

Young people's changing routes to independence

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**John Bynner, Peter Elias, Abigail McKnight, Huiqi Pan and
Gaëlle Pierre**

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In the report we have indicated which authors have been responsible for the various chapters. Where no authorship is shown, all authors have contributed.

Introduction and summary

The situation of young people today is substantially different from that which prevailed 25 years ago. Compared with their counterparts in the late 1970s and the early 1980s, a much higher proportion pursues their education for a longer period, frequently now to degree level.

Unemployment among young people appears to have been declining, assisted by a sustained period of economic growth through the mid- and late 1990s. In other areas of their lives, young people now behave differently. Marriage has become less popular as young men and women choose to live alone or with other single friends. The average age of women at the time of their first birth continues to rise as family formation plans are postponed or scaled back while women opt instead to pursue employment.

In this report we examine these changing pathways to employment and family life in more detail than has hitherto been available. We question whether the changes we observe are consistent with a general improvement in young people's lives. Are they better off than their counterparts were one or two decades earlier? We look closely at how these changes in working and domestic lives have manifested themselves among young people generally. Have some gained whilst others appear to be losing out?

To research these issues we take advantage of a unique and valuable resource. Two groups of people have been the subjects of continuing investigations ever since they were born 30 or more years ago. Known as the birth cohort studies, each provides information on more than 10,000 persons. One group, termed the *National Child Development Study*, consists of persons all born in one week in 1958 (the '1958 cohort'). For this group we investigate the nature of the transitions they made from the time they reached the end of their compulsory education in 1974 through to their mid-twenties. The other group, termed the *1970 British Cohort Study*, provides similar information for persons born in one week in 1970 (the '1970

cohort'). For this group we observe the transitions they made as they passed from the end of their compulsory education in 1986 through to the mid-1990s. Further details about both of these studies, their strengths and weaknesses, are given in Appendix A.

The plan of the report is as follows. Chapter 1 is essentially scene setting. Here we document the extent of the changes that have taken place over the last 25 years in both the economic environment facing young people (their jobs, earnings and unemployment) and in their family and domestic lives. Chapter 2 introduces the two birth cohorts and presents a detailed account of the changing nature of the transitions made by these two groups of young people as they move from education to employment and from dependent to independent family status. Chapter 3 explores these transitions in more detail and shows how the nature of the transitions varies between different groups of young people within each age cohort and between the two cohorts. Chapter 4 explores what we mean by the term 'better off'. By examining the patterns of earnings and the mental health of these young people in their early or mid-twenties, the research evidence is used to draw conclusions about the varying fortunes and misfortunes of the two groups born 12 years apart. Chapter 5 presents an intergenerational view of the process through which poverty and economic disadvantage transmits from parents to children. Chapter 6 discusses the findings within the context of recent policy developments aimed at influencing the transitions made by young people in both the economic and social spheres.

Each chapter provides a summary of the research findings it presents, while the final chapter draws these results together and interprets the general findings in terms of the policies now in place to address issues of economic disadvantage and social exclusion among young adults. Our main findings are as follows:

- For a variety of reasons, mainly structural, the employment of early school leavers has been marginalised in the past 15 years. Traditional school leaver 'entry' jobs for young men and women (craft apprenticeships for young men and clerical/secretarial jobs for young women) have been largely replaced by sales occupations and other service sector occupations (hospitality, catering and caring), often part-time and on relatively low pay.
 - In terms of their earnings, young people in their mid-twenties today are, on average, significantly better off in real terms than their counterparts were a generation earlier. However, relative to older workers (those aged 30 and over), they are less well positioned now than they were 25 years ago.
 - The distribution of young people's earnings is wider than it was in the previous generation. This probably reflects the 'marginalisation' of the jobs held by young people as increasing numbers stay on in full-time education to gain qualifications.
 - While high-level qualifications do still contribute to improved earnings, the premiums associated with such qualifications do not now appear to be as significant as they used to be.
 - We have some evidence that the psychological health of young people, especially young women, appears to have declined relative to the psychological health of young people 12 years earlier.
 - Pathways to adult life are changing. Opportunities for 16-year-old school leavers are reducing. A gap appears to be growing between those who gain good educational qualifications and those who do not.
- Marriage has become unfashionable and parenthood appears to have been postponed, except for a small minority of young people who contribute to the highest rate of teenage pregnancy in western Europe.
 - Family background remains a critical factor moderating these transitions, but the role played by high-level qualifications appears to be growing in importance.
 - Family background continues to influence the prospects of young people as they move from school to work. Poverty in childhood is linked with lower educational attainment, higher unemployment and low earnings in adulthood. There is evidence to suggest that this 'poverty penalty' has increased over time.
- We conclude this report with a chapter that attempts to take stock of these changes within the context of recent policy developments aimed at improving the educational status and increasing employment opportunities for young people. Here we argue that there is a need to consider afresh the raft of new initiatives that have been put in place since 1997. In particular, the evidence we present relating to the continuing and growing disparity between those young people who gain access to and benefit from furthering their education and those who do not is disturbing. This problem is complex and deep-seated. No simple policy initiatives will rapidly resolve the growing polarisation we see in the youth labour market. However, it is clear that there is a need to refocus attention towards the significant numbers of young people who cannot and will not benefit from the expansion of higher education.

1 The changing situation of young people

Introduction

In achieving adult status, most young people have to make transitions in two domains of their lives. The first involves the move from education to the labour market, in which continuing beneficial full-time employment is, for most, the ultimate goal. The second is in relation to family life, where young people have to achieve one major transition and possibly a further one: moving from the status of dependent child in the family of origin to establishing independence; including leaving the parental home and frequently becoming a parent themselves.

Up to 25 years ago, such status transitions were relatively straightforward for the majority of young people. Transition to the labour market, for those not continuing to higher education (HE), comprised leaving school and getting a job, which on the most valued route from school to work would involve apprenticeship, at least for boys. Transition to independent living comprised getting engaged, getting married and setting up a home of one's own.

As recently as the mid-1970s these two types of transition pattern were the experience of the majority of young people (Ferri, 1993), although cracks in the traditional framework for transition were beginning to show. By the end of the 1970s entry to jobs directly from school was becoming more difficult as large areas of British industry changed or collapsed under the pressure of technological change. The Youth Opportunities Scheme (YOPS) was the first of a series of initiatives brought in by the government at the time in an attempt to make up for the lack of employment opportunities for young people. In the early 1980s, a major world-wide recession compounded the problem and brought large-scale unemployment in its wake.

For those attempting to leave school in the 1980s, employment was becoming an increasingly difficult option for minimum-age school leavers, at

least in the old industrial heartlands (Banks *et al.*, 1992). In place of it was the government's national Youth Training Scheme (YTS, later abbreviated to YT), in which all young leavers were expected to engage after leaving school. The scheme began as one year's training, subsequently (from 1986) extended to two, and was intended to replace all other forms of pre-vocational training. Even the previously prestigious apprenticeship, which was part of an employment contract and paid a wage rather than a training allowance, was absorbed into it. But the lack of jobs, and the difficulty of getting continuing employment, meant for many an extended period of training schemes and short-term jobs before finding a niche in the labour market: a 'navigation' into adult employment, as Evans and Furlong (1997) described it.

Partly because of the extension of the transition to work, the move to independent living was also changing. Young people were staying at home longer, and when they did leave it was more often to live with friends or to cohabit. For the majority, the formal commitment of marriage, and especially having children, was increasingly postponed. In contrast, one section of school leavers, those who had left at the minimum age without qualifications, were often accelerating their transition to parenthood with or without a stable relationship as part of it. Many young women in this situation were exiting from the labour market to pursue the alternative career of motherhood, only moving back to employment later via part-time casual work to support their families. In contrast, young men without the prospect of a secure job tended to postpone the transition to parenthood, or entry into a stable relationship, often remaining at home dependent on their family instead (Wallace, 1987). This increasing evidence of polarisation between those with prospects and those without them has fuelled the growing concern with 'social exclusion' (Atkinson, 1998). This is manifested in such statuses as teenage pregnancy and 'NEET' (not in education, employment or training) during the late

teens, which are said to set in train a series of problems (ill health and criminality) in adult life. A raft of policy initiatives emanating from the 1997 Labour government's Social Exclusion Unit have been developed subsequently to help young people resist entry into these statuses, for example the 'ConneXions' service proposed in the report *Bridging the Gap* (Social Exclusion Unit, 1999a, 1999b, 2000); Department for Education and Employment [DfEE], 2000).

Available evidence on the causes and consequences of these changing pathways to employment and adult life is often fragmentary and partial. Comparisons between the pathways exhibited by young people 20 years ago and nowadays are notoriously difficult to interpret because of the entwined effects of external changes on them (for example changes in economic conditions and social and cultural norms) and the impacts of intergenerational influences. This report describes our attempts to address this issue using information from two major and continuing surveys, one of people born in one week in 1958 and a comparable survey of those born in one week in 1970. Further details about these surveys are supplied in Appendix A.

Before turning directly to the detailed information we have from the 1958 and 1970 cohorts on the changing nature of these transitions, we present in the remainder of this chapter a brief account of the main changes experienced by young people in employment, unemployment, earnings and family situation as recorded in a variety of statistical sources. Our intention is to help the reader to understand the changing environment faced by the members of the two cohorts as they moved from adolescence into adulthood. We have attempted wherever possible to examine trends over the 25-year period of 1975–2000. Where this was not possible due to changes in data collection methods, we illustrate these changes with the longest time-series of data available to us.

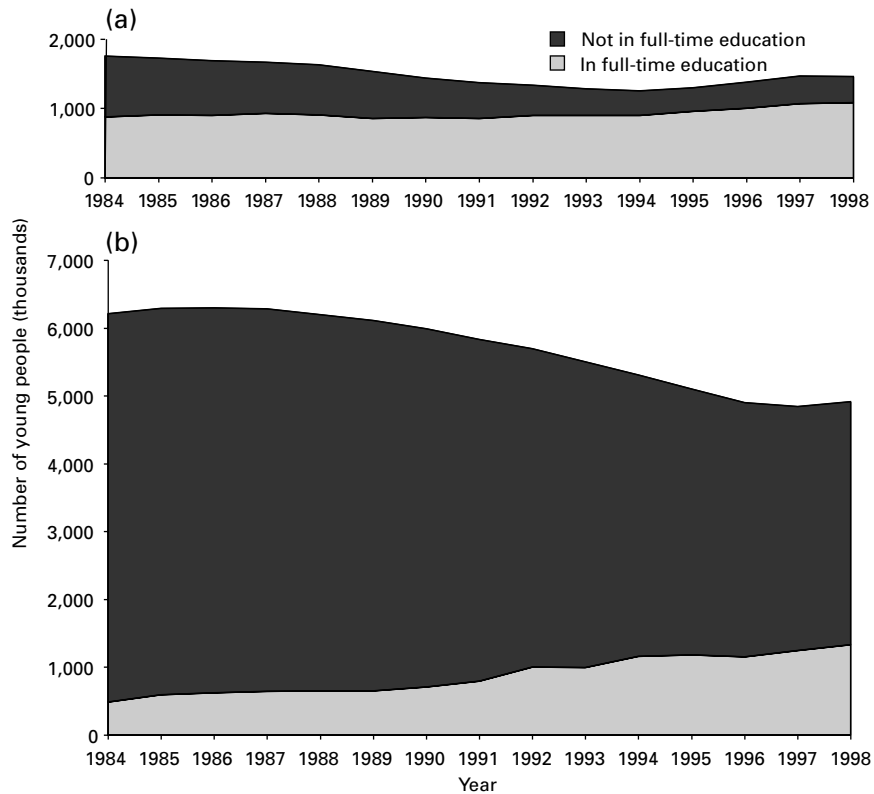
Demographic trends and educational participation

There have been substantial changes in the British labour market over the past 25 years among the patterns of education, training, recruitment and employment of young people. In part, these changes reflect the well-predicted effects of the decline in the birth rate in the late 1970s, the so-called 'demographic time-bomb' set for the 1990s. However, although demographic trends have undoubtedly had some impact on the labour market, it appears that a second major contributory factor has been the decisions made by young people to continue their participation in the educational system well beyond what used to be the typical British school-leaving age of 16 years. These decisions reflect the structural changes in employment, transformations that have been driven by new technology, the economic recession of the early 1980s, changes in the nature of further and higher education, and new patterns of global trading.

Figure 1 shows the general downward trend in the population of young people in Great Britain from 1984 to 1998, together with the rise in their participation in full-time education. We distinguish the 16–17-year-old age group from 18–24-year-olds, given that this divides educational participants between those who are staying on at school or entering further education from those who participate in HE.

For 16–17-year-olds the population continued to decline until 1994, then rose slowly due to the recovery in the birth rate in the early 1980s. By 1998, the population stood at just over 80 per cent of its level in 1984. What is most striking, however, is the growth in the proportion of this age group remaining in full-time education. In 1984, about one-half of this age group was outside the educational system. By 1998 three-quarters of the population of 16–17-year-olds were still in full-time education.

Figure 1 The population of young people and their participation in full-time education. (a) 16–17-year-olds; (b) 18–24-year-olds



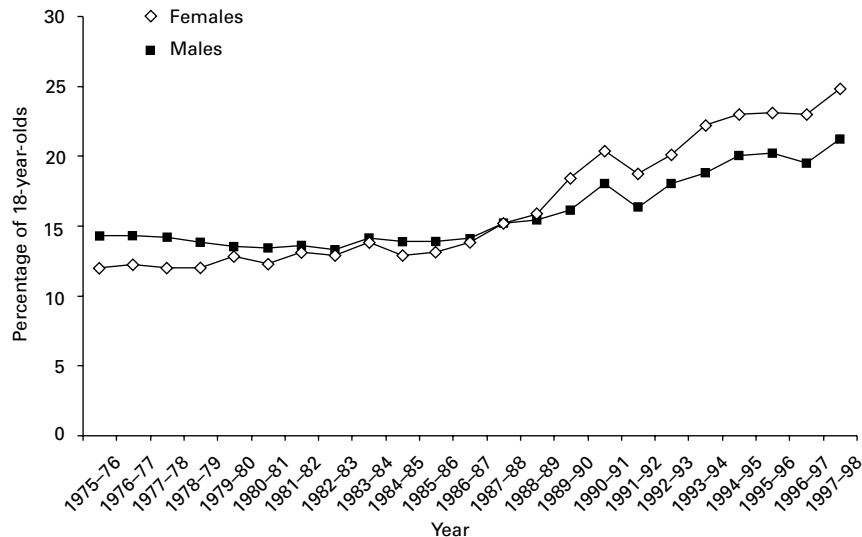
Source: Labour Force Survey, 1984–98 (IER estimates)

The lower part of Figure 1 shows similar information for the 18–24-year age group. The decline in the population in this age range has levelled out one million persons lower than in 1984. Full-time educational participation has grown steadily, with the population in full-time HE doubling over the period.

Part of the growth in educational participation that is evidenced in Figure 1 is due to the rapid expansion of the HE system in the early 1990s. As access to HE has improved, so the proportion entering HE has risen. However, this growth is also a product of the higher levels of school-leaving qualifications of young people. Some indication of the trend in school-leaving qualifications can be obtained from examination of Figure 2, showing

the proportion of 18-year-olds in the UK who gained two or more school-based Advanced (A)-level qualifications (or the equivalent in Scotland, three or more Highers), the qualification level generally regarded as a minimum for entry into HE. From the beginning of the 1990s, this proportion climbed at a more rapid rate than at any time since the introduction of the qualification. This indicates that a significantly higher proportion of young people were staying on at school for reasons not necessarily associated with the negative effect of high rates of joblessness in the youth labour market but presumably as part of a longer-term plan to enter HE. The attainment of women changed from a situation in the late 1970s, when young men were more likely than young women to

Figure 2 Percentage of 18-year-olds achieving two or more A-levels (three or more Highers in Scotland) by gender



Source: DfEE

achieve two or more A-levels, to a turn around at the start of the 1990s when young women exceeded the A-level performance of young men. By 1998 5 per cent more 18-year-old women than men achieved two or more A-levels.

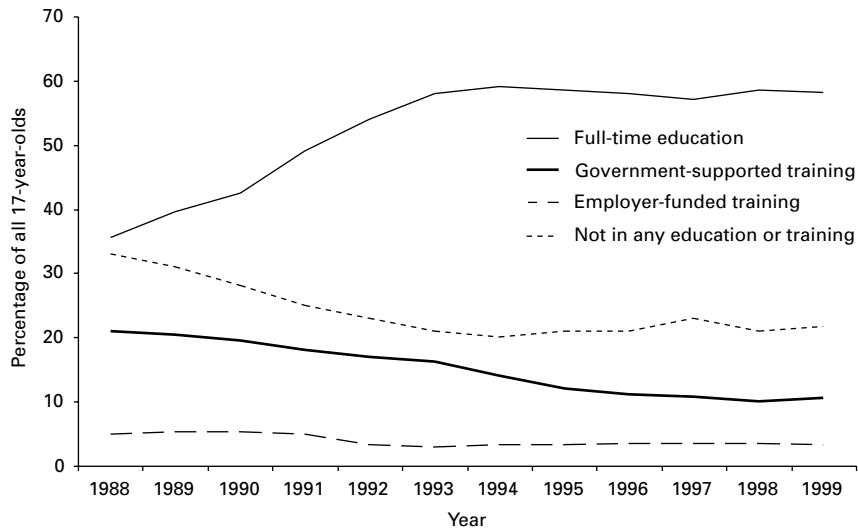
Combining the effects of rising educational participation with the declining cohort size, the number of young people (16–24-year-olds) working or available for work on a full-time basis is estimated to have dropped from approximately 6.5 million in 1984 to less than 4.0 million by 1998, a fall of more than one-third.¹ In the immediate future, further declines will be driven both by continued demographic trends and by a likely continuation of increases in the participation of young people in full-time education.

