teachers. Instead of carefully monitoring progress and taking immediate action to overcome difficulties they simply accept low achievement as inevitable. The annual report of the Chief Inspector of Schools (OFSTED, 2002) remarks that some local authorities automatically assign all children in public care to a stage on the SEN Code of Practice, irrespective of their level of attainment. Attention is focused on attendance and behaviour rather than learning. Unlike children with good home support LAC do not see GCSEs or university as goals to aim for and therefore lack motivation, especially in the later years of secondary school.

1.3.3: Placement instability

Most children who stay for many years in care experience several changes of placement (over 10 for about 10%). These often involve changes of school or disruption of preparation for exams. The practice of moving children at 16 in the run-up to GCSE to 'independent living' is especially damaging to their chances (Evans, 2000; Jackson & Thomas, 2001). However the association between instability and poor education outcomes is not simple. Placement breakdown or changes are certainly damaging to educational opportunities, but school difficulties are also an important cause of placement problems or of needing to be looked after in the first place (Francis, 2000).

1.3.4: The care environment

Neither traditional foster homes nor children's homes offer an educationally stimulating or supportive environment. Social services departments do not pay attention to educational background in selecting foster carers, nor do they give them a clear understanding that educating the children is as important a part of their role as caring for them. Foster homes often lack suitable facilities for homework and are not able to provide help. Foster carers are also confused about their responsibilities vis-à-vis social workers and birth parents and are not given clear guidance (Borland *et al*, 1998).

The education and training of residential care workers is generally at a very low level. They often consider education the business of the school, but on the other hand do not succeed in promoting school attendance. Facilities and equipment for study, including books, in most children's homes are still extremely poor. Computers may be reserved for staff use (Berridge & Brodie, 1998; Rees, 2001).

1.3.5: Exclusion or diversion from mainstream schooling

Children in care are 20 times more likely to be excluded from school than other children, but are also much more likely to miss school for other reasons. Despite the Guidance (Department of Health & Department for Education and Employment, 2000) which requires care and school placements to be planned together and a education place to be found within 20 school days, many children still experience long gaps in their education. An education place may be in alternative provision such as a pupil referral unit where the focus is on social learning and which offers limited opportunities for academic achievement. Such provision is also experienced as stigmatising by children (Galloway *et al*, 1994). LAC are five times more likely to be allocated to special schools even when their disabilities are less serious than those of other children in mainstream schooling (Gordon, Parker & Loughran, 2000).

Missing periods of schooling due to family turmoil or not having a placement cause children to fall even further behind and whatever the reason (not necessarily behavioural problems) makes reintegration very difficult. Few succeed in returning to mainstream schools, though further education colleges sometimes offer a lifeline. Attendance from children's homes is particularly poor, with outcomes markedly worse than from foster care (Berridge & Brodie, 1998).

There is a strong association between exclusion from school and offending behaviour, especially for boys. Among offenders of school age who are sentenced in youth courts, 42% are excluded from school. Of those permanently excluded, 78% commit offences (Social Exclusion Unit, 1998; Berridge *et al*, 2001). These figures are extremely relevant to the potential benefits of improving the educational experience and attainment of looked after children. As we show in Chapter 3, reducing the amount of crime accounted for by the care

and ex-care population could produce very substantial savings in public expenditure.

Regular, continuous school attendance is one of the few factors that distinguish care leavers who are relatively successful in education from looked after children generally (Martin & Jackson, 2002).

1.3.6: Bullying and discrimination

LAC are at high risk of victimization by other pupils if their care status is known. In the case of disputes arising from taunting or insults from other children the looked after child is much more likely to be blamed, having no parent to come to the rescue. This is a common cause of school exclusions (Blyth & Milner, 1994; Brodie, 2001).

1.3.7: Inattention to literacy

Research on higher achievers from care shows that reading early and fluently is a strong predictor of later success (Jackson & Martin, 1998). Most pre-school children come into care having little acquaintance with books and ill-prepared to learn to read. Those who enter the care system later may already have serious literacy problems. A few may have specific learning difficulties, such as dyslexia. Others have just not been taught to read. Either way immediate remedial action is required but is often delayed for many months, during which the child has increasing problems at school which may manifest themselves as difficult behaviour. The care environment is not often conducive to literacy or developing a love of books (Bald *et al*, 1995; Griffiths, 1999; Who Cares? Trust, 2001).

1.4: CHANGING THE PICTURE

Lack of attention to education is only one of the failings of the care system. Research has revealed many others. Educational achievement is affected by the general quality of care, by relationships with carers and family members, stability of placement and many other factors. So even if dramatic improvements in support for education were put in place problems would remain. However school is a very crucial element in children's lives, and if things go well there it is likely to have a positive effect on everything else, and in particular to reduce the risk of placement breakdown.

All the negative factors listed above (and well supported by research evidence over many years) could be overcome, given the political will and adequate resources. Some of the ways in which this might be done are set out in the Institute of Education's response to the SEU Consultation. In brief it argues that since the education of children in care has been neglected so long and the deficit is so large it will be necessary to tackle it at all levels and by all possible means to make any impression on the problem. It is important to recognise this because if the obstacles to improved LAC attainment levels were immutable the potential cost benefits discussed in Chapter 3 could not be achieved.

1.5: THE WIDER BENEFITS OF LEARNING

We turn now to evidence on the long-term impact of educational attainment and life-long learning on adult outcomes and quality of life. People who have achieved a good level of basic education are much more likely to continue to seek further education and learning

throughout their lives (Sargant *et al*, 1997).

The Centre for Research on the Wider Benefits of Learning, established in 1999 has explored links between levels of education and a number of other areas – health, crime, families and parenting, active ageing and civic engagement (Schuller *et al*, 2001).

The impact of learning, and the potential effects of improving educational outcomes for LAC on improvements in health and reduction in crime are discussed in detail in Chapter 3. There is robust evidence for positive correlations between years of education and health status relating to physical and depressive conditions (Hammond, 2002)

Learning impacts on health through its effect on economic conditions and social status and in addition affects access to and uptake of medical services. It appears that education affects health behaviours both through shaping attitudes and enabling individuals to behave in accordance with them.

Apart from physical health there is also consistent evidence that education, as measured by years of formal education and qualification level is correlated with happiness, lower rates of depression and reduced risk of suicide. Very substantial effects have been reported. Results from the 1970 British cohort study show that respondents with no qualifications were by the age of 26 four times more likely to report poor general health than those with the highest educational qualifications (Whitty *et al*., 1998)

Outcomes of learning include improvements in self-esteem, self-efficacy, inter-personal trust, anti-discriminatory attitudes, access to a wider network of social support and social and

political engagement and activity. These outcomes not only change health-related behaviours but also increase resilience – the ability to cope with adverse conditions and stress-inducing circumstances. Individuals who are more resilient experience lower levels of stress in such circumstances, which in turn benefits their health. These effects also operate at national and community levels.

Higher educational levels are strongly associated with self-efficacy, which American research suggests acts as a mediator between education and health-related behaviours (Ross & Mirowsky, 1999). Perceived self-efficacy has also been shown to be associated with educational success for children in care (Jackson & Martin, 1998), so it appears that the effect works both ways.

It can be seen that all these positive outcomes of better education would be of particular benefit to looked after children and care leavers, who typically have low self-esteem, have no feeling of control over their lives, are liable to be extremely mistrustful and are often isolated and lack supportive networks (Biehal *et al*, 1995).

The most important effects for LAC may be the psychosocial outcomes of learning in generating the behaviours, skills and personal attributes that have a long-term impact on both mental and physical health. Many studies have found high levels of mental health problems among looked after children (e.g. Courtney *et al*, 2001; Dimigen *et al*, 1999; Harman *et* al, 2000; McCann *et al*, 1996; Williams *et al*, 2001). There is evidence from qualitative studies that higher education makes it more likely that these can be managed and overcome rather than carried into adult life (Jackson & Martin, 1998).

This view is supported by quantitative and qualitative work at the Wider Benefits of Learning Centre which shows the complexity of causal relationships between education and outcomes. Whilst education may have important direct and transformative effects, one of its most significant effects, especially in the field of mental health and psychological wellbeing, is the contribution it makes to sustaining people during periods of stress (Schuller *et al* 2002). Both the transformative and the sustaining effects are relevant to LAC.

1.5.1: Other effects

A further line of research demonstrates the effect of reducing inequalities in education on social capital and social cohesion which in turn improves the health of individuals and communities (Whitty *et al*, 1998). In considering the benefits of better education for LAC it is important to recognise these wider outcomes as well as direct benefits such as reduction in costs to the NHS.

Learning affects family life in a variety of ways (Blackwell & Bynner, 2002). Education levels shape fertility patterns and family formation and have an important role in ameliorating the effects of family dissolution (though not in reducing the incidence of divorce). They influence maternal employment – better-educated women are likely to remain in full-time continuous employment, contributing to higher family income. Education can equip people to make cost/benefit analyses in decision-making – for instance using contraception or postponing childbearing.

The effects are intergenerational. In the 1970 British Birth Cohort daughters of men in unskilled manual work were nine times more likely to become teenage mothers than daughters of fathers in professional occupations. Girls who were successful at school were

less likely to become pregnant in adolescence but also more likely to return to education after the birth of a child. The protective effect of education is especially important for young women in care because they are at far higher risk of teenage pregnancy.

There are also intergenerational consequences of negative educational outcomes. Looked after children who fail at school, at present a large majority, are likely to transmit their poor experience of schooling to their own children. Bynner, Joshi and Tsatsas (2000) found that parents' educational level at the time their respondents in the 1958 and 1970 birth cohorts were born were 'critically important factors in determining what was going to happen to them sixteen years later' (p. 61). Raising the educational attainment of children in care is therefore not just important for them and their own life outcomes but for their future children as well.

Some of the strongest associations between education and life course outcomes can be seen in relation to crime, though a number of writers have argued that poverty is more important. These are not necessarily alternatives. Education and training reduces crime directly because it increases wages; conversely the lack of education and training increases crime because it leads to unemployment and increased poverty (Ward, 1995).

Adolescents who lose interest in education, often because it offers them no chance of success, can become caught up in a vicious cycle of cumulative disadvantage, including low aspirations and achievements, dropping out of school, parenting problems and ultimately second generation delinquency (Hagan, 1997). Many male care leavers with no educational qualifications fall into this category. The evidence on crime is further discussed in Chapter 3.

1.6: SUMMARY

In this chapter we set out the various strands which have contributed to our attempt to estimate the costs of educating children in care and to model the potential benefits of educating them much better. We show that this will not be at all an easy task since the problem of looked after children's low attainment is a longstanding one and the gap between their average educational qualifications at 16 and those of the general population is extremely wide. On the positive side, the factors which contribute to their educational failure are now well understood and, we suggest, in large part remediable given sufficient commitment and resources.

We conclude with a brief discussion of the wider benefits of raising their education levels. These include better health, both physical and mental, higher self-esteem, a sense of self-efficacy, greater resilience, less likelihood of teenage pregnancy, better parenting and family relations, more rewarding employment, higher income, a more positive attitude to learning, which will in turn affect their own children, and greater social involvement and more supportive social networks. Most of these benefits, in addition to improving their general well-being, will also lead to reductions in public expenditure. For three of the dimensions, health, crime and unemployment, where sufficient information on children in care is available, we provide estimates of the potential savings in Chapter 3.

Chapter 2: ESTIMATING PUBLIC EXPENDITURE ON THE CARE AND EDUCATION OF LOOKED AFTER CHILDREN

The research proposal for this study posed two questions about public expenditure on the care and education of looked after children (LAC).

1) What is the direct public expenditure on children in care and their education?
2) What would be the impact on public expenditure on education if the difference between educational outcomes for children in care and for other children were eliminated?

This chapter deals with the first question and in part with the second question, by considering what would be the reduction in public expenditure on the current forms of provision for LAC if their educational experiences at school reflected those of all children on average. Clearly additional expenditures would need to be committed if this commonality in experience were to be achieved but it is not part of the remit of the report to consider what these additional expenditures would need to be or what would be their required magnitude.

The approach adopted in this report to obtaining estimations of current levels of public expenditure on the care and education of LAC utilises as far as possible, official statistics as sources of data. There are no published statistics directly on the costs of educating looked after children, since these children are not identified in the education statistics. We have therefore pieced together from a large range of statistical sources and research studies, estimates of public expenditure on the care and education of looked after children.

2.1: STATISTICS ON CARE: DATA AVAILABLE ABOUT THE NUMBERS AND COSTS OF LOOKED AFTER CHILDREN

In order to answer the first part of question one, to cost the care of looked after children, we needed to obtain sources of data that would give information about the basic costs of providing:

a) Foster Care

b) Residential care

c) Other care

These figures were straightforward to find and are located within the annual publication entitled 'Children Looked After by Local Authorities, Year Ending 31 March (date) England'. This publication is jointly produced by the Department of Health and National Statistics and includes data derived from four sources: the SSDA 903 collection (a detailed statistical return introduced in 1997 to collect local authority data based on a 'one-third' sample of their looked after children), the CLA100 collection (introduced in 1997/8 to collect aggregated figures on looked after children in LA care), the OC1 form (introduced in 1999/2000 to collect data about the educational qualifications of all young people aged 16 or over who ceased to be looked after) and the AD1 form (introduced in 2000/2001 to collect data on looked after children adopted from care during the year) (Department of Health, 2002a).

It should be noted here that the CLA 100 collection only provides a snapshot of the total children looked after at 31st March for each year. These statistics are able to give some estimates of the total length of time children have *continuously* spent in care. However, there

are many children that come into and out of the system several times during one statistical year count and it is difficult to gauge from these statistics the total length of time spent in care for these children.

Costs per year per looked after child for foster care and residential care are available in electronic form from the Department of Health's Key Information Graphical System (KIGS) which is regularly updated with available statistics about the looked after population, and from the Department of Health website. The data in KIGS are collated using the Department of Health's EX1 return (this replaced the RO3 in 2000/2001), which collects data on expenditure for personal social services by local authorities (e.g. Department of Health, 2002b).

2.1.1: The looked after children population in 2001

The publication 'Children Looked After by Local Authorities, Year Ending 31 March (date) England' also provides useful information about the looked after population. These are a few useful facts from the latest collection (all figures exclude agreed series of short term placements):

- The total number of children looked after at 31st March 2001 was 58,900.
- The total number of children starting to be looked after during the year ending 31st March 2001 was 24,500.
- The total number of children ceasing to be looked after during the year ending 31st March 2001 was 25,100.
- The total number of children aged 16 or over ceasing to be looked during the year ending 31st March 2001 was 6,800.
- The total number of days of care provided for the year ending 31st March 2001 was

21,260.

- The total number of children looked after on care orders at 31st March 2001 was 37,600 – interim care orders (7,900) and full care orders (29,700).
- The total number of children looked after on 31st March 2001 in Foster Placements was 38,400. This compares with 6,900 placed with parents, 6,800 in secure units, homes and hostels, 3,400 placed for adoption, 1,100 in residential schools and 680 in other residential settings.

Table 2.1, adapted from table B in the publication 'Children Looked After by Local Authorities, Year Ending 31 March 2001, England' (Department of Health, 2002a) shows the age and sex breakdown of the looked after population in 2001.

Table 2.1: Age and sex breakdown of children looked after in 2001 in England.

		%	Numbers
Age	Under 1	3.9	2,300
	1-4	15.8	9,300
	5-9	22.7	13,300
	10-15	41.8	24,700
	16 and over	15.5	9,300
Gender	Boys	55.3	32,600
	Girls	44.7	26,300
All Children		**100**	**58,900**

Source: Department of Health (2002a).

Most of the statistics available in the Department of Health's Children Looked After Statistics volume exclude children accommodated under an agreed series of short breaks or

placements. However, it is still important to acknowledge that some children are accommodated in this way – over 1,100 looked after children were looked after on short-term placements (or breaks) on any one day for the year 2000. These children are mostly looked after due to a disability – 70% of children looked after under a series of short term placements were recorded as being looked after during 2000/2001 for reasons relating to a child's disability.

For children not looked after under an agreed series of short breaks or placements, only 3% (750) had a disability as their main reason for starting to be looked after (Department of Health, 2002a). In addition to these children, the Department of Health commentary suggests an estimated 11,100 children looked after have a disability but this was not the main reason that they were taken into care/requiring social services.

The number of care leavers with 5 or more GCSE passes at grade A to C was just 5% in the year 2001. As noted in Chapter 1, this is well below the government target of 15% by the end of 2003/4 (Department of Health, 2002a).

Approximately 33,100 of children looked after in 2000 were of an age to be eligible for compulsory schooling. Of these, 8,600 (26%) had a statement of special education needs, 500 had received a permanent exclusion from school (1.5%) and 4,000 had missed at least 25 days of school (Department of Health, 2001d).

2.2: STATISTICS ON EDUCATION: DATA SOURCES AVAILABLE ON THE EDUCATION OF ALL CHILDREN AND LOOKED AFTER CHILDREN

In order to answer the second part of question one of the research proposal, to cost the education of LAC, we needed to obtain specific information on:

- pupil numbers in pre-primary, primary, secondary, special schools, further education and higher education;
- costs involved with mainstream education (primary, secondary, special schools, further education and higher education); and,
- costs involved with special education (pupil referral units, special education needs, education out of school and exclusions[1]).

And, how the proportions of LAC in each of these different types of educational provision compared with all children.

Whilst it was relatively easy to obtain the information in the above bullet points for all children, the same could not be said about obtaining these figures for LAC. We could not find any published statistical sources that provided information about either the proportions of looked after children in mainstream education/ special education or the costs involved in educating looked after children. Looked after children did not seem to be directly identified within the published sources of education statistics. There was no explanation for why this is

[1] For special education, we identified a number of separate provisions:
1) statements of SEN in mainstream schooling
2) non-statemented SEN
3) special schools
4) pupil referral units
5) exclusion and home tuition
6) home tuition due to not being placed in a mainstream school

the case within the published statistical sources we consulted, but published research suggests this is for a variety of reasons including issues of confidentiality and because education departments often work independently from social services departments (Martin & Jackson, 2002; Francis, 2000; Fletcher-Campbell, 1997), because of the lack of communication between schools and social workers (Social Services Inspectorate, 1995) and also because Social Service Departments put educational progress low on their list of priorities (Jackson, 2000; Francis, 2000; Aldgate *et al*., 1993).

Because of the lack of quantitative evidence on the education of LAC from published statistical sources, we consulted published research. We found, that there is also a lack of quantitative evidence on the education of LAC within published research. However from some published research we found, it was possible to identify the proportion of looked after children of pre-primary age and the proportions of looked after children of primary and secondary age (these are assumed to be in school) (Table 2.2) and we found out that very few LAC go on to further education and even fewer onto higher education - between 12 and 19% (17% as average) LAC attend further education (Martin & Jackson, 2002). It is difficult to be completely sure how many of these young people in further education go on to higher education, although it has been suggested in Fletcher-Campbell (1997) that the upper figure is 1% (this agrees with unpublished research by Jackson & Roberts, 2001). The cost of living for a student over a 38-week academic year is estimated by the National Union of Students to be £7,308 in the London area and £5,943 outside London, in both cases amounting to over £2,000 more than the student loan. It also assumes that the student can live at home during vacations and will work through the summer. The cost to the local authority is therefore

likely to be higher, but the overall numbers are so small that they do not affect the national figures.

In addition to these figures about the proportions of LAC in mainstream education, it was also possible to obtain some figures about the use of special education services by LAC (Table 2.3) – notably the proportions of looked after children with a statement of special education needs and the proportions of LAC that have been excluded from school. However, there are no published statistics or other sources that offer any information about the proportions of LAC attending special schools.

For all children, we were able to obtain figures for both the proportions in mainstream/special education and the costs of these different types of educational provision. We obtained these from three main data sources:

1. The DfES publication '*Statistics of Education: Schools in England, 2001*' (Department for Education and Skills, 2001b). This gives information about full-time and part-time pupils in maintained primary and secondary schools and the proportion of statemented children in maintained mainstream schools or pupil referral units/special schools.
2. Publications of the Chartered Institute of Public Finance Accountants (CIPFA). CIPFA collate information supplied to the DfES from individual local authorities within the Section 52 Education Outturn Statements. The publication from CIPFA entitled '*Education Statistics Actuals Incorporating the Handbook of Unit Costs*' provides an England summary of the actual costs (e.g. Chartered Institute of Public Finance Accountants, 2001a) involved in delivering primary, secondary, special schools and education out of school. The publication from CIPFA entitled '*Education Statistics Estimates*' provides estimates of costs for the forthcoming year, based on local authority

budgets, and includes a more detailed section about special education than that contained within the education actuals (e.g. Chartered Institute of Public Finance Accountants, 2001b).

3. The DfES Statistical Bulletin series entitled '*National Statistics First Release*' which gives figures earlier than the full report. Two of these first release reports have been used to find figures about special education needs (statemented or non-statemented) (Department for Education and Skills, 2002) and exclusions from mainstream schooling (Department for Education and Skills, 2001a).

To summarise, it was only possible to obtain from published statistics on education, figures for all children – not LAC. However, using published research, it was possible to obtain some figures about LAC (although not about costs or special schools). The figures for LAC have been used to compare LAC with all children. Figures on the costs involved in providing education for all children, together with information about how LAC compare with all children in mainstream and special education (see section 2.2.1 below), were used to cost the education of LAC. Please refer to Table 2.5, which shows the estimated total public expenditure on the education of looked after children.

2.2.1: How do LAC compare to all children in terms of education?

Tables 2.2 and 2.3, on the following page, show how LAC compare with all children in terms of age, type of education, special education needs and exclusions.

Table 2.2: How LAC compare with all children in mainstream education.

Age	Type of Education	No. of LAC	Pop est. all children (thousands)	LAC as % of all children
<5	Pre-primary	11,600	3,038.24	0.38
5-9	Primary	13,300	3,261.60	0.41
10-15	Secondary	24,700	3,338.11	0.74
16-18	Post 16	9,300	1,669.06	0.56

Source: LAC numbers from Department of Health (2002a); population estimates from Department of Health (2002b) (KIGS).

Table 2.3: How LAC compare with all children in special education.

	LAC	All children
SEN	26% (8,600)	3.0%
Permanent exclusions	1.5% (500)	0.1%

Source: Department of Health (2001d). These figures exclude children looked after for less than 1 year.

2.3: OTHER COSTS AND DATA THAT COULD NOT BE FOUND

Apart from the figures mentioned in section 2.2, there are other costs that we felt needed to be included in estimating the direct costs of the education of LAC. These are costs that would be met by parents of non-LAC and which should be met as part of the 'corporate parenting' role that Local Authorities play in the upbringing of LAC. These figures might be considered as part of the programme for improvement, which is not within our remit, but would need to be included to provide a fuller picture of current expenditure.

These figures of extra costs would be:

- transport to school for LAC (often by taxi);
- provision of school uniform and materials for use at school;

- home tuition for pupils who do not have a school place and who have not been excluded from school;
- learning resources (books, materials, computers);
- 'equal chances' expenditure (music lessons, sport, clubs, school trips, other leisure activities);
- educational provision in residential care;
- educational support for foster carers;
- earmarked allowances for foster carers;
- voluntary workers' expenses (e.g. educational visitors);
- project materials and stationery;
- training for foster carers and residential workers;
- specialist foster placements; and,
- specialised career guidance for LAC.

We were unable to find these figures at the national level but we were able to get some estimates of such costs from a few local authorities (see section 2.7).

2.4: ESTIMATING THE DIRECT PUBLIC EXPENDITURE ON THE CARE OF LAC AND THE EDUCATION OF LAC

This section sets out the actual method/process we used to estimate the direct public expenditure on the care of LAC and education of LAC. All figures we used to estimate these two things have been given for the year 2000-01. Where statistics could not be obtained for

this year, the GDP deflator (from Economic Trends)[2] was used to adjust the figures to give 2001 prices.

We used the following information to estimate total public expenditure on the care of LAC for each type of care provision (Table 2.5):

- the number of LAC at a point in time[3] (31st March) in each type of care provision;
- the unit cost of each type of care provision (annual cost per child).

We used the following information to estimate total public expenditure on the education of LAC for each type of educational provision (Table 2.9):

- the number of LAC at a point in time in each type of educational provision;
- the unit cost of each type of educational provision.