It was widely predicted some years ago that a ‘supply-side’ change of such magnitude would disrupt employers’ recruitment plans for young people, that it would curtail the scale of youth training programmes and have a positive impact on the relative earnings of young people. If the demand for youth labour remained unchanged, and in the absence of good substitutes for youth

labour, the earnings of young people would be expected to rise relative to older workers, a trend that could radically affect the decisions made by young people to participate in further and higher education. In the following subsection we show that the reverse has happened. In terms of the occupations in which they work and their relative earnings, young people without qualifications appear to be a marginalised group in the labour market. First, though, we show the changing participation in work-related training.

Figure 3 indicates that these changes in the percentages of young people staying on in full-time education and A-level attainment have been accompanied by changes in participation in work-related training (government and employer funded). Here we focus specifically upon 17-year-olds given the dramatic decline in the participation of 16-year-olds in paid employment. The rise in participation in full-time education among 17-year-olds is quite marked up until the end of 1993, at which point it stabilises at just under 60 per cent. Examination of the trends in training also shows that the share of 17-year-olds who are not in full-

Figure 3 Education and training status of 17-year-olds in England



Source: Education and Training Statistics for the UK (various years)

time education but undertaking some form of training (government-supported or employer-funded) has fallen from a peak of 26 per cent in 1988 to 14 per cent in 1998, reflecting the decline in the traditional apprenticeship. Consequently, the proportion of 17-year-olds who are not in full-time education and are not receiving any training has been stable or rising slowly since 1994.

The occupations and earnings of young people

Driven by the structural shifts in the industrial structure of the economy and the rapid technological advancements, the British labour market has been characterised in recent years by an acceleration of the trend away from traditional craft and operative occupations and towards managerial, technical, administrative and service jobs (Wilson, 2000). Clerical occupations, once the mainstay of employment for young women, have also commenced a downward trend, assumed to be associated with the productivity gains of information technology and office automation. While these trends have been well documented across the national labour market and for all age

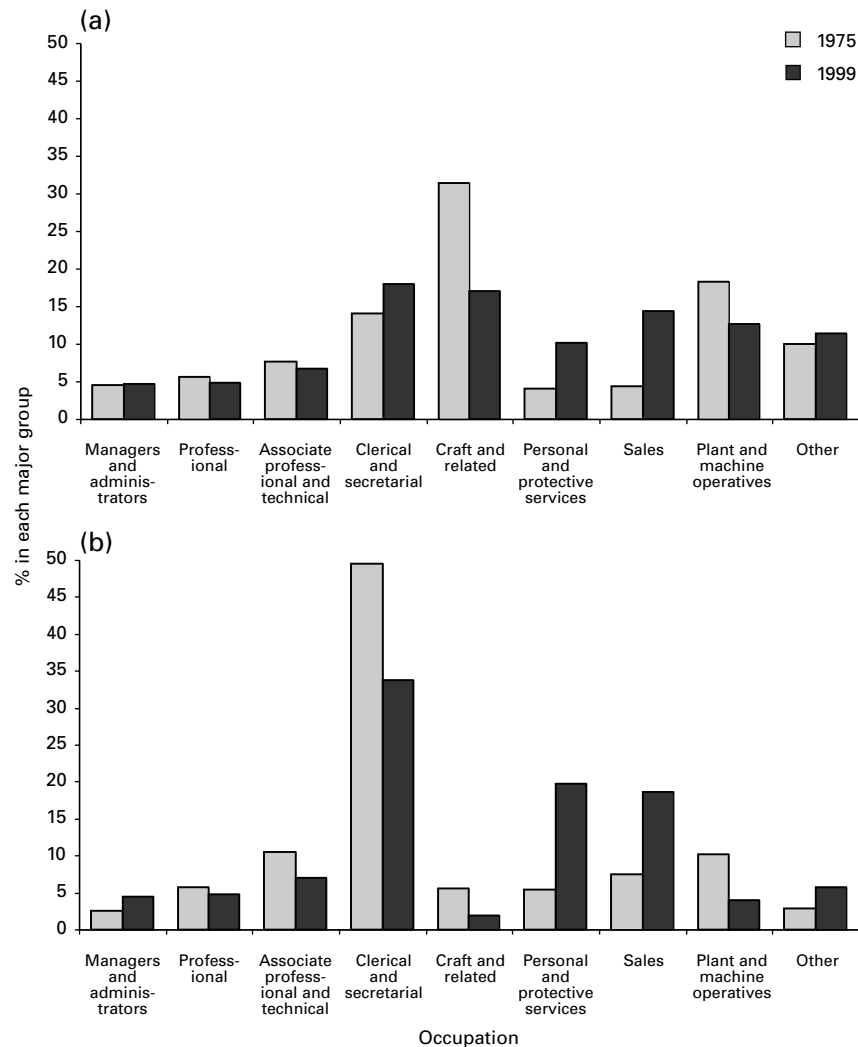
groups, few studies have focused particularly upon the situation of young people as they enter the labour market.

To examine the effect of both demographic and structural changes on the occupations and the relative earnings of young people, we turn to the major source of information on employee earnings in Britain, the *New Earnings Survey*. Figure 4 shows the changing occupational distribution of the jobs in which young men and women aged 18–24 years² worked in 1975 and 1999. We note the significant decline in the proportion of young men employed in ‘Craft and related’ occupations. ‘Plant and machine operatives’ also exhibit a decline, but not on the scale associated with the fall in the proportion employed in craft and related occupations. For young women, the main area of decline has been concentrated in ‘Clerical and secretarial’ occupations. As with men, the proportion of young women employed in ‘Personal and protective services’ and ‘Sales’ occupations has risen markedly over this period.

Overall, the figures suggest that there has been a fall in the type of jobs available to young school

Young people's changing routes to independence

Figure 4 The occupational distribution of employees aged 18–24 years, 1975 and 1999. (a) Men; (b) women



Source: New Earnings Surveys, 1975 and 1999 (IER estimates)

leavers away from craft jobs for young men towards low-skilled occupations, and from administrative and clerical occupations towards sales and personal service occupations for young women. Many of these occupations tend to have more limited opportunities for advancement and are less likely to provide high-quality training. It is evident that the vocational route into the labour market, which provided high-quality training to young people who left school at the age of 16 or 17, is rapidly disappearing.

Thus, there is strong evidence of some major occupational shifts over this decade, particularly in those areas where young men and women were traditionally recruited (craft and related occupations for young men and clerical occupations for young women). However, it would be misleading to consider these occupational shifts as a response by employers to a growing shortage of young recruits. The decline in employment in these areas should be seen as part of the wider national changes in occupational structure.

Evidence for this can be found by examining trends in the relative earnings of young people. Without a significant shift in occupational recruitment patterns and in the face of a significant decline in the numbers of young people available for work, the relative earnings of young people relative to older workers would be expected to rise.

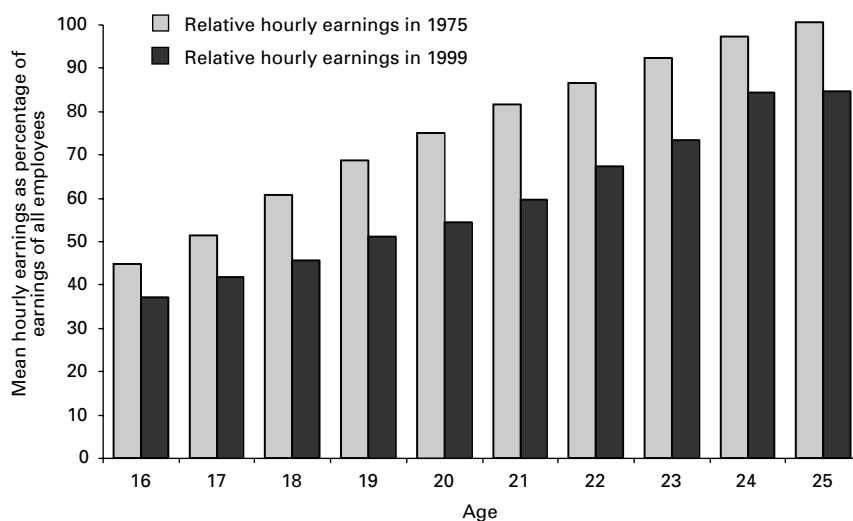
Figure 5 shows the relationship between age and earnings by single years of age from 16 to 25, contrasting the situation in 1975 with that prevailing in 1999. For each year group the mean of hourly earnings of employees is shown as a percentage of the mean hourly earnings of all employees. Examining first the situation in 1975, the average hourly earnings of young people grows from about 45 per cent of the national average at age 16 to 100 per cent at age 25. In 1999, the rate of increase of earnings with age was lower at all ages in this range, starting to catch up slightly at age 24. In other words, the relative hourly earnings of young people declined very significantly over this period, particularly for those in the 18–23-year age range. These trends indicate that the demand for youth labour generally has weakened over the period and/or that the prevalence of low-paid

work among young people has increased significantly.

Further evidence of the impact of related demand-side restructuring in the labour market for young people can be gained by examining the outcome of the supply–demand process, measured in terms of the scale of unemployment prevailing in these age groups. Figure 6 shows the estimated number of men and women who are unemployed according to the international definition (i.e. without paid work, seeking work and available to start work) as a percentage of the population in the relevant age group, contrasting the changing situation for 16–19-year-olds with that for 20–24-year-olds. What is of interest here is the fact that the percentage of 16–19-year-olds that are unemployed appears to have levelled out at 12 per cent for men and 8 per cent for women during the 1990s.³ This is surprising, given that the combined effects of a declining population have reduced the scale of the potential labour market for young people on such a wide scale.

The conclusion we draw from these changes is that the combined supply-side forces of demographic change and educational

Figure 5 Changes in the relative earnings of young employees, 1975 and 1999



Source: New Earnings Surveys, 1975 and 1999 (IER estimates)

Figure 6 Unemployed young people as a percentage of the age group, 16–19-year-olds and 20–24-year-olds, 1977–2000. (a) Men; (b) women



Source: Labour Force Surveys, 1977–2000, spring quarter each year (IER estimates)

participation have not driven the restructuring of the youth labour market. Rather than leading to a situation of excess demand for youth labour, youth wages have fallen in relative terms and, at any one time, about one in 10 of young people still experience some unemployment. It seems likely therefore that the general occupational shifts taking place in the labour market have affected employers' recruitment patterns, and

that these shifts appear at their strongest in the patterns of recruitment of young people. Employers have reacted by switching their traditional recruitment paths away from the youth labour market, and this switch may indeed have worsened the relative labour market position of the declining but still very significant group of young people who do not go on to further or higher education.

Young people's family situations

The changes in young people's family situations over the last 20 years can be viewed in relation to the changes in education and employment. While other factors are likely to be at work, it may well be the case that a consequence of extended education and training, with potentially less secure positions in the labour market, has been a steady postponement of marriage and family commitments as more and more young people try to find an occupational niche before making that form of commitment.

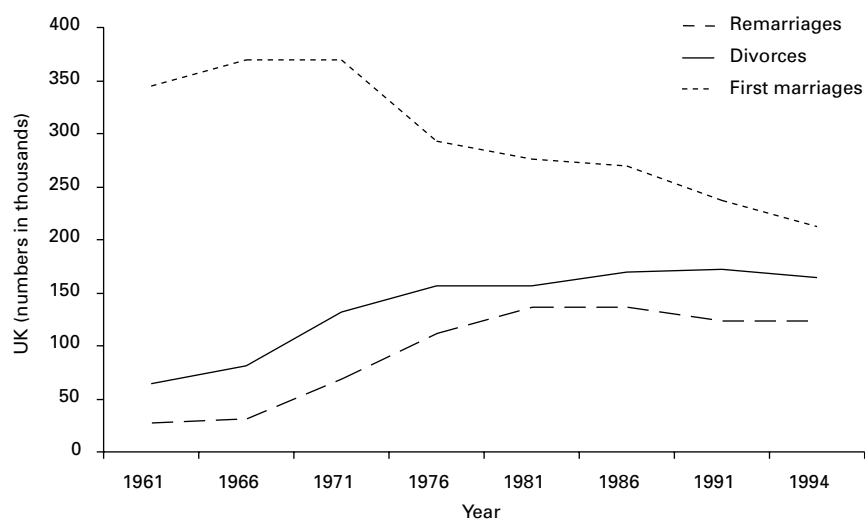
Marriage, cohabiting and divorce

Figures 7 and 8 taken from registration statistics show, respectively, the changes in the numbers of people getting married, divorced and remarrying for the period 1961–94 at different ages in the UK, and the changes in the percentages of people cohabiting before first and second marriages. Figure 7 shows that after a degree of relative stability in the early figures from 1970, a dramatic decline in first marriages was evident,

accompanied by a rise in divorce and a similar rise in second marriages. Part of the explanation of this phenomenon is the increasing postponement of marriage, a feature of all European countries. Thus in Britain in 1970 the median age of first marriages was 21 for women and 23 for men. By 1990, the median age had risen to 25 for women and 27 for men (Utting, 1995). Another factor is the tendency towards a period of cohabitation before (or in place of) marriage (Figure 8). In 1968, only 5 per cent of women had cohabited with their partner before their first marriage. By 1990, 60 per cent had done so.

The whole picture is one of marriage as a much more unstable institution than it was in the past and as a less obvious means for establishing independence away from the parental home. For those who do marry there is increasing likelihood of the first marriage ending in divorce. Cohabitation is also becoming the norm before the first marriage (and before second marriages). Living alone or with friends after leaving the family home is also a popular option.

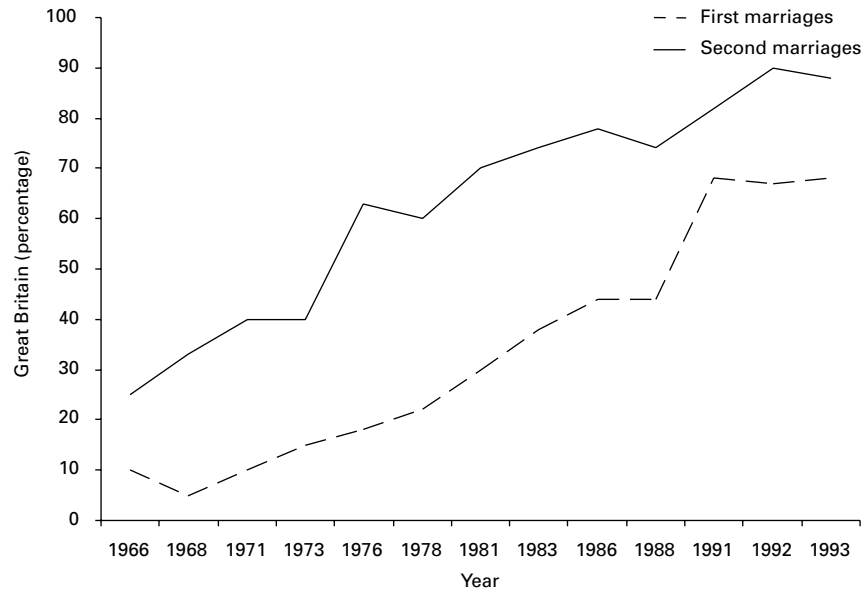
Figure 7 Marriages and divorces, 1961–94



Notes: Divorces include annulments. Remarriages are for one or both partners.

Source: Office for National Statistics (ONS); General Register Office for Scotland; Northern Ireland Statistics and Research Agency

Figure 8 Premarital cohabitation of women, by year of marriage, 1989–94



Notes: Data for first marriages relate to the combined years 1990–91 and 1993–94. Data for second marriages relate to the combined years 1989–90 and 1993–94.

Source: General Household Survey; ONS

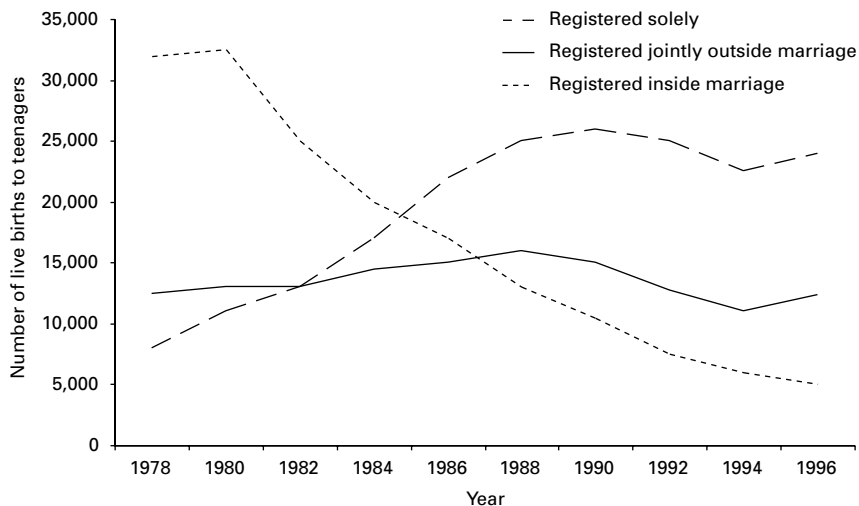
Pregnancy and parenting

The postponement of marriage to ever-later ages is accompanied by the postponement of having children, a trend that is in evidence in all western European countries. However, in Britain another phenomenon is observed: that of teenage pregnancy, for which Britain has the highest rates in Europe. The birth rate among 15–19-year-olds in the UK has diverged from those in other European countries, with a roughly stable rate over the period 1978–97 while in every other country it has fallen. By 1997 the UK rate, although still a small minority of young people, is, at 30 per 1000 of 15–19-year-olds, six times the rate of Switzerland and the Netherlands and more than three times the rate of France. Only ex-Soviet bloc countries exceed

Britain's rate, with the Russian federation and Bulgaria approaching 50 per 1000. Another trend in the UK is against these pregnancies ending in marriage and increasingly towards sole registration of the birth by the mother. Figure 9 shows that by 1996 sole registration by teenage mothers had quadrupled compared with 1978 and marriages were down to one-seventh of the previous rate.

There is no evidence that young people in Britain start sexual activity any earlier than in other European countries, Canada and the USA, but their reported use of contraception is very much rarer: 50 per cent in the UK, for example, compared with 85 per cent in the Netherlands and 78 per cent in the USA. It is not surprising therefore, that teenage pregnancy in Britain has such a high prevalence.

Figure 9 Live births to teenagers by marital status and registration, England 1978-97



Source: Social Exclusion Unit (1999b)

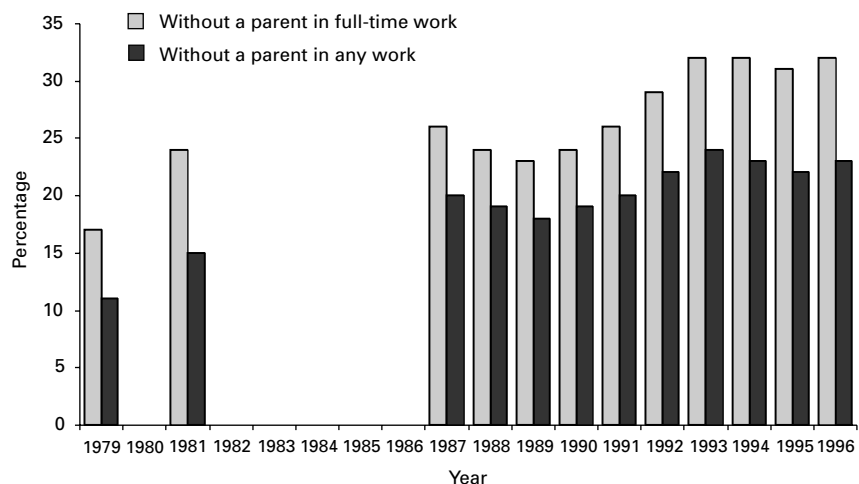
Family poverty

The final set of changing social and economic circumstances we consider in this chapter relates to family life in the UK. Figure 10 shows, for the period 1979-96, the percentages of children in households with non-working parents. Figure 11 shows the proportions of the total population in households, below certain percentages of mean

income (after deducting housing costs) for the period 1979-80 to 1996-97. Again, there are trends in the direction of increases under both headings.

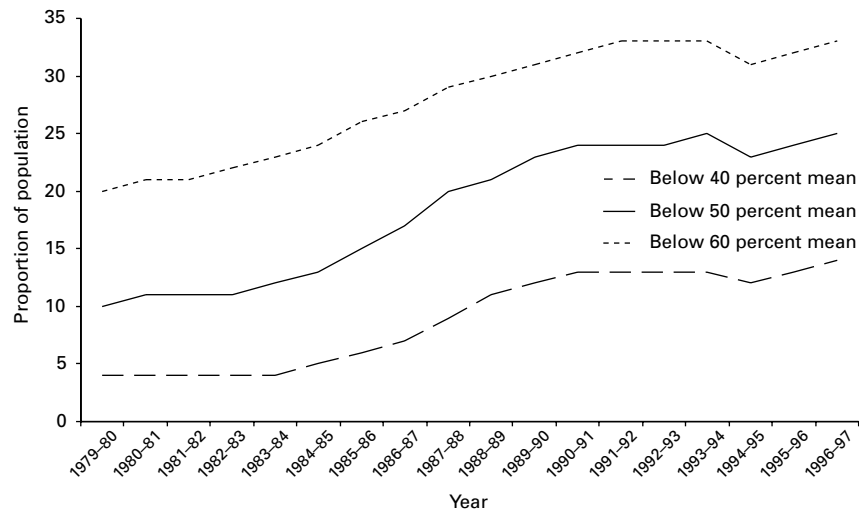
Figure 10 indicates that the proportion of children with non-working parents rose steadily through the late 1980s, remaining at over 30 per cent for parents not in full-time work and just under 25 per cent for not in any kind of work (full-

Figure 10 Percentage of children in households with non-working parents



Source: Family Expenditure Survey, Institute of Fiscal Studies

Figure 11 Proportion of population in households below certain percentage points of mean income (after housing costs)



Source: Family Expenditure Survey, Institute of Fiscal Studies

time or part-time). Even more strikingly, as Figure 11 shows, the proportion of households in poverty also rose markedly throughout the 1980s and continued to rise, although more modestly, through the 1990s. In 1980, 10 per cent of families were reporting household incomes 50 per cent below the mean. By the end of 1997, 25 per cent of the population were in this situation of relative poverty.

Summary

The general picture presented in this chapter shows the significant changes in the economic and social context of young people's lives, with the potential for greater division emerging between rich and poor. Although the trend is towards more extended education and training for an ever-larger proportion of the population, a substantial proportion of young people shows signs of falling behind. Those young people now taking what was previously the traditional route of leaving school at the minimum age of 16 are likely to find reduced opportunities for employment. Despite Britain

experiencing one of the longest periods of sustained economic growth, unemployment among young people remains stubbornly high. The relative earnings of young people have continued to decline, indicating that those who fail to gain the benefits of HE may find themselves increasingly marginalised in the labour market. Although attempts have been made over the last ten years or more to provide active labour market programmes to assist such young people, it has often been the case that the training schemes many of them entered failed to lead to a beneficial job (Banks *et al.*, 1992). While the demand for highly qualified labour grows, the weakening of demand in the traditional areas of craft apprenticeship and clerical and administrative occupations places a substantial number of young people in a much less secure position. For some young men this may now act as a brake on their move towards independence. For some young women it could be that early partnership and pregnancy still offer an alternative route to adulthood, but with uncertain economic and social consequences. These are the issues we explore in the two following chapters.

2 Changes in pathways to employment and adult life?

John Bynner and Huiqi Pan

Introduction

The purpose of this chapter is to reveal some of the increasing complexity in youth transitions that was already occurring by the mid-1980s and onwards as successive cohorts left education and the family home on the route to adulthood. We do so by comparing the transition routes of the 1958 and 1970 birth cohorts using a more rigorous longitudinal framework for comparison than has hitherto been available (see Appendix A). To what extent had these patterns changed over the 12-year interval separating the 1958 and 1970 birth cohorts? Were transitions becoming more extended? Was polarisation increasing?

Charting of routes to employment and independence

Two kinds of transitions are investigated.

Transition to employment

This transition may comprise direct entry into employment or the intermediate status of training: the government's YTS for the 1970 cohort or apprenticeship for the 1958 cohort. Other statuses at this stage comprise a mixture of intermediate statuses between education, training and work mainly made up of unemployment. For our purposes having one of these statuses means having been in it for at least six months.

It should be noted that apprenticeship and youth training are only very weakly equivalent. Apprenticeship, which took up to five years to complete, was a high-prestige route to skilled work with employee status attached, whereas YTS was a 'catch all' form of vocational preparation for school leavers, who had not moved directly into jobs. Nevertheless, both represented a transitional period in employment through which the young

person was expected to acquire some of the skills and work habits appropriate to full-time adult work.

Transition to independent living

The changes of status defined here comprise all possible combinations of partnership (living with a partner as man and wife), parenting and leaving the family home. Note that partnership as defined constitutes living as a couple, although this may still involve living in the parental home.

Transition to employment

We start by comparing statuses (held for at least six months) at age 17 and at age 26 and then identify the main features of the routes from the former to the latter.

Table 1 shows the percentages of young men and young women in the four statuses (for at least six months) of apprenticeship/training, employment, full-time education and 'other'. The shift between cohorts from employment to training as a first step into the labour market is evident, especially for women. Thus, although by age 17, 27 per cent of the young men in the 1958 cohort were in apprenticeship, and 27 per cent in the 1970 cohort were in training, among young women the comparable percentages were 3 per cent of the 1958 cohort and 23 per cent of the 1970 cohort. This reflects in part the strong equal-opportunities thrust of YTS, but also the lack of jobs for both young men and young women in the mid-1980s.

Staying on in education was also evident in the younger cohort, with 38 per cent of young men in the 1970 cohort and 49 per cent of young women staying on compared with 32 per cent of young men in the 1958 cohort and 39 per cent of young women.

Young people's changing routes to independence

Table 1 Employment status at age 17

Status	Young men		Young women	
	1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Apprenticeship for the 1958 cohort/training for the 1970 cohort	27	27	3	23
Employment (at least 6 months)	32	28	46	21
Full-time education (at least 6 months)	32	38	39	49
Other statuses	9	7	12	7
Total (100%)	5,606	746	5,799	875

Notes: The 1970 cohort total is the 10 per cent subsample, surveyed at age 21; the 1958 cohort total is the complete sample as surveyed at age 33. For details, see Appendix A.

Table 2 shows the percentages of men and women with the different outcome statuses at age 26 including the additional categories of part-time employment, being at home (housework) and unemployment, and excluding the 'training' category that no longer applied at age 26. By age 26, despite the slower start into the labour market by the younger cohort with more staying on in education beyond 16, by age 26 among men the two cohorts were close to convergence, with 89 per cent of the 1958 cohort men in full-time employment compared with 84 per cent of the 1970 cohort. The big differences were between men and women and among women themselves. Far fewer women overall than men were in full-time

employment at 26, but the proportion was also much lower in the earlier rather than the later cohort. This points to the increasing postponement of parenthood among women in the later cohort, as parenting takes women at least temporarily out of the labour market. More members of the older cohort were engaged in housework. About the same proportions in both cohorts were in part-time work.

We now turn to the main routes from the age 17 to the age 26 statuses. Figure 12a–d shows what happened to each of the groups of young men and young women who started with a particular status at age 17.

Notable results include the following.

Table 2 Employment status at age 26

Status	Young men		Young women	
	1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Full-time employment (at least 6 months)	89	84	56	65
Full-time education (at least 6 months)	1	3	1	2
Part-time employment	0	2	11	13
Housework	0	0	27	14
Unemployment	5	7	3	4
Other statuses	4	3	3	4
Total (100%)	5,182	4,050	5,053	4,821

Notes: Totals are full sample sizes for the 1958 cohort at age 33 and the 1970 cohort at age 26.

- Apprenticeship at age 17 led to full-time employment by age 26 for 92 per cent of the men in the 1958 cohort, and training led to this status for 87 per cent of the men in the 1970 cohort. For women the comparable figures were lower: 46 per cent, 1958 cohort, and 59 per cent, 1970 cohort (Figure 12a).
- For those in full-time education at age 17 the full-time employment outcome at age 26 was the same between cohorts for men but significantly more likely for the 1970 cohort women: 68 per cent, 1958 cohort, and 77 per cent, 1970 cohort (Figure 12b).

Figure 12 Status by age 26. (a) Those in training at age 17. (b) Those in full-time education at age 17. (c) Those in employment at age 17. (d) Those in 'other' statuses at age 17

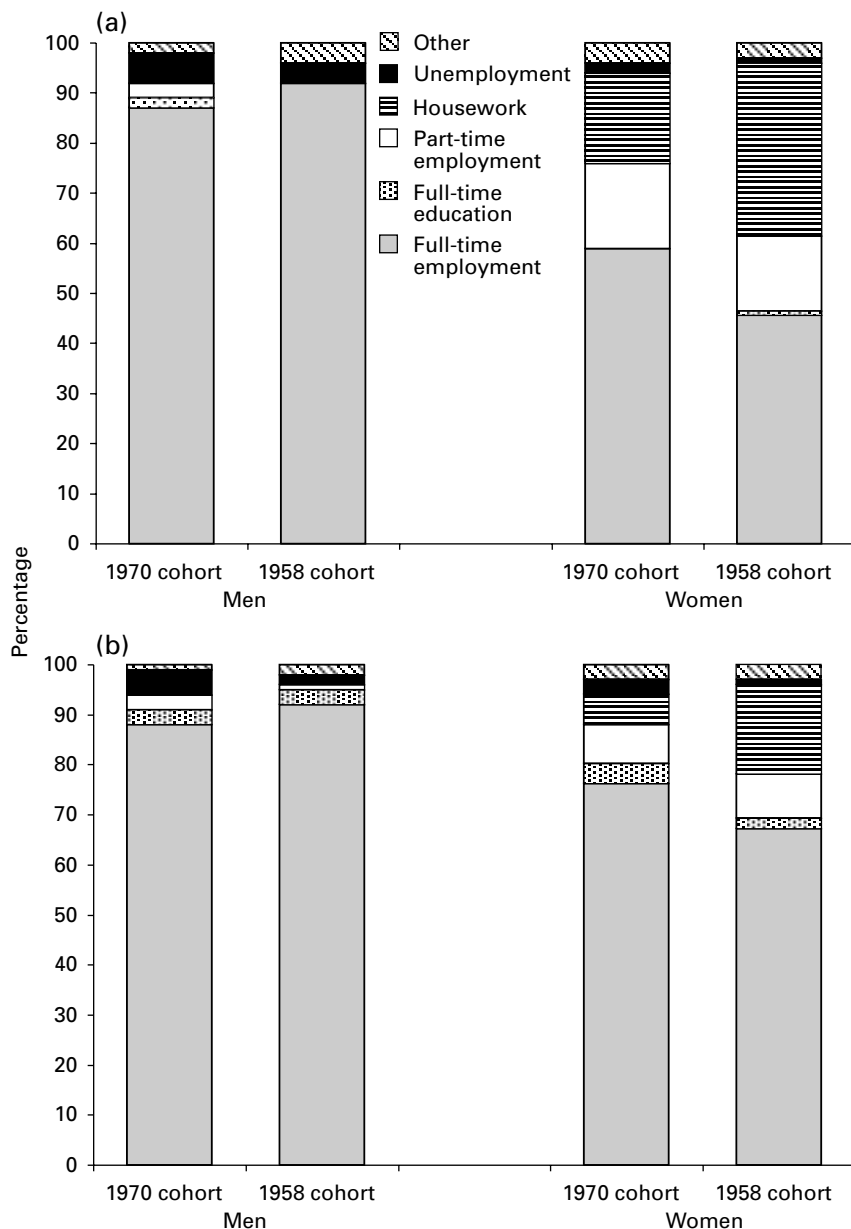
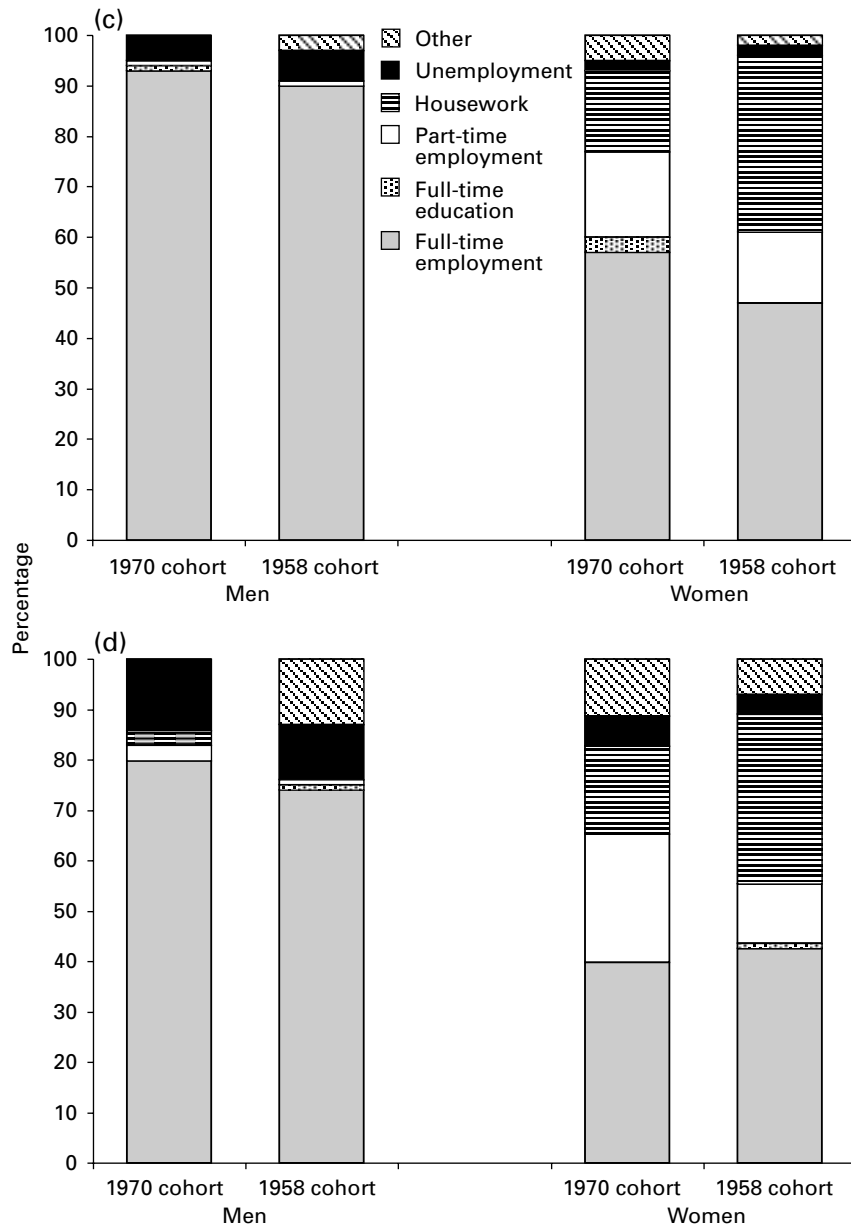


Figure 12 continued



- Those men who had gained entry to full-time employment at age 17 in the 1958 cohort were likely to be in the same status at 26: 92 per cent, 1958 cohort, and 86 per cent, 1970 cohort. For women the comparable percentages were much the same as for the outcome of training: 47 per cent, 1958 cohort, and 57 per cent, 1970 cohort (Figure 12c).