2.4.1: Direct public expenditure on the care of LAC – figures and process

The Department of Health (2002c) gives the gross expenditure on children's homes and on fostering services. For 2000-2001 these are respectively £690m and £550m. Additionally, it gives £30m for secure accommodation and £50m for other residential accommodation. Unit costs (per child per week) are also given: for residential care in children's homes it is £1,910, in foster placements it is £281 (for all children either in foster care or children's homes it is £545), and for children looked after in secure accommodation it is £770. (Data for individual local authorities are available from the Department of Health web site: http://www.doh.gov.uk/public/pss_stat.htm).

[2] It was not possible to find all the expenditure data required from a single year.
[3] The census date on which the data are collected is assumed to be representative of the year as a whole.

To convert these unit costs per child per week to annual costs per child requires information on how many weeks a child will spend in each form of accommodation in a year. This is not straightforward. Data are collected on the total numbers of days children spend in each form of care, but not how many children that represents. On 31st March each year local authorities report how many children are looked after in each form of care (e.g. Department of Health, 2002a). These are shown in Table 2.4, which includes the codes from the Department of Health SSDA 903 form and the EX1 form that collects data on expenditure. Expenditure on children's homes is code BB1; expenditure on foster placements is code BB3; expenditure on secure units is covered by code BB2.

Table 2.4: Children looked after at 31st March 2001.

SSDA 903 codes	EX1 codes	Placement	No. of children
		All children	58,900
F1-6	BB3	Foster placements	38,400
P2, P3	BB4	Living independently or in residential employment	1,200
H1, H2	BB2	Secure units	180
H3, H4	BB1	Homes and hostels subject to Children's Home Regulations	6,100
H5	BB1	Homes and hostels not subject to Children's Home Regulations	520
S1	BB1	Residential schools	1,100
A1	BB3	Placed for adoption	3,400
P1	BB4	Placement with parents	6,900
R1-5	BB4	Other accommodation	1,200

Source: Department of Health (2002a) Table D.

From Table 2.4 it can be seen that some looked after children are not in one of these three

forms of care. Gross expenditure on these other children is collected under a single heading of 'Other children looked after services', code BB4. The total figure for 2001 was £53m. (This figure comes from the 'Detailed activity' spreadsheet at the above web address.) The Department of Health does not publish an estimated unit cost for this residual group. The description for this group, taken from the EX1 form, is shown below.

Include support to looked after young people:

- In NHS/other establishments providing nursing/medical care.
- Residential, respite and emergency nights in residential beds at family centres.
- In lodgings or hostels
- In Mother and baby homes.
- Living independently in flats, Bed and Breakfast establishments or with friends.
- In residential employment.
- Placed with their parent or person with parental responsibility.
- Independent visitor costs and relevant contact payments under sections 20/34 of the Children Act 1989 not included under Children's Homes or Fostering Services above.

However, some of the children in Table 2.4 will have started to be looked after in the year and so will not have been accommodated for the whole year, whilst others will have left during the year and so will not be included in the count for 31st March. However, it is a reasonable assumption that the number present on 31st March will be much the same as the number present on every other day in the year. There is a small increase in the number of LAC over the year, so that the 31st March figure might be a slight overestimate, but the difference is very small (less than 2 percent in 2000) and so makes little difference. Therefore the annual cost can be estimated as 52 times the weekly cost, even though different children might be accommodated on different weeks.

On that basis, the annual gross expenditure per child in a children's home is £99,300, in foster care is £14,600, in secure units is £40,000 and for other care it is £5,700. These annual unit costs are shown in Table 2.5.

Table 2.5: Public expenditure on the care of looked after children (2001).

Type of care	Number of LAC	Annual cost per child	Total annual expenditure (£m)
Foster care	41,800	£14,600	£550
Children's homes	7,720	£99,300	£690
Secure units	180	£40,000	£50
Other	9,300	£5,700	£53
Total	58,900	-	£1,343

In addition to the direct public expenditure of the care of looked after children, this study also aimed to obtain an estimate of the average lifetime cost of care per LAC. The lifetime cost of care for LAC will depend both on the type of care they are receiving and the length of time they spend in that care. However, estimating how long a looked after child will spend in care during their childhood is not straightforward. The Department of Health collects information on the duration of care placements, duration of periods of care and the number of placements and periods of care for each child. (A period of care is the time a child was continuously looked after by the local authority; a period of care may be made up of a number of consecutive placements. These may be of the same or different types.) From these data it should be possible to calculate how long each child has spent in each form of care.

However, the data are published (Department of Health, 2002a) in a different form. For children ceasing to be looked after, the duration of the latest period of care is given. For children who ceased to be looked after in the year ending 31st March 2001 this was an

average of 711 days, or almost two years. The duration of the period of care is strongly related to the legal status at the time the child leaves care. This is shown in Table 2.6. (For children in care during the year ending 31st March 2001 the average number of care days provided within the year was 262: Department of Health, 2002a; page 29.)

Table 2.6: Children who ceased to be looked after in the year ending 31st March 2001 by legal status on ceasing and duration of latest period of care.

	All Children	Full Care Order	Interim Care Order	Voluntary Agreements	Other
Number of children	25,100	4,700	1,800	15,800	2,800
Average duration of stay (days)	711	2,215	357	346	468

Source: Department of Health (2002a) Table T.

Some of the children ceasing to be looked after during the year will have had previous periods of care. The number of periods of care and the number of placements for children who ceased to be looked after during the year ending 31st March 2001 are shown in Table 2.7. It is not possible to estimate the total time in care by multiplying the average duration of a period of care by the number of periods, since it is possible that the average duration of a period of care might be different for children with many periods than for children with one or few periods.

The majority of children ceasing to be looked after (69 percent) had had only one period of care. It cannot be assumed, however, that this will be their only period of care. The children in Table 2.7 are the children who ceased to be looked after that year: a number of them will return to the care of the local authority later in their childhood, and so their total number of periods of being looked after will be greater. This further complicates the estimation of the total duration of care. This total will only be known when children reach the age when they

can no longer be looked after by the local authority.

Table 2.7: Children who ceased to be looked after during the year ending 31st March 2001 by number of periods in care and number of placements in care history.

	Periods	Placements
All children	*25,100*	*25,100*
1	17,400	8,700
2	4,300	5,400
3	1,600	3,300
4	740	2,000
5	410	1,500
6	200	900
7	100	680
8	80	470
9	60	410
10 or more	170	1,800

Source: Department of Health (2002a) Tables U and V.

The duration of a placement within a period also varies by the type of placement. This is shown in Table 2.8 on the next page.

No data have been published on the lifetime care history of individual children, making it difficult to estimate how long, on average, a looked after child will spend in care during their childhood. From Table 2.8, the average number of care periods for children ceasing to be looked after is 1.9. This is probably an underestimate of the average total number of care periods in a child's life, as some of the children ceasing to be looked after will return to being looked after. The average duration of being looked after for children was 711 days for

children looked after during the year to 31st March 2001. Some of these children will continue to be looked after over coming years, so this average will probably underestimate the average duration in care. Taking these two figures, for average number of periods and average length of period – both of which are likely to be underestimates – we get an average duration of 1,350 days, or 3.7 years. It seems reasonable, therefore, to estimate that the average duration in care for a looked after child, over their entire childhood, is at least four years.

Table 2.8: Duration of placements ceasing during the year ending 31st March 2001.

	Placements	Average duration (days)
All placements	*77,300*	*248*
Foster placements	48,800	256
Children's homes	12,200	198
Schools	1,000	296
Placed with parents	5,600	362
Placed for adoption	3,200	394
Living independently	2,500	155
Other placements	4,100	93

Source: Department of Health (2002a) Table W.

2.4.2: Direct public expenditure on the education of LAC – figures and process

Obtaining an estimate of the annual public expenditure on the education of looked after children is more complicated than for care, as there are no direct data published on this nor on all of the elements needed for the calculations. Hence, it has been necessary to make a number of assumptions, which are indicated below in the course of the discussion.

Table 2.9 presents the estimates, which are further explained in the commentary on the table and in Appendix 1. The figures in the fourth column are obtained by multiplying those is column 2 (number of LAC) with those in column 3 (unit cost).

The total public expenditure in 2000-01 on the education of looked after children is estimated to be around £251 million. Only a proportion of this expenditure is due to the children being in care. Education expenditure on these children if they were not looked after needs to be subtracted from the overall total of £251 million to give an estimate of the additional public expenditure on education due to these children being in care.

The average expenditure on a looked after child's compulsory education in 2000-01 was £5192 in 2001 prices. If we include 16-18 year olds, the average cost falls to £4442. This is lower than for the compulsory aged group because only 17% or so of LAC continue with post 16 education (Department of Health & Department for Education and Skills, 2002).

Table 2.9: Estimated public expenditure on the education of looked after children.

Type of provision	Estimated no. LAC utilising provision	Unit cost of type of provision (£)	Total public expenditure on LAC provision (£000s)
Mainstream nursery and primary (ages 1-10)	20,870	2,159	45,059
Mainstream secondary (ages 11-15/16)	17,290	2,754	47,609
Non-statemented SEN in mainstream schools	29,570	857	25,341
Statemented SEN in mainstream schools	6,110	2,576	15,742
Special schools	5,100	11,525	58,778
Pupil referral units	3,760	12,555	47,207
Education out of school due to exclusions	280	8,450	2,366
Education psychology service attributed to LAC	29,450	119	3,501
Further education (16+ to 18)	1,580	3,245	5,127
Higher education	123	5,372	661
TOTAL aged 1-18 (not double-counting)	56,600	-	251,390

NB: all expenditure data reported for earlier years are adjusted to 2001 prices using the GDP deflator (from Economic Trends)[4]. Also, non-statemented SEN children are in mainstream school. We costed children with statements of SEN who are attending special schools within expenditure on special schools.[5]

[4] It was not possible to find all the expenditure data required from a single year.
[5] Education Statistics Actuals Table 3 England Summary reports data on expenditure on special schools and separately net expenditure on pupils with statements in the primary, secondary and special schools sectors. It is clear from the size of the figures that the costs of statements are included within the special schools expenditure when these are reported separately.

2.5: THE IMPACT ON PUBLIC EXPENDITURE IF LOOKED AFTER CHILDREN HAD THE SAME INCIDENCE OF EDUCATIONAL PROVISION AS ALL CHILDREN

This section answers, in part, question two of the research proposal.

Looked after children of compulsory school age tend to incur greater additional costs compared to non-LAC. This is due to the larger proportion of LAC who attend the more expensive types of provision (special schools, pupil referral units (PRUs), education out of school) and who have statemented and non-statemented educational needs. However, post-compulsory school age LAC tend to incur less public expenditure. This is because LAC participate far less in further and higher education (see previous section).

Table 2.10 (page 54) estimates the public expenditure on the education of the LAC if they had the same incidence of types of educational provision as all children. In this event the proportions of all children in the different types of provision is shown below with the estimated percentage of LAC in parentheses:

- Mainstream nursery, primary and secondary: 98.7% (92% nursery & primary; 70% secondary).
- Special schools: 1.2% (11%).
- PRUs: 0.1% (8%).
- Excluded: 0.1% (1.5%).
- Statements of special educational need: 3% (26%).
- SEN without statement: 18.6% (78%).
- Assumed use of educational psychology service; 20% (50%).
- Participation in education: 16 year olds 76%; 17 year olds 65.3% (17%).

Participation in HE: 33% assumed (1% of LAC). Since the number of LAC does not include persons over the age of 18, it is further assumed that 33% of an average year group in the age range 10-15 would enter HE.

From Table 2.10, we can see that the estimated public expenditure on the education of 56,600 children who are not LAC, including an additional 4,076 young people in higher education, is £175 million. If we restrict the comparison to children up to the age of 18 (i.e. exclude HE) then the public expenditure on 56,600 children in care is £251 million compared to an estimated £153 million for the same number of non-LAC. Thus, the additional expenditure per LAC child aged 1-18 is roughly £1,700 per child.

If we restrict the comparison further to nursery and compulsory school aged children then the estimated expenditure on LAC is £245 million compared to £131 million if these children were not in care at any stage in their lives. This difference is estimated to be £2,780 per LAC. The larger difference in expenditure is due to the much higher incidence of the more expensive types of special education provision for LAC.

Table 2.10: Estimated public expenditure on the education of 56,600 children aged 1-18 if they were not in care.

Type of provision	Estimated no. pupils utilising provision	Unit cost of type of provision (£)	Total public expenditure on provision (£000s)
Mainstream nursery and primary (ages 1-10)	22,325	2,159	48,200
Mainstream secondary (ages 11-15/16)	24,400	2,754	67,186
Non-statemented SEN in mainstream schools	7,068	857	6,057
Statemented SEN in mainstream schools	844	2,576	2173
Special schools	500	11,525	5763
Pupil referral units	38	12,555	477
Education out of school due to exclusions	38	8,450	321
Education psychology service attributed to LAC	11,200	119	1,346
Further education (16+ to 18)	6,557	3,245	21,276
Higher education	4,076[6]	5,372	21,895
TOTAL aged 1-18 (not double counting) and excluding HE	56,600	-	174,694

NB: all expenditure data reported for earlier years are adjusted to 2001 prices using the GDP deflator (from Economic Trends)[7].

[6] This figure is derived from three cohorts of one third of the size of a secondary school year group from the sample of 56,600, assuming a 0.25% drop out rate from HE.
[7] It was not possible to find all the expenditure data required from a single year.

2.6: WHAT ARE THE NET SAVINGS OF THE IMPACT ON PUBLIC EXPENDITURE IF LOOKED AFTER CHILDREN HAD THE SAME INCIDENCE OF EDUCATIONAL PROVISION AS ALL CHILDREN?

The annual cost of educating looked after children has been worked out to be £251.0m (Table 2.9). If looked after children were not in care, the cost of their education would be reduced by £76.7m (Table 2.10). This saving is related to the extra costs of special education being used by LAC. This net saving would be even greater if higher education and further education were taken out of the equation (£114m). This is because whilst LAC use special education more than all children, very few LAC go into further and higher education.

The crucial assumptions upon which these differences in estimated expenditure depend are those relating to:

- the percentage of LAC with statements of SEN who attend special schools;
- the percentage of LAC who attend PRUs;
- all LAC in mainstream schools requiring resources for additional educational need, even if they do not have statements.

The sources of data and the details of the assumptions and methods used for the estimation of unit costs and numbers of LAC utilising different types of educational provision are detailed in Appendix 1.

2.7: EXAMPLES OF LOCAL AUTHORITY EXPENDITURE ON COSTS ASSOCIATED WITH EDUCATION, WHICH FOR NON-LAC WOULD BE MET BY THEIR PARENTS

As mentioned previously (section 2.3), there are no national data for the costs associated with the education of LAC, which for non-LAC would be met by their parents. However, we were able to obtain a few examples of these costs from a few local authorities we spoke with. The figures given below are what we believe has been spent explicitly to improve the educational experience of LAC. They might be considered as part of the programme for improvement, which is not within our remit, but are included here because they indicate the kinds of information that would be needed to provide a fuller picture of current expenditure.

The following are the examples of local authority spending that we obtained:

Cost of comprehensive education support service designed to 'turn round' a child's education situation from failure and/or no education provision to successful attendance at mainstream school (see Appendix 2 for details):

- Charge to independent fostering agencies: £160-£195 per week per child (cost absorbed by agencies from charge to local authorities, no charge to schools.
- Charge to residential children's homes £350 per week per child.
- Individual children: costed at 4 service levels depending on teacher input required to secure a successful education placement, exclusive of VAT and car mileage.
  - Level 1 £3,133 per school term
  - Level 2 £7,033 per school term
  - Level 3 £10,270 per school term
  - Level 4 £15,600 per school term

The above charges take account of overheads as well as direct costs.

Estimated expenditure on educational enhancement by 2 local authorities

- Multi-agency training: 3 half-day training days on education of LAC for teachers, residential and field social workers, school nurses, and CAMHS staff, including materials £18,000
- Creating a database interface between social services and education £40,000
- Designated worker to enable young people to access learning through leisure £6,000
- Secondment for teacher to work with residential homes £1,800
- Work shadowing and back up seminars for care staff and newly qualified teachers £4,000
- Computers for foster carers and homework support £51,000
- Award ceremonies for LAC £1,500 p.a.

(Many other examples could be given.)

2.8: KEY ISSUES

- Looked after children are not identified within the education system and are therefore not openly reflected within published statistics on mainstream education.

- It is also difficult to distinguish the proportion of looked after children who are completing further education in schools compared to sixth form or further education colleges.

- Although looked after children are more likely to require special education services, there is a distinct lack of published information about how much looked after children use such services (e.g. pupil referral units/education psychology services/therapeutic services/facilities) relative to all children.

Chapter 3: THE COSTS AND BENEFITS OF IMPROVING LIFE COURSE OUTCOMES FOR LOOKED AFTER CHILDREN

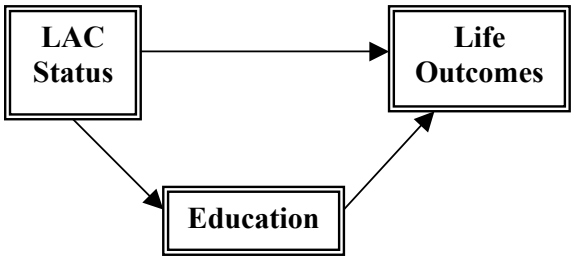
This chapter provides estimates of the costs of poor adult outcomes for looked after children (LAC). It does this using two methods as described below in sections 3.1 and 3.2.

3.1: METHOD 1

In the first method, we use the British birth cohort studies to estimate the relations between LAC status and particular adult outcomes, such as crime and health.

Educational failure is a key channel for the effect of LAC status on life outcomes but, in the first method, we do not model this explicitly. Rather, we estimate what economists call a "reduced form" model. This can be explained with reference to Figure 3.1 which shows the direct link from LAC status to life outcomes such as crime and also the indirect pathway via educational failure.

Figure 3.1: Direct and indirect effects of LAC status.



Educational failure is a mediator or channel for the effect of LAC status on life outcomes, LAC have poor life outcomes in a large part because of school failure in terms of measures such as low attendance, poor literacy levels and failure to attain qualifications. It is possible to estimate the relative importance of these different pathways for effects on life outcomes.

Statistical methods can distinguish between that part of the LAC effect that is mediated by education and that part that is channelled through other mediators. However, to estimate the full structural model is costly in terms of time. Moreover, although the precise links are interesting in themselves, they are a distraction from the key issue which is the full magnitude of the effect of LAC status on life outcomes. If the two separate channels were modelled separately, subsequent analysis would in any case have to re-aggregate in order to estimate the full effect of LAC status on life outcomes.

The reduced form approach does not attempt to identify the precise links in the causal chain from LAC status to life outcomes but instead estimates the total magnitude of the effect of LAC status on outcomes, regardless of the channel. It is a short-cut to the outcome of interest for this report, namely the social and economic cost of poor outcomes for LAC children. Implicitly, it aggregates the direct and indirect effects from Figure 3.1 and so gives us the elasticities we need.

We use cost information from other sources to estimate costed “effects” based on two comparisons representing upper and lower bound estimates.

The upper bound is the social and economic cost of the difference in outcomes between LAC and average children. The lower bound estimate is based on the recognition that LAC are not

drawn randomly from the general population but from a disadvantaged sub-group of the population whose outcomes are likely to be worse regardless of LAC status. The lower bound, therefore, is chosen to indicate the social and economic cost of the difference in outcomes between LAC and children from similar disadvantaged groups.

The data and results by this method are reported in sections 3.3 and 3.4.

3.2: METHOD 2

Our second approach is to focus more directly on educational failure and to model the link from educational failure to negative outcomes. To do this we draw on the more detailed work commissioned by the DfES (Social Policy Research Unit (SPRU), 2002) looking at the economic and social costs associated with 16-18-year-olds 'not in education, employment or training', the so-called NEET group of teenagers.

The advantage of this method is that it draws on a more substantial and well-rounded study that estimates costs across a wider range of areas and considers annual and discounted lifetime costs separately. It also makes explicit the educational failure channel, although only one channel (being NEET) can be considered.

By considering the likelihood of LAC being NEET, we estimate associated costs using the SPRU study. The results are presented in Section 3.7.

The disadvantage of this second method is that it only considers costs of being NEET and

although LAC are at high risk of being NEET, they are, in fact at greater risk of achieving negative outcomes than the average NEET teenager. This is highlighted by the results of our first method, the reduced form approach. The additional level of risk and cost is ignored by our second method. We emphasise, too, that the two methods are alternatives and that adding the results from the two would lead to double-counting.

Before addressing these costs issues, in Section 3.3 we describe the results of a literature review on the nature and effects of being in care.

3.3: LITERATURE REVIEW: SUMMARY OF THE FINDINGS FROM THE LITERATURE QUOTING THE LONG-TERM OUTCOMES OF THOSE WHO HAVE EVER BEEN LOOKED AFTER

The section below summarises the information drawn from the literature we were able to trace, pertaining to the long-term outcomes of those who have been looked after as children. The detailed findings, and the full references to which the literature summarised here refers, can be found in a series of tables contained in Appendix 3. Generally there is a serious shortage of longitudinal and follow-up studies and little reliable quantitative data. Some of the best studies are now quite old and it might be questioned whether their results are still valid. However on the whole they agree with more recent findings. We have included some French and American studies for comparative purposes although they are not directly relevant.

3.3.1: General and descriptive findings

To contrast with the figures for the year ending 31st March 2001, mentioned in Chapter 2 of this report (section 2.1.1), national figures show that in England in 2000: 58,100 children were in care on 31st March 2000 (representing 2% of the childhood population); 92,400 passed through the care system during the year ending 31st March 2000; and, 8,100 young people left the care system in the same period (Department of Health, 2001b). Fairly even numbers of males and females are looked-after, four-fifths of whom are of White ethnicity. It is perhaps not surprising that the research shows that deprivation is strongly associated to being placed in care. Those who end up being looked after are more likely than their non-looked after counterparts to: come from single-parent families; have been born to younger mothers; have been born pre-term and have a low birth weight; have more siblings and thus overcrowded homes; have parents with mental health problems; have parents claiming benefits; and, to be generally experiencing poverty (Bebbington & Miles, 1989).

However, one should not overlook the fact that the research reviewed here shows that the experiences of those in care, and the families from which they originate, present a diverse picture. Whilst a sizeable number are placed in institutional care at an early age, spend many years in care and experience multiple placements, there are many who spend only a brief duration with caring foster parents and are then returned to their families where they remain without further experiencing the circumstances which first prompted their move to care (Packman & Hall, 1998). The long-term outcomes of those placed in care are likely to be associated with a number of different factors, such as: age at first placement; type of alternative care received; degree of contact with birth families whilst in care; duration of time spent in care; number of placements experienced; age upon leaving care; and, degree of support received whilst in care.

Not surprisingly very few of the studies and literature reviewed here quote findings which consider these factors. Similar problems were encountered in the literature to those which are highlighted by Courtney *et al* (2001), in that: (1) sample attrition is often high which raises questions about whether those targeted for study and not observed are different to those targeted and who were observed; (2) timing of transitions in and out of care differ for members within a sample, and all manner of variations can be seen within the same study; (3) some samples include individuals whose exposure to care does not coincide with others in the sample and for whom duration of post-care experiences will therefore differ; and, (4) study designs are invariably cross-sectional making it impossible to draw inferences about causality or event sequence. Bearing these facts in mind, a summary of the findings as they relate to specific outcomes now follows.

3.3.2: Employment

Unemployment figures for those leaving care, throughout the 1990s, range from 11-80%, although 40-50% seems to be more common (Biehal *et al*, 1995; Sinclair & Gibbs, 1996). Where control groups or national mean figures are quoted, the looked-after group is invariably three to five times more likely to be unemployed. They also spend longer in unemployment than non-looked after samples. One study has shown how unemployment figures amongst this group actually rise, the longer the duration from the point at which they left care (Cheung & Heath, 1994). Similar figures are quoted in a USA study, although another shows how unemployment figures can be reduced (to half of that quoted by the other USA study) through the use of independent living programmes offered to those being looked after, pre-discharge (Mallon, 1998). Thus, imaginatively designed effective interventions may help provide those being looked after with the skills necessary to find fulfilling employment.