- Men in the 'other' statuses category at age 17 (comprising mainly unemployment) were the most likely still to be in this status later, with unemployment (now separately identified) also being a common outcome. Thus, 11 per cent of the 1958 cohort men in this group were identified as unemployed at 26, and 13 per cent were still categorised as

in 'other' statuses. In the 1970 cohort, 14 per cent of men in the 'other' category were identified as unemployed at 26, and 7 per cent were still categorised as 'other' (Figure 12d).

- For women, full-time housework was replacing employment at a higher rate by age 26 in the 1958 cohort than in the 1970 cohort, with 35 per cent of the 1958 cohort women engaged in it compared with just over half this percentage, 18 per cent, in the 1970 cohort (Figure 12c).
- For women the most common outcome following 'other' statuses was housework: 34 per cent of the 1958 cohort women were engaged in housework at age 26, and in the 1970 cohort 17 per cent. The much lower level of 17 per cent for the 1970 cohort women could be explained partly by the rise in part-time work: twice the proportion of 1970 cohort women compared with 1958 cohort women had a part-time job at age 26 (25 per cent compared with 12 per cent) (Figure 12d).

These figures point to some elements of stability between cohorts and some evidence of a shift. Most notably those men who gained employment after leaving school tended to be employed later in both cohorts. In other words, despite all the government claims at the time that youth training would replace youth jobs on German lines (Bynner and Roberts, 1992), the best form of vocational preparation continued to be work itself. Other good routes into employment included the apprenticeship and to a lesser extent youth training. For women the move into housework was evident from all categories, but at a lower rate in the 1970 cohort, as more women postponed partnership and family formation.

Risky transitions to employment?

By age 26 the male statuses were similar, i.e. most of the young men were in full-time employment, but earlier a much bigger divergence was apparent in the transition histories leading to them, pointing to the greater risk surrounding those of the 1970 cohort. At age 17 the 'other' statuses category was applied to those young people who reported they were not engaged in education, training or employment. It comprised mostly young people who were unemployed, about 10 per cent of both samples, although it was uncertain at this age how temporary or continuing their unemployment was. For the 1970 cohort, in parts of the country where unemployment was high, youth training could similarly be as much of a holding operation, merely temporarily substituting for unemployment, as a certain route to a job (Banks *et al.*, 1992). Tables 3 and 4 show, respectively, for those young people in the 'other' statuses and in training at 17, subsequent 'risk' outcomes at 21 and 26: training, unemployment and housework.

Table 3 shows that, at age 21, four times the proportion of 1970 cohort young men leaving the 'other' statuses category were unemployed compared with the 1958 cohort young men (20 per cent compared with 5 per cent). In 1979, when the 1958 cohort was aged 21, there was a major recession under way, which, if anything, would have tended to reduce their prospect of employment. In 1991 when the 1970 cohort reached 21, the economy was expanding. This re-enforces the conclusion based on small sample sizes (see the notes to the tables) that at age 21 the 1970 cohort was carrying the penalty of poor labour market transition experience earlier. For young women leaving the 'other' statuses category there was no difference of this kind between cohorts with respect to unemployment, but in relation to housework there was a similar striking difference. At age 18, 24 per cent of the 1970 cohort women gave

Young people's changing routes to independence

Table 3 Risk outcomes of 'other' statuses at age 17

Risk outcome		Young men		Young women	
		1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Training by age	18	8 (276)	15 (53)	1 (373)	2 (58)
	21	4 (320)	0 (54)	1 (428)	5 (58)
	26	0 (358)	0 (29)	0 (444)	3 (36)
Unemployed by age	18	7	8	8	14
	21	5	20	4	5
	26	11	14	4	6
Housework by age	18	0	0	16	24
	21	0	1	21	33
	26	0	0	34	17

Notes: Samples sizes are in parentheses (repeated for each outcome status): total sample, 1958 cohort; 10 per cent subsample, 1970 cohort. In the latter case, the sample numbers are small so the percentage differences need to be treated cautiously.

Table 4 Risk outcomes of training status at age 17

Risk outcome		Young men		Young women	
		1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Training by age	18	87 (1,368)	51 (195)	75 (167)	42 (202)
	21	15 (1,302)	1 (196)	5 (157)	1 (203)
	26	0 (1,310)	0 (125)	0 (145)	1 (147)
Unemployed by age	18	1	3	1	3
	21	1	10	1	5
	26	4	6	1	2
Housework by age	18	0	0	2	2
	21	0	1	14	11
	26	0	0	35	18

Notes: Samples sizes are in parentheses (repeated for each outcome status): total sample, 1958 cohort; 10 per cent subsample, 1970 cohort.

'housework' as their main activity, compared with 16 per cent of the 1958 cohort women, and by age 21 33 per cent of the 1970 cohort women compared with 21 per cent of the 1958 cohort women were engaged in housework. By age 26, the proportions had reversed as more of the 1958 cohort women took the traditional route out of the labour market to get married and have children. For the 1970 cohort women in the 'other' statuses category, as

we have seen, the exit seemed to have been occurring earlier and this appeared to be followed by a return to the labour market (usually into part-time work) earlier. Half the percentage of 1970 cohort women, compared with 1958 cohort women, were engaged in housework at age 26 (17 per cent compared with 34 per cent).

Training status at age 17 generally appeared to lead to more secure outcomes, but the notable

differences between the two cohorts showed how the traditional transition to skilled work (apprenticeship) had been reshaped (Table 4). Thus, 87 per cent of young men and 75 per cent of young women were still engaged in apprenticeship at 18 in the 1958 cohort, compared with 51 per cent of young men and 42 per cent of young women in the 1970 cohort. By the age of 21, although 15 per cent of young men were still in training in the 1958 cohort and 5 per cent of young women in the 1970 cohort, the percentages were down to 1 per cent. There is a certain irony in the fact that, at a time when the transition to employment was generally extending in all industrialised countries, in Britain under YTS the route to skilled work was becoming truncated. The route was also showing signs of risk. By age 21, 10 per cent of male ex-trainees in the 1970 cohort and 5 per cent of the women were unemployed, compared with 1 per cent of men and women respectively in the 1958 cohort.

Transition to independent living

As we saw in Chapter 1, the labour market changes confronting the younger cohort were paralleled by changes in their move to independence. Marriage and family formation were increasingly postponed. Our definition of independence comprises living in a partnership (cohabiting or married), becoming a parent and leaving the family home. We take the transition to be completed when the last of these three statuses has been achieved. The others are

more to do with means through which independence from the family of origin may be achieved, i.e. forming a partnership and/or having a family of one's own.

To reveal these routes to independence and the changes taking place in them between cohorts, we first compare statuses at 19 (Table 5) and then at 26 (Table 6). Table 5 begins with the main step towards independence, partnership. Notably, by age 19, only 5 per cent of 1958 cohort men and 6 per cent of 1970 cohort men had experienced partnership. For the young women, the overall prevalence of this experience at 19 was higher than it was for men, but lower for the 1970 cohort women than for the 1958 cohort women: 12 per cent compared with 17 per cent.

By age 26, we were able to include the full range of statuses reflecting independence: partnership, having children and leaving the family home for a home of one's own. Table 6 shows the percentages of men and women who were in these statuses at age 26. Table 6 also shows the percentages in different combinations of partnership and parenthood.

The cohorts were virtually identical with respect to leaving home: two-thirds of the young men and four-fifths of the young women had left by the age of 26. Having a partner and especially having a child was less common in the 1970 cohort for both genders. For men the percentage with partners dropped from 61 per cent to 51 per cent and for women from 75 per cent to 63 per cent. The young

Table 5 Partnership status at age 19

Status	Young men		Young women	
	1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Had partnership	5	6	17	12
No partnership	95	94	83	88
Total sample (100%)	5,606	746	5,799	875

Notes: The 1970 cohort total is the 10 per cent subsample; the 1958 cohort total is the complete sample.

Young people's changing routes to independence

Table 6 Family/independence status at age 26

Status	Men		Women	
	1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Has left parental home	66	68	79	80
Has partner	61	51	75	63
Has own child	31	21	47	32
Has partner and has child	29	18	43	25
Has partner and no child	32	33	32	38
No partner and has child	2	3	4	7
No partner, no child	36	46	21	30
Total	100	100	100	100
Total (100%)	5,385	3,728	5,634	4,579

Notes: Totals are full samples sizes for both the 1958 cohort and the 1970 cohort. Percentages in italics relate to the classification of the whole sample in terms of partnership and parenthood, thus totalling 100 per cent.

men's achievement of parenthood declined from 31 per cent to 21 per cent between the two cohorts and women's from 47 per cent to 32 per cent. Therefore, by age 26 in the 1970 cohort the great majority of both genders had yet to have children, whereas in the 1958 cohort by this age half the women had done so. The various combinations of partnership and parenthood show this shift even more strikingly, displaying quite a substantial decline in the incidence of partnerships with children and an increase in single living (no current partner or child): at age 26 nearly half the 1970 cohort young men were in this 'single' status category and just a third of the young women.

What happens to the groups who had experienced partnership before the age of 19? Again, we traced the changing statuses at different ages up to 26 in the two cohorts (Figure 13a–c). Figure 13a shows the percentages that were in partnerships, Figure 13b the percentages that had children and Figure 13c the percentages that had left the family home. Figure 14a–c shows the comparable percentages for those who had not experienced partnership by the age of 19.

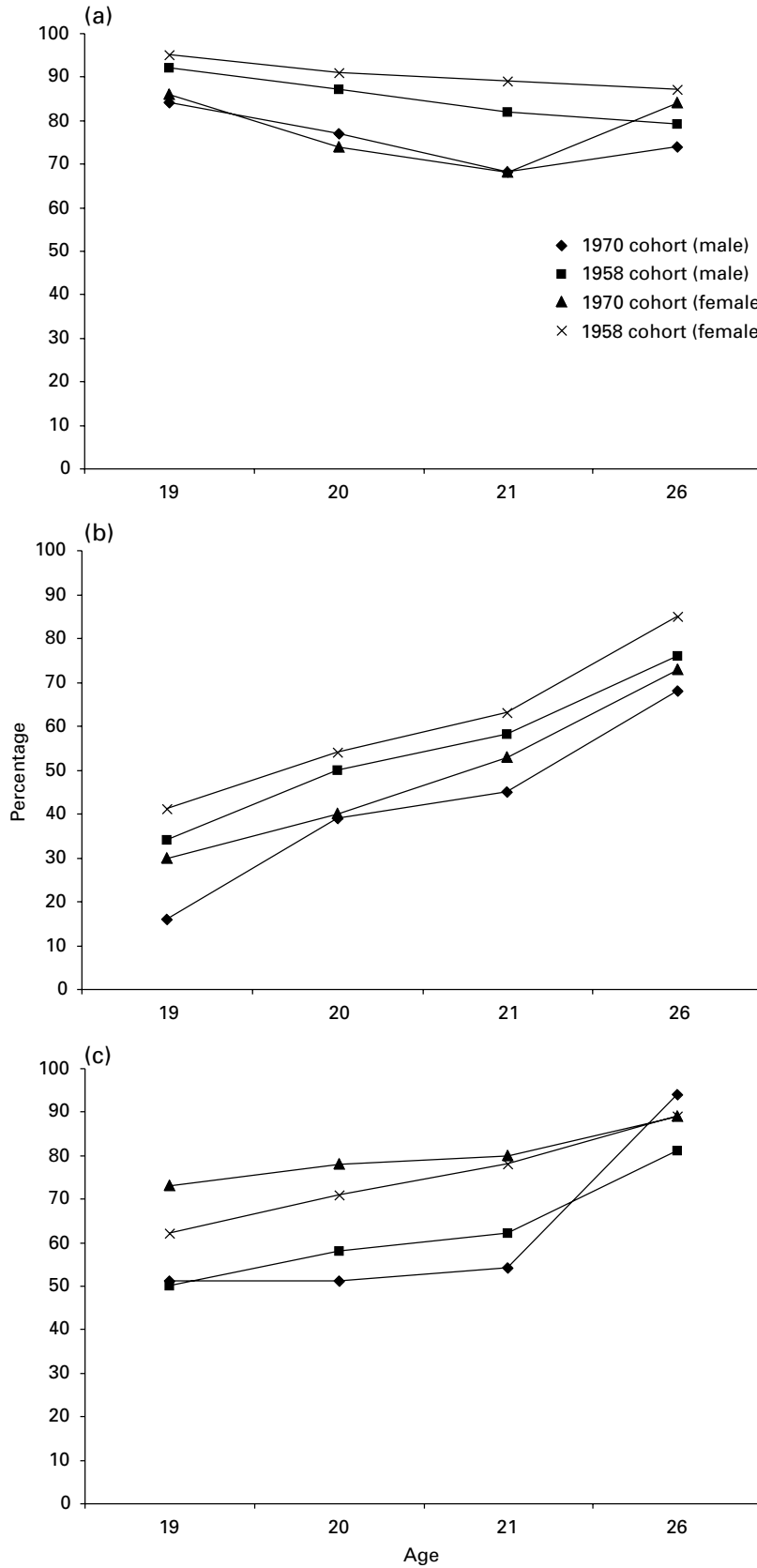
Over time and at each time point an individual may experience any number of the statuses defined

– the statuses are not mutually exclusive – or they may experience none of these statuses. For example, a young woman who had experienced partnership by age 19 may not be in a partnership at age 19 or at age 20, nor have a child at either of these ages, but may be living away from her parents' home. At the age of 21, she may be in a partnership, with a child and living in her parents' home.

Notable results include the following.

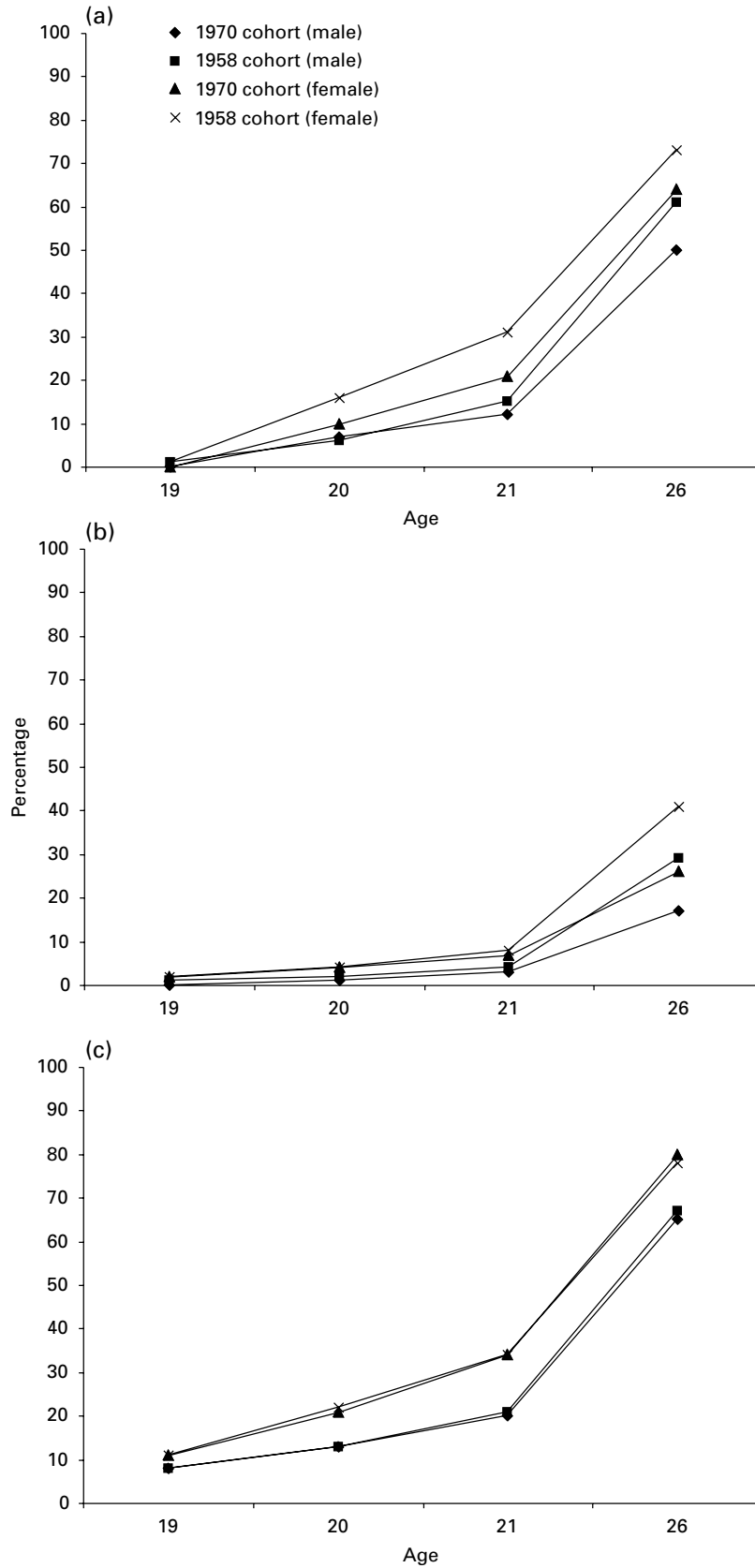
- Of those young men and young women who had experienced a partnership by age 19, the great majority were still in this status at later ages (not necessarily with the same partner). By age 26 over four-fifths of the women and just under four-fifths of the men were in partnerships (Figure 13a).
- Of the 1958 cohort young men who had experienced a partnership by age 19, just under half were parents by age 20. By age 26, the percentage had risen to 76 per cent, by which time 81 per cent had left home (Figure 13b,c). In the 1970 cohort, of those who were in partnerships at age 19, a smaller proportion than in the 1958 cohort had

Figure 13 Cohort members who had experienced partnership by age 19, by status at later ages. (a) In partnership; (b) has child; (c) has left parental home



Young people's changing routes to independence

Figure 14 Cohort members who had not experienced partnership by age 19, by status at later ages. (a) In partnership; (b) has child; (c) has left parental home



become parents: by age 20 just under two-fifths, and by age 26 just over two-thirds, by which time 94 per cent had left home (Figure 13b,c).