Where those who have been looked after are in part-time or full-time employment, this is more likely to be semi-skilled or unskilled work. Unsurprisingly, hourly wages are more likely to be lower than for those who have never been in care. Females who have ever been looked after are also more likely to have partners in semi-skilled or unskilled occupations (Quinton & Rutter, 1988).

Those who have ever been looked after are also only half as likely to have managerial or professional occupations. One study indicates that employment outcomes are far worse for those who have been placed in the care system before age 11, who do not leave the system until after they are 11-years-old and who spend much longer in the system (on average 9 years) (Cheung & Heath, 1994).

3.3.3: Housing and homelessness

The average age of those leaving care is some three to five years lower than the average age that other young people leave their family homes. One study found that one in ten looked after children had already experienced living independently before the official school leaving age (Barnardos, 1996).

When looked-after groups are followed-up after discharge from care, they are commonly found to be living in unsatisfactory, temporary and/or social housing without standard household possessions such as a washing machine (National Foster Care Association, 1997; Quinton & Rutter, 1988). One study found that those looked-after were a staggering 118 times more likely to be living in independent households than the rest of the population. These individuals are also far more likely to change address in short spaces of time, commonly three or four times within 12-18 months of discharge (Biehal *et al*, 1992).

Looked-after children are more likely to find themselves homeless after discharge from the care system than those raised with their birth families. Up to one in five are homeless within two years of discharge, with males being twice as likely to experience this situation. One study states that looked-after children are in fact sixty times more likely to find themselves homeless than other young people. Studies focussed on homeless samples have found that 22-50% have experienced a period of being looked-after, with approximately 30% more commonly reported (Centrepoint, 2001).

Many looked-after children report feeling unprepared for independent living and lacking in the skills to find appropriate accommodation (Broad, 1998). Once again, a study by a team in the USA has shown how an independent living programme intervention can reduce the likelihood of homelessness and equip looked-after children with the skills necessary to survive beyond and outside of the system.

3.3.4: Social Security and benefits

There was a paucity of research pertaining to the long-term benefit-claiming status outcomes of looked-after children. However, that which was traced shows that since 16-17-year-old care leavers are not able to claim Income Support or Housing Benefit, a disproportionate amount have to claim Severe Hardship Allowance (Barnardos, 2002). Follow-up studies in the UK and the USA report similar figures, that one third of looked-after children are claiming benefits one to four years after discharge (Hobcraft, 1998). This is almost twice the figure for the general population. Once again, an independent living programme intervention tested in a USA study showed that at follow-up 4-5-years later, only 6% of the sample were claiming benefits, which compared very favourably to the general population figure of 5%.

3.3.5: Crime

Figures show that 11-50% of children (both males and females), who are being looked after, have had contact with the police. Studies commonly report that this degree of contact is three times that of other children in similar age groups (e.g. Courtney *et al*, 2001; Department of Health, 2001d). When these children are followed-up some time after discharge from the care system they are again more likely to have had further contact with the police or probation services, with figures for males tending to be two to three times higher than for females (Hobcraft, 1998).

Studies of prison populations show that those who have been looked-after are over-represented, with figures commonly reported of between 25% and 50%. This equates to between twelve and twenty-five times the figure for the general population. Contact with the police and spells in prison are more likely for those who enter care early and spend longer being looked after.

One USA study reported that looked-after children were also more likely to have been the victim of a physical or sexual assault. No comparable figures could be found for the UK but this is an interesting area for future research and raises the issue that those who have been in care may be as likely to be on the receiving end of criminal acts as they are to be the perpetrators.

3.3.6: Health and social functioning

Far more research has been carried out looking at the long-term health and social functioning outcomes of those who have been looked-after. Whilst being looked after, these children are more likely to receive inadequate routine physical health checks, such as immunisations and

dental checks (Williams *et al*, 2001). They are also more likely to exhibit behavioural and conduct problems, and difficulties in developing interpersonal relationships. Their mental health also suffers with anything between three and ten times as many looked-after children experiencing psychiatric disorders or receiving a mental health diagnosis (Dimigen *et al*, 1999). As many as a half make use of mental health services and they are over seven times more likely to be hospitalised for a mental health condition. Approximately one in three looked after children will experience multiple mental health problems. Those with more developmental problems often remain in care for longer, which in itself can lead to a cycle of increased health and social functioning problems, further preventing assimilation back into their birth or adoptive families. Some of the problems discussed here may be due to the fact that no single person is responsible for the health and well-being of the looked-after child, nor familiar with their full medical history, and thus symptoms and early warning signs may go unnoticed (Ward, 1995).

Given their increased likelihood to experience health and social functioning problems during care, it is not surprising to find that, when followed-up after discharge from the care system, those who have been looked-after continue to experience problems. They are twice as likely to experience mood disorders (e.g. depression) and emotional problems, six times as likely to experience psychiatric disturbance and up to twenty-two times as likely to be hospitalised due to psychiatric problems (Hobcraft, 1998). Psychological distress and poor social functioning are commonly reported in those who were once looked-after and it is easy to appreciate that for those who had high expectations on leaving care, can quickly become disillusioned when faced with unsettled relationships, isolation and a sense of vulnerability (Triseliotis *et al*, 1995). Poor employment prospects and a lack of effective life-coping skills can exacerbate health problems.

Health and social functioning problems appear to be worse for those who have come from more disadvantaged backgrounds, where their parents have also suffered from mental health problems, where their siblings were also placed in care and where they have experienced childhood abuse or neglect. However, the picture need not be so gloomy since intervention studies carried out in the USA with children who are being looked-after, have shown that behavioural, social and mental health problems can be alleviated with a range of specialist therapies and 'treatment' foster care. Obviously, the sooner these can be implemented, the better the prospects for those entering the system (Reddy & Pfeiffer, 1997).

3.3.7: Parenthood and marital status

Finally we turn to the long-term outcomes of looked-after children as they relate to parenthood and marital status. The research reviewed here tends to focus upon the female experience and shows that between 12.5% and 25% of females leaving care are pregnant or already mothers (Garnett, 1992). This is commonly reported to be approximately three times the rate for the general 16-18-year-old female population (e.g. Garnett, 1992; Hobcraft, 1998). One study showed that female care leavers were eight times more likely to be pregnant by the age of 19 compared to a non-looked after sample (Sinclair & Gibbs, 1996).

When these females are followed-up after discharge from the care system they are up to three times more likely to have four or more children (who are less likely to have been fathered by the same man), half as likely to be in a cohabiting stable relationship, twice as likely to have experienced divorce and twice as likely to be a lone mother. One study has shown that outcomes appear to be better for those who'd had a more positive educational experience (Quinton & Rutter, 1988). The post-care family picture described here closely resembles the families of the children who are in the care system and given the implications this has for

social exclusion and cycles of inter-generationally transmitted disadvantage, policies which target the prevention of, or the ability to cope with, early parenthood can only be of benefit to this group.

3.4: DEVELOPING ESTIMATES OF THE "EFFECTS" OF LAC STATUS[8]

3.4.1: Overview

It is evident from Section 3.1 that there are strong bivariate associations of LAC and adult outcomes. However, in order to estimate realistic, costed benefits of treatments to improve the outcomes for LAC it is necessary to move beyond simple correlations.

It is clear that LAC children have high odds of criminality, for example. The estimation problem is to establish the extent to which LAC status operates over and above other factors that tend to also be in operation for LAC children such as poverty, parental neglect and poor psychological and educational development, for example. Thus, if a child at age 7 has already experienced years of deficit and then becomes LAC, the most plausible comparison group for such a child will be other children who have experienced similar deficit and not become LAC. If the child's outcomes are compared to those of non-LA children who did not have similar experience prior to age 7, then the LAC "effects" that are estimated can only be reversed by policy if policy is able to make LAC like average children, many of whom will not have received the environmental and genetic insults experienced by the majority of LAC.

[8] In order to avoid unnecessary repetition we refer to children in public care throughout this report as 'LAC'. The term 'looked after' was only introduced by the Children Act 1989 and does not therefore apply to those in the birth cohort studies who were all in care before 1991. However to simplify the discussion we have used

Generalisation from such results would lead to over-estimates of the potential benefit of improving the care system unless policy can not just overcome the effects of LAC status itself but also of prior deficit.

It had been hoped that it might be possible to develop a costed "effect" of LAC status on negative social and economic outcomes from a secondary review of the available evidence. However, because of the paucity of robust quantitative analysis as outlined in section 3.1, it has been necessary to undertake a fairly rapid, primary study of the evidence provided by the 1958 and 1970 British birth cohorts.

The method adopted is first to estimate raw differences in outcomes for LAC and others. Overcoming these differences are akin to a treatment that brings the outcomes for LAC children up to the population average. Second, we then look to see how these differences are attenuated when one takes account of experience prior to LAC status. We use this multivariate analysis to estimate the likely benefits if LAC children could achieve the outcomes achieved by their peers who started out in similar kinds of families with similar risk factors but who did not become LAC. This leads to lower estimates of the social benefits of improving policy for LAC but requires lower expectation (and implicit targets) of policy.

In the remainder of section 3.4 we describe the data used in this study and the outcomes considered. In section 3.5 we report the bivariate and multivariate evidence in these data. In 3.6 we lay out the costing information and describe the assumptions made. These are necessarily crude and dangerously simplistic. Future research will doubtless show the

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'LAC' and 'in care' interchangeably in this chapter.

resulting estimates to be flawed because the speed with which this exercise has been undertaken has not enabled us to do more than calculate broad, 'back-of-the-envelope' type calculations. In some areas, even with more time to model things more carefully, better estimates would still not result because the evidence is not available to relax crucial assumptions. In other cases, better modelling will be possible in future when new data comes on stream or information is drawn from a wider area. Where possible we have described the simplifications made.

3.4.2: The data

The data are drawn from the two main British cohort studies. The first cohort, the British Cohort Study (BCS), or 1970 cohort, followed all children born in Great Britain in the first week of April 1970. Their parents were interviewed when the children were ages 0, 5, 10 and 16[9]. The children themselves were interviewed at ages 10, 16, 21, 26 and 30. They were tested at ages 5, 10 and 16. Medical officers and teachers were interviewed when the children were 10 and 16. As a result a considerable body of educational, medical, social, psychological and economic, longitudinal information is available.

The second cohort, the National Child Development Study (NCDS), or 1958 cohort, has information on UK children born in the first week of March, 1958, roughly 16,000 children. Data was collected at ages 7, 11, 16, 23, 33 and 42.

At the latest sweep, the data collection in the two cohorts was synthesised so that the same questions were asked of each. This was not the case in prior sweeps so that not all constructs,

[9] It is important to note that the age 16 data suffers from a number of problems, not least the coincidence of a

particularly developmental measures, are available for both cohorts. Nonetheless, taken together the British birth cohorts provide a picture of the life-course histories of two cohorts of British children.

Table 1 in Appendix 4[10] shows the numbers of children reported to be in care at the available ages in the two cohorts.

We are particularly concerned to examine the relation between being in care and adult/adolescent outcomes such as crime and health. There are a number of explanations for the observed statistical association of care status and negative outcomes. To discuss these we consider the example of criminality. It is possible that:

- care status mediates the effect of disadvantages in family background. In other words, children who later came into care were already at risk of criminality, whether or not they had been taken into care, because of the experiences of family deprivation which tend (on average) to lead to both criminality and coming into care;
- care status mediates the effect of prior aspects of psychological development that leads to care status and criminality, i.e. anti-social or difficult children are both more likely to come into the care system and more likely to offend. Care status is therefore merely a mediator of this process and has no effect of itself; and,
- being looked after by a local authority in and of itself leads to criminality.

In section 3.4.3 we attempt to distinguish between these explanations using the longitudinal and cross-sectional wealth of information in the cohort studies. We do not attempt to clarify

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teachers' strike during data collection, that make interpretation of results hazardous.

the process by which LAC status or family deprivation might lead to criminality since such a study is beyond the terms of reference of this report. Readers are referred to invaluable work by, for example, Sampson and Laub (1993). Rather, here the aim is to estimate the extent to which the LAC risk factor operates on negative outcomes independently of those other risk factors that lead both to LAC status and also to negative outcomes.

3.4.3: Adult outcomes

The social and economic outcomes we consider here are, broadly, crime, health teenage parenthood and earnings, outcomes defined in more detail in Tables 2-7 in Appendix 4. The tables also give the relative probabilities and odds of negative outcomes for LAC and other children.

Crime

There is a very substantial difference in the self-reported criminality of the two cohorts, in line with the rapid rise in crime in the 1970s and 1980s. Given this, the analysis of the costs of crime is only undertaken on the 1970 cohort who are substantially more like current cohorts than are the 1958 cohort. Nonetheless, in this descriptive section we report the results for both cohorts to demonstrate the cohort shift and the changing pattern in the relation between LAC status and criminality.

Table 2 in Appendix 4 shows that LAC in the 1958 cohort had higher odds of crime than others by all the available measures of criminal outcomes. Odds ratios are higher still for the more discriminatory measures, arrest, caution and being found guilty. LAC do even worse

[10] Other tables relating to the analysis in this section are in Appendix 4.

for repeat measures, i.e. more than one negative outcome.

Table 3 in Appendix 4 reports the same set of results for the later BCS cohort.

The substantial increase in criminality and reported criminality during the 1970s and 1980s is apparent from the comparison of Tables 2 and 3 in Appendix 4. Whereas only 3% of those born in 1958 had been moved on by the police, 19% of the 1970 cohort had been moved on. The proportion reporting "being warned" rose from 12% to 29%. The relative odds for the LAC did not rise in to keep pace with this rise in minor criminality in the population as a whole so that for the later cohort the odds of being stopped and questioned or let off with a warning were not significantly different for LAC than others. The odds for being cautioned or arrested for LAC fell between cohorts but remained substantial and significant. Despite the rapid increase in crime between the cohorts, the odds for being found guilty in court did not decline at all!

We cannot fully differentiate between adolescence-limited and life-course persistent offending (Moffitt, 1993) because we do not have sufficiently accurate information on the timing and seriousness of offences. However, to attempt a partial differentiation of persistent or chronic offenders on the one hand and minor offenders on the other, we focus on two key crime variables. We take the "courta" variable to be a broad indicator of offending, and "courtb" to indicate more chronic offending. It differentiates the 514 BCS sample members who have been moved on arrested, cautioned and found guilty in court from the 1,468 people in the sample who reported merely one such form of interaction with the justice system. LAC status is a risk factor for both outcome measures but more strongly for the more serious measure. In line with other evidence, this suggests that LAC are more likely than other

children to commit crime but also even more likely to form a part of that small group of persistent offenders who commit half of all crime[11].

Health

Tables 4 and 5 in Appendix 4 report the definitions, probabilities and odds ratios for the health variables in the two cohorts.

It can be seen that LAC are more likely to be depressed in adulthood and to smoke, less likely to be in good or excellent health, or to take regular, hard exercise. They are not, however, at risk of obesity in these data.

Household and parenting characteristics

Tables 6 and 7 in Appendix 4 show that LAC are at high risk of becoming members of workless households, with or without dependent children. Looked after girls are at risk of becoming teenage parents. They are not particularly at risk of becoming single parents, however.

3.5: ESTIMATING THE EFFECT OF LAC STATUS

We have seen the generally strong association of LAC status and social and economic outcomes but, of course, LAC status is just one risk factor for negative outcomes and, moreover, is correlated with those other risk factors. It is important to test the extent to which

[11] Evidence from the Offenders' Index. This number is equivalent to 6% of all individuals or 18% of all

there is an effect of LAC status over and above that of the other risk factors with which it is associated.

In the first part of Section 3.5 we show the correlation of LAC status with other risk factors. In the second part we estimate the additional effect of LAC status.

3.5.1: Other risk factors

Key childhood risk factors for negative social and economic outcomes are poor academic performance, poor psychological development, young parents, low social class, low parental education, large family size, financial hardship, family breakdown. That these factors are also associated with LAC status is shown in Table 8 for the NCDS and Table 9 for the BCS, in Appendix 4.

The available control variables are slightly different in the two samples. For the earlier cohort, the variable indicating personal development at age 3 is a useful indicator. The poor psychological development at age 5 variable in the BCS contains more information but is slightly more likely to be concurrent with LAC status than the age 3 variable in the NCDS. Ethnicity information is better for the later cohort. The key predictors in both cases, however, are family size, age of mother, single parent, low income and low SES. These variables predict LAC status quite well, although, unsurprisingly, a substantial proportion of the variation is unexplained.

Nonetheless it is clear that LAC status is quite strongly correlated with other risk factors for

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offenders. Home Office Statistical Bulletin, 1995.

negative adult outcomes. Importantly also, these measures are all on the whole determined prior to LAC status. The implications of this have already been discussed. For example, if LAC are in most cases drawn from the low-income segment of the population, it is not altogether informative to compare their outcomes to those of the average income range, if family income during childhood exerts an effect on adult outcomes. To do so would suggest that policy reformulation that improved the outcomes of LAC could redress not only the negative effects of LAC status but also of low income, large families, poor genetic inheritances and all the other factors that also tend to lead to negative outcomes and to pre-determine LAC status. Although such a goal may be a worthy one for policy, it is a much tougher one than the policy target of helping LAC children attain the same expected outcomes as children drawn from similar segments of the population but who did not become LAC.

3.5.2: Raw and adjusted "effects" of LAC status

Tables 10-14 in Appendix 4 show how the estimated deficits associated with LAC status are reduced when the estimation controls for features of families that operated prior to LAC status. The "raw" figures give the overall social deficit for LAC compared to average children. The adjusted figures give the deficit relative to other children with conditions similar to those of LAC prior to being taken into care. Tables 10 and 11 give results for the NCDS, and Tables 12-14 give result for the BCS. Results are presented separately for crime, health and household circumstances.

The broad indications of these results are that the associations of LAC status and adult outcomes are relatively robust, though somewhat attenuated when controls for prior circumstances are introduced. The information is summarised here in Table 3.1.

Table 3.1: Summary raw and adjusted "effects" of LAC status on adult outcomes.

		NCDS			BCS		
		Raw	Adjusted	Robustness	Raw	Adjusted	Robustness
Been found guilty by a court at least once	Male	-	-	-	0.183	0.138	0.75
	Female	-	-	-	0.044	0.025	0.57
Been found guilty by a court more than once	Male	-	-	-	0.100	0.058	0.58
	Female	-	-	-	0.006	0.003	0.50
Depressed (score above 8 on Malaise)	Male	0.153	0.143	0.93	0.067	0.038	0.57
	Female	0.088	*0.037*	0.42	0.081	0.073	0.90
Very good or excellent self-reported health	Male	-0.066	*-0.030*	0.45	-0.090	-0.065	0.72
	Female	-0.046	-0.066	1.43	-0.052	-0.039	0.75
Smokes once or more cigarettes per week	Male	0.063	*0.011*	0.17	0.011	0.002	0.18
	Female	0.152	0.077	0.51	0.055	0.038	0.69
In a workless household at age 42	Male	0.079	0.047	0.59	0.042	0.025	0.60
	Female	0.085	0.052	0.61	0.034	0.022	0.65
In a workless household with children at age 42	Male	0.026	0.015	0.58	0.007	0.001	0.14
	Female	0.063	0.043	0.68	0.027	0.013	0.48
Log of hourly wage	Male	-0.101	*0.005*	0.05	-0.074	-0.054	0.73
	Female	-0.057	*0.031*	0.54	-0.114	-0.081	0.71
Teen mother		0.096	0.054	0.56	0.026	0.012	0.46

NB: The "robustness" column reports the adjusted effect divided by the raw effect, indicating the non-attenuating element of the raw difference.
"Effects" in italics are not significant at 5.

It can be seen, for example, that whereas the raw LAC status "effect" on repeat, male criminality is 10 percentage points, this attenuates to 5.8 points when controls are introduced

for prior risk factors. The 10 points is an indicator of the risk factor relative to the mean person in the data. The 5.8 points is a lower bound LAC "effect" estimate, i.e. the magnitude of the risk factor relative to people in the with similar characteristics as those who become looked after. The social cost implications of these figures are now developed in section 3.

3.6: DEVELOPING COSTED ESTIMATES OF THE FAILURE OF POLICY FOR LAC.

3.6.1: Crime

Research carried out at the Home Office (Brand & Price, 2000) suggests that the annual cost of crime in England and Wales was £60bn in 1999/2000. Included costs are those due to the anticipation of crime (security and insurance administration), as a consequence of criminal activity (loss/damage to property, emotional and physical impact) and in costs to the criminal justice system. The study was not able to estimate the costs associated with the fear of crime, the effect on victims' families or inter-generational effects. The figure is, therefore, a lower bound estimate.

This total figure is made up of £32.2bn costs of crime against individuals and households, £9.1bn commercial and public sector victimisation, £13.8bn fraud and forgery and £4.8bn traffic and motoring/other non-notifiable offences.

In a detailed costing analysis, one would want to consider separately the effect of LAC status on each of these sub-categories of crime and build up to an overall cost. This is important

because LAC may be more likely to commit some types of crime than others[12]. We do not yet have evidence on these differential impacts, however and are forced to make simplifying assumptions, namely:

1. the proportion of LAC in prisons is indicative of the proportions of crime committed by LAC, i.e. 26%;
2. LAC criminals commit offences at the mean level of cost.

We recognise that the cost of crime associated with prisoners is not the same as the average cost of crime. For example, 22% of the male prison population was sentenced for violence against the person[13], a crime with a very high average cost of £19,000. If LAC are particularly likely to commit serious crime involving assault on the person then the resulting estimates will under-state the true social and economic costs resulting from LAC status. The crucial assumption, however, is that because LAC form 26% of the prison population, they commit 26% of crime and cause 26% of the annual economic and social cost of crime. This is somewhat questionable because there is evidence that LAC who commit offences are more likely to be caught and more likely to receive custodial sentences because of the confounding effects of homelessness, unemployment and ineffective advocacy (Jackson, 2001). However we also know that the proportion of ex-care people in young offender institutions is closer to 50% (Grewcock, 2002), and since a high proportion of crime is committed by young people these two factors are likely at least to cancel out. Moreover crimes leading to prison are likely to be more expensive than the average crime. We recognize that these are crude

[12] It is worth noting that the costs of crime vary a great deal by type of crime. Costs range from those for homicide, which warrants an average cost per crime of £1.1m (mainly in emotional and physical impact on victims) to theft from a shop which has an average economic and social cost of £100 per incident (Brand & Price, 2000.)

[13] Home Office Research Findings, 154. "The prison population in 2000: a statistical review".

assumptions but we have no firm basis for relaxing them or modelling the costs more precisely.

The implications of these assumptions are mapped out in Table 3.2.

Based on the finding from Cheung and Heath (1994) that 2.3% of the 1994 population had been in care, we obtain an ex-LAC adult population of 813,694.

Table 3.2: Estimating the crime bill of LAC.

	Population	Care population
Numbers of people	35,378,000	813,694
% of crime	0.74	0.26
Cost (£bn)	44.4	15.6
Cost per capita (pc) (£)	1255.02	19,171.83
Upper bound benefit		
Cost if cost pc = population mean (£bn)		1.021
Saving (£bn)		14.712
Lower bound benefit		
Saving (£bn)		8.46

NB: All sterling figures are in 1999 prices.
Care population calculated as 2.3% of population (Cheung & Heath, 1994).
National Statistics, (2000) UK working-age population for mid-1998.

If LAC commit 26% of crime, the contribution of the LAC population to the economic and social cost of crime is £15.6bn at an average per LAC cost of £19,172 compared to an

average per capita cost of £1,255. If the average cost per LAC could be reduced to that of the mean person, the saving would be £14.7bn. This upper bound figure is the saving that would result from policy that brought the outcomes of LAC up to the level of the average child. From Table 3.5, we estimate that 42% of this benefit is due to features of background that operated prior to LAC status. This is the level of attenuation when controls are introduced to the "courtb" regression for males, the variable indicating that the sample member has been found guilty in court on more than one occasion. We consider the attenuation for males as males contribute the vast majority of the economic and social cost of crime. We take the attenuation on the "courtb" variable as indicative because this variable is the best discriminator of persistent offenders in these data and it is those in this group who contribute most of the cost of crime. Attenuation in the courta variable is much lower (25%) but this includes those who do not repeat offend and who therefore contribute relatively little to the cost of crime. These choices are necessarily crude and arbitrary but do provide ballpark estimates of the likely attenuation of benefits that may result if the easier, lower-bound policy option is adopted.

Thus, if policy treatment did not address the implications of development resulting from prior risk factors but only from LAC status, the benefit would be reduced accordingly. By these calculations, if LAC could be brought to the same risk of criminality as those from the same part of the distribution of family background disadvantage as LAC children, the benefit would attenuate to £8.5bn. However this is a pessimistic estimate assuming that the quality of care and improvement in educational performance is not good enough to counteract previous risk factors.

We emphasise that this cost is due to crime committed by the existing population of ex-LAC

children in society, not by the flow. This means that this full benefit is not the benefit that would be realised on an annual basis if policy were successful in improving outcomes for one cohort of LAC. Rather, it is an estimate of the ultimate annual benefit that would result when all flows of LAC had received an improved quality of care such that criminality rates in the existing ex-care population had been reduced.

The first year of a successful ameliorated programme would only reduce crime by a small proportion of this full benefit. However, 33% of the 276,600 males sentenced in England and Wales in 2000 were under 21[14], suggesting that the potential benefits from the reduction in criminality would flow through fairly rapidly.

A more precise statement would depend on assumptions made about the relation between age and the seriousness of crime committed. Assuming that there was no such relation, such that the crimes committed by care leavers were of the average cost, and that the age of leaving care is the 16th birthday, one third of the full benefit would be accruing after 5 years of the new policy, i.e. between £2.8bn and £4.9bn p.a. Again assuming no age-cost relation, one fifth of this would be available after the first year, two-fifths after the second year and so on.[15]

The implication is that after one year of the new (successful) policy, the benefit in terms of crime reduction would be between £0.5bn and £1bn p.a. assuming that the crime committed by care leavers is of the average kind.

[14] Criminal Statistics England and Wales 2000 - Statistics relating to Crime and Criminal Proceedings for the year 2000. Cmnd paper 5312, HMSO.
[15] The age of 16 for leaving care reflects actual local authority practice. The official age of discharge from care

3.6.2: Health

There are substantial costs associated with ill-health. The total budget of the NHS was £40.2bn for 1999-00[16] and this will rise substantially. Beyond this aspect of the cost, it is estimated that almost a quarter of a million working years are lost through disease each year[17]. The CBI has estimated that temporary sickness costs business over £10bn per year[18]. Acheson (1998) has estimated that 240,000 working man-years are lost annually due to "premature death," defined as death before 65. Other substantial costs include insurance costs and the large and important private dis-benefits of ill-health.

The evidence reviewed in Section 1 and our own analysis of the cohort studies suggests that there are serious and persistent mental and physical sequelae of LAC status. We take these in turn.

Mental health

The Department of Health estimates that 12% of NHS costs and 91 million working days are lost each year due to mental health problems (Department of Health, 1995). Patel and Knapp (1998) estimate the total cost of mental illness in the UK to be £32bn. Of this total the major items were £12bn due to lost employment and productivity, £8bn to benefits payments and £4bn to NHS costs[19].

This excludes costs for day hospital attendances, some benefits payments, lost working days

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under the Children (Leaving Care) Act 2000 is 18.

[16] Departmental Expenditure Limit (DEL) outturn from Public Expenditure: Statistical Analyses 2001–02, April 2001, HMSO Cm 5101.

[17] Back pain, for example, accounts for 119 million days of certified incapacity. It also consumes 12 million GP consultations and 800,000 in-patient days of hospital care.

[18] Quoted by the Chancellor of the Exchequer during Budget Speech, April 2002.

[19] The figure was subsequently quoted in The UK Department of Health White Paper, "Saving Lives - Our Healthier Nation. 1999."

for some diagnostic groups and, most important of all, hard to measure effects on quality of life. The estimate is, therefore, a lower bound of the total. However, since the estimate includes a large proportion for lost employment, it may also be an over-estimate of the costs for LAC whose "lost" employment and productivity will tend to be of lower value than average because of their higher risk of unemployment. In the absence of better information, we shall assume that these two biases cancel each other out.

These are substantial costs that we know are influenced by LAC status. McCann *et al* (1996) found that 96% of children in residential care and 57% in foster care had psychiatric disorders. Minnis and Del Priore (2002) report a number of studies in Scotland which show similarly high levels of psychopathology, especially for those in residential care. These figures for children, concurrent with LAC status, are of course higher than those for adults, as the long-term effects depreciate. Nonetheless, we find depression rates to be substantially higher in middle age for LAC children than others, even allowing for prior circumstances and prior psychological development.

For the psychiatric depression indicator in our data, we find that the reduction in mental health problems with age varies between samples and by sex. For men in the older cohort, the reduction is extremely modest at 7%, for women it is large at 58%. In the 1970 cohort, the picture is reversed, 10% for women, 43% for men. It is not clear why this should be, however for our present purpose we can deal with it by grouping men and women in the two samples, giving raw marginal effect estimates of 9.9 percentage points (against a sample mean depression rate of 13.4%, so higher by 74% as compared with people who have never been in care) with an attenuation of 26% attributable to ageing.

As Table 3.3 shows, our starting point is the finding that 8% of adults experience some form of mental health problem in any year (Office of Population Censuses and Surveys, 1995). Based on a UK population above age 15 of 47 million[20], this suggests 3,790,960 people suffering mental health problems. Assuming that all the cost is caused by those in this group, the per capita cost is £8,441 per mentally ill person.

Table 3.3: Estimating the mental health bill of LAC.

Care population	1,089,901
Mental ill-health rate	0.08
Predicted number	87,192
Cost per mentally ill person (£)	8,441
Total cost if rate = population mean rate (£bn)	0.736
Upper bound benefit	
Total cost if rate = higher rate (14%)	1.286
Saving (£m)	544.6
Lower bound benefit	
Total cost if rate = attenuated higher rate (14%) (£bn)	0.947
Saving (£m)	211.7

NB: All sterling figures are in 1997 prices.
Care population calculated as 2.3% of population (Cheung & Heath, 1994).

[20] National Statistics, (2000) UK population over age 15 for mid-1999.

Assuming (by necessity) that the relation between LAC status and depression can be generalised to that for all mental health problems, we obtain a rate of 14% for the ex-LAC community (0.25*1.74.) This suggests a total social bill of £1.27bn p.a.. If the rate of mental illness for ex-LAC could be reduced to that for the mean person, the saving would be £529.9m p.a.. This attenuates to £211.7m if the comparison group is that from which LAC are most likely to be drawn.

As was the case with crime, these are annual 'stock' benefits from the reduction in mental illness for the existing ex-care population, though they are more uniformly distributed with respect to age than is the case with crime. The flow benefit can be calculated in the same way and assuming an outflow from LAC status of 8,000[21] p.a. comes out as between £1.6m and £4.0m p.a.

Physical health

The annual budget of the NHS was noted above. However, it cannot be a goal of policy to reduce NHS costs to zero since health improvements in early and working life will, at least to some extent, lead to postponed expenditures in old age. Although health improvements prior to old age may reduce costs during old age, we have no evidence on the nature of this relation. We, therefore, ignore potential savings on care for the elderly.

The Department of Health Departmental Report (Her Majesty's Stationery Office, 2000)[22] reports that expenditure in 1997-98 on people aged 65 and over accounted for approximately

[21] Godfrey et al (SPRU, 2002) estimate 7,826. Barnados report "over 8,000". Therefore, we settle on 8,000 as a reasonable approximation.
[22] The Government's Expenditure Plans - 2000-2001 Cmd 4603.

39 per cent of total expenditure[23]. We remove this element of expenditure from the total and note that 12% of the remainder is spent on mental illness. Since this has already been covered we omit this, too, leaving 53.7%. A further 5 percentage points of the full amount is due to maternity care, leaving 48.7% when omitted from consideration. Based, therefore, on the 1999/2000 out-turn, we have an annual NHS cost amenable to LAC policy change of £20bn.

If the cost per capita LAC was the same as that in the rest of the population, the 2.3% LAC cost would be £460m at £410.28 per capita[24]. We have shown in Section 2 that LAC are more likely to smoke as adults, less likely to be in good health and more likely to be depressed (a risk factors for other illnesses.) We note, too, that the unit cost per GP consultation is estimated as £18 (Netten & Curtis, 2000), a prescription, £15.67, an inpatient visit per day, £223 and per outpatient appointment, £68.

If these risk factors led to one extra GP consultation per year and two extra prescriptions, an extra cost of £49.34 would result. This is a 15% increase on the mean level. A higher effect might factor in two outpatient appointments and one day's hospital stay giving an extra cost of £359. This would be broadly equivalent to doubling the cost per LAC. Taking these as the minimum and maximum points, we estimate an annual saving of between £55.3m and £402.5m.

These numbers demonstrate the great expense of NHS care. They omit any cost of ill-health in terms of lost working hours, personal and social repercussions or insurance costs. Once

[23] Although the elderly account for only 16% of the population. This is mainly because approximately 41 per cent of acute expenditure and significant proportions of expenditure on services for mentally ill people and other community services are for people aged 65 and over.

again, they are stock costs. The flow costs must take account of the age profile. We have considered costs for the non-elderly but costs are lower in childhood and teenage years, rising slowly towards retirement age. The Department of Health Departmental Report, (Her Majesty's Stationery Office, 2000) suggests that costs for 5-15 year olds account for 5% NHS budget, 16-44 year olds, 25% and 45-64 year olds, 20%. The implied ratios per year cohort are 0.5% in childhood, 0.9% for 16-44 year olds and 1% 45-64. Thus the benefit from the first year's flow of healthier LAC in the first year of exit would be between £0.3m and £2m but this would be repeated each year for that cohort and rise over time (subject to discounting.)

3.6.3: Workless households

We estimated above that LAC in the 1958 cohort were 4.2 percentage points more likely to be in workless households with children at age 42 than other children. This is against a base of 2.6% for the population as a whole and attenuates to 2.8 points when prior circumstances are controlled for. The figures in the later cohort are lower and attenuate more but are less accurate in that many cohort members will not yet have started families. We generalise, therefore, from the NCDS figures.

There were 2.5 million dependents of claimants of key benefits in November 2001, of which the number of claimants classed as unemployed was 200,000 dependents in 95,000 families[25]. This group is by definition eligible for Job Seeker's Allowance (JSA) of which 84% will receive income-based JSA as opposed to contributions-based JSA[26].

[24] Based on a population below pension-able age of 48,747,600 (National Statistics, 2000, op cit.)
[25] DWP (2001a) Client Group Analysis. Quarterly bulletin on families with children on key benefits. Nov.
[26] Those who have paid sufficient National Insurance contributions get contribution-based JSA, at a personal

Income-based Jobseeker's Allowance consists of three elements appropriate to a person's circumstances: a personal allowance for the Jobseeker and their partner (if they have one) and for each child that they look after; premiums for groups of people with special needs such as families with children, people with disabilities, pensioners and people who are getting Invalid Care Allowance; housing costs, including help with mortgage interest payments

JSA will not cover rent or Council Tax. Recipients of income-based Jobseeker's Allowance may be entitled to maximum Housing Benefit and Council Tax Benefit and have access to the Social Fund. Those in receipt of contribution-based JSA may qualify for Housing Benefit or Council Tax Benefit on the grounds of low income but have to apply direct.

The average amount paid per week in income-based JSA to unemployed claimants with children was £120.31 at February 2002[27]. The average weekly housing benefit payment to those in receipt of JSA was £52,40[28]. Summing gives a total average benefit payment of £172.71.

Based on an estimated 7.64 million UK households with dependent children and assuming that 2.3% of these have an ex-LAC parent, gives 175,000 families in which one parent was LAC.

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rate for up to six months. Those who do not qualify for, or whose needs are not met by contribution-based JSA may qualify for income-based JSA for themselves and their dependants according to need. The income-based element is paid as long as needed, provided that the qualifying conditions continue to be met. DWP (2001b) "Client group analysis: Quarterly bulletin on the population of working age on key benefits." November 2001

[27] Jobseeker's Allowance Quarterly Statistical Enquiry, February 2002. DWP

If the rate of worklessness for these families was 2.6% as estimated for the 42 year olds in the NCDS, this would give 4,569 families. Table 3.4, on the following page, reports the average length of duration of receipt of JSA and uses this information to estimate the JSA and housing benefit cost per 100 workless households in any one year.

Based on 4,569 families, the annual cost would be £28.4m. The upper bound LAC effect is estimated to be 4.2 points above the mean 2.6% worklessness rate. This would give an additional 7380 families costing an additional £45.82m. The lower bound estimate is an extra 4,920 families costing £30.5m p.a..

The flow benefit would be substantially less (near zero) in the first year as these estimates are based on effects in mid-life.

[28] The actual figure quoted is the average for those in receipt of JSA, Income Support or MIG. Housing Benefit and Council Tax Benefit Quarterly Summary Statistics, February 2002. DWP.

Table 3.4: Estimating the benefit cost of workless households.

Duration	Predicted weeks receipt pa	Total payment, £	% of families	Total cost per average family
Under 3 months	6.5	1122.62	33	370
3-6 months	19.5	3367.85	18	606
6 months-1 year	39	6735.69	19	1,280
1 -2 years	52	8980.92	16	1,437
Over 2 years	52	8980.92	28	2,515
Total				6,208
				Total cost, £m
		Total for 4,569 families		28.36
		Total for 7,380 families		45.82
		Total for 4,920 families		30.54

Duration data from DWP (2001) "Client group analysis: Quarterly bulletin on the population of working age on key benefits." November 2001.

3.7: THE COST OF BEING NOT IN EDUCATION, EMPLOYMENT OR TRAINING (NEET)

Another way to consider the costs of LAC status is to consider the connection between LAC status and not being in education, employment or training (NEET) at age 16-18. The DfES have commissioned research from the SPRU (Social Policy Research Unit, 2002) which suggests that the economic and social cost of being NEET is £10,800 p.a. in current resource and public finance costs and £97,000 in the resulting, present value lifetime costs. It is useful to build on that work by modelling the effect of reducing the probability of the association of LAC and NEET status but our review has not discovered any strong evidence on this correlation.

Biehal *et al* (1995) report unemployment rates of 80% for ex-LAC 18-24 year olds and 50% six months after leaving care suggesting that for many LAC or ex-LAC employed 16-18, employment was likely to be brief. The Utting Report (Utting, 1997) reported that 75% of LAC left school with no qualifications. We assume that there is considerable overlap between the unemployed and unqualified and that few ex-LAC are in training. A reasonable range, therefore, is that between 50 and 70% of LAC school leavers are NEET[29]. Based on an annual exit of 8,000 16-18 year olds from care, this gives an annual flow of 4000-5,600 NEET ex-LAC school-leavers.

The resulting, discounted lifetime costs from the yearly flow are between £388m and £543.2m. The current costs are between £43.2m and £60.5m p.a.

This ignores any costs to those LAC who do not become NEET and also assumes that there is no LAC/NEET interaction such that LAC children who become NEET have worse outcomes than other NEET children. For these reasons the estimate is conservative and we do not estimate attenuation bias since the range estimate is already a lower bound of the likely true range.

[29] The SSI found (SSI, 1985) that 70% of LAC 16-18 were not in employment or FE, suggesting that 70% might be a reasonable approximation to the LAC NEET rate but those are old figures from a small sample of LAC still in care 16-18.

3.8: SUMMARY

This analysis has shown the very negative effects of being looked after by a local authority on adult outcomes, even taking into account the socially disadvantaged backgrounds from which most looked after children originate. Many of these effects have large social and economic costs as well as personal costs for the individuals themselves and those with whom they form relationships. They are likely also to be transmitted to their own children. These personal, inter-generational and wider relationship costs have not been estimated on a pound for pound basis. However, we have attempted to cost the public finance and resource costs in some more accessible areas.

The first method adopted was to estimate effects of care status on particular outcomes for which information is available and to model the implications of negative outcomes in those areas where reliable cost information could be obtained. For many areas this information was not available so that the survey of outcomes considered had to be limited to crime, health and worklessness.

The second method is to use available work on the costs of being not in education, employment or training - NEET (Social Policy Research Unit, 2002) and match in the effects of care status on being NEET. This uses more robust and wide-ranging cost data but under-estimates the care effect which is greater than that of being NEET.

The included and excluded costs from these two methods and the results obtained are summarised in Table 3.5 (pages 98-100).

We note that a whole range of potential benefits are excluded by method 1 because of a shortage of evidence or time. Primary amongst these are foregone earnings and benefits due to unemployment, wider benefit costs including the benefit costs of teenage parenthood, peer effects in schools and communities, costs in terms of personal well-being and inter-generational effects. The result of these omissions is that our figures, although we believe they give a good indication of the kind of savings that are feasible, err on the side of caution. Further work on these issues would almost certainly show that far greater reductions in public expenditure are possible, whereas the benefits in quality of life for the individuals concerned are incalculable.

The two methods give very different results, since the second method is based on the benefits for the flow out of LAC status (young people leaving care year by year) whereas the first method necessarily considers cost effects of the numbers of people in the community who have previously been in care. The first method also obtains a better estimate of the likely cost of crime.

We also note that in calculating the total for the different savings estimated by method 1, estimates for different years and hence at different price levels are aggregated. Given the current climate of low inflation and the serious lack of precision in the estimates, this is not thought to be of concern.

Overall, by method 1 we find a benefit in terms of reduced crime, better health and reduced worklessness of between £9bn and £16bn p.a. if the outcomes for the ex-care population can be made like those who have never been in care. This is overwhelmingly (more than 9/10) made up of effects on criminality, for which LAC show very high propensity not explained

by their prior circumstances and which carry a very high cost. Health and worklessness costs are much smaller but nonetheless extremely substantial given the kinds of expenditures involved.

Method 2 suggests current costs from the yearly flow resulting from the high proportion of looked after children who are not in education, employment or training are between £43.2m and £60.5m p.a. These are the savings that could be achieved if LAC could be helped to attain the same outcomes as the non-NEET population. The resulting, discounted lifetime costs are between £388m and £543.2m.

Table 3.5: Summary costs of effects of LAC status on adult outcomes.

	Included costs elements	Excluded cost elements	Potential stock savings p.a. (Savings accruing when all stock of ex-LAC have had outcomes ameliorated)	Potential flow savings (Savings accruing p.a. as each new cohort leaves care)
Method 1				
Crime	Types of Crime Violence against the person Common assault Sexual offences Robbery Burglary Theft and handling Fraud and forgery Criminal damage Types of Cost Security expenditure Administration of insurance Loss of property and output Emotional and physical impact Health and victim support costs Police costs Prosecution, legal aid and Courts Probation and prison services Jury service Criminal Injuries Compensation	Types of Crime Drug trafficking and possession Public order offences Low level disorder Fare evasion Motoring offences Main types of cost Precautionary behaviour Fear effects on quality of life Quality of life of victims Crime prevention activity Miscarriages of justice Costs to offenders and their families . Wider effects of crime (such as economic distortions)	Lower bound: £8.5bn. Upper bound: £14.7bn	One third of the stock benefit after 5 years of the new policy, i.e. between £2.8bn and £4.9bn. p.a.., assuming no age-cost relation, one fifth of this would be available after the first year, two-fifths after the second year and so on. The implication is that after one year of the new (successful) policy, the benefit in terms of crime reduction would be between £0.5bn and £1bn p.a.. assuming that the crime committed by those who have just left care is of the average (cost) kind

Mental health	Benefit payments Lost employment NHS services Informal care Lost productivity due to suicide LA social services Criminal justice LA children's services Homeless accommodation Alternative medicine Other costs	Secondary effects on physical health Inter-generational effects	Lower bound: £211.7m. Upper bound: £529.9m	Lower bound: £1.6m. Upper bound: £4.0m.
Physical health	NHS services	Secondary health effects Effects on children Benefit payments Lost employment Informal care Lost productivity due to death LA social services LA children's services Alternative medicine	Lower bound: £55.3m Upper bound: £402.5m	Lower bound: £0.3m Upper bound: £2.0m
Workless families	Benefit payments (JSA and HB)	WFTC for low paid Effects on children Secondary personal effects Lost productivity	Lower bound: £30.5m. Upper bound: £45.8m.	Near zero in first few years.
Total potential LAC saving			Lower bound: £8.8bn. Upper bound: £15.7bn.	

	Included costs elements	Excluded cost elements	Potential stock savings p.a. (Savings accruing when all stock of ex-LAC have had outcomes ameliorated)	Potential flow savings (Savings accruing p.a. as each new cohort leaves care)
Method 2 **Educational under-achievement**	Foregone earnings Tax foregone			
Unemployment	Foregone earnings Tax foregone Benefit payments			
Inactivity	Foregone earnings			
Poor health	NHS costs Cost of premature death			
Crime	As for crime in method 1 + treatment costs resulting from substance abuse			
Total potential LAC saving				The resulting, current costs from the yearly flow into NEET from LAC are between £43.2m. and £60.5m. p.a.. The resulting, discounted lifetime costs are between £388 and £543.2m.

Chapter 4: CONCLUSION

This report should be seen as a first step towards mapping the costs and benefits of achieving the government's aim of bringing the educational attainment of looked after children closer in line with that of children generally. This of course is a moving target since educational standards have been steadily rising over many years and particularly in the last four. If anything the gap between looked after children and others has widened in that time. Our review of the literature has shown that outcomes for children who spend any length of time in care are extremely negative and are likely to persist throughout their adult lives. On the other hand the work of the Centre for the Wider Benefits of Learning is demonstrating the benefits of better education, both for individuals and the community. It is worth emphasising that the greatest benefits occur at the top end. For children in care, who start from such a disadvantaged position, we should not therefore be satisfied with average performance but aim for them to achieve the highest level of education of which they are capable (which is after all the aspiration of most parents).

In recent years considerable progress has been made in raising awareness and creating structures to facilitate collaboration between social services and education. The numerous education initiatives introduced by the present government have the potential to benefit looked after children as much as any other disadvantaged group. The Joint Guidance on the education of young people in public care of which some elements are statutory provides an excellent framework for significant improvement in services. The Children (Leaving Care) Act implemented in 2001 opens up realistic opportunities for looked after children to continue into post-16 and higher education, providing them and their carers with new goals to aim for.

All this provides grounds for optimism. At present, as we have shown in Chapter 2, large sums are spent on the care and education of looked after children with very poor results. We are certainly not arguing for saving in expenditure on services. There will be no way of transforming the chronic under-achievement of looked after children without substantial extra resources and seriously questioning our current assumptions about how they should be spent. We do suggest that the most cost-effective way of targeting those resources, is to focus clearly on providing intensive support for education, both in and out of school, from the first day that children begin to be looked after and throughout their care career (which may include separate episodes). It is not part of our remit to go into any detail about the kind of programme that might achieve the significant changes that are necessary, but only to say that our reading of the evidence is that they are achievable with sufficient funds and commitment.

Our estimates of the potential savings in expenditure that could result can only be approximate because of the lack of time and available data. We have been extremely cautious and even the upper bound figures probably underestimate the likely benefits. It is clear, however, that if we could make coming into care a path to educational success, as it is in some other countries, we would not only transform the lives of the children concerned but save immense amounts of public money. The cost of our past failure to educate children in care can be counted in billions.

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Appendix 1: CALCULATIONS FOR CHAPTER 2.

Sources of data on unit costs and methods of calculation

Mainstream nursery and primary: DFES, *Education and Training Expenditure since 1991-2, Statistical Bulletin* (for 1999-00 adjusted to 2001 prices). Note: separate unit costs for nursery and primary are not provided in this source.

Mainstream secondary: DFES, *Education and Training Expenditure since 1991-2, Statistical Bulletin* (for 1999-00 adjusted to 2001 prices). Note: unit costs include 6th form provision in schools.

Non-statemented SEN in mainstream schools. Numbers of pupils with SEN without statements: *National Statistics First Release (May 2002) Special Education Needs in Schools in England,* January 2002 (provisional), DFES. Expenditure on non-statemented SEN from *CIPFA Education Estimates 2001*.