- Among the 1958 cohort young women who had experienced a partnership by 19, over half were parents by the age of 20, and by age 26 85 per cent had achieved this status, by which time 89 per cent had left home. Fewer of the 1970 cohort women had become parents by the same ages: two-fifths by age 20 and three-quarters by age 26, by which time 89 per cent had left home (Figure 13b,c).
- Single parenthood was most common among those who had experienced partnership early, and by age 26 extended to 11 per cent of the 1958 cohort men and 9 per cent of the women. Of those young women in the 1970 cohort who had formed early partnerships, the percentage that were single mothers at age 26 was, at 15 per cent, almost twice as high (the male sample was too small to compute a reliable figure).
- Among the 1958 cohort young men who had not experienced partnership by age 19 the proportions achieving it by age 26 were lower than for those who had experienced partnership. Although at age 26, 61 per cent of the young men were in partnerships, only 29 per cent had a child and 33 per cent were still living at home. Of the group of 1970 cohort men without a partner by age 19, the proportions of those who had become parents were even lower than in the 1958 cohort. By age 26, 49 per cent were in partnerships and 16 per cent had a child. Only one percentage remained much the same between the two cohorts: 35 per cent were still living at home (Figure 14a–c).

- Much the same pattern was evident for the young women: 73 per cent of the 1958 cohort women who had not experienced partnership by age 19 were in partnerships at age 26, but only 41 per cent had a child and 22 per cent were still living in their parents' home. For the 1970 cohort the comparable figures were, as for the men, lower: 64 per cent were in a partnership at age 26 and 26 per cent had a child. Again, however, leaving home had much the same prevalence in the two cohorts: 20 per cent of the 1970 cohort young women were still living in their parents' home.

These figures reveal another kind of polarisation in the later 1970 cohort. The tendency towards postponement of marriage, and particularly parenthood, is clearly seen in the 1970 cohort, reflecting the greater involvement in education and training and establishing oneself in employment over a more extended period. Among those in the 1958 cohort, those who had formed partnerships and become parents tended to leave the family home first, young women more than young men; but this did not signal any general tendency overall for leaving home to occur earlier or later in the 1970 than the 1958 cohort. This critical indicator of full independence appeared to be relatively stable across the two cohorts.

Risky transitions to independence

Where are the signs of greatest risk in the two cohorts' transitions to independence, and is such risk increasing? Early and late experience of partnerships can provide the foundations for two kinds of vulnerability. Early partnership, when leading on to early pregnancy and parenthood, may increase the likelihood of single parenthood later on. Postponed partnership experience may

Young people's changing routes to independence

extend for some young people into failure to make the transition to partnership and parenthood at all.¹

Tables 7 and 8 show each of these possible outcomes of early and late partnership experience: single parenthood and lack of partnership and parenthood at ages 19, 20, 21 and 26.

The small bases for the 1970 cohort percentages, especially for the young men, suggest that they should be interpreted cautiously. Nevertheless some quite striking differences between the two cohorts cannot easily be explained away in terms of small

samples, and point to significant changes in transition experiences. With respect to early partnerships, a shift between cohorts is particularly evident among the young women, with three times the percentage of this group in the 1970 cohort being single parents at age 21 and twice the percentage at age 26. At age 21 15 per cent of the 1970 cohort women were single parents compared with 6 per cent of the 1958 cohort, and at age 26 15 per cent of the 1970 cohort women were single parents compared with 9 per cent of the 1958 cohort women.

Table 7 Domestic status outcomes among those who had experienced partnership by age 19

Domestic status		Young men		Young women	
		1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Single parent at	19	2 (175)	0 (31)	2 (731)	3 (100)
	20	3 (175)	0 (31)	5 (731)	8 (100)
	21	6 (175)	7 (31)	6 (731)	15 (100)
	26	11 (731)	16 (15)	9 (731)	15 (53)
No partner, not parent at	19	6	16	3	12
	20	10	23	4	18
	21	12	26	6	18
	26	10	11	4	2

Notes: Samples sizes are in parentheses (repeated for each outcome status): total sample, 1958 cohort; 10 per cent subsample, 1970 cohort.

Table 8 Domestic status outcomes among those who had not experienced partnership by age 19

Domestic status		Young men		Young women	
		1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Single parent at	19	1 (4,560)	0 (694)	2 (4,223)	2 (751)
	20	1 (4,560)	1 (694)	2 (4,223)	2 (751)
	21	1 (4,560)	2 (694)	2 (4,223)	4 (751)
	26	2 (4,560)	3 (379)	3 (4,223)	4 (518)
No partner, not parent at	19	99	99	97	98
	20	93	98	82	87
	21	85	87	67	75
	26	38	47	24	32

Notes: Samples sizes are in parentheses (repeated for each outcome status): total sample, 1958 cohort; 10 per cent subsample, 1970 cohort.

For the young people who had yet to experience partnership by age 19, the prevalence of single parenthood was too small to make detailed comparison between the two cohorts. However, for the status of being without a partner, the prevalence was large enough to establish differences between cohorts. Among the young men who had not had a partner by age 19, 47 per cent of the 1970 cohort were without a partner or child by age 26 compared with 38 per cent of the 1958 cohort. Among the young women, 32 per cent of the 1970 cohort were without a partner or child compared with 24 per cent of the 1958 cohort. The difference was larger at age 21, suggesting a degree of catching up by the 1970 cohort by age 26. But persistence at 26 did point to significant postponement of parenthood for a sizeable group in the younger cohort.

Summary

The evidence we have presented here gives some striking indications of a cohort shift in relation to some features of youth transitions and relative stability in others. It is useful to review them against the changing patterns of transition we considered in the previous chapter.

First, it was clear that even over the relatively short interval of 12 years separating the 1958 cohort and the 1970 cohort, the overall pattern of transition had changed. When the 1958 cohort reached 16, most who left school had relatively little difficulty in getting a job, including, in the case of boys, the high-prestige apprenticeship. By the time the 1970 cohort reached the age of 16, opportunities for youth jobs were reducing and apprenticeships were being absorbed into the government's YTS. This had the effect, as seen in the 1970 cohort of school leavers and for both genders, of causing young people increasingly to enter YTS rather than a job. Compared with apprenticeship, however, the prospects of moving from YTS to a full-time job were poorer,

pressurising young people to pursue the alternative pathway of staying on in education as the best route to a job. The training in YTS also tended to be much shorter than the traditional apprenticeship it replaced, propelling the ex-trainees much earlier into the labour market.

Second, the impact of societal change on the younger cohort also manifested in their family life. Postponement of partnerships and having children was more common in the 1970 cohort, although at the same time a solid minority had moved as quickly into partnership and parenting as their older counterparts in the 1958 cohort had done. This widening gap between those on the fast and the slow lanes to adulthood reflects a phenomenon of central policy concern: social exclusion. As we shall see in the next chapter, accelerated transitions are most common among the least educated; prolonged transitions tend to be the prerogative of the most advantaged. The latter get jobs with good prospects; the former can reside on the margins of the labour market. Teenage motherhood, perhaps more than any other status, epitomises the problem: early school leaving, no qualifications, poor job or youth training, pregnancy and child birth, poor prospects of ever getting a decent job, family poverty (Bynner *et al.*, 2000).

So we can see that, in the case of the 1970 cohort, while some groups of young women in particular were still rushing forward into adulthood, as anticipated, certain elements of the transition to adulthood appeared to be slowing up. Thus, although we were not able to identify large differences between cohorts with respect to leaving home, among the more educated groups in the 1970 cohort the commitments involved in marriage and having children were being postponed. There was increased evidence of the growth of the 'single life style', offering a kind of moratorium between living with parents and forming a family of one's own. This is one of the most striking life style changes of the current era. The

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uncertainties about the single life style that remain, and apply perhaps particularly to women, are whether the decline in having children early is merely a postponement or permanent abstinence for more women from parenthood. It is ironic that the once common occurrence of women having children in their late teens is now seen as something to be avoided, a manifestation of social exclusion.

While this pressure on young women (and young men) to postpone parenthood for the sake of qualifications and employment experience makes obvious sense in today's labour market, the price to be paid may be increasing numbers who never become parents. An apparently inexorable decline in the birth rate and family formation is a common phenomenon in all industrialised countries (Utting, 1995).

3 Understanding transition

John Bynner and Huiqi Pan

Characteristics associated with different kinds of transition routes

The data considered in the previous chapter define a number of early adult outcomes in the twin domains of employment and independence and the routes through which they had been achieved. In this chapter we use multivariate statistical methods to analyse the defining features of these two facets of adulthood in terms of earlier circumstances and experience (see Appendix A). A particular focus is the role of educational achievement as expressed in the highest qualification gained in predicting achievement of a particular status by age 26. In view of the rising level of qualifications between the two cohorts and the extension of the transition to adulthood that this entails, we might expect qualification level to be a particularly strong predictor of the different statuses at age 26. The question we want to address is whether this relationship is sustained when a wide range of other characteristics of the young people reflecting earlier circumstances and experience are taken into account. We focus on four outcomes at age 26: three indicators of transition to independent adulthood – full-time employment, having a child by age 26, teenage parenthood – and one indicator of delayed transition – living in parents' home with no partner and no child.

We used the statistical technique of logistic regression to predict the likelihood of such an outcome occurring for a cohort member with a given characteristic such as 'A-level qualifications', taking account of the other characteristics. The analysis produces relative odds or 'odds ratios' for each category of each characteristic. The odds ratios give the relative chances of the outcome occurring as opposed to not occurring for a given category. These are compared with a baseline category for which the odds ratio is, by definition, one. Odds ratios greater than one, therefore, signify a positive relationship between membership of the category

and the outcome, and odds ratios less than one, a negative relationship. Thus, if 'no qualifications' is the baseline category for the prediction of full-time employment at age 26, we might expect the odds ratio for A-level qualifications to be greater than 1, i.e. young people with A-levels are more likely to be in employment when they are adults than are young people without qualifications, all other things being equal.

We first consider the characteristics that predict being in full-time employment, as opposed to being unemployed or out of the labour market at age 26, as indicated by the odds ratios for each category of each characteristic. We then move on to parenthood, considering who has achieved the status of parent by age 26 and who has not. We also report results on having the first baby when in the teens (women only, because there were too few teenage fathers for analysis). Finally, using the definitions adopted in the previous chapter, we consider the status signifying the least 'independence' of all at age 26: still living at home, without a partner and never having had a child.

The analyses were carried out separately for the young men and young women in the two cohorts, and in stages reflecting the stages of life in which the data had been collected. For each adult outcome, we first examined the odds ratios for family background characteristics present at birth (age of mother at birth of cohort member, father's social class, mother's and father's age of leaving full-time education) (stage 1). We then brought in measures of family poverty (free school meals, rented accommodation, overcrowded accommodation) and educational test scores at age 10/11 (stage 2). Then we took into account age of leaving full-time education (stage 3). Next, we included highest qualification achieved (stage 4). In a fifth stage, partnership and parenthood were added into the prediction of adult employment, and adult employment was added into the prediction of parenting.

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Table 9 shows the percentages with these background and experience characteristics for men and women in the 1958 and 1970 cohorts. The percentages for partnership and parenthood, and employment, were presented in the last chapter.

The rise in qualification level between the two

cohorts was evident, with half the proportion leaving school without qualifications in the 1970 cohort compared with the 1958 cohort (6 per cent, 1970 cohort; 14 per cent, 1958 cohort). Rising affluence was also apparent (Table 10), with a smaller proportion of the 1970 cohort coming from

Table 9 Post-16 educational achievements

Educational achievement	1958 cohort		1970 cohort	
	Young men (%)	Young women (%)	Young men (%)	Young women (%)
Left education before 16	62	55	49	42
Highest qualification				
No qualification	14	15	7	5
CSE 2–5/NVQ1	11	15	19	17
O-level/NVQ2	30	39	39	43
A-level/NVQ3	18	12	10	12
Higher/NVQ4	14	11	5	5
Degree+ /NVQ5	14	9	22	19
Total (100%)	5,587	5,455	3,801	4,574

CSE, certificate of secondary education; O-level, general certificate of education ordinary level (age 16); A-level, general certificate of education advanced level; NVQ, national vocational qualifications.

Table 10 Other explanatory variables

Variable	1958 cohort		1970 cohort	
	Young men (%)	Young women (%)	Young men (%)	Young women (%)
Measured at birth				
Mother 20 or younger when born	9	9	13	12
Father left school by 15	79	77	62	62
Mother left school by 15	78	78	62	64
Measured at age 10/11				
Rented accommodation	52	53	34	33
Receipt of free school meals	9	10	9	8
Overcrowding	36	38	26	26
Maths score*	47	48	40	47
Reading score*	45	44	45	42
Total (100%)	5,060	5,146	3,596	4,309

*Bottom two quartile ranges of distribution of the scores for the cross-sectional survey at age 10 (1970 cohort) and 11 (1958 cohort). In the longitudinal data sets, there are losses from the sample due to missing data at one or more sweeps; hence, the bottom two quartile ranges (men and women combined) add up to less than 50 per cent.

working class (manual) family backgrounds or living in rented and overcrowded accommodation. On the other hand, for one indicator of poverty, free school meals, there was little difference between the cohorts. Finally, there was a small rise in the percentages of the cohorts born to young mothers: 9 per cent of the 1958 cohort's mothers were aged 20 or younger when they gave birth to them, compared with 13 per cent of the 1970 cohort's mothers.

What predicts the outcomes?

The research question we are able to address is: to what extent does highest qualification achieved absorb the effects of all other characteristics in the prediction of the transition outcomes? The tables giving the results of the logistic regression analysis (Appendix B, Tables B.1–B.3) show the results only for the final stage of the analysis. We illustrate the results for the early stages schematically.

In discussing the results, we focus on any shift in the statistical significance in the odds ratios for particular characteristics between the earlier (1958) and the later (1970) cohort and between men and women. Statistically significant odds ratios ($P <$

0.05) are shown in bold in the tables, i.e. for these values the odds are 19 to 1 against the result having arisen by chance.

Full-time employment

Not unexpectedly, of the characteristics positively predicting full-time employment at age 26, for both men and women the highest qualification achieved had the largest statistically significant odds ratios (Tables 11 and 12). The largest odds ratios were for the 1970 cohort. As Table 12 shows, for men and women together, qualifications almost entirely replaced family social class and the reading and maths scores at age 10/11 as predictors of employment. NVQ4 (and its academic equivalent) showed the strongest relationship for the 1970 cohort young men, and A-level and above showed the strongest relationships for the 1970 cohort young women (Appendix B, Table B.1).

Notably, having a partner at age 26 positively predicted full-time employment for men in both cohorts and for women in the 1970 cohort, but for women in the 1958 cohort the relationship was in the opposite direction, i.e. 1958 cohort women with partners were less likely to be in employment. Having a child appeared to work against

Table 11 Characteristics predicting full-time employment, 1958 cohort

Characteristic	At birth	At age 10/11	At age 16	At age 23	At age 26
Father unemployed	---	-	-	-	-
Free school meals		---	---	---	---
Maths scores		+++	+++	+++	+++
Highest qualification				+++	+++
Has child					--
Has partner					+++

Notes: Tables 11 and 12 illustrate negative (-) and positive (+) relationships between the characteristics listed in the column on the left, and adult full-time employment based on the estimated odds ratios at each of the five stages of the analysis. The number of minuses or pluses indicates the level of statistical significance, a pointer to the strength of the relationship. Only variables for which statistically significant odds ratios were found are included in the tables. In the case of highly correlated variables such as reading and maths scores only one variable achieves statistical significance and is included in the table. Not statistically significant, NS; one + or -, $P < 0.05$; two + or -, $P < 0.01$; three + or -, $P < 0.001$.

Table 12 Characteristics predicting full-time employment, 1970 cohort

Characteristic	At birth	At age 10/11	At age 16	At age 23	At age 26
Father leaving education post-16	+	++	+	+	+
Free school meals		---	---	-	-
Maths scores		+++	+++	++	++
School leaving age post-16			+++	NS	+
Highest qualification				+++	+++
Has child					--
Has partner					+++

Notes: See Table 11.

employment for both genders, but especially for women. For women in both cohorts having a child was by far the most powerful predictor of not being in employment at age 26, substantially reducing the effects of qualifications.