Statemented SEN in schools. Numbers from: *National Statistics First Release (May 2002) Special Education Needs in Schools in England,* January 2002 (provisional), DFES. Costings from CIPFA *Education Actuals 2001*

Special schools: DFES, *Education and Training Expenditure since 1991-2, Statistical Bulletin* (for 1999-00 adjusted to 2001 prices).

Pupil referral units. Numbers from*: Statistics of Education, Schools in England, 2001,* page 24. Costings from: CIPFA *Education Estimates 2001 (Budget Statement)*

Education out of school due to exclusions. Numbers of exclusions are from *National Statistics First Release* (May 2001) *Permanent exclusions from schools and exclusion appeals, England 1999/2000 (*provisional), DFES. Costings from: CIPFA *Education Estimates 2001 (Budget Statement)*

Education psychology service: total expenditure from *CIPFA Education Estimates 2001*. Derive unit cost from assumption that 20% of all pupils use the service.

Further education (16+ to 18). Unit costs for 1997-98 from *Education and Training Statistics for the UK* (DfES) 1999.

Higher education. Costs from: *National Statistics first release. Student support for Higher Education in England and Wales. Academic year 2000/2001* (30 April 2002) and DFES (?) *Education and Training since 1991-2* (www.dfes.gov.uk/statistics/DB/SBU/b0285/162-t5a.htm). HE numbers from: DFES (2002) *Student Enrolments on higher education courses at publicly funded higher education institutions in the United Kingdom 2001/2* (National Statistics).

Sources of data for numbers of LAC using each type of provision and methods of calculation

Mainstream nursery and primary (ages 1-9) and secondary (ages 10-15). Numbers of LAC in age group 1-4, 5-9 and 10-15 are from *Children Looked After by Local Authorities, Year Ending 31 March 2001, England'* (Department of Health, 2001a). Children aged 1-4 and 5-9 are assumed to be having nursery or primary education: 92% in mainstream nursery or primary schools. Thirteen per cent of primary aged LAC assumed to be in special schools (26% of LAC have statements of SEN and of these half are assumed to be in special schools). One percent of primary aged children are assumed to have been excluded (1.5% of LAC of school age are known to be excluded – see below). Only 70% of LAC aged 10-15 are assumed to attend mainstream secondary school. Of the 26% with statements of SEN (see data source below) it is assumed that half attend special schools, and 4% PRUs and 1% are educated out of school. The basis of these assumptions is explained below – see special schools and PRUs.

Non-statemented SEN in mainstream schools. It is known from data sources (see above) that in 2001 18.6% of all pupils in England had SEN but without statements. It is assumed that all LAC who attend mainstream schools require additional resources which schools fund from their additional educational needs funding.

Statemented SEN in mainstream schools. Percentages of LAC with statements from: Table 1 in Department of Health (2001*) Outcome indicators for Looked After Children*, Year Ending

30 September 2000, England.

Special schools. There are no data on how many or what proportion of LAC attend special schools. However *National Statistics First Release (May 2002) Special Education Needs in Schools in England,* January 2002 (provisional), DFES. gives the numbers of pupils with statements of SEN who attend different types of educational provision. From this we can calculate that 36% of pupils with statements attend special schools. It is therefore assumed that this percentage is higher for LAC and 50% is used in the expenditure calculations.

Pupil referral units. The same data source enables us to calculate that 7.4% of all pupils with statements of SEN attend PRUs. If we double the incidence for LAC, then 4% of LAC attend PRUs by virtue of having SEN statements and a further 4% of secondary aged LAC pupils are assumed to attend PRUs.

Education out of school due to exclusions: the percentages of LAC excluded from school (1.5%) are from: Department of Health (2001) *Outcome Indicators for Looked After Children, Year Ending 30 September 2000, England*. For the expenditure calculations we assume that 1% of these are educated out of school and the rest in PRUs.

Education psychology service attributed to LAC: it is assumed that half the LAC utilise the service as there are no published data on this.

Further education (16+ to 18). Participation rates of 16- and 17-year-olds (whole population)

from *Education and Training Statistics for the UK* (DfES) 2001. Percentage of LAC in FE from: Department of Health/DfES (2002*) Education of Young People in Public Care: Guidance. Originally* from: Biehal N, Clayden J, Stein M and Wade J (1995) *Moving On: Young People and Leaving Care Schemes*. Also quoted in: Martin, P.Y. and Jackson, S. (2002) Education success for children in public care: advice from a group of high achievers. *Child and Family Social Work*. Volume 7, pp. 121-130. Numbers for LAC from Children looked After Statistics (2001). Population figure from KIGS 2000.

Higher education. Percentage of LAC who enter HE is from Fletcher-Campbell, F. 1997. *The Education of Children who are looked-after*, National Foundation for Educational Research.

Appendix 2: COSTS OF MAINTAINING LAC IN MAINSTREAM SCHOOLS OR REINTEGRATING THEM.

Information supplied by the National Teaching and Advisory Service (NT&AS)

Direct NT&AS education services to children, schools, parents and carers – included in ALL contracts for specific groups of children

NT&AS provides direct education services to children who are looked after and children in need, where NT&AS is commissioned by a local authority education or social services department, or the independent child-care sector. Where our infrastructure and staffing levels permit, we are also able to respond on a spot-purchase basis for individual children.

Irrespective of which local authority or agency commissions NT&AS the service we provide to all children consists of the following common elements:-

- Initial education training to carers, social workers and appropriate others on partnership work with NT&AS

- Research and preparation, background reports

- Detailed planning of individual school placements including communication with field social workers, carers, parents, subject teachers on matters such as progress, difficulties, code of conduct, uniform, time-tables, travel arrangements

- Full-time teacher support in class/school support for up to two weeks or longer if required

- Subsequent intensive support until formal review of progress

- Preparation of differentiated curriculum materials where necessary

- Establishment of daily routines

- Home/school liaison (daily visits to foster carers/parents)

- Formal review after the six week period to include support planning for the immediate future

- Daily monitoring of education targets, attendance, achievement and behaviour

- Report writing including summary progress reports

- Monitoring of education provision

- Negotiating school/college/other access for children, including management of statement/funding issues within and between authorities

- Management of exclusions where necessary

- Co-ordination of education provision with carers, other education personnel and agencies etc.

- Home/school liaison (regular visits to schools, foster carers, parents)

- Contact points with schools, facilitating communication with social workers, carers, parents on matters such as progress, difficulties, code of conduct, uniform, time-tabling, travel arrangements etc.

- Ensuring attendance at all school events, e.g. parents' evenings

- Attendance at statutory reviews, annual statement reviews and other formal meetings

- Servicing of all such meetings through formal reports, advice, etc.

- SEN assessment advice where appropriate

- Advice to carers, parents, children and young people on choice of school, GCSE coursework, options, careers etc.

- Education telephone help-line for field social workers, residential social workers, foster carers and parents

- Detailed recording of all education casework

Additional services included within Local Authority core contracts

- Professional training and development of foster carers, residential social workers, appropriate others, as required and agreed

- Advice and advocacy on behalf of children within the local authority, other than those directly contracted to work with

- Seminars and briefings for elected members of the council, senior officers and multi-agency professionals, as agreed

Additional Services included within core contracts with Independent Fostering Agencies

- Education assessment of prospective foster carers as part of the Form F process

- Representation of education "expert" on fostering panel, if required

- Education report as part of annual review of foster carers

NB**:** Our contracts also take into account the management/teacher ratio required to maintain a high level of support and supervision to our own staff. NT&AS is committed to a specific methodology and provides a high degree of prescription in how we require our staff to approach children, their parents/carers and schools.

NT&AS Contract Costs

NT&AS costs are all inclusive, other than VAT. Our contracts are priced in three separate ways.

1) Local authorities identify the number of children and their particular circumstances. These may be in external high cost placements, local authority children's homes, foster care etc. We have learned through experience how many teacher hours from us are likely to be required to 'turn round' a child's education situation from failure and/or no education provision into successful attendance at a mainstream school We then plan to manage NT&AS teacher caseloads in such a way as to release intensive (up to full-time) teacher support to individual children who require high levels of input.

For children facing the highest level of difficulties, we would estimate that the cost to us (all inclusive) per child, is £16/17,000 per annum, where we are asked to work with say, 15 or more children or young people.

The contract cost for work at any one time is deceptive, as the successful mainstreaming of children allows for a turnover of children worked with, which significantly reduces the unit cost per child over a period of one year, for example.

If you compare the cost of what frequently happens to children not referred to us – high cost residential care, or education – the cost is substantially higher (can be between £100,000 & £250,000 per annum), and remains the same regardless as to how the child responds within the provision.

2) Independent Fostering Agencies are charged between £160 and £195 per week per child, over 52 weeks. Charges are made on a daily basis and commence from the onset of a placement and continue until the child moves. Invoices are forwarded at the end of each calendar month (see enclosed examples)

The education service within these agencies is incorporated within the placement fee charged to local authorities. The agencies who commission NT&AS spend just under 20% of their income in the purchase of a comprehensive education service for their

children, professional carers, social workers and mainstream schools. No other charges are made to local authorities or schools outside of the weekly fee.

Residential Children's Homes are charged between £330 and £350 per week per child, over 52 weeks. The difference in costs is explained by the smaller numbers of children in a single children's home, and the level of input normally required to change the culture within a residential setting and to provide intensive levels of teacher support to children and their schools.

3) Spot-purchases for individual children and young people are frequently requested from NT&AS. There are 4 levels of support (and costs) that are levied. These are as follows:

Spot Purchase Prices – April 1st 2002 to March 31st, 2003

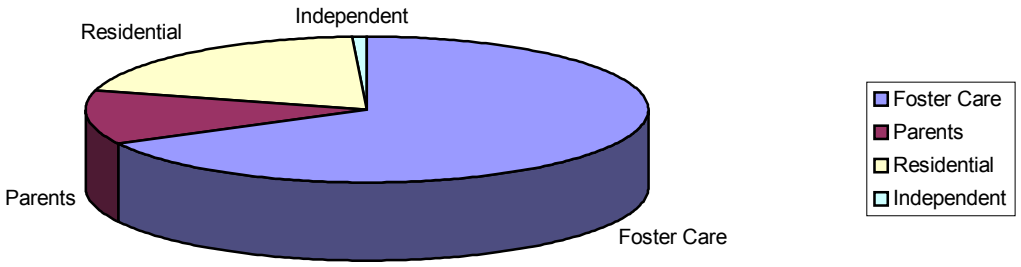
Service Level 1:	**£3,133**	**+**	**VAT**	**per sch term**
Service Level 2:	**£7,033**	**+**	**VAT**	**per sch term**
Service Level 3:	**£10,270**	**+**	**VAT**	**per sch term**
Service Level 4:	**£15,600**	**+**	**VAT**	**per sch term**
Car Mileage Costs	**33p**			**per mile**

The level of input required is determined by negotiation between ourselves and the local authority purchaser, who has the knowledge of the child's particular circumstances. The price differentials are entirely determined by the extent of NT&AS teacher input required to secure a successful education placement.

General Comments re group of children and young people worked with by NT&AS of school age

Number of Children Key Stage 1&2	Number of Children Key Stage 3&4	Total Number of school age
96	147	243

These children and young people are currently living in the following home/care placements:



We know that of the full group of school aged children with whom NT&AS works, 76 were attending mainstream schools at the point of referral, with 167 others out of school. Currently 233 (96%) of our children are now regularly attending mainstream schools. In this way we

are able to estimate the costs incurred for the process of accessing and supporting mainstream school placements.

The current turnover of NT&AS	=	**£2,838,468.36**
Total number of children currently worked with	=	**254**
Unit cost per child (average across all contracts & placements)	=	**£11,175.07 or £214.90 per week**
Costs of 167 children: access and support to mainstream from no school place starting point	=	**£1,866237.07**

The limitations of this exercise include the lack of knowledge we currently have on the number of teacher/staff hours (and costs) deployed in the specific cases of the 167 for whom we accessed and supported mainstream school placements. It is possible that there is a disproportionately high number of hours spent working with those children not yet placed within mainstream schools.

Appendix 3: EVIDENCE OF THE LONG-TERM OUTCOMES OF BEING RAISED IN CARE.

(1)	General / Descriptive		
No.	***Source***	***Methodology***	***Evidence/Data***
1.	Adams, K. (2001). ***Developing Quality to Protect Children: SSI Inspection of Children's Services August 1999-July 2000***. Department of Health.	31 local inspections were carried out from which 1,601 cases were sampled; 291 cases were studied in detail. Received 725 completed questionnaires from parents as service-users and 925 evaluations provided by key-workers on cases sampled. 250 foster carer, staff, personnel and disciplinary files were examined. Inspectors interviewed 1,100 people.	81% of children in the cases sampled were white, 17% were black or from minority ethnic groups.
2.	Bebbington, A. & Miles, J. (1989). The background of children who enter local authority care. ***British Journal of Social Work***, **19**, 349-68.	Studied 2,528 children entering care in 13 social service authorities in England, between June and November 1987.	Deprivation is strongly associated with coming into care: • only 25% lived with both parents; • almost 75% families received income support; • only 20% lived in owner occupied accommodation; • over 50% lived in poor neighbourhoods (wards). They state that: • living with one adult is the single greatest risk factor for entering care (45% of sample compared to 7% in control sample); • living in crowded accommodation is the second most significant risk factor (28% of sample v. 7% control sample); • families in receipt of supplementary benefits were the next most significant risk factor (66% of care sample v. 15% of control sample); and, • having a mother under the age of 21 (5% v. 1%) was a further risk factor.

3.	Cheung, S. Y. & Heath, A. (1994). After care: the education and occupation of adults who have been in care. ***Oxford Review of Education***, **20**, 361-74.	Data analysed from the National Child Development Study 1958: 1981 sweep (cohort aged 23) and 1991 sweep (cohort aged 33) used to look at educational qualifications and subsequent occupations of people who'd experienced care as children.	Out of a sample of 12,414, 286 had been in care (2.3%).
4.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	141 individuals interviewed pre-exit from care: • 57% female; • 65% Caucasian, 27% African American, 6% American Indian, 2% other; • 55% had other siblings in care; • mean out-of-home care stay was 5.5 years (median = 4.4 years); • mean number of placements was 4.6 (median = 3). 113 followed up at wave 2 (12-18 months later) post-exit from care: • 55% female; • 68% Caucasian, 24% African American, 5% American Indian, 3% other.

5.	Department of Health (2001). ***Children Looked After by Local Authorities Year Ending 31 March 2000, England***. **A/F 00/12**.	Government statistics – returns made by Local Authorities in England with Social Services responsibilities. Descriptive account of characteristics of children currently in care.	• 58,100 children were looked after on 31 March 2000 – 5% increase on 1999. • 63% of these were under care orders, 33% were under single voluntary agreements. • 65% in foster homes; 11% in children's homes, 11% with parents. • 92,400 passed through the care system in the year ending 31 March 2000. • 18% had experienced 3+ placements during the year. • 55% were boys – highest concentration in 10-15-year-olds – upward trend. • Average age was 10 years 5 months (downward trend). • Average length of last placement was 252 days (increasing trend). • 5,400 left care aged 16-18-years-old and 2,700 were adopted during the year ending 31 March 2000.
6.	Dumaret, A., Coppel-Batsch, M. & Courand, S. (1997). Adult outcome of children reared for long-term in foster families. ***Child Abuse and Neglect***, **21**, 911-927.	French study: Data on care experiences of 63 children, 45 of whom were followed up with semi-structured interviews at least 5 years after leaving care and who were at least 23-years-old. In childhood these people had been brought up for at least 5 years in a foster family, referred by the 'Oevre Grancher' agency (which specialises in placing children from families with severe psychosocial and psychiatric problems). At follow-up, an aggregated social integration score was obtained, which was used as a DV to relate to 3 risk factors: (1) parental care experiences; (2) parental behavioural/psychiatric problems; and, (3) pre-admission childhood experiences.	• 33 males and 30 females in childhood sample. • 71% came from families with 4 or more children (v. 11% for France as a whole in 1975). • Alcoholism in their birth fathers was 4 times more likely, and in their birth mothers was 10 times more likely, than in the general population (ref. Choquet, Facy, Laurent & Davidson, 1982[1]). • Psychiatric disorders were 4 times more likely in birth families than in the general population (ref. Choquet, Facy, Laurent & Davidson, 1982[1]). • Mean length of placement was 8 years. • Mean age at discharge was 15.5 years. • 48% experienced more than one placement. • Significantly more boys than girls had experienced more than one placement (27% v. 3%: $\chi^2 = 4.63$, $p < 0.03$).

[1] Full reference: Choquet, M., Facy, F., Laurent, F. & Davidson, F. (1982). Les enfants à risque en âge pré-scolaire. ***Archives Françaises de Pédiatrie***, **39**, 185-192.

7.	Gregg, P. & Machin, S. (1999). ***The relationship between childhood experiences, subsequent educational attainment and adult labour market performance***. CEP Discussion paper.	Analysis of adult outcomes using the National Child Development Study 1958 and the British Cohort Study 1970.	Results from the National Child Development Study: • Between ages 7 and 16, 3.8% had been placed in care.
8.	Hobcraft, J. (1998). ***Intergenerational and Life-course Transmission of Social Exclusion: Influences of Childhood Poverty, Family Disruption, and Contact with the Police***. (CASE paper, CASE /15). London: Centre for Analysis of Social Exclusion.	Data analysed from the National Child Development Study 1958 (N = 18,558). Adult outcomes analysed: demographic; psychological; welfare position; educational qualifications; and, economic situation. Among other background variables, children who had been in care or fostered were included as a predictor variable.	• At 7-years-old, 0.9% lived in care or foster homes (n = 15,468). • At 11-years-old 1.3%, lived in care or foster homes (n = 15,503). • At 16-years-old 1.1% lived in care or foster homes (n = 14,761).
9.	Mapstone, E. (1969). Children in care. ***Concern***, **3**, 23-28.	Used National Child Development Study 1958 to look at 314 cohort members who had been looked after some time before age 7 years 9 months.	• One quarter born outside of marriage (seven times the proportion of the rest of the cohort). • More likely to be born to younger mothers: twice as many mothers were under twenty in care group v. rest of cohort. • More likely to be born pre-term compared to the rest of cohort: 10% before 36 weeks v. 2% of rest of cohort. • More likely to be lower birth weight: 13% under 5.5 lbs v. 6% in rest of cohort. • Care group moved house more often: 34% had three or more moves before 7-years-old v. 13% of the rest of the cohort. • Changed school more often: 40% of care group changed schools before 7-years-old v. 20% of the rest of cohort.
10.	Minty, B. (1999). Annotation: Outcomes in long-term foster family care. ***Journal of Child Psychology and Psychiatry***, **40**, 991-999.	Literature review of effects of long-term foster care in UK and the USA. [Few numbers and figures are presented]	• Progress over time for looked-after children seems to be a better criterion than success (on particular outcomes). • There are few reported "natural experiments". Where comparisons are made to other groups of children, most often the general population of children has been used, where, he argues, it would be more appropriate to compare looked-after children to those growing up in families known to the social service agencies but not being looked after by the state.

11.	Reddy, L. A., Pfeiffer, S. I. (1997). Effectiveness of treatment foster care with children and adolescents: A review of outcomes studies. ***Journal of the American Academy of Child and Adolescent Psychiatry***, **36**, 581-588.	USA Study: The effectiveness of 'treatment foster care' was assessed by comparing 40 published studies (finding 25 different outcomes), using Weighted Predictive Values (WPV) to analyse the impact of the care on five outcomes: placement permanency; behaviour problems; discharge status; social skills; and, psychological adjustment. Treatment outcomes were categorized (positive/ neutral/negative), as were the outcome variables. Weighted Predictive Values (WPV) were calculated: WPV = $\frac{\Sigma \text{ (mean outcome values)(sample size weights)}}{\Sigma \text{ (sample size weights)}}$ Values can range between –1 to +1 and can be interpreted like correlations or β-coefficients. Contd.	The authors acknowledge a general lack of follow-ups of foster care on outcomes after discharge.
12.	Rutter, M., Quinton, D. & Liddle, C. (1983). Parenting in two generations. Looking back and looking forwards. In N. Madge (Ed.). ***Families at Risk***. London: Heinemann.	Prospective study of 94 females who were in a children's home in 1964, 81 of whom (91%) were followed up in 1978 when aged 21-27. Compared to a control group of 51 females, 41 (80%) of whom were followed up at age 21-27.	The majority of the ex-care sample had experienced prolonged periods of institutional care from an early age: • over one third had been in children's homes before age 2 and over two thirds before age 5; • nearly 90% spent at least 4 years in institutional care; • over half remained there until 16-years-old; • three-quarters of those who were returned to their families, experienced persistent family discord.
13.	Triselotis, J. (2002). Long-term foster care or adoption? The evidence examined. ***Child and Family Social Work*****,** **7,** 23-33.	Literature review of studies of long-term care and adoption. The six outcomes focused upon were: stability of long-term placement; adjustment; sense of security and belonging; personal and social functioning; the cared-for individual's retrospective perceptions; and, the substitute parents' perspective.	Recent studies of breakdowns of long-term care and adoption show that the quality of long-term care has improved over time (i.e. a decline in long-term breakdown has occurred).

(2)	Employment		
No.	***Source***	***Methodology***	***Evidence/Data***
1.	Biehal, N., Clayden, J., Stein, M., & Wade, J. (1992). ***Prepared for living? A survey of young people leaving the care of three local authorities (Leaving Care Research Project Leeds University)***. Leeds: Leeds University.	Information collected, by social workers, on 183 young people (16-18+) leaving care in Leeds in late 1990. Among the minority youth, five were Afro-American, two or Asian origin and seventeen were of mixed origin (11 Afro-Caribbean/White; 5 Asian/White; one Middle-Eastern/White).	80% of the young people leaving care were unemployed 30 months later.
2.	Biehal, N., Clayden, J., Stein, M & Wade, J. (1995). ***Moving On: Young People and Leaving Care Schemes***. National Children's Bureau. London: HMSO.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	• 36.5% of care leavers were unemployed shortly after leaving care, rising to 50% when 74 young people were followed up 6-months later. • 80% of care leavers aged 18-24 were jobless, compared to national mean of 16%.
3.	Broad, B. (1994). ***Care in the 90s***. London: Royal Philanthropic Society.	Survey of 859 young people. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	49% of care leavers were unemployed.
4.	Cabinet Office (2001). ***Raising the Educational Attainment of Children in Care. Consultation Letter***. Available at: http://www.cabinet-office.gov.uk/seu/young_people/cic_c_letter.htm Viewed May 2002.	Unknown – simple list of statistics in a consultation letter on their Social Exclusion Unit website.	Young people in care are disproportionately likely to become unemployed.

5.	Cheung, S. Y. & Heath, A. (1994). After care: the education and occupation of adults who have been in care. ***Oxford Review of Education***, **20**, 361-74.	Data analysed from the National Child Development Study 1958: 1981 sweep (cohort aged 23) and 1991 sweep (cohort aged 33) used to look at educational qualifications and subsequent occupations of people who'd experienced care as children.	• In 1981 [n = 10,503 of which 354 (3.4%) had been in care]:
			  ○ 19.2% of 'care' group were unemployed v. 11.1% of 'non-care' group;
			  ○ 17.5% 'care' group in semi/unskilled work v. 12.3% of non-care group;
			  ○ 11.8% care group were employers/managers/professionals /semi-professionals v. 21.3% of non-care group.
			• In 1991 [n = 9,499 of which 251 (2.6%) had been in care]:
			  ○ 10.8% of 'care' group were unemployed v. 3.6% of 'non-care' group;
			  ○ 21.5% 'care' group in semi/unskilled work v. 15.7% of non-care group;
			  ○ 19.2% care group were employers/managers/professionals /semi-professionals v. 31.3% of non-care group.
			• When these effects were modelled: significant parameter estimate found of relationship between care status and job in 1981, controlling for qualifications and gender (-0.54, SE 0.16).
			• Results do not apply equally to all who have experienced care:
			  ○ those with short spell before 1-year-old perform close to national average.
			• Most disadvantaged were those in care before age 11 and who did not leave until after age 11 spending an average of 9 years in care, in spite of more equal occupational attainments than expected given their lack of qualifications.
			• When these effects were modelled: significant parameter estimate found of relationship between care status and job in 1981, controlling for qualifications and gender (-0.91, SE 0.37); significant parameter estimate found of relationship between care status and job 1991, controlling for qualifications, gender and job in 1981 (-1.14, SE 0.45). [n = 69].

6.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Of 113 followed-up 12-18 months after exit from care: • 39% were unemployed (no significant differences in ethnicity or gender); • 32% felt they were not prepared for finding a job; • 32% felt they were not well-prepared for managing money.
7.	Dumaret, A., Coppel-Batsch, M. & Courand, S. (1997). Adult outcome of children reared for long-term in foster families. ***Child Abuse and Neglect***, **21**, 911-927.	French study: Data on care experiences of 63 children, 45 of whom were followed up with semi-structured interviews at least 5 years after leaving care and who were at least 23-years-old. In childhood these people had been brought up for at least 5 years in a foster family, referred by the 'Oevre Grancher' agency (which specialises in placing children from families with severe psychosocial and psychiatric problems). At follow-up, an aggregated social integration score was obtained, which was used as a DV to relate to 3 risk factors: (1) parental care experiences; (2) parental behavioural/psychiatric problems; and, (3) pre-admission childhood experiences.	Of 45 people who were followed-up in adulthood (mean age 27.8): • 0% were senior executives or professionals (v. 7% of 20-39-year-old population); • 11% were unemployed (v. 21.5% of 20-39-year-old population). [The employment status of 15% of the sample is unaccounted for. If they were all unemployed this would not make the total too different from the national rate.]
8.	Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	PhD. Thesis.	He states that lack of mainstream employment can only make it more likely that these young people will experience homelessness, poverty, or resort to crime and/or prostitution.

9.	Garnett, L. (1994). ***Education of Children Looked After***. Humberside SSD and Education Dept. Unpublished paper. Humberside Local Authority.	Study of looked after children leaving all Humberside schools in July 1993. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Found that: • 65% of 124 looked-after people who completed Year 11 had not received a careers interview; • 48% engaged in FE or Youth Training by the following October, compared to 83% of County's school leavers; • 21% were unemployed, compared to the County mean of just under 5%, and this rose to 33% the following January.
10.	Gregg, P. & Machin, S. (1999). ***The relationship between childhood experiences, subsequent educational attainment and adult labour market performance***. CEP Discussion paper.	Analysis of adult outcomes using the National Child Development Study 1958 and the British Cohort Study 1970.	National Child Development Study results: • At age 23, the hourly wage was lower for those who had ever been in care (£2.56 v. baseline of £2.71 for males; £2.22 v. baseline of £2.38 for females). This differential increased by age 33 (£6.36 v. baseline of £7.63 for males; £4.78 v. baseline of £5.24 for females). • At age 23, those who had ever been in care had spent longer unemployed since aged 16 (11 months v. baseline of 5 months in males; 6 months v. baseline of 4 months in females). • At age 23, those who had ever been in care are less likely to be employed (0.72 v. baseline of 0.86 for males; 0.51 v. 0.66). This differential remains at age 33 (0.75 v. baseline of 0.91 in males; 0.62 v. baseline of 0.76 in females).
11.	Mallon, G. P. (1998). After care, then where? Outcomes of an independent living program. ***Child Welfare***, **77**, 61-78.	USA study: Descriptive and evaluative data for youths discharged from a New York-based independent living programme between 1987 and 1994: N = 46 males; 96% non-White ethnicity; mean age at admission to programme was 18 years and at discharge was 21 years. They were followed-up at average age of 24 (range 20-28) where n = 43. An example of an effective intervention programme.	• 72% of those followed-up were in full-time employment, 7% were in part-time employment and 21% were unemployed. • At follow-up, 39% had savings accounts compared to 65% at discharge.

12.	Meegan, F. (1997). ***Business Support for Young People Leaving Care: A Very Positive Response***. Who Cares? Trust, The Prince's Trust & Business in the Community.	[Quoted in National Foster Care Association (1997). ***Foster Care in Crisis: A Call to Professionalise the Forgotten Service***. NFCA. (Report written by David Warren.)]	Estimate that up to 80% of care leavers are likely to be unemployed between the ages of 16 and 25 (three to four times that of members of their peer group).
13.	Rutter, M., Quinton, D. & Liddle, C. (1983). Parenting in two generations. Looking back and looking forwards. In N. Madge (ed.). ***Families at Risk***. London: Heinemann.	Prospective study of 94 females who were in a children's home in 1964, 81 of whom (91%) were followed up in 1978 when aged 21-27. Compared to a control group of 51 females, 41 (80%) of whom were followed up at age 21-27.	80% of ex-care females had partners with semi-skilled or unskilled jobs v. 40% of comparison group.
14.	Sinclair, I. & Gibbs, I. (1996). ***Quality of Care in Children's Homes***. York: University of York.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	50% of 16-year-old care leavers were unemployed compared to national mean of 18%.
15.	Social Services Inspectorate (1985). ***Inspection of Community Homes***. London: HMSO.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Fewer than 30% of 368 children who were over school-leaving age and encountered in inspections, were in FE or employment.
16.	Social Trends (1994)	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	National unemployment amongst 16-19-year-olds in 1993 was 22% for males and 16% for females.
17.	Stein, M. & Carey, K. (1986). ***Leaving Care***. Oxford: Basil Blackwell.	Representative study of 45 care leavers.	• Between 50 and 80% of care leavers are unemployed. • Care leavers are more likely to be living in poverty and unemployed.

(3)	Housing and homelessness		
No.	*Source*	*Methodology*	*Evidence/Data*
1.	Barnardos (1996). ***Too Much Too Young***. Ilford: Barnardos.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	One third of those in care had left by the age of 16 and almost all had left by the age of 18. This increases their chances of homelessness and, once homeless, their prospects of finding a route back out is poor.
2.	Barnardos (2002). ***Leaving Care: Statistics***. Available at: http://www.barnardos.org.uk/AboutBarnardos?Ourwork?leaving.html Viewed 30 April 2002	Unknown – simple list of statistics on their website.	• 25-30% of young single homeless people have been in care (ref. Social Exclusion Unit). • The average age of a young person leaving care is 16-17, whereas the average age of young people leaving home is between 20 and 22.
3.	Biehal, N., Clayden, J., Stein, M., & Wade, J. (1992). ***Prepared for living? A survey of young people leaving the care of three local authorities (Leaving Care Research Project Leeds University)***. Leeds: Leeds University.	Information collected, by social workers, on 183 young people (16-18+) leaving care in Leeds in late 1990. Among the minority youths, five were Afro-American, two or Asian origin and seventeen were of mixed origin (11 Afro-Caribbean/White; 5 Asian/White; one Middle-Eastern/White).	• Minority Black youths (13 out of 25; 52%) were more likely than majority White youths (66 out of 156; 42.5%) to be accommodated in temporary accommodation after discharge from care. • In the total sample (N = 178) 68 (38%) had not moved, 50 (28%) had moved up to three times, 20 (11%) had moved four or more times, and 40 (22.5%) didn't know how many times they had moved since discharge.
4.	Biehal, N., Clayden, J., Stein, M & Wade, J. (1995). ***Moving On: Young People and Leaving Care Schemes***. National Children's Bureau. London: HMSO.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	• 59% of care leavers are living in independent households compared to 0.5% of general population. • 22% became homeless within 18-24 months after leaving care, some on more than one occasion: males are twice as likely to be homeless as females.
5.	Cabinet Office (2001). ***Raising the Educational Attainment of Children in Care. Consultation Letter***. Available at: http://www.cabinet-office.gov.uk/seu/young_people/cic_c_letter.htm Viewed May 2002.	Unknown – simple list of statistics in a consultation letter on their Social Exclusion Unit website.	25-33% of rough sleepers have been looked after by local authorities as children.

6.	Centrepoint (2001). ***Being Looked After by a Local Authority***. ***Fact Sheet Series***. Available at: http://www.cantrepoint.org.uk	Survey of young homeless people – reported in factsheet on their website	30% of young homeless people said they'd experienced being looked after by a local authority. Of these: • 78% left home due to factors beyond their control; • 47% ran away from home before they were 16-years-old; • 65% were White; • 41% were from outside London; • 66% were male; • 90% were unemployed compared to 73% homeless sample who had never been looked after; • 32% had experienced health problems compared to 22% of homeless sample who had never been looked after; • 37% of those who had slept rough had experienced being looked after by a local authority.
7.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Of 113 followed-up 12-18 months after exit from care: • 14% of males and 10% of females reported being homeless at least once since exit (12% of wave 2 sample); • 22% had lived in four or more separate places since exit; • 37% were living alone in their own room or apartment; • 31% felt they were not well-prepared for finding housing; • 29% felt unprepared for living on their own.
8.	Department of Education and Science (1981). [Reference not given.]	Survey of young homeless people. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	• Of 134 homeless people aged under 25, 22% had been in care. • Of 44 homeless people aged under 20, 32% had been in care.

9.	Dumaret, A., Coppel-Batsch, M. & Courand, S. (1997). Adult outcome of children reared for long-term in foster families. ***Child Abuse and Neglect***, **21**, 911-927.	French study: Data on care experiences of 63 children, 45 of whom were followed up with semi-structured interviews at least 5 years after leaving care and who were at least 23-years-old. In childhood these people had been brought up for at least 5 years in a foster family, referred by the 'Oevre Grancher' agency (which specialises in placing children from families with severe psychosocial and psychiatric problems). At follow-up, an aggregated social integration score was obtained, which was used as a DV to relate to 3 risk factors: (1) parental care experiences; (2) parental behavioural/psychiatric problems; and, (3) pre-admission childhood experiences.	Of 45 people followed-up in adulthood (mean age 27.8), 29% were homeowners (v. 34% of 20-39-year-old population).
10.	Garnett, L. (1994). ***Education of Children Looked After***. Humberside SSD and Education Dept. Unpublished paper. Humberside Local Authority.	study of looked after children leaving all Humberside schools in July 1993. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Found that 10% of Year 11 pupils were living independently and had been some time prior to the official school leaving age.
11.	Hobcraft, J. (1998). ***Intergenerational and Life-course Transmission of Social Exclusion: Influences of Childhood Poverty, Family Disruption, and Contact with the Police***. (CASE paper, CASE /15). London: Centre for Analysis of Social Exclusion.	Data analysed from the National Child Development Study 1958 (N = 18,558). Adult outcomes analysed: demographic; psychological; welfare position; educational qualifications; and, economic situation. Among other background variables, children who had been in care or fostered were included as a predictor variable.	Among those who had ever been in care or fostered between the ages of 7 and 16, males were 1.79 times and females 1.66 times more likely to live in social housing at age 33, than those who had been brought up with their biological parents.

12.	Jones, G. (1987). Leaving the parental home. ***Journal of Social Policy***, **16**, 49-74.	Large scale Scottish study. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Found that the median age for leaving care to independent living was 17, compared to 20 years in females and 22 years in males in the general population.
13.	Mallon, G. P. (1998). After care, then where? Outcomes of an independent living program. ***Child Welfare***, **77**, 61-78.	USA study: Descriptive and evaluative data for youths discharged from a New York-based independent living programme between 1987 and 1994: N = 46 males; 96% non-White ethnicity; mean age at admission to programme was 18 years and at discharge was 21 years. They were followed-up at average age of 24 (range 20-28) where n = 43. An example of an effective intervention programme.	• Quotes Susser *et al* (1987)[22] who found that 23% of a sample of 223 homeless men had ever been in care. • At follow-up, youths had on average lived in three different locations since discharge.
14.	Rutter, M., Quinton, D. & Liddle, C. (1983). Parenting in two generations. Looking back and looking forwards. In N. Madge (ed.). ***Families at Risk***. London: Heinemann.	Prospective study of 94 females who were in a children's home in 1964, 81 of whom (91%) were followed up in 1978 when aged 21-27. Compared to a control group of 51 females, 41 (80%) of whom were followed up at age 21-27.	• 47% of ex-care females were in unsatisfactory housing v. 7% of controls. • 89% of ex-care females lacked at least one standard household possession v. 40% of controls (e.g. 54% were without a washing machine v. 19% of controls).
15.	Stein, M. & Carey, K. (1986). ***Leaving Care***. Oxford: Basil Blackwell.	Representative study of 45 care leavers.	Found that care leavers were more likely to change accommodation frequently.

[2] Full reference: Susser, E. S., Struening, E. L. & Conover, S. A. (1987). Childhood experiences of homeless men. ***American Journal of Psychiatry***, **144**, 1599-1601.

16.	Vostanis, P. & Cumella, S. (1999). ***Homeless Children***. London: Jessica Kingsley.	Survey of 600 homeless people. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Up to 50% had experienced social work 'in care' experiences.
17.	Young Homelessness Group (1991). ***Carefree and Homeless***.	Reported by National Foster Care Association (1997). ***Foster Care in Crisis: A Call to Professionalise the Forgotten Service***. NFCA. (Report written by David Warren)	41% of homeless young people using facilities at Centrepoint in central London had been previously looked after by local authorities. By 1994 this figure had dropped to 10% but this still makes them 60 times more likely to be homeless than other young people.

(4)	Social Security and benefits		
No.	*Source*	*Methodology*	*Evidence/Data*
1.	Barnardos (2002). ***Leaving Care: Statistics***. Available at: http://www.barnardos.org.uk/AboutBarnardos?Ourwork?leaving.html Viewed 30 April 2002.	Unknown – simple list of statistics on their website.	There is no Income Support for 16-17-year-olds so they may have to rely on the Severe Hardship Allowance. Income Support for 18-24-year-olds is lower than for those aged 25+. They also receive lower Housing Benefit. They ask why, since the cost of living same if you are aged 18 or 26.
2.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Of 113 followed-up 12-18 months after exit from care, 32% were in receipt of benefits (40% females and 23% males).
3.	Hobcraft, J. (1998). ***Intergenerational and Life-course Transmission of Social Exclusion: Influences of Childhood Poverty, Family Disruption, and Contact with the Police***. (CASE paper, CASE /15). London: Centre for Analysis of Social Exclusion.	Data analysed from the National Child Development Study 1958 (N = 18,558). Adult outcomes analysed: demographic; psychological; welfare position; educational qualifications; and, economic situation. Among other background variables, children who had been in care or fostered were included as a predictor variable.	Among those who had ever been in care or fostered between the ages of 7 and 16, males were 1.69 times and females 1.89 times more likely to receive state benefits than those who had been brought up with their biological parents.

4.	Maclagan, I. (1993). ***Four Years' Severe Hardship***. ***Young People and the Benefits Gap***. Youthaid, COYPSS, & Barnardos.	Report reviewing statistics demonstrating ineffectiveness of Youth Training schemes.	Quotes MORI study in which 10% of 16-17-year-old claimants of DSS Severe Hardship Allowance payments had been in care.
5.	Mallon, G. P. (1998). After care, then where? Outcomes of an independent living program. ***Child Welfare***, **77**, 61-78.	USA study: Descriptive and evaluative data for youths discharged from a New York-based independent living programme between 1987 and 1994: N = 46 males; 96% non-White ethnicity; mean age at admission to programme was 18 years and at discharge was 21 years. They were followed-up at average age of 24 (range 20-28) where n = 43. An example of an effective intervention programme.	• Quotes Pettiford (1981)[3] who found that one third of youths leaving care in New York relied on Aid to Families with Dependent Children (AFDC) programme or the city's home relief programme [where average use for all 18-21-year-olds is 12%]. • At follow-up, 6% were receiving benefits, which is comparable to the general population figure of 5%.

[3] Full reference: Pettiford, P. M. (1981). ***Foster Care and Welfare Dependency: A Research Note***. New York: Human Resources Administration.

(5)	Crime		
No.	***Source***	***Methodology***	***Evidence/Data***
1.	Audit Commission (1997). ***Misspent Youth***. Abingdon: Audit Commission Publications.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Linked vulnerability of children in care becoming involved in crime to disaffection from school, which either led to exclusion or self-exclusion.
2.	Cabinet Office (2001). ***Raising the Educational Attainment of Children in Care. Consultation Letter***. Available at: http://www.cabinet-office.gov.uk/seu/young_people/cic_c_letter.htm Viewed May 2002.	Unknown – simple list of statistics in a consultation letter on their SEU website.	26% of prisoners have been in care as children compared to 2% of total population.
3.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Of 141 interviewed pre-exit from care: • 71% reported committing at least one criminal act; • the average number of self-reported criminal acts was 4.23; • 25% had committed 7 or more criminal acts; • 14% admitted breaking and entering. Of 113 followed-up 12-18 months after exit from care: • 18% had been arrested at least once since exit; • 27% of males and 10% of females had been incarcerated since exit; • 25% males and 15% females reported being physically victimised since exit; • of the females, 11% had been sexually assaulted and 13% had been assaulted and/or raped since exit.
4.	Department of Health (2001). ***Outcome Indicators for Looked After Children Year Ending 30 September 2000 England***.	Report of national statistics.	Of 42,200 children who'd been looked after continuously for at least one year on 30 September 2000: • 11% of those aged 10 or over were cautioned or convicted of an offence during the year (three times the rate for all children of this age).

5.	Department of Health (2002). ***Mapping Quality in Children's Services: An Evaluation of Local Responses to the Quality Protects Programme. National Overview Report***. London: DoH.	Government report detailing an evaluation of the Quality Protects programme and related Management Action Plans in all 150 Local Authorities by the Social Services Inspectorate.	The majority of Management Action Plans included the reduction of offending of looked after children and the development of Youth Offending Team Plans. Some described joint preventive strategies and some had developed training for residential childcare staff.
6.	Dumaret, A., Coppel-Batsch, M. & Courand, S. (1997). Adult outcome of children reared for long-term in foster families. ***Child Abuse and Neglect***, **21**, 911-927.	French study: Data on care experiences of 63 children, 45 of whom were followed up with semi-structured interviews at least 5 years after leaving care and who were at least 23-years-old. In childhood these people had been brought up for at least 5 years in a foster family, referred by the 'Oevre Grancher' agency (which specialises in placing children from families with severe psychosocial and psychiatric problems). At follow-up, an aggregated social integration score was obtained, which was used as a DV to relate to 3 risk factors: (1) parental care experiences; (2) parental behavioural/psychiatric problems; and, (3) pre-admission childhood experiences.	This population tended to get in trouble with the law, essentially for minor offences.
7.	Gregg, P. & Machin, S. (1999). ***The relationship between childhood experiences, subsequent educational attainment and adult labour market performance***. CEP Discussion paper.	Analysis of adult outcomes using the National Child Development Study 1958 and the British Cohort Study 1970.	National Child Development Study results: • At age 16, contact with the police or probation services was higher for children who had ever been in care (0.1 higher than base of 0.02 for males; 0.03 higher than the base of 0.01 for females). • At age 23, spell in prison since 16 was higher for those males who had ever been in care (0.07 higher than base of 0.01).
8.	Hobcraft, J. (1998). ***Intergenerational and Life-course Transmission of Social Exclusion: Influences of Childhood Poverty, Family Disruption, and Contact with the Police***. (CASE paper, CASE /15). London: Centre for Analysis of Social Exclusion.	Data analysed from the National Child Development Study 1958 (N = 18,558). Adult outcomes analysed: demographic; psychological; welfare position; educational qualifications; and, economic situation. Among other background variables, children who had been in care or fostered were included as a predictor variable.	20.3% of cared-for females (odds-ratio 2.79) and 51.6% of cared-for men (odds-ratio 2.83) had contact with the police by age 16, compared to 4.9% of females and 15.1% of males brought up by their natural parents.

9.	Home Office & OFSTED (2002). ***A Second Chance: A review of Education and Supporting Arrangements within Unit for Juveniles managed by HM Prison Service***. HM Inspectorate of Prisons for England and Wales.	Governmental review and questionnaire survey of six establishments.	Of 171 people under the age of 18 surveyed by HM Prison Inspectorate research team, 49% reported having at some time been in local authority care.
10.	Howard League (1997). ***Lost Inside: The Imprisonment of Teenage Girls***. Report of the Howard League Inquiry into the Use of Prison Custody for Girls aged under 19. London: Howard League	Reported in Jackson, S. (2001). ***Nobody Ever Told Us School Mattered: The Path from Care to Prison***. Paper presented at 19th Annual Conference of the Howard League Conference for Penal Reform. New College Oxford. 11-12 September.	Almost all males in young offender institutions, and 40% of women under the age of 18 in prison, have been looked after by local authorities at some time.
11.	Jackson, S., Williams, J., Maddocks, A., Love, A., Cheung, W. & Hutchings, H. (2000). ***The Health Needs and Health Care of School Age Children Looked After by Local Authorities***. University of Wales Swansea. Report to the Wales Office or Research and Development.	Case-controlled study comparing health, behavioural and social development of school-age children in care, with those growing up in their own family.	Looked-after children were: • three times more likely to have been cautioned by the police or charged with a criminal offence; • five times more likely, by self-report, to have done something that might get them into serious trouble (e.g. drug-dealing, stealing cars, vandalism, fire-setting, theft).

12.	Mallon, G. P. (1998). After care, then where? Outcomes of an independent living program. ***Child Welfare***, **77**, 61-78.	USA study: Descriptive and evaluative data for youths discharged from a New York-based independent living programme between 1987 and 1994: N = 46 males; 96% non-White ethnicity; mean age at admission to programme was 18 years and at discharge was 21 years. They were followed-up at average age of 24 (range 20-28) where n = 43. An example of an effective intervention programme.	At follow-up, one youth (2%) was in prison.
13.	Minty, B. (1999). Annotation: Outcomes in long-term foster family care. ***Journal of Child Psychology and Psychiatry*****, 40,** 991-999.	Literature review of the effects of long-term foster care in the UK and the USA. A review of a matched comparison group study (N = 59, Minty (1987[4], 1988[5])).	Minty (1987[4], 1988[5]) are referred to: • In a study of the criminal records of 59 boys, those who had been admitted to long-term care had accumulated more criminal offences in adulthood than a matched comparison group of boys who had not been admitted to long-term care. • Among the boys admitted to care, those who had been admitted earlier and stayed longer were less likely to have multiple convictions, and less likely to have convictions for violent crimes in adulthood, than those who were admitted later.
14.	National Children's Bureau (1992). ***Childfacts***. London: National Children's Bureau.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	38% prisoners between ages 18 and 25 had been in care.

[4] Full reference: Minty, B. (1987). ***Child Care and Adult Crime***. Manchester: Manchester University Press.

[5] Full reference: Minty, B. (1988). Public care or distorted family relationships: the antecedents of violent crime. ***Howard Journal of Criminal Justice***, **27**, 172-87.

15.	Office for Population and Census Studies (1991) [No reference given]	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Being in public care is correlated with later imprisonment; 38% of the under-21 prison population had been in care compared to just 2% of general population.
16.	Prison Reform Trust (1991). ***The Identikit Prisoner: Characteristics of the Prison Population***.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	23% adult prisoners and up to 38% young offenders had been in care.
17.	Rutter, M., Quinton, D. & Liddle, C. (1983). Parenting in two generations. Looking back and looking forwards. In N. Madge (ed.). ***Families at Risk***. London: Heinemann.	Prospective study of 94 females who were in a children's home in 1964, 81 of whom (91%) were followed up in 1978 when aged 21-27. Compared to a control group of 51 females, 41 (80%) of whom were followed up at age 21-27.	22% of care group reported criminality (criminal record) v. 0% of control group ($\chi^2_{(1)} = 8.59$; $p > .02$).
18.	Williams, J., Jackson, S., Maddocks, A., Cheung, W-Y., Love, A., & Hutchings, H (2001). Case-control study of the health of those looked after by local authorities. ***Archives of Disease in Childhood, 85***, 280-285.	Case-controlled study comparing health, behavioural and social development of school-age children in care, with those growing up in their own family. Matched pairs used in pairwise analyses of data.	Children looked after by local authorities had significantly more contact with the police than children in the control group (20% of those in care (n = 65) versus 3% of the controls (n = 65) - 95% CI of difference 6% to 28%).