For the 1958 cohort men, two early childhood circumstance variables also emerged as significant (negative) predictors of full-time employment at age 26. Having an unemployed father and receiving free school meals appeared to reduce the chances of employment. For the 1970 cohort men, father leaving education at age 18 or later predicted employment, and having had free school meals again appeared to reduce the chances of employment. For women having a father who left full-time education at age 16–17, i.e. after the statutory leaving age, predicted full-time employment. For 1970 cohort women, only living in rented accommodation appeared to reduce additionally the chances of being in employment.

Figure 15 plots the odds ratios for full-time employment against the different qualification levels for the two cohorts separately. It can be seen that 1970 cohort men with NVQ4 were three and a half times more likely to be in full-time employment compared with those without qualifications at age 26, and women four times as likely. In the 1958 cohort the relationships, although statistically significant, were much weaker, with a modest tendency for qualifications at A-level and degree level (NVQ4 and NVQ5) to predict

employment for men and an even weaker tendency for women. Thus it appears that, for both men and women, qualifications were more closely associated with full-time employment in the 1970 cohort than in the 1958 cohort.

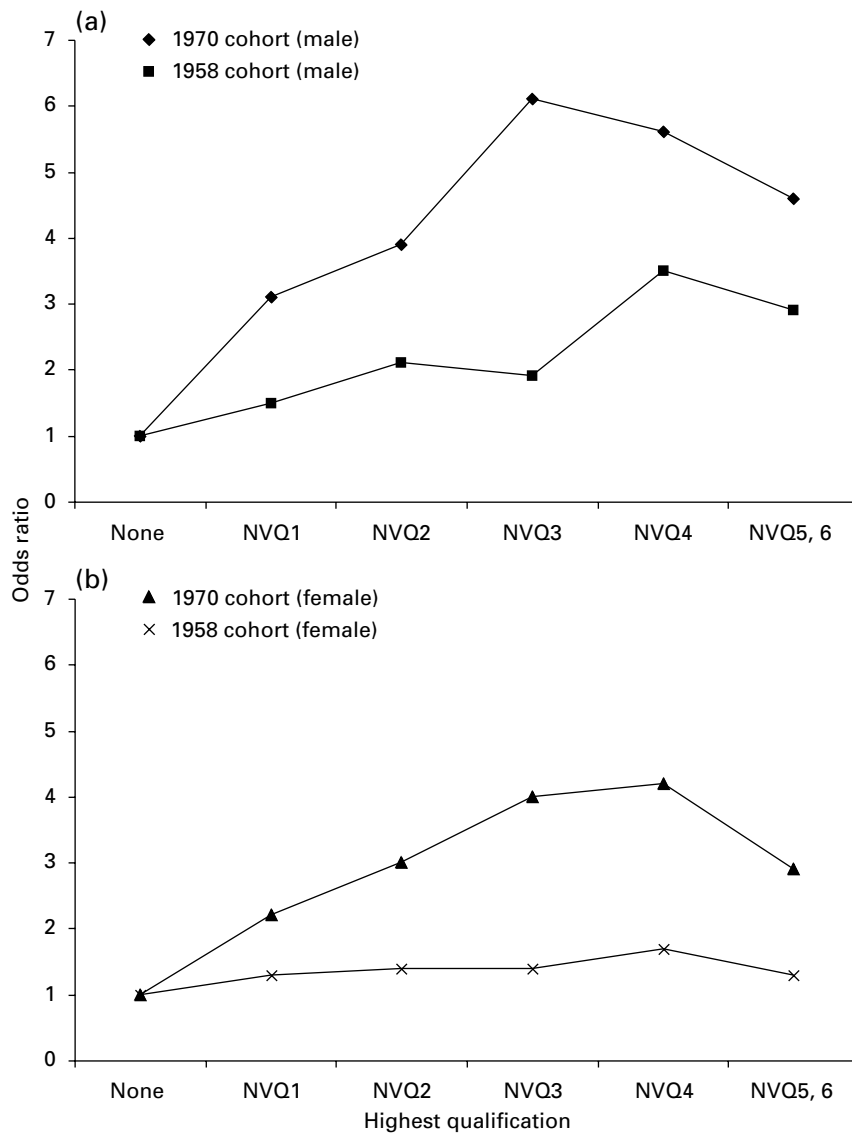
Parenthood

Under this heading we examined two outcome statuses: whether the cohort member had a child by age 26 and, for the young women, whether they had become parents as teenagers (Appendix B, Table B.2).

As for full-time employment, having a child by age 26 was strongly predicted by qualifications, especially for men in the 1958 and 1970 cohorts and for women in the 1958 cohort, although in this case all the relationships were negative, i.e. the higher the qualification achieved the less likely the young person was to be a parent. Figure 16 shows how having a child by age 26 varied across the different qualification levels. For men, the relationships were stronger for the 1970 cohort than for the 1958 cohort, which showed an increasing tendency for men at the higher qualifications levels to postpone family commitments. For women the strong relationship between age of having a first child and highest qualification level was much the same for the two cohorts.

As shown schematically below for women (Tables 13 and 14), this time a wider range of family circumstance variables also appeared as predictors

Figure 15 Full-time employment and qualifications. (a) Men in full-time employment at age 26. (b) Women in full-time employment at age 26

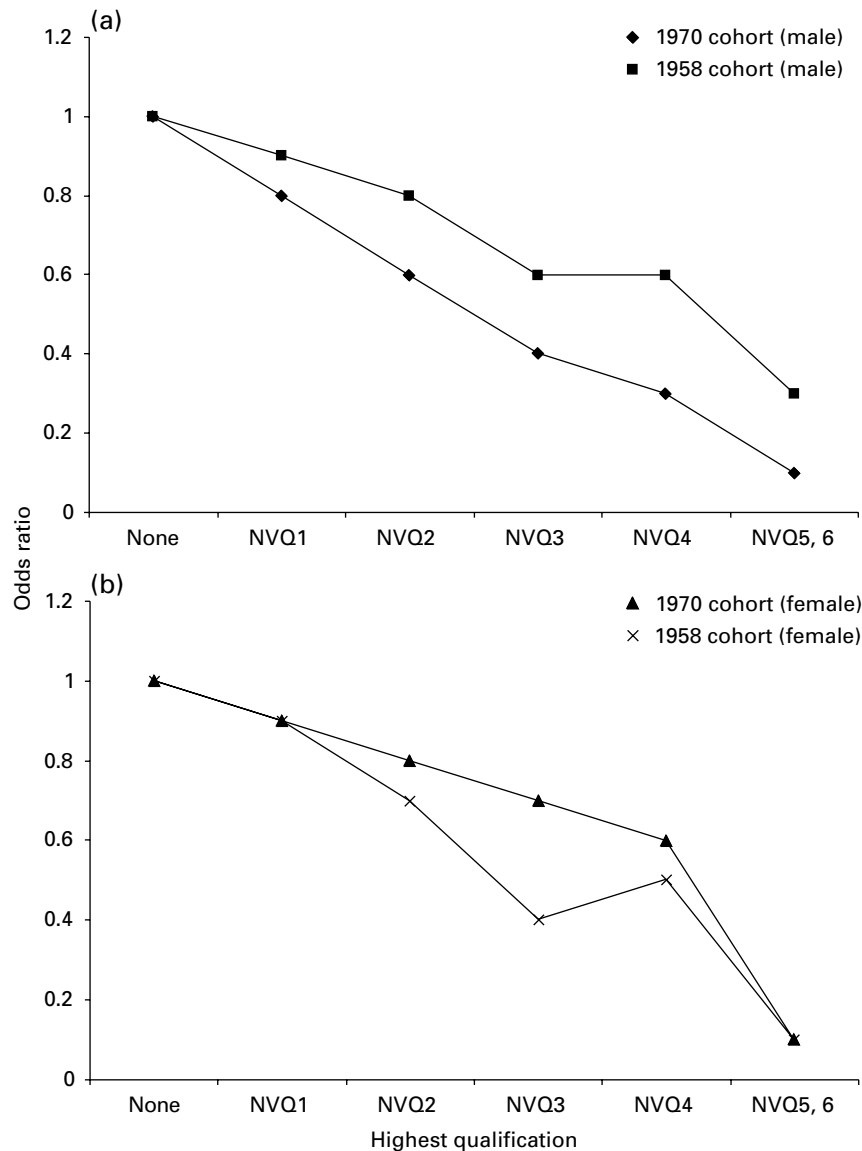


independently of qualifications. They continued to be significant predictors of parenthood in the final stage of the analysis, showing the relevance of perhaps additional social and cultural factors in determining the timing of this transition. Being born to a young mother (especially for women), growing up in a working class family and parents who had left school early were all involved. In addition, receiving free school meals, living in rented housing and overcrowding also predicted this outcome at age 26. Thus having a child by the

age of 26 was 1.8 times as likely for the 1958 cohort women born to a young mother (under age 20) and 1.5 times as likely for the 1970 cohort women.

However, the strongest 'predictor' of parenthood for women was relationship to the labour market: those in full-time employment were far less likely to have had a child by age 26 than those not in employment, reflecting the constraints women face combining childcare responsibilities and full-time employment.

Figure 16 Having a child and qualifications. (a) Men who have own child at age 26. (b) Women who have own child at 26



The analysis was pursued one stage further to address the current concern about young parenthood. This had actually been more than twice as common in the earlier of the two cohorts. In the 1958 cohort 17 per cent of the young women and 9 per cent of the young men had had their first child by age 20, compared with 9 per cent of the young women and 3 per cent of the young men in the 1970 cohort.

Table 15 shows the statistically significant odds ratios for the characteristics predicting young

parenthood compared with the odds ratios for the same characteristics predicting parenthood among the young women as a whole. (Numbers were insufficient to make an effective analysis for male teenage parents, so the results are shown only for women.) The figures show an almost identical, although sharpened, picture for the teenage mothers compared with mothers as a whole, with the odds ratios for teenage motherhood, for example, declining even further as the young women moved up the qualifications scale. The

Table 13 Characteristics predicting women’s parenthood, 1958 cohort

Characteristic	At birth	At age 10/11	At age 16	At age 23	At age 26
Young mother	+++	+++	+++	+++	+++
Father’s social class manual	+++	+++	+++	+++	++
Father leaving education, post-16	---	---	--	-	-
Mother leaving education, post-16	---	---	--	-	-
Free school meals		+++	+++	++	NS
Rented housing		++	NS	NS	NS
Reading and maths scores		---	---	--	--
School leaving age			---	---	--
Highest qualification				---	---
Full-time employment					---

Notes: Tables 13 and 14 illustrate negative (-) and positive (+) relationships between the characteristics listed in the column on the left, and parenthood based on the estimated odds ratios at each of the five stages of the analysis. The number of minuses or pluses indicates the level of statistical significance, a pointer to the strength of the relationship. Not statistically significant, NS; one + or -, $P < 0.05$; two + or -, $P < 0.01$; three + or -, $P < 0.001$.

Table 14 Characteristics predicting women’s parenthood, 1970 cohort

Characteristic	At birth	At age 10/11	At age 16	At age 26	At age 26
Young mother	+++	+++	++	++	++
Father’s social class manual	+++	+	NS	NS	NS
Father leaving education, post-16	---	---	NS	NS	-
Mother leaving education, post-16	---	---	-	NS	-
Free school meals		++	++	++	NS
Rented housing		+++	+++	+++	NS
Reading and maths scores		---	---	-	NS
School leaving age			---	---	---
Highest qualification				---	---
Full-time employment					---

Notes: See Table 13.

gradient was much the same for both cohorts. Not being in full-time employment was also negatively associated with teenage motherhood, but more weakly (odds ratio closer to 1.00) than for parenthood generally. This suggests that more of the teenage mothers were continuing in jobs (or the older age of their children had allowed them to return to work by the age of 26).

The early childhood characteristics of free school meals, rented housing and overcrowding

were still involved in the regression, but only for the 1958 cohort. With two exceptions, none of these variables survived in the 1970 cohort analysis, all being overtaken by highest qualification achieved in both cohorts. The main exception was that having a young mother strongly predicted teenage motherhood. Having a father who left school after the minimum age of 16 appeared to reduce the chances of teenage parenthood in the more recent cohort.

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Table 15 Has own child at age 26 compared with had a child before the age of 20, final odds ratios

Predictor	Has child at 26		Had a child before 20	
	1958 cohort (%)	1970 cohort (%)	1958 cohort (%)	1970 cohort (%)
Young mother (not = 1)*	1.00	1.00	1.00	1.00
Yes, 20 or under	1.88	1.46	1.53	1.69
Age left education (CM) (<16 = 1)*	1.00	1.00	1.00	1.00
16–17	0.48	0.70	0.23	0.51
18 or over	0.33	0.34	0.11	0.24
Qualification (CM) (no = 1)*	1.00	1.00	1.00	1.00
CSE 2–5/NVQ1	0.85	0.87	0.72	0.35
O-level/NVQ2	0.68	0.83	0.50	0.31
A-level/NVQ3	0.38	0.65	0.22	0.24
Higher qualification/NVQ4	0.52	0.61	0.11	0.25
Higher qualification/NVQ5, 6	0.14	0.14	0.01	0.10
Full-time employment (no = 1)*	1.00	1.00	1.00	1.00
Yes	0.03	0.05	0.18	0.13

Notes: Number of cases included in the analysis (1958 cohort) = 5,387. Number of cases included in the analysis (1970 cohort) = 3,776. Statistically significant odds ratios ($P < 0.05$) are in bold. *Reference category; CM, cohort member.

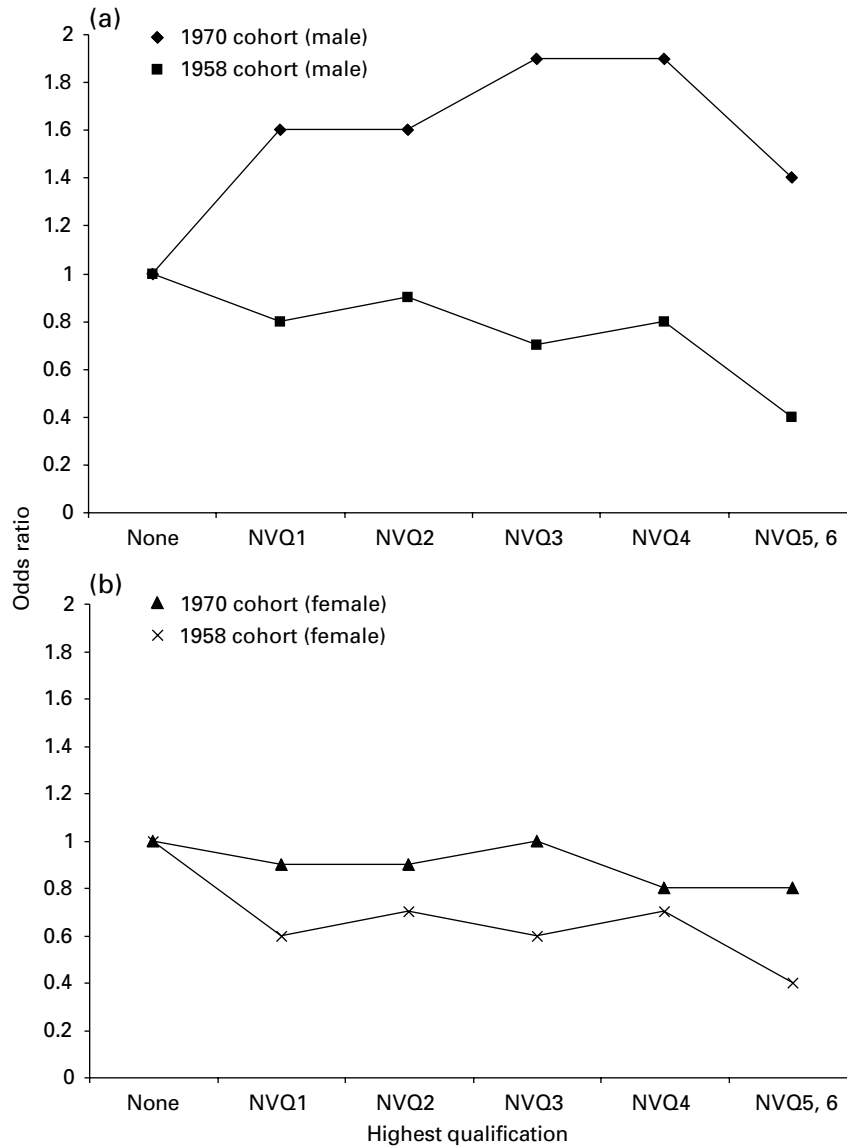
Staying in parents' home

Finally, we used logistic regression to predict the extreme opposite of the statuses just considered: that of living in the parental home without a child and without a partner at age 26 (Appendix B, Table B.3). Here there was an interesting reversal between the 1958 cohort and the 1970 cohort. Figure 17 shows that, for both genders in the 1958 cohort, having qualifications was negatively related to this particular outcome status, whereas for the 1970 cohort men qualifications related positively to it. Thus, the higher achieving men in the earlier cohort were tending to leave home before the others, whereas higher achievers in the later cohort were tending to stay single without children and live at home with parents. Staying on at school beyond 18 and being in full-time employment at age 26 also predicted staying at home.

For women in the 1970 cohort, higher qualifications did not predict staying at home, but staying on in education beyond 18 and being in full-time employment at age 26 did. This points to a change across cohorts towards prolonged dependency for members of the younger cohort for a period before branching out on their own. This may reflect the phenomenon of returning home after leaving university to maintain a comfortable single life style free of the financial burden associated with getting one's own place in which to live.

The other main predictor was being born to a young mother, which was negatively related to dependency status. In other words, this characteristic predicted a faster transition. There were no other consistent patterns in the data.

Figure 17 No partner, no child and living at home with parents. (a) Men; (b) women



Summary

The various multivariate analyses point to three types of characteristic being implicated in the ages and stages when youth transitions occur and the adult statuses that arise from them. Early family background plays a part, including social class, as does being born to a young mother. Evidence of

childhood poverty is also significant. However, with few exceptions these factors tend to exercise their influence via educational achievement, especially highest qualification obtained. This human capital marker generally ‘absorbed’ the effects on later adult outcomes of all the social background and early educational attainment

factors. High educational level divided its recipients substantially from the others in terms of virtually all outcomes, with generally stronger effects for the 1970 cohort than for the 1958 cohort.

One notable exception was the highly significant effect of being born to a young (teenage) mother on later outcomes, especially those relating to the transition to parenthood. Women particularly showed signs of following in their mother's footsteps, forming partnerships, leaving home and having children earlier than other women.¹ This consistent and striking evidence in young women's life courses of intergenerational transfer poses a particular challenge for the government's social exclusion agenda.

It is notable that similar variables were implicated in the transition to employment and the transition to independence, although after taking qualifications into account family background variables were less prominent in the former than in the latter. This makes the point that the two kinds of transition are closely related; but notably cultural forces, driving a degree of intergenerational continuity in the transition to parenthood, are not completely overtaken by education. On the other hand, educational achievement also plays a part in the timing of the domestic as well as the occupational transitions. Qualifications dictate not only status in relation to the labour market, but status in relation to family life as well. The best educated tend to be most assured of full-time employment. They are also the young people who leave the family home last and, when they do, it is frequently not to form partnerships and have families. These latter commitments are postponed

increasingly in favour of a single life style. The significant feature of their lives is the extended transition in which they are involved. It remains to be seen, when data collected in more recent surveys become available, whether this single life style constitutes merely a postponement of entry into traditional family life or, for increasing numbers, a more permanent feature.

We saw in the previous chapter that changes between cohorts were mainly revealed in the transition patterns. The results presented in this chapter suggest that, with some exceptions, the life course processes underpinning them tended to be more stable across cohorts. Much the same characteristics in both cohorts predict the outcome statuses at age 26. There were essential continuities in the ways adulthood was achieved.

As we have noted, family background was a critical factor early on, but apparently exercised most of its influence via educational attainment later, as recorded through qualifications, especially in relation to engagement with the labour market. However, there were strong signs in the 1970 cohort that the key educational relationship with employment was getting stronger. This reflects the ever-growing demand from employers for higher levels of qualifications as a prerequisite for getting a job, and the ever-growing postponement among young people of the commitment to partnership and family formation that traditionally went with employment. In many respects, therefore, the 1958 cohort was still reflecting the youth transitions of the past, whereas the 1970 cohort was revealing what they were increasingly becoming.

4 Pathways, earnings and well-being

Peter Elias and Gaëlle Pierre

Introduction

The preceding chapters have examined the changing nature of the main transitions occurring in early adulthood, contrasting the experiences of those born in the late 1950s with a sample of young people born in 1970. A number of differences in these transitions have been made apparent, particularly the increased incidence of unemployment in the pathways from school to work and the new patterns of partnership and family formation (the decline in marriage, the growth of single parenthood, the delayed start of family formation). Additionally, a very significant change relates to the rise in acquisition of educational qualifications. As shown in Chapter 1, this rise is not simply confined to the two age groups represented by these cohorts, but is part of a general increase in the level of qualifications now held by young people. Despite their better qualifications young people nowadays earn relatively less compared with older workers than they did 25 years ago.

All of this raises an important question. If educational qualifications lead to better jobs and facilitate a smoother transition to adult life, does this imply that young people today are potentially better off than their counterparts were 15–20 years ago? This question, while intriguing, clearly oversimplifies the issues. Qualifications, a good income and beneficial living arrangements contribute only in part to the well-being of young people. Other issues, such as their perceptions of job security and the risk of the breakdown of partnerships, may count heavily in the calculus of general well-being. Furthermore, the rise in educational qualifications may favour those who would have done reasonably well in the labour market anyway, meaning that the observed rise in the average level of qualifications among young people could disguise a worsening gap in well-being between the qualified and the unqualified.

This chapter focuses more closely upon this issue, using two specific indicators of the well-being of young people. First, we present results from an examination of the earnings of young people at ages 23 (1958 birth cohort) and 26 (1970 birth cohort). This analysis attempts to show not just how various influences on earnings (for example rising qualifications) have contributed to the changes in earnings between these two groups over the 12-year period, but also to measure the change in the way the labour market ‘values’ certain factors that contribute to earnings. In the second part of this chapter we step away from earnings as a measure of economic well-being and turn our attention to psychological well-being, using a method of self-assessment that was replicated in both the 1981 survey of the 1958 birth cohort and the 1996 survey of the 1970 birth cohort. Termed the *malaise inventory*, this measure consists of a battery of 24 questions ‘referring to the emotions or to aspects of the physical state which have an important psychological component’ (Rutter *et al.*, 1970).¹

We know little about general trends in the psychological health of young people. What limited time-series evidence there is on this issue points to the fact that reported levels of well-being among young people in western Europe and the USA rose from the early 1970s to the 1990s. In their study of trends and variations in self-reported levels of happiness, Blanchflower and Oswald (2000) consider a number of reasons why life satisfaction levels among young people (aged less than 30) in most western European countries rose steadily between 1973 and 1992. Interestingly, their analysis shows that the increase in young people’s well-being is concentrated among the group that remains unmarried, suggesting that the changing patterns of partnership and delayed family formation plans may well be contributing significantly to the rise. There is, however, an

important caveat to their general findings that the authors make:

Taking the under thirties in the 13 countries, in each nation except Great Britain and Northern Ireland there is a positive and statistically significant upward time trend over the most recent decade, 1983–92. Why the British Isles [sic] misses out on this recent growth of well-being among the young is a puzzle.

(Blanchflower and Oswald, 2000, p. 302)

This issue is pursued further in this chapter, using not self-reported measures of happiness or life satisfaction but a psychological measure of well-being to reveal interesting new evidence of changes in the well-being of young people. First, we present findings from an examination of trends and variations in the earnings of young people, contrasting the situation in 1981 with that in 1996.

The earnings of young people

As shown in Chapter 1, the earnings of young people relative to older workers have declined over the past 25 years. At every year of age, the relative hourly earnings of 16–25-year-olds in full-time employment declined dramatically over the period 1975–96 for both young men and women. However, the present study is concerned particularly with the relative decline in earnings for those who are 21 years and older. For men aged 21–29 years, we observed a 10–12 percentage point decline in their full-time gross weekly earnings relative to all men over the period 1981–96. The decline is more recent for women in this age group.

The reasons underlying these changes in the relative pattern of earnings by age are likely to be complex and varied. In part, they could reflect the 'narrowing' of the youth labour market associated with the increase in the proportions of young men and women staying on at school and entering further or higher education. As the better qualified remain outside the labour market in their youth, so

the youth labour market becomes increasingly a market for less well-qualified labour. However, this explanation does not account for the 10–12 percentage point decline in relative earnings of 25–29-year-olds, the vast majority of whom will have completed their education on reaching this age. Explanations for this decline are again conjectural. It could result from changes in pay structures, which have moved away from graded age-related pay scales to performance-related schemes. The later age of entry into the labour market by young people means that, while better qualified on average than their predecessors, they are relatively inexperienced. If the labour market values experience more than qualifications, a relative decline in the earnings of young qualified people could result. Alternatively, the relative decline in their earnings could be a legacy of recessions and labour market restructuring that so characterised the labour markets of the 1980s. In 1981, 21–24-year-olds would have joined the labour market in the period 1973–76, well before the rise in unemployment, particularly youth unemployment, in the early 1980s. Fifteen years on the situation was not so easy for young people attempting the transition from full-time education to employment. Perhaps what we now observe is the 'scarring' effect of early unemployment in the work histories of the younger generation.

In this section, we explore these ideas by examining the relationship between earnings, experience, qualifications and unemployment for the two birth cohorts: 23-year-olds in 1981 (the 1958 cohort) and 26-year-olds in 1996 (the 1970 cohort). Our analysis commenced by looking at the variation in the earnings according to a number of key characteristics, contrasting the situation in 1981 for 23-year-olds with that in 1996 for 26-year-olds and for men and women separately. Table 16 shows the average hourly earnings recorded by respondents to the 1981 and 1996 surveys, for various groups and by gender.

Table 16 Variations in the average hourly earnings of men and women by key characteristics, 1981 (1958 cohort at age 23) and 1996 (1970 cohort at age 26)

Characteristic	Men (£/hour)		Women (£/hour)	
	1981	1996	1981	1996
All respondents	1.95	5.47	1.68	4.97
Qualification by age 23 (26 in 1970 cohort)				
Other / none	1.84	4.78	1.55	4.63
O-level / lower vocational	1.98	5.43	1.62	4.53
A-level / mid-vocational	2.04	5.94	1.72	5.42
High vocational	2.08	5.68	1.85	5.12
Degree	2.00	6.30	2.02	5.96
Maths test score at 11 (10 in 1970 cohort)				
Bottom 25% of distribution	1.80	4.67	1.51	4.20
Low-mid (25-50%)	1.94	5.08	1.60	4.50
Top-mid (50-75%)	2.01	5.39	1.71	5.24
Top 25%	2.01	5.97	1.86	5.47
Age father left school				
Before 16	1.95	5.14	1.69	5.00
16-17	1.99	5.73	1.76	4.99
18+	1.93	6.29	1.78	5.83
Age of mother at birth of respondent				
Less than or equal to 20	1.95	5.47	1.69	5.00
Older than 21	2.00	5.35	1.57	4.68
Housing tenure				
Parents owners	1.97	5.68	1.73	5.07
Parents tenants	1.93	4.78	1.64	4.27
Partnership formation				
No partner at time of survey	1.85	5.35	1.67	4.97
Living with partner at time of survey	2.08	5.60	1.69	4.97
Number of natural children				
None	1.93	5.53	1.66	5.01
One child	2.05	5.25	1.76	4.83
2 or more children	2.03	5.28	2.14	4.50
Length of longest unemployment spell				
No unemployment	2.02	5.74	1.73	5.13
1-3 months	1.92	5.59	1.73	5.13
4-6 months	1.79	5.24	1.53	4.66
7+ months	1.69	4.60	1.46	4.87

Sources: 1958 cohort at age 23 years, 1970 cohort at age 26 years

Examining the relationship between qualifications and earnings, we see a strong association between higher levels of qualifications and higher levels of earnings. While it is difficult to

determine the separate effect of qualifications on earnings from the information in Table 16, a similar relationship is apparent in both years and for men and women. If anything, the relationship appeared

to be more pronounced in 1996 than it was in 1981. Similarly, the link between performance on a childhood maths test score at age 10 or 11 and earnings at age 23 or 26 appeared strong. For respondents whose father left school at an early age, a difference in average earnings was apparent in 1996 that was not so obvious in 1981. Similarly, the earnings difference between those whose parents were owner-occupiers as opposed to tenants appeared relatively larger in 1996 than in 1981. Partnership formation appeared to confer an earnings advantage to men in both periods, but not for women, a fact that could be related to the relationship between the number of natural children born to the respondent and earnings. The positive correlation between earnings and children apparent for both men and women in 1981 appeared to have reversed by 1996. Finally, the information in Table 16 shows a relationship between the duration of the longest spell of unemployment experienced and earnings. For both men and women, significant spells of unemployment (four months or more) were correlated with lower average earnings.

Analysing earnings for the birth cohorts

To separate out the influences of personal characteristics, qualifications, labour market and other experiences on earnings we undertook a regression analysis. The measure of earnings used as the dependent variable in this analysis was the natural log of net hourly pay including overtime.² We used net pay because it was the only available measure in the 1970 cohort at age 26. Hourly wage is considered a better measure of earnings because it is not affected by possible changes in hours worked. Both full-time and part-time workers were included in the analysis.

The factors that were deemed to influence hourly earnings were grouped into three categories: family background, personal characteristics and personal background. The family background variables included the age of the mother at the time

the respondent was born, the school leaving age of the father, and the housing tenure of the parents when the child was 16 years old. The latter variable probably acts as a proxy for social class influences and/or resources available for education. Other factors may also have had an influence on earnings, such as the occupation of the father, the school leaving age of the respondent's mother and housing density (the number of persons per room) during the cohort member's childhood (at age 10/11). These were found to be statistically insignificant in the regression analysis and were therefore dropped from the specification.

The personal characteristics of the cohort member included in the regressions were mainly measures of mathematical ability (tests conducted while at school) and qualifications. These were measured by maths test scores at age 11 in the 1958 cohort or age 10 in the 1970 cohort and by the highest qualification attained by age 23 (1958 cohort) or 26 (1970 cohort). Personal background variables were indicative of family and labour market status during early adulthood (i.e. at age 23 in the 1958 cohort and at age 26 in the 1970 cohort). To describe the current family situation, we included the number of natural children and partnership status at age 23 or 26 to take this into account. We also added a health indicator, as this was likely to affect labour market outcomes. The self-reported health variable is likely to be endogenous because it may be correlated with labour income. Unobserved individual factors may also influence both health and labour income. In order to check whether this affected our results, we estimated the same models dropping the health variable. The results remained unaffected.

The career paths of individuals were likely to have had an influence on their current wage. We included several variables indicative of the work history of the cohort members: the length of their longest unemployment spell, the length of tenure in the current job, the number of jobs held since leaving school, and whether they had been out of

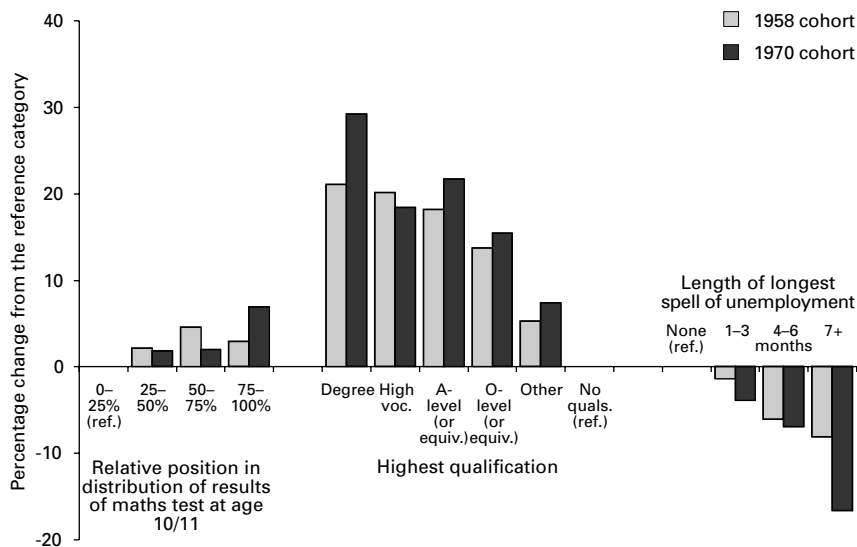
the labour force. According to the literature on the scarring effect of unemployment, long spells of unemployment are expected to be detrimental to future economic success. For the same type of reasons, periods of time out of the labour force may also have a negative effect on future earnings. People with longer tenure in their current job may be expected to have higher wages than others. They are likely to have benefited from internal promotion and they may be more valuable to their employer, having gained training specific to their job. Finally, we included in each regression model the unemployment rate for the region in which the young person was living in 1981 (the 1958 cohort) or 1996 (the 1970 cohort). This variable was intended to capture the effect of regional differences in earnings that arise because of the spatial variation in labour markets across Great Britain.

The number of observations in the sample depended on the specification. In the simple regressions (see Appendix C for further details),

only those in paid work were included. The sample consisted of 4,369 men and 3,575 women for the 1958 cohort, and 2,761 men and 3,123 women for the 1970 cohort. For women, we also estimated these regressions with a method that takes account of any effects arising from 'selection' into employment. The sample then included those who were not in paid work at the time of each survey work; this added 2,237 and 1,389 women for the 1958 and 1970 cohorts, respectively.