(6)	Health and social functioning		
No.	***Source***	***Methodology***	***Evidence/Data***
1.	APA Community and Drug Alcohol Initiatives (1996). Survey of clients.	Survey by a national drug and alcohol agency reported in National Foster Care Association (1997). ***Foster Care in Crisis: A Call to Professionalise the Forgotten Service***. NFCA. (Report written by David Warren.)	Of drug and alcohol service clients: • 44% had been in local authority care at some point in their lives; • 16% had been in foster care.
2.	Biehal, N., Clayden, J., Stein, M & Wade, J. (1995). ***Moving On: Young People and Leaving Care Schemes***. National Children's Bureau. London: HMSO.	Sample of 183 care leavers from three Local Authorities. Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	60% of the sample suffered serious health issues.
3.	***Community Care*** (1996). Study at Eastleigh Hospital, Hampshire. Community Care 19/12/96.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	The rate of psychiatric disorder was 67% amongst residential and foster care children, compared to 15% in children as a whole.
4.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Of 141 interviewed pre-exit from care: • 47% had received mental health care services in the preceding year; • they scored significantly higher on psychological distress in the Mental Health Inventory than is typical for the age group; • the General Health Rating Index score for Caucasian subjects was significantly lower than typical scores for Caucasian in this age group, whereas African Americans' scores were not significantly different. Contd.

4.	Contd. Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	Contd. USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Contd. Of 113 followed-up 12-18 months after exit from care: • they perceived less social support from their birth family, than from significant others, friends and former foster families; • 21% had received mental health care services (half as many as before) yet scored the same on Mental Health Inventory, i.e. still significantly more psychological distress than is typical in this age-group; • the General Health Rating Index scores were the same as for pre-exit, i.e. Caucasian subjects scored significantly lower than is typical for Caucasians in this age-group, whereas African Americans' scores were not significantly different; • 44% had problems acquiring needed medical care most or all of the time; • 23% did not feel well-prepared regarding health information.
5.	Department of Health (1999). ***Promoting Health for Looked After Children: Consultation Document***. London: DoH.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	There is clear evidence that looked-after children have greater levels of health needs and are less likely to receive adequate health care than their peers. "*Conduct and anxiety disorders, depression and attentional disorders are particularly common in this group of children and young people*." (para. 9.2)
6.	Department of Health (2001). ***Outcome Indicators for Looked After Children Year Ending 30 September 2000 England***. London: DoH.	Report of national statistics.	Of 42,200 children who'd been looked after continuously for at least one year on 30 September 2000: • 31% had not had up-to-date immunisations; • 37% had not had a dental check; • 35% had not had an annual health assessment.
7.	Department of Health (2002). ***Mapping Quality in Children's Services: An Evaluation of Local Responses to the Quality Protects Programme. National Overview Report***. London: DoH.	Government report detailing an evaluation of the Quality Protects programme and related Management Action Plans in all 150 Local Authorities by the Social Services Inspectorate.	Plans in relation to the health needs of looked-after children were well-developed across the country. This included good multi-agency working, named health visitors and linking mental health professionals to individual residential children's homes.

8.	Dimigen, G., Del Priore, C., Butler, S. & Ferguson, L. (1999). Psychiatric disorder among children at time of entering local authority care. ***British Medical Journal***, **319**, 675.	Glasgow-based study of 5-12-year-olds attending health assessment within 6 weeks of admission into care. N = 89. Accompanying carer given the Devereux scales of mental disorders (converted to t-scores, mean of 50 and SD of 10) to be returned by post. Response rate = 70 questionnaires (79%): 34 males, 36 females; 44 in residential care, 26 in foster care; mean age 9.6 years.	• 38% boys and 33% girls had 'very elevated levels' of conduct disorder (2+ SD above mean). • Children in residential settings were significantly more likely to have very elevated levels of depression (13 [50%] v. 12 [27%]; p<.05). • 30% had severe attention difficulties (CI 16-36%). • 26% had autistic-like detachment (CI 16-36%). • 16% had very elevated anxiety problems (CI 7-25%). • Comorbidity was found in over one third of the children (27 obtained a score of 70 or more on more than one subscale). • They conclude this shows: "*that a considerable proportion of young children have serious psychiatric disorder at the time they enter local authority care but are not being referred for psychological help. We believe that these findings strongly indicate the need for early intervention policies to help this vulnerable group. Furthermore, the complex needs of these children can only be assessed effectively through multidisciplinary discussion and strategic planning*" (p. 675).

9.	Dumaret, A., Coppel-Batsch, M. & Courand, S. (1997). Adult outcome of children reared for long-term in foster families. ***Child Abuse and Neglect***, **21**, 911-927.	French study:
		Data on care experiences of 63 children, 45 of whom were followed up with semi-structured interviews at least 5 years after leaving care and who were at least 23-years-old. In childhood these people had been brought up for at least 5 years in a foster family, referred by the 'Oevre Grancher' agency (which specialises in placing children from families with severe psychosocial and psychiatric problems). At follow-up, an aggregated social integration score was obtained, which was used as a DV to relate to 3 risk factors: (1) parental care experiences; (2) parental behavioural/psychiatric problems; and, (3) pre-admission childhood experiences.
			Of 45 people followed-up in adulthood (mean age 27.8):
			• 62% were well-integrated or fairly well-integrated socially and in good health;
			• 29% were not well-integrated socially and had poor mental health.
			• Significantly poorer social integration scores were found in adults:
			  ○ whose parents had been on 'welfare' ($r = .340$, $p < .02$);
			  ○ whose siblings had also been placed in care ($r = .301$, $p < .05$);
			  ○ whose parents had social or psychiatric problems ($r = .417$, $p < .005$);
			  ○ who had experienced multiple care admissions, neglect or abuse ($r = .405$, $p < .01$).

10.	Faber, S. (2000). Behavioral sequelae of orphanage life. ***Pediatric Annuls***, **29**, 242-8.	USA study: Review of the more common and serious sequelae of early deprivation in two internationally adopted children.	One child adopted age 13 months from Eastern European orphanage: o constantly upset and had tantrums with little provocation; o fearful and anxious in unfamiliar places and crowds; o ate few foods – very intolerant; o distressed if things in house were changed; o reactive attachment disorder - disorder of nonattachment – thus, very emotionally withdrawn; o exhibited signs of Post Traumatic Stress Disorder (PTSD); o Sensory Processing Disorder – could not tolerate light touch or certain textures; o intermittent aggression, dissociation and anger for 3 years. • A highly structured environment, family psychotherapy and occupational therapy helped to restore child's behaviour to that expected when aged 4 years 5 months. • Another child adopted aged 18 months, again from an Eastern European orphanage: o skills at the level of a 2-month-old; o borderline mild autism – Pervasive Development Disorder Not Otherwise Specified (PDD-NOS). • After a programme of physical, occupational, speech and language therapies his motor skills near normal at age 4. • Applied behaviour analysis and medication also helped anxiety problems.

11.	Harman, J. S., Childs, G. E. & Kelleher, K. J. (2000). Mental health care utilization and expenditures by children in foster care. ***Archives of Pediatric and Adolescent Medicine***, **154**, 1114-7.	USA study:
		Determined the percentage of children with mental health diagnoses and the utilisation and expenditure of mental health services among children in foster care v. others receiving 'Medicaid'. They analysed Medicaid claims and eligibility records in SW Pennsylvania for one fiscal year – 1995. N = 39,500 children aged 5-17 years.
			• 3,696 children were in foster care (9.3% sample), who:
			  ○ were 3-10 times more likely to receive a mental health diagnosis;
			  ○ had 6.5 times more mental health claims;
			  ○ were 7.5 times more likely to be hospitalised for a mental health condition;
			  ○ had mental health expenditures that were 11.5 times greater ($2,082 v. $181) than children in the Aid to Families with Dependent Children (AFDC) programme.
			  ○ overall, their utilisation rates, expenditures and prevalence of psychiatric disorders were comparable to those children with disabilities.
			• They quote Halfon *et al* (1992)[6] who found that although foster care children represent less than 4% of Medicaid-eligible children in California, they accounted for 41% of all mental health claims.
			• They quote Takayama *et al* (1994)[7] who found that 25% of children in Washington's foster care system used Medicaid-reimbursed mental health services, only 3% of children eligible through AFDC programme had mental health service use.

12.	Hobcraft, J. (1998). ***Intergenerational and Life-course Transmission of Social Exclusion: Influences of Childhood Poverty, Family Disruption, and Contact with the Police***. (CASE paper, CASE /15). London: Centre for Analysis of Social Exclusion.	Data analysed from the National Child Development Study 1958 (N = 18,558). Adult outcomes analysed: demographic; psychological; welfare position; educational qualifications; and, economic situation. Among other background variables, children who had been in care or fostered were included as a predictor variable.	Males who had ever been in care were 2.08 times more likely and females who had ever been in care were 1.60 times more likely to be at risk for depression, compared to those who had lived with their natural parents.

[6] Full reference: Halfon, N., Berkowitz, G. & Klee, L. (1992). Mental health services utilization by children in foster care in California. ***Pediatrics***, **6**, 1238-44.

[7] Full reference: Takayama, J. I., Bergman, A. B. & Connell, F. A. (1994). Children in foster care in the state of Washington: health care utilization and expenditures. ***Journal of the American Medical Association***, **271**, 1850-5.

13.	Horwitz, S. M., Simms, M. D., & Farrington, M. S. W. (1994). Impact of developmental problems on young children's exits from foster care. ***Developmental and Behavioral Pediatrics***, **15**, 105-110.	Examined physical and mental health of 272 children (1 month to 7 years) seen at a foster care clinic, using the Peabody Picture Vocabulary Test-Revised (PPVT-R) and the Preschool Language Scale of the Battelle Developmental Inventory (BDI).	Being older at initial placement (> 2-years-old) and having been in care for less than 3 months were related to developmental problems: • 68 out of 98 (69%) children with behavioural problems were older than 2 at first foster placement, compared to 72 out of 158 (40%) children without behavioural problems who were older than 2 at first placement (risk ratio = 1.50, 95% CI 1.23 to 1.84). Being non-white, over 2 at entry and having one or more developmental disorders were related to remaining in care: • 93 out of 139 (67%) non-white children with behavioural problems had remained in care, compared to 47 out of 94 (50%) non-white children without behavioural problems who remained in care (risk ratio = 1.3; 95% CI 1.06 to 1.69); • 86 out of 131 (66%) children with developmental problems *and* behavioural problems had remained in care, compared to 59 out of 111 (54%) children with developmental problems without behavioural problems who remained in care (risk ratio = 1.2; 95% CI 1.00 to 1.53) In sum, having two or three of the above features increased the likelihood of remaining in care.
14.	House of Commons (1984). Second report from the Social Services Committee Session 1983-84. ***Children in Care, Vol. 1***. London: HMSO.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	The health of children in care can suffer because no single adult is intimately familiar with their medical history and symptoms go unnoticed: "*…so that they may suffer from non-acute but serious problems such as hearing or sight defects or other long-standing conditions such as asthma or diabetes. Younger children in particular may miss out on the proper series of inoculations, and dental treatment may be duly intermittent*" (para. 331).

15.	Mallon, G. P. (1998). After care, then where? Outcomes of an independent living program. ***Child Welfare***, **77**, 61-78.	USA study: Descriptive and evaluative data for youths discharged from a New York-based independent living programme between 1987 and 1994: N = 46 males; 96% non-White ethnicity; mean age at admission to programme was 18 years and at discharge was 21 years. They were followed-up at average age of 24 (range 20-28) where n = 43. An example of an effective intervention programme.	At follow-up, one youth (2%) had committed suicide.
16.	Mapstone, E. (1969). Children in care. ***Concern***, **3**, 23-28.	Used NCDS 1958 cohort to look at 314 cohort members who had been looked after some time before age 7 years 9 months.	33% were badly adjusted on the Bristol School Adjustment Guide, which is three times higher than in the general population.
17.	McCann, J. B. A., Wilson, S. & Dunn, G. (1996). Prevalence of psychiatric disorder in young people in the care system. ***British Medical Journal***, **313**, 1529-30.	All 13-17-year-olds looked after by Oxfordshire LA were studied, in comparison to a group matched for age and sex randomly selected from same school or general practice, who had never been in care. They were screened using the Achenbach Child Behaviour Checklist and Youth Self-report Questionnaires. High scorers then interviewed using KIDDE-SADS (assesses affective disorders and schizophrenia). Care group = 134 (69 males, 65 females) – mean age 14.8 (SD 2.5), of which 88 (66%) responded. Comparison group = 100 responders (75%).	They found a particularly high prevalence of mental health problems amongst looked-after children in residential sector: • 53% (47) of care group responders were high scorers in phase one, compared to 12% of control group. • Weighted prevalence of psychiatric disorder in care group was 67% v. 15% of controls. • 96% of those in residential care had psychiatric disorde5rs compared to 52% in foster care. • 23% in care suffering form major depressive disorder v. 4% controls. • They conclude: *"a significant number of adolescents were suffering from severe, potentially treatable psychiatric disorders which had gone undetected. Local and health authorities need to direct their attention and ultimately resources to the types and complexities of psychiatric disturbances that are present in adolescents in the acre system, as this disadvantaged group does not necessarily attract strong political advocates*" (p. 1530).
18.	National Foster Care Association (1997). ***Foster Care in Crisis: A Call to Professionalise the Forgotten Service***. NFCA (Report written by David Warren)	Report based on literature review, presenting snapshot of foster care services, prospects for fostered children, shortcomings in the provision of foster care and suggestions for the future.	They quote research from 1996 (source not properly documented) that young people in care are four times more likely to develop a psychiatric disorder and five times more likely to suffer from a major depressive illness than their counterparts.

19.	Quinton, D. & Rutter, M. (1988). ***Parenting Breakdown: the Making and Breaking of Intergenerational Links***. Aldershot: Gover.	Followed-up a group of girls brought up in children's homes.	Those able to provide good parenting were those who had support from a non-deviant spouse, which was result of: ability to plan ahead as an adolescent; and, positive school experiences.
20.	Reddy, L. A., Pfeiffer, S. I. (1997). Effectiveness of treatment foster care with children and adolescents: A review of outcomes studies. ***Journal of the American Academy of Child and Adolescent Psychiatry***, **36**, 581-588.	USA Study: The effectiveness of 'treatment foster care' was assessed by comparing 40 published studies (finding 25 different outcomes), using Weighted Predictive Values (WPV) to analyse the impact of the care on five outcomes: placement permanency; behaviour problems; discharge status; social skills; and, psychological adjustment. Treatment outcomes were categorized (positive/ neutral/negative), as were the outcome variables. Weighted Predictive Values (WPV) were calculated: WPV = $\frac{\Sigma \text{ (mean outcome values)(sample size weights)}}{\Sigma \text{ (sample size weights)}}$ Values can range between –1 to +1 and can be interpreted like correlations or β-coefficients.	Treatment foster care had large positive effects on children's social skills and medium effects on reducing behavioural problems and improving social adjustment. *Behavioural problems* In 11 reviewed studies, treatment foster care had a positive effect in 6 studies, a neutral effect in 4 studies and a negative in 1 study. The WPV for behavioural problems yielded a value of 0.50. *Psychological adjustment* This was used as a collective term for outcomes such as emotional well-being, self-esteem, affect and quality of sleep. Out of 8 studies, 5 reported positive outcomes, 2 reported neutral outcomes and 1 reported a negative outcome. The WPV for behavioural problems again yielded a value of 0.50. Among the reviewed literature the authors conclude that 68% of the studies examined focused on reduction and/or improvement of only one or two symptoms.
21.	Rutter, M., Quinton, D. & Liddle, C. (1983). Parenting in two generations. Looking back and looking forwards. In N. Madge (ed.). ***Families at Risk***. London: Heinemann.	Prospective study of 94 females who were in a children's home in 1964, 81 of whom (91%) were followed up in 1978 when aged 21-27. Compared to a control group of 51 females, 41 (80%) of whom were followed up at age 21-27.	They found that women who had been in care: • scored higher on the Malaise Inventory (80% rated themselves as having emotional difficulties v. 33% of controls); • had a significantly higher rate of psychiatric disorder during the early years of parenthood (44% had been in-patients in psychiatric unit/hospital v. 2% of controls); • were more likely to have a current psychiatric disorder than controls (31% v. 5%; $\chi^2_{(1)} = 9.21$; $p > .01$).
22.	Social Services Inspectorate (1997). ***Leaving Care***. London: SSI.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	Many people leaving care after 16 are isolated and vulnerable.

23.	Stein, M. & Carey, K. (1986). ***Leaving Care***. Oxford: Basil Blackwell.	Representative study of 45 care leavers.	Care leavers are more likely to be confused about their past or be unsettled in their current relationships.
24.	Triselotis, J. (2002). Long-term foster care or adoption? The evidence examined. ***Child and Family Social Work*****, 7,** 23-33.	Literature review of studies of long-term care and adoption. The six outcomes focused upon were: stability of long-term placement; adjustment; sense of security and belonging; personal and social functioning; the cared-for individual's retrospective perceptions; and, the substitute parents' perspective.	Among those who had been in foster care: • 57% thought their current coping was very good or good (compared to 90% among those who were adopted); • 35% thought their current sense of well-being was very good or good (compared to 90% among those who were adopted).
25.	Williams, J., Jackson, S., Maddocks, A., Cheung, W-Y., Love, A., & Hutchings, H. (2001). Case-control study of the health of those looked after by local authorities. ***Archives of Disease in Childhood*****, 85,** 280-285.	Case-controlled study comparing health, behavioural and social development of school-age children in care, with those growing up in their own family. Matched pairs used in pairwise analyses of data.	Children looked after by local authorities were significantly different from the children in the control group: They • had fewer incomplete immunisations: 35 out of 86 (40%) children in care v. 48 out of 86 (56%) controls (95% CI of difference –26% to –4%); • received inadequate dental care: 85 out of 112 (76%) children in care v. 101 out of 112 (90%) control children (95% CI of difference –23% to –5%) • suffered from more anxiety between the ages of 10 and 16: in 81 matched pairs the mean score for children in care was 22.05 v. 15.38 for control children (95% CI of difference 1.89 to 11.45); • had more difficulty in interpersonal relationships between the ages of 10 and 16: in 78 matched pairs the mean score for children in care was 62.50 v. 69.12 for control children (95% CI of difference –10.48% to –2.76%); • had more behavioural problems between the ages of 10 and 16: in 81 matched pairs the mean score for children in care was 37.54 v. 24.25 for control children (95% CI of difference 7.34% to 19.26%).

(7)	Parenthood and marital status		
No.	*Source*	*Methodology*	*Evidence/Data*
1.	Cabinet Office (2001). ***Raising the Educational Attainment of Children in Care. Consultation Letter***. Available at: http://www.cabinet-office.gov.uk/seu/young_people/cic_c_letter.htm Viewed May 2002.	Unknown – simple list of statistics in a consultation letter on their SEU website.	Children who have been in care are 2.5 times more likely to become teenage parents.
2.	Courtney, M. E., Piliavin, I., Grogan-Kaylor, A. & Nesmith, A. (2001). Foster youth transitions to adulthood: a longitudinal view of youth leaving care. ***Child Welfare***, **80**, 685-717.	USA study: Tracked the experiences of 141 17-18-year-olds who left care in Wisconsin in 1995 and 1996. Interviewed pre- and post-exit. This article describes the first follow-up at 12-18 months after leaving care – only descriptive data available at this stage. They plan to do a 3-year follow-up. (Sample excluded those who were developmentally disabled and who had exited care but were not recorded as such on the Wisconsin Human Services Reporting System.)	Of 113 followed-up 12-18 months after exit from care: • 8% males and 19% females had parented children; • 6% had ever been married.
3.	Dumaret, A., Coppel-Batsch, M. & Courand, S. (1997). Adult outcome of children reared for long-term in foster families. ***Child Abuse and Neglect***, **21**, 911-927.	French study: Data on care experiences of 63 children, 45 of whom were followed up with semi-structured interviews at least 5 years after leaving care and who were at least 23-years-old. In childhood these people had been brought up for at least 5 years in a foster family, referred by the 'Oevre Grancher' agency (which specialises in placing children from families with severe psychosocial and psychiatric problems). At follow-up, an aggregated social integration score was obtained, which was used as a DV to relate to 3 risk factors: (1) parental care experiences; (2) parental behavioural/psychiatric problems; and, (3) pre-admission childhood experiences.	Of 45 people followed-up in adulthood (mean age 27.8): • 80% were with a partner (v. 82.3% of 20-39-year-old population); • 40% were married (v. 47.9% of 20-39-year-old population); • 64% had children (v. 67.6% of 20-39-year-old population); • 9% were divorced (v. 3.9% of 20-39-year-old population).

4.	Garnett, L. (1992). ***Leaving Care and After***. National Children's Bureau.	Study of looked after children leaving all Humberside schools in July 1993. Reported by: National Foster Care Association (1997). ***Foster Care in Crisis: A Call to Professionalise the Forgotten Service***. NFCA (Report written by David Warren)]	One in seven young (14%) women leaving care aged 16 or 17 were pregnant, and one in four (25%) had children already (compared to the 1991 national figures of one in 25 (4%) 16-year-olds and one in 15 (7%) 17-year-olds).
5.	Gregg, P. & Machin, S. (1999). ***The relationship between childhood experiences, subsequent educational attainment and adult labour market performance***. CEP Discussion paper.	Analysis of adult outcomes using the National Child Development Study 1958 and the British Cohort Study 1970.	National Child Development Study results: • At age 23, females who have ever been in care were more likely to be a lone mother (0.17 v. baseline 0.08).
6.	Hobcraft, J. (1998). ***Intergenerational and Life-course Transmission of Social Exclusion: Influences of Childhood Poverty, Family Disruption, and Contact with the Police***. (CASE paper, CASE /15). London: Centre for Analysis of Social Exclusion.	Data analysed from the National Child Development Study 1958 (N = 18,558). Adult outcomes analysed: demographic; psychological; welfare position; educational qualifications; and, economic situation. Among other background variables, children who had been in care or fostered were included as a predictor variable.	Females who had grown up in care were 2.44 times more likely to become teenage mothers than those who were brought up with their natural parents.
7.	Horwitz, S. M., Simms, M. D., & Farrington, M. S. W. (1994). Impact of developmental problems on young children's exits from foster care. ***Developmental and Behavioral Pediatrics***, **15**, 105-110.	Examined physical and mental health of 272 children (1 month to 7 years) seen at a foster care clinic, using the Peabody Picture Vocabulary Test-Revised (PPVT-R) and the Preschool Language Scale of the Battelle Developmental Inventory (BDI).	One in eight (12.5%) of the young women were parents at the time of discharge.
8.	Maclagan, I. (1993). ***Four Years' Severe Hardship. Young People and the Benefits Gap***. Youthaid, COYPSS, & Barnardos.	Report reviewing statistics demonstrating the ineffectiveness of Youth Training schemes.	Quotes DoH figures (year unspecified) cited in 'Leaving Care and After' (National Children's Bureau, 1992) in which 14% of female care leavers was pregnant or had a child when officially discharged.

9.	Quinton, D., & Rutter, M. (1988). ***Parenting Breakdown: The Making and Breaking of Intergenerational Links.*** Aldershot: Gower.	Followed-up a group of girls brought up in children's homes.	Girls reared in institutions who had had positive educational experiences increased their future planning about partnership and work. These girls were likely to select a non-deviant spouse in early adulthood.
10.	Rutter, M., Quinton, D. & Liddle, C. (1983). Parenting in two generations. Looking back and looking forwards. In N. Madge (ed.). ***Families at Risk***. London: Heinemann.	Prospective study of 94 females who were in a children's home in 1964, 81 of whom (91%) were followed up in 1978 when aged 21-27. Compared to a control group of 51 females, 41 (80%) of whom were followed up at age 21-27.	• 42% of the ex-care group were pregnant by age 19 v. 5% of the control group ($\chi^2(1) = 16.75$; $p > .001$). • 60% of ex-care females had at least 4 children v. 20% of controls. • 43% of the children of ex-care females had the same fathers v. 93% of controls. • Ex-care females interacted less with their babies and were less effective parents (regarding expressed warmth, sensitivity, discipline techniques); only 10% of ex-care females lacked day-today problems v. 37% of controls. • Less than 50% of care mothers were in a stable co-habiting relationship v. 90% of controls. • Of those with children (ex-care group n = 49; control group n = 15), 22% of the ex-care group were without a male partner v. 0% of control (exact test p = 0.039).
11.	Sinclair, I. & Gibbs, I. (1996). ***Quality of Care in Children's Homes***. York: University of York.	Reported in Evans, R. J. (2000). ***The Educational Attainments and Progress of Children in Public Care***. Thesis, University of Warwick, Institute of Education.	17% young female care leavers were pregnant or already mothers.
12.	Stein, M. & Carey, K. (1986). ***Leaving Care***. Oxford: Basil Blackwell.	Representative study of 45 care leavers.	14% young women leaving care are pregnant or already mothers.

Appendix 4: *TABLES RELATING TO SECTION 3.4.*

Table 1. Numbers of looked after children in the two British Birth Cohort Studies.

1958 Cohort		1970 cohort	
Age	***No. of children***	***Age***	***No. of children***
Up to age 7	319	Up to age 5	303
Between 7 and 11	230	Between 5 and 10	194
Between 11 and 16	179	Between 10 and 16	225
Ever (to age 16)	728	Ever (to age 10)	722

NB: Table reports timing of initial LAC status. For example, those reporting LAC status "up to age 7" made first report at the age 7 data sweep. They may or may not still have been in care "between 7 and 11" but that cannot be discerned in these data. Similarly, it is not possible to identify the length of LAC status or the type. These weaknesses lead to a number of necessary assumptions in the modelling, discussed in Section 3.

Table 2: Definition and probability of crime outcomes for LAC and other children (NCDS).

Variable	Definition	No.	Probability if not LAC	Probability if LAC	Odds	P-val.
Police1a	Been moved on by police at least once	386	0.033	0.071	2.25	0.000
Police1b	Been moved on by police more than once	220	0.018	0.049	2.74	0.000
Police2a	Been stopped and questioned at least once	2,175	0.191	0.235	1.30	0.029
Police2b	Been stopped and questioned more than once	1,072	0.093	0.142	1.61	0.001
Police3a	Been let off with warning at least once	1,335	0.117	0.161	1.46	0.006
Police3b	Been let off with warning more than once	337	0.029	0.044	1.52	0.089
Police4a	Been arrested & taken to station at least once	500	0.042	0.093	2.31	0.000
Police4b	Been arrested & taken to station more than once	134	0.011	0.034	3.18	0.000
Police5a	Been formally cautioned at station at least once	433	0.037	0.083	2.38	0.000
Police5b	Been formally cautioned at station more than once	86	0.007	0.017	2.38	0.029
Courta	Been found guilty by a court at least once	517	0.044	0.086	2.02	0.000
Courtb	Been found guilty by a court more than once	105	0.009	0.024	2.84	0.002

Table 3: Definition and probability of crime outcomes for LAC and other children (BCS).

Variable	Definition	No.	Probability if not LAC	Probability if LAC	Odds	P-val.
Police1a	Been moved on by police at least once	2,146	0.193	0.237	1.29	0.040
Police1b	Been moved on by police more than once	1,631	0.147	0.183	1.30	0.056
Police2a	Been stopped and questioned at least once	4,559	0.413	0.441	1.12	0.287
Police2b	Been stopped and questioned more than once	3,204	0.290	0.320	1.15	0.213
Police3a	Been let off with warning at least once	3,233	0.293	0.325	1.17	0.174
Police3b	Been let off with warning more than once	1,495	0.135	0.164	1.26	0.107
Police4a	Been arrested & taken to station at least once	1,922	0.172	0.263	1.78	0.000
Police4b	Been arrested & taken to station more than once	840	0.075	0.145	2.13	0.000
Police5a	Been formally cautioned at station at least once	1,618	0.144	0.250	1.99	0.000
Police5b	Been formally cautioned at station more than once	523	0.046	0.116	2.77	0.000
Courta	Been found guilty by a court at least once	1,468	0.131	0.231	2.01	0.000
Courtb	Been found guilty by a court more than once	514	0.046	0.094	2.20	0.003

Table 4. Definition and probability of health variables for LAC and other children (NCDS).

Variable	Definition	No.	Probability if not LAC	Probability if LAC	Odds	P-val.
Depressed	Score above 8 on Malaise score	1,628	0.138	0.258	2.17	0.000
Obese	Body mass index above 30	1,706	0.150	0.150	0.97	0.875
Good general health	Self-reported health is very good or excellent	3,517	0.192	0.135	0.66	0.000
Exercises	Exercises hard more than once a week (i.e. getting out of breath or sweaty during exercise)	3,504	0.189	0.174	0.90	0.313
Smoker	Smokes one or more cigarettes pw	2,933	0.154	0.257	1.90	0.000

Table 5. Definition and probability of health variables for LAC and other children (BCS).

Variable	Definition	No.	Probability if not LAC	Probability if LAC	Odds	P-val.
Depressed	Score above 8 on malaise score	1,501	0.132	0.211	1.75	0.000
Obese	Body mass index above 30	1,213	0.109	0.103	0.93	0.689
Good general health	Self-reported health is very good or excellent	3,733	0.230	0.158	0.63	0.000
Exercises	Exercises hard more than once a week (i.e. getting out of breath or sweaty during exercise)	3,645	0.224	0.165	0.68	0.000
Smoker	Smokes one or more cigarettes pw	3,243	0.196	0.226	1.19	0.048

Table 6. Definition and probability for household and economic variables for LAC and other children (NCDS).

Variable	Definition	No.	Probability if not LAC	Probability if LAC	Odds	P-val.
Teenm	Teen mother	754	0.081	0.177	2.45	0.000
Singlem	Single mother at 42	576	0.064	0.082	1.32	0.175
Wkless1	In workless household at 42	942	0.048	0.129	2.97	0.000
Wkless2	In workless household with children at 42	477	0.024	0.066	2.86	0.000

Table 7. Definition and probability for household and economic variables for LAC and other children (BCS).

Variable	Definition	No.	Probability if not LAC	Probability if LAC	Odds	P-val.
Teenm	Teen mother	318	0.037	0.058	1.58	0.048
Singlem	Single mother at 30	601	0.072	0.086	1.21	0.323
Wkless1	In workless household at 30	1,124	0.067	0.102	1.60	0.000
Wkless2	In workless household with children at 30	609	0.036	0.053	1.47	0.024

Table 8. Risk factors for LAC status (NCDS).

	DF/dX	(Z-stat)
Father in SES 1	-0.016	(2.66)
Father in SES 2	-0.016	(3.61)
Father in SES 3m,	-0.013	(2.92)
Father in SES 3nm	-0.010	(2.83)
Father in SES 4	-0.006	(1.50)
Father SES unknown or n.a.	0.028	(1.52)
Mother less than 20 years	0.011	(1.81)
Father less than 20 years	0.013	(0.97)
No. of siblings	0.006	(9.79)
Mother stayed on past 16	-0.002	(0.64)
Father stayed on past 16	-0.003	(0.69)
Experienced financial hardship pre-16	0.033	(8.12)
Not toilet trained at 3	0.040	(5.72)
Single parent family	0.033	(6.57)
Girl	-0.003	(1.36)
Observations	12,287	

NB: Absolute value of z statistics in parentheses.
The dF/dX column reports marginal effects, i.e. the effect on the probability of LAC status in percentage point terms.

Table 9. Risk factors for LAC status (BCS).

	DF/dX	(Z-stat)
Father in SES 1	-0.011	(1.33)
Father in SES 2	-0.015	(2.24)
Father in SES 3nm	-0.013	(1.74)
Father in SES 3m,	-0.016	(2.42)
Father in SES 4	-0.001	(0.14)
Father in other SES group	0.032	(1.09)
Father in unclassified SES or n.a.	0.044	(2.83)
Poor psychological development at age 5	0.010	(3.25)
Mother less than 20 years	0.038	(6.51)
No. of siblings	0.007	(6.39)
Father stayed on past 16	0.001	(0.26)
Mother stayed on past 16	-0.003	(0.78)
Low family income	0.016	(2.33)
Had single parent	0.050	(4.84)
Afro-caribbean ethnicity	0.028	(2.40)
Other non-white ethnicity	-0.002	(0.34)
Girl	-0.001	(0.50)
Observations	15,824	

NB: As Table 8.

Table 10. Raw and adjusted "effects" of LAC status on health (NCDS).

	Depressed (Age 42)				In good health (Age 42)				Smoker (Age 42)			
	Males		Females		Males		Females		Males		Females	
	(1)	(2)	(3)	(4)	(9)	(10)	(11)	(12)	(17)	(18)	(19)	(20)
Care	0.153	0.143	0.088	0.037	-0.066	-0.030	-0.046	-0.066	0.063	0.011	0.152	0.077
	(6.06)	(4.52)	(3.30)	(1.17)	(3.39)	(1.00)	(2.10)	(1.97)	(3.37)	(0.46)	(6.79)	(2.64)
Father in SES 1		-0.056		-0.078		0.084		0.138		-0.072		-0.112
		(2.29)		(2.73)		(2.43)		(3.71)		(2.80)		(4.44)
Father in SES 2		-0.060		-0.064		0.063		0.080		-0.063		-0.080
		(3.19)		(2.84)		(2.36)		(2.80)		(3.18)		(3.99)
Father in SES 3m,		-0.060		-0.073		0.065		0.131		-0.054		-0.067
		(3.14)		(3.25)		(2.31)		(4.31)		(2.59)		(3.23)
Father in SES 3nm		-0.061		-0.035		0.029		0.061		-0.021		-0.053
		(3.51)		(1.80)		(1.34)		(2.62)		(1.19)		(3.03)
Father in SES 4		-0.048		-0.046		0.038		0.059		-0.014		-0.029
		(2.80)		(2.24)		(1.55)		(2.25)		(0.76)		(1.57)
Father in unclassified SES or n.a.				0.056		0.047		0.071		0.028		-0.034
				(0.66)		(0.56)		(0.73)		(0.42)		(0.48)

Mother less than 20 years	-0.010	0.025	-0.039	-0.060	0.049	0.028
	(0.44)	(1.00)	(1.56)	(2.37)	(2.20)	(1.21)
Father less than 20 years	0.041	0.016	0.023	0.037	-0.002	-0.032
	(0.68)	(0.25)	(0.37)	(0.53)	(0.04)	(0.59)
No. of siblings	0.009	0.007	-0.012	-0.011	0.012	0.017
	(3.01)	(1.89)	(3.32)	(2.88)	(4.21)	(5.57)
Mother stayed on past 16	-0.016	-0.010	0.031	0.024	0.003	-0.013
	(1.30)	(0.72)	(2.38)	(1.78)	(0.25)	(1.07)
Father stayed on past 16	-0.008	-0.031	0.034	0.045	-0.009	-0.009
	(0.61)	(2.10)	(2.35)	(3.06)	(0.70)	(0.66)
Experienced financial hardship pre-16	0.016	0.073	-0.009	-0.046	0.032	0.062
	(1.07)	(4.23)	(0.54)	(2.66)	(2.20)	(4.02)
Not toilet trained at 3	0.014	0.043	-0.042	0.030	0.000	-0.002
	(0.55)	(1.56)	(1.63)	(1.11)	(0.01)	(0.08)
Single parent family	-0.014	0.009	-0.015	0.006	0.007	0.012
	(0.74)	(0.44)	(0.71)	(0.30)	(0.38)	(0.65)

Table 11. Raw and adjusted "effects" of LAC status on adult household characteristics (NCDS).

	Teen mother		Wkless1				Wkless2				Log of income			
			Males		Females		Males		Females		Males		Females	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Care	0.096	0.054	0.079	0.047	0.085	0.052	0.026	0.015	0.063	0.043	-0.101	0.005	-0.057	0.031
	(5.67)	(2.89)	(6.70)	(3.58)	(5.86)	(3.01)	(3.70)	(2.06)	(5.31)	(2.99)	(2.03)	(0.08)	(1.24)	(0.52)
Father in SES 1		-0.056		-0.021		-0.033		-0.003		-0.028		0.164		0.246
		(2.81)		(1.65)		(2.27)		(0.42)		(2.59)		(2.82)		(4.35)
Father in SES 2		-0.028		-0.019		-0.025		-0.006		-0.022		0.121		0.113
		(2.08)		(2.03)		(2.25)		(1.09)		(2.65)		(2.62)		(2.57)
Father in SES 3m,		-0.038		-0.033		-0.028		-0.009		-0.024		0.136		0.054
		(2.85)		(3.58)		(2.41)		(1.72)		(2.82)		(2.90)		(1.22)
Father in SES 3nm		-0.008		-0.004		-0.019		-0.003		-0.018		-0.002		0.053
		(0.75)		(0.50)		(1.99)		(0.59)		(2.48)		(0.05)		(1.45)
Father in SES 4		0.001		-0.006		-0.008		-0.005		-0.015		-0.039		-0.005
		(0.11)		(0.72)		(0.80)		(0.99)		(2.07)		(0.92)		(0.12)
Father unclassified SES or n.a.		0.069		-0.003		-0.004		0.023		-0.015		-0.043		0.030
		(1.23)		(0.10)		(0.11)		(1.11)		(0.51)		(0.31)		(0.20)

Mother less than 20 years	0.031	0.022	0.016	0.014	0.005	0.047		0.017	
	(2.03)	(1.92)	(1.18)	(1.98)	(0.48)	(1.00)		(0.39)	
Father less than 20 years	0.003	-0.031	-0.029	-0.007		-0.031		-0.112	
	(0.09)	(1.66)	(1.02)	(0.64)		(0.27)		(0.97)	
No. of siblings	0.011	0.003	0.007	0.001	0.004	-0.032		-0.021	
	(5.86)	(2.57)	(3.80)	(1.06)	(3.00)	(4.99)		(3.32)	
Mother stayed on past 16	-0.032	-0.008	-0.012	-0.002	-0.004	0.091		0.115	
	(3.81)	(1.23)	(1.61)	(0.55)	(0.71)	(3.96)		(5.16)	
Father stayed on past 16	-0.038	-0.004	-0.004	-0.004	-0.006	0.147		0.154	
	(4.02)	(0.56)	(0.45)	(0.99)	(0.90)	(5.87)		(6.31)	
Experienced financial hardship pre-16	0.044	0.022	0.027	0.019	0.016	-0.075		-0.076	
	(4.38)	(3.04)	(2.99)	(3.92)	(2.28)	(2.44)		(2.62)	
Not toilet trained at 3	0.038	0.037	0.012	0.002	-0.013	-0.145		-0.043	
	(2.37)	(2.96)	(0.86)	(0.33)	(1.20)	(2.89)		(0.93)	
Single parent family	0.024	-0.006	0.012	-0.005	0.005	-0.002		0.055	
	(2.03)	(0.74)	(1.12)	(1.00)	(0.60)	(0.04)		(1.62)	
Constant						2.304	2.290	1.902	1.819
						(263.61)	(55.62)	(228.47)	(47.87)

Table 12. Raw and adjusted "effects" of LAC status on crime (BCS).

	Courta				Courtb			
	Males		Females		Males		Females	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Care	0.183	0.138	0.044	0.025	0.100	0.058	0.008	0.003
	(5.15)	(3.89)	(3.03)	(1.93)	(4.10)	(2.67)	(1.17)	(0.60)
Father in SES 1		-0.081		-0.021		-0.032		
		(2.29)		(1.53)		(1.47)		
Father in SES 2		-0.014		-0.004		-0.019		-0.007
		(0.44)		(0.29)		(1.06)		(1.61)
Father in SES 3nm		-0.042		-0.004		-0.014		
		(1.25)		(0.27)		(0.68)		
Father in SES 3m,		0.015		-0.003		0.011		-0.005
		(0.52)		(0.26)		(0.62)		(1.20)
Father in SES 4		0.005		0.003		0.011		-0.005
		(0.15)		(0.21)		(0.57)		(1.37)
Father in other SES group		-0.169		0.069				
		(1.59)		(1.29)				
SES or n.a.		0.027		0.050		-0.000		
		(0.48)		(1.71)		(0.01)		
Mother less than 20 years		0.140		0.022		0.090		0.014
		(6.28)		(2.44)		(6.10)		(2.87)
No. of siblings		0.024		0.002		0.014		0.001
		(4.90)		(0.95)		(5.06)		(1.20)
Poor psychological development at age 5		0.040		0.001		0.019		0.001
		(3.33)		(0.22)		(2.54)		(0.41)

Father stayed on past 16	-0.038	-0.002	-0.022	-0.001
	(2.76)	(0.41)	(2.50)	(0.23)
Mother stayed on past 16	-0.024	-0.011	-0.024	-0.005
	(1.72)	(1.93)	(2.82)	(1.67)
Low family income	0.032	0.028	0.031	0.012
	(1.01)	(2.09)	(1.59)	(1.83)
Afro-caribbean ethnicity	0.050	0.053	0.021	
	(0.90)	(2.10)	(0.65)	
Other non-white ethnicity	-0.029	-0.016	-0.014	-0.002
	(1.42)	(2.16)	(1.14)	(0.71)
Had single parent	0.018	0.007	0.015	-0.003
	(0.48)	(0.47)	(0.66)	(0.63)

Table 13. Raw and adjusted "effects" of LAC status on health BCS).

	Depression (Age 30)				Good general health (Age 30)				Smoker (Age 30)			
	Males		Females		Males		Females		Males		Females	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Care	0.067	0.038	0.081	0.073	-0.090	-0.065	-0.052	-0.039	0.011	0.002	0.055	0.038
	(2.53)	(1.52)	(3.05)	(2.76)	(4.14)	(2.84)	(2.14)	(1.55)	(0.52)	(0.07)	(2.38)	(1.66)
Father in SES 1		-0.063		-0.005		0.052		0.143		-0.019		-0.061
		(2.66)		(0.17)		(1.68)		(3.81)		(0.67)		(2.20)
Father in SES 2		-0.034		-0.040		0.037		0.131		-0.008		-0.019
		(1.58)		(1.60)		(1.40)		(4.21)		(0.35)		(0.78)
Father in SES 3nm		-0.019		-0.036		0.032		0.079		-0.005		0.004
		(0.77)		(1.30)		(1.12)		(2.29)		(0.18)		(0.13)
Father in SES 3m,		-0.017		-0.000		0.009		0.077		0.022		0.016
		(0.83)		(0.00)		(0.39)		(2.75)		(0.99)		(0.70)
Father in SES 4		-0.002		-0.003		0.008		0.055		0.017		0.020
		(0.07)		(0.10)		(0.31)		(1.76)		(0.69)		(0.80)
Father in other SES group		-0.008		-0.057		0.215		0.245		-0.024		0.165
		(0.10)		(0.72)		(2.09)		(2.51)		(0.26)		(1.90)

SES unclassified or n.a.	-0.021	0.060	0.059	0.165	0.063	-0.003
	(0.58)	(1.27)	(1.26)	(3.08)	(1.41)	(0.07)
Mother less than 20 years	0.041	0.039	-0.065	-0.036	0.027	0.065
	(2.52)	(2.15)	(4.09)	(2.05)	(1.68)	(3.91)
No. of siblings	0.010	0.012	-0.022	-0.012	0.012	0.013
	(2.96)	(3.09)	(5.35)	(3.05)	(3.29)	(3.86)
Poor psychological development at age 5	0.031	0.030	-0.017	-0.028	0.035	0.019
	(3.44)	(3.03)	(1.83)	(2.72)	(3.82)	(2.08)
Father stayed on past 16	-0.009	-0.025	0.018	0.026	0.019	-0.006
	(0.90)	(2.18)	(1.59)	(2.19)	(1.72)	(0.56)
Mother stayed on past 16	-0.009	-0.017	0.045	0.040	-0.007	-0.018
	(0.91)	(1.50)	(4.06)	(3.44)	(0.66)	(1.68)
Low family income	0.061	0.011	-0.040	-0.024	0.045	0.036
	(2.44)	(0.45)	(1.64)	(0.95)	(1.89)	(1.58)
Afro-caribbean ethnicity	-0.034	-0.037	-0.048	-0.129	-0.121	-0.137
	(0.94)	(0.86)	(1.21)	(3.08)	(3.55)	(4.13)
Other non-white ethnicity	0.020	-0.003	-0.048	-0.032	-0.032	-0.050
	(1.30)	(0.19)	(3.18)	(2.08)	(2.14)	(3.60)
Had single parent	-0.006	-0.036	0.002	0.156	-0.001	0.038
	(0.21)	(1.32)	(0.06)	(4.43)	(0.03)	(1.37)

Table 14. Raw and adjusted "effects" of LAC status on adult household characteristics (BCS).

	Teen mother		Wkless1				Wkless2				Linc			
			Males		Females		Males		Females		Males		Females	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Care	0.026	0.012	0.042	0.025	0.034	0.022	0.007	0.001	0.027	0.013	-0.074	-0.054	-0.114	-0.081
	(2.17)	(1.31)	(3.19)	(2.08)	(2.08)	(1.41)	(1.06)	(0.22)	(1.90)	(1.06)	(1.58)	(1.17)	(2.52)	(1.84)
Father in SES 1		-0.032		-0.039		-0.034				-0.050		0.327		0.394
		(3.26)		(3.41)		(1.97)				(3.99)		(6.77)		(7.33)
Father in SES 2		-0.029		-0.029		-0.026		-0.008		-0.032		0.235		0.267
		(3.87)		(2.82)		(1.76)		(1.54)		(3.03)		(5.53)		(5.78)
Father in SES 3nm		-0.016		-0.032		-0.023		-0.011		-0.022		0.210		0.209
		(1.86)		(2.96)		(1.39)		(2.02)		(1.78)		(4.60)		(4.14)
Father in SES 3m,		-0.006		-0.024		-0.007		-0.003		-0.013		0.089		0.110
		(0.72)		(2.34)		(0.51)		(0.58)		(1.19)		(2.25)		(2.50)
Father in SES 4		-0.005		-0.022		0.002		-0.006		-0.006		0.095		0.129
		(0.56)		(2.20)		(0.10)		(1.22)		(0.48)		(2.17)		(2.67)
Father in other SES group		0.037		0.003		-0.023		0.061		-0.033		0.310		0.152
		(1.10)		(0.08)		(0.46)		(1.86)		(0.91)		(2.03)		(1.20)

Father in unclassified SES or n.a.	-0.010 (0.73)	-0.002 (0.10)	-0.020 (0.76)	0.006 (0.52)	-0.024 (1.21)	0.044 (0.60)	0.140 (1.88)
Mother less than 20 years	0.036 (4.75)	0.028 (3.04)	0.040 (3.43)	0.019 (3.68)	0.045 (4.56)	-0.014 (0.52)	-0.129 (4.34)
No. of siblings	0.007 (5.38)	0.004 (2.29)	0.012 (5.62)	0.002 (2.62)	0.011 (6.56)	-0.026 (3.92)	-0.024 (3.49)
Poor psychological development at age 5	0.003 (0.70)	0.015 (2.87)	-0.001 (0.13)	0.005 (1.75)	-0.006 (1.21)	-0.024 (1.58)	-0.041 (2.61)
Father stayed on past 16	-0.001 (0.27)	-0.002 (0.38)	-0.002 (0.21)	-0.001 (0.37)	-0.000 (0.03)	0.015 (0.84)	0.027 (1.47)
Mother stayed on past 16	-0.017 (3.49)	-0.008 (1.35)	-0.018 (2.38)	-0.006 (1.93)	-0.019 (3.19)	0.105 (6.13)	0.090 (5.14)
Low family income	0.009 (0.97)	0.022 (1.78)	0.040 (2.49)	0.001 (0.20)	0.039 (2.97)	-0.142 (3.21)	-0.077 (1.76)
Afro-caribbean ethnicity	-0.010 (0.83)	0.000 (0.03)	-0.015 (0.67)		-0.016 (0.94)	-0.003 (0.03)	0.214 (2.96)
Other non-white ethnicity	-0.002 (0.32)	-0.003 (0.40)	-0.007 (0.72)	-0.006 (1.53)	-0.011 (1.46)	0.096 (3.60)	0.070 (2.66)
Had single parent	-0.002	-0.016	-0.017	0.001	-0.017	0.216	0.159

	(0.16)	(1.28)	(1.05)	(0.12)	(1.40)		(4.31)		(3.08)
Constant						2.126	1.970	1.954	1.782
						(277.08)	(46.53)	(243.53)	(38.90)

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