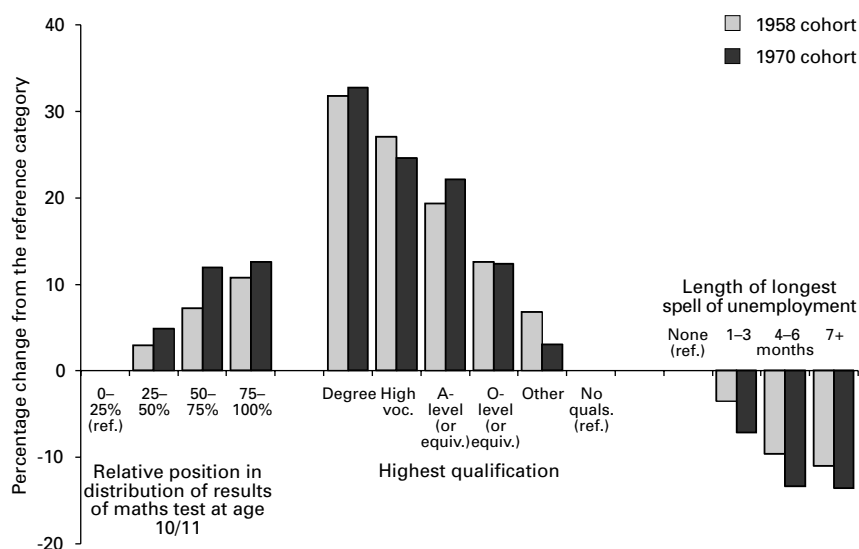
Figures 18 and 19 show the key results for men and women. The relationship between having higher ability in maths (measured as being in the top 50 per cent in maths test scores) and earnings increased between the two cohorts for women. For men, this relationship only held true for those in the top 25 per cent of maths scores. Returns to educational qualifications were positive and statistically significant compared with having none. Apart from highest vocational qualification, it appeared that the premiums associated with each qualification, in particular with having a degree,

Figure 18 The effect of mathematical ability, qualifications and unemployment on the earnings of young men: a comparison of the 1958 cohort with the 1970 cohort



Notes: Reference (ref.) categories are, respectively, in the lowest quartile of the distribution of results of a maths test at age 10/11, no qualifications, and no experience of unemployment. The dependent variable is the log of hourly net earnings.

Figure 19 The effect of mathematical ability, qualifications and unemployment on the earnings of young women: a comparison of the 1958 cohort with the 1970 cohort



Notes: Reference (ref.) categories are, respectively, in the lowest quartile of the distribution of results of a maths test at age 10/11, no qualifications, and no experience of unemployment. The dependent variable is the log of hourly net earnings.

increased between the two cohorts for men. For women, the relationship between qualifications and earnings remained essentially unchanged over this period. However, the earnings premium associated with the lowest qualification became statistically insignificant. The premium associated with holding a degree appeared very similar (at about 30 per cent) for men and women in 1996, while it was greater for women in 1981 (31 per cent for women and 22 per cent for men). From an examination of the mean values of these variables (see Appendix C, Tables C.1 and C.2) it can be seen that more men and women in the 1970 birth cohort continued their education to degree level, while fewer had a higher vocational qualification compared with the 1958 birth cohort.

The effect of the duration of the longest unemployment spell on earnings became more detrimental between the two cohorts. For men, a spell of seven months or more decreased hourly net earnings by about 8 per cent in 1981 versus 15 per

cent in 1996. In addition, for men, compared with 1981 short spells of unemployment became statistically significant in 1996. This effect became more damaging between 1981 and 1996, at the same time as the proportion of people who experienced unemployment increased.

Evaluating the evidence

From the preceding analysis, it can be seen that there is a great deal of similarity between the effects of various characteristics on the earnings of young adults in 1981 and, 15 years later, in 1996. Our measures of childhood mathematical ability (performance in maths tests at age 10 or 11) had a clear and similar effect on earnings. However, for both men and women, post-16 qualifications remained the most powerful influence on earnings. For women the strength of these effects, as measured by the size of the coefficients, was essentially unchanged. For men the effects appeared stronger in 1996 than in 1981, adding

almost 30 per cent to earnings for degree holders compared with those who had no qualifications.

These results concerning the relationship between earnings and qualifications must be treated with some caution because we observed these two groups of young people at different ages. For those with higher levels of qualification, particularly for graduates, earnings are known to increase quite rapidly in these early years of labour market experience. Drawing upon information from the Labour Force Survey for the period 1993–99, we note that the rate of increase of the real earnings of first-degree graduates (both men and women) between the ages of 23 and 26 is approximately 15 per cent higher than the rate of increase of earnings of non-graduates. The earnings of graduates relative to non-graduates increases with age during their early twenties and this effect is more marked for women than for men. The result we obtained for men, showing the effect of having a degree on earnings rising by almost 30 per cent relative to non-degree holders, is due in part to the difference in age at which the two cohorts were observed. We compute that almost half of this rise is due to age, the remainder reflecting a growing earnings premium for men with a degree. Relative to non-degree holders, women with a degree derive a significant earnings premium and we know from analysis of the Labour Force Survey that this difference increases markedly between the ages of 23 and 26. However, the earnings premium for a degree was essentially unchanged between the two cohorts. This implies that there may well have been a decline in the degree premium for women over this 15-year period had we been able to compare women at exactly the same age.

The other major set of influences on earnings related to prior work history, particularly the experience of unemployment. For men, the effects appeared to be strengthening over the period, such that a significant spell of unemployment (seven months) or more in 1996 appeared to be associated

with a 15 per cent reduction in earnings compared with 8 per cent in 1981.

Changes in the pattern of earnings arise not just because of the way in which different characteristics of individuals or their earlier experiences are ‘valued’ in the labour market but also, and perhaps more significantly, because of the changing proportions of young people with particular characteristics. From our analyses, it is clear that the two most important influences in this respect are qualifications and experience of unemployment.

From these varying perspectives (by gender, for holders of different levels of educational qualifications and in terms of prior employment history) the changes that are apparent for young people over this 15-year period appear to influence their earnings in different directions. Women have made considerable progress up the distribution of earnings over the period, assisted by their growing propensity to remain in education after the age of 16, with twice as many gaining a degree in 1996 than in 1981. However, there is some evidence to suggest that, for women, the rewards for having a degree may have been declining. For both men and women, those who have made it to the upper part of the earnings distribution have gained a larger share of the general growth in earnings over this period than those who moved into the lower half of the earnings distribution. For men the experience of a significant spell of unemployment between the time they completed their full-time education and ages 23/26 became much more a feature of the later birth cohort. How then have these varying experiences impinged upon the changing distribution of hourly earnings?

To shed light on this issue, we show graphically how the effects of growth in qualifications and the rising experience of significant spells of unemployment manifest themselves within the distribution of earnings. Figure 20 shows the changes in the percentage of employed respondents

Young people's changing routes to independence

holding a degree, differentiating this growth according to the position of the respondent within the distribution of earnings. In all parts of the distribution except the bottom 20 per cent, the percentage with a degree has risen, but more so towards the top end of the distribution. In terms of the rising experience of long duration unemployment, the picture is reversed. From Figure 21 it can be seen that much of the increase in unemployment experienced by young people between 1981 and 1996 is located in the bottom

fifth of the distribution of hourly earnings in 1996.

It appears, therefore, that the growth in high-level qualifications coupled with the declining demand for the employment of less well-qualified young people (as evidenced by their growing experience of significant spells of unemployment between the completion of their education and entry into the labour market) has led to a widening in the distribution of earnings of young people over this 15-year period. Young women may have fared

Figure 20 The distribution of highly qualified young persons by deciles of hourly earnings, 1981 and 1996

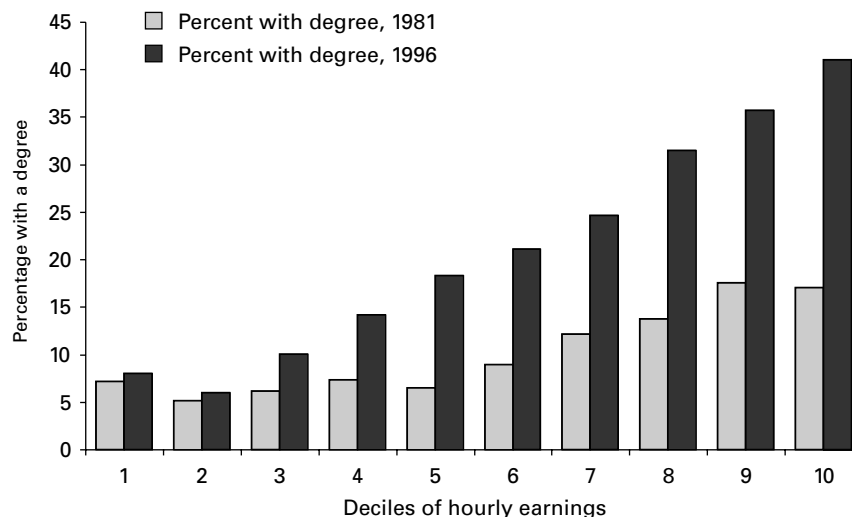
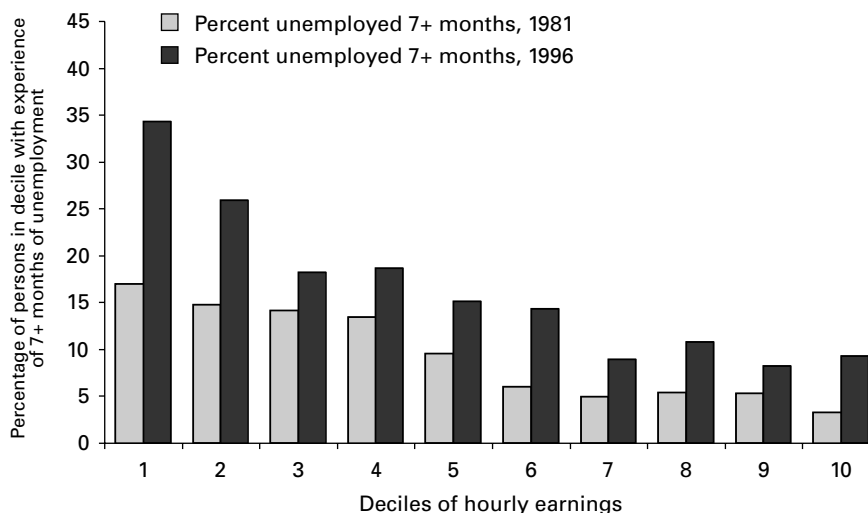


Figure 21 The experience of unemployment by deciles of hourly earnings, men, 1981 and 1996



better than young men in this process, in that they have made some further progress towards earnings equality and may have escaped the worsening impacts of youth unemployment to some extent, but this view is complicated by the fact that some women may choose not to describe themselves as unemployed in times of joblessness.

In summary, we have shown that some young men and women have done well in economic terms over this period. Others have not fared so well, and their lack of economic success appears to be linked to indicators of their education and social background. To find out whether or not these economic changes affect their general well-being, we present in the following section an analysis based upon a psychological measure of their mental health.

The psychological well-being of young people

While earnings information is a useful indicator of economic well-being, there are a number of problems associated with its interpretation as a measure of how well the young people in these studies are getting on in life. In this section, we move away from earnings to a more general measure of individual well-being. To achieve this we made use of the malaise inventory, a 24-point scale constructed from the simple (yes/no) answers to a set of 24 questions (see Appendix D, Table D.1) designed to enquire into the mental state of the respondent. Simply by adding the number of positive responses to these questions, a score is obtained that indicates the extent to which the respondent approaches a state defined as 'indicating a tendency towards non-clinical depression'³ (Bowling, 1983).

Figures 22 and 23 show how the distribution of these scores has changed between 1981 and 1996. For men and women, the changing shapes of these distributions show that mental well-being had decreased for young people from 1981 and 1996.

For both genders, the proportion that scored zero had declined almost by a half, with significant increases in the proportions scoring above four. By focusing specifically upon those who recorded a score of eight or more we gain some indication of the extent of the increase in this indicator of non-clinical depression, from 7.4 per cent of 23-year-olds in 1981 to 13.8 per cent of 26-year-olds in 1996. This increase affected both men and women, with more than one in seven of 26-year-old women indicating signs of depression in 1996.

To establish the main factors associated with this indicator of depression, a detailed investigation was undertaken to determine the variables that were linked to the indicator (a score of 8 or more on the malaise inventory). This analysis established that a number of factors were closely related to signs of depression. A significant experience of unemployment correlated with a higher score on the malaise inventory, while higher qualifications correlated with lower scores. Earnings and indications of depression were negatively related: young people who earned more were less likely to report high scores on the inventory.

To determine how the changing experiences of these two cohorts may be implicated in the observed rise in the risk of non-clinical depression, we undertook a multivariate regression analysis with pooled data from the two surveys and examined for the statistical significance of effects that were common in both cohorts and those which were particular to the 1958 cohort. The results of this analysis are shown in Table 17.

The top part of Table 17 shows the effects that were common in both the 1958 and 1970 cohorts. The bottom part of Table 17 reveals how these effects are moderated if examining the 1958 cohort only. Where a factor appears in both parts of Table 17, this indicates that the nature of the effect has changed significantly between the two cohorts. For example, a clear relationship is revealed between the length of the longest spell of unemployment

Figure 22 Malaise inventory scores, men at age 23 in 1981 (1958 cohort) and age 26 in 1996 (1970 cohort)

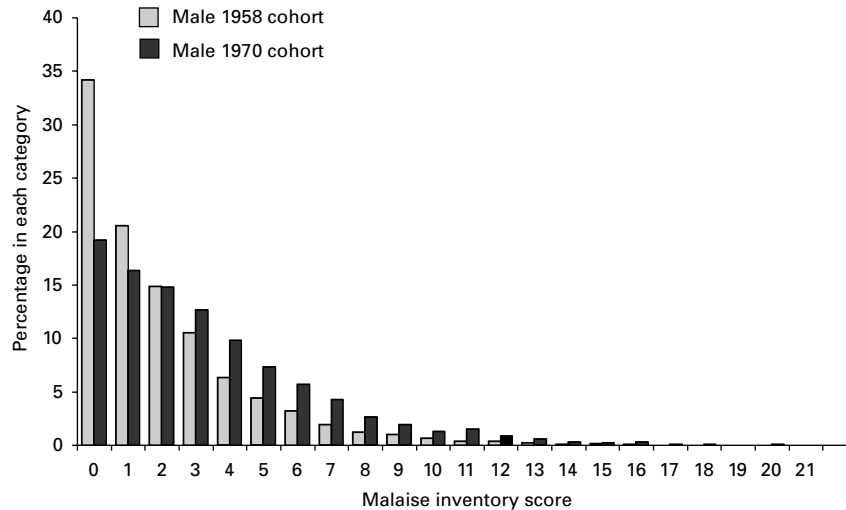
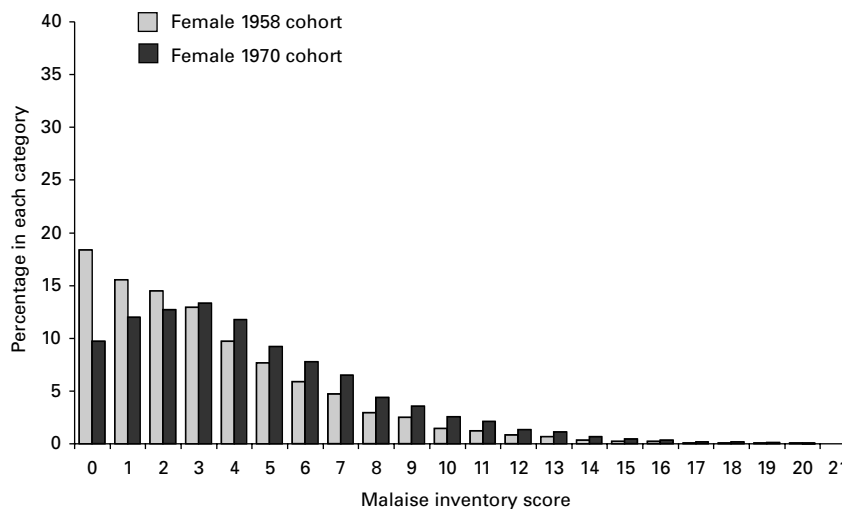


Figure 23 Malaise inventory scores, women at age 23 in 1981 (1958 cohort) and age 26 in 1996 (1970 cohort)



experienced by the cohort member. The effect of a spell of seven months or more was apparent for both the 1958 and 1970 cohorts, but was lower in the 1958 cohort than in the 1970 cohort. We also observed how a degree served to ‘protect’ from signs of depression. Those born in 1970 who had gained a degree were more than a third less likely to indicate symptoms of depression than those who did not have a degree. However, in the 1958 cohort the effect of a degree in terms of its association with a reduced likelihood of depression was significantly stronger than this.

Other influences can be seen at work here. Those whose mother worked when they were aged 16 were less likely to show signs of depression at the ages of 23 or 26, but having an older mother increased the odds that a cohort member scored more than 8 on the malaise inventory. High maths test scores at age 10 or 11 were associated with low malaise scores in early adulthood. Women were also significantly more likely than men to score highly on this measure of non-clinical depression, and the difference between men and women appeared to be increasing even after taking account

Table 17 Factors influencing the odds of a respondent scoring 8 or more on the malaise inventory

	% change in odds ratio relative to the reference group
1958 and 1970 cohort effects	
Mother worked when respondent was 16	-21
Mother was aged 20 or more at birth of respondent	+20
Father completed education at age 18 or older	-23
Respondent in third quartile on maths test at 10/11	-16
Respondent in top quartile on maths test at 10/11	-24
Respondent has had 5+ jobs	+26
More than 2 years in current job	+31
Respondent has a degree	-37
Respondent living with partner	-22
Two or more children	+44
Female	+96
Longest spell of unemployment	
1-3 months	+20
4-6 months	+46
7 months or more	+119
1958 cohort effects only	
Father completed education at 16-17	-33
Rented housing at age 16	+20
Respondent in bottom quartile maths test	+45
Low vocational qualifications	-38
O-level/GCSE	-47
A-level	-59
High vocational qualifications	-60
Respondent has a degree	-66
Respondent has had 2-5 jobs	-16
More than 2 years in current job	+29
Male	-34
Longest spell in unemployment	
7 months or more	-26

of their different experiences of unemployment and their qualifications.

One possibility that could not be discounted is that the observed increase in malaise among both men and women is a result of methodological problems associated with the data collection techniques. While the malaise inventory is a self-completion instrument, and was administered as such in both 1981 and 1996, the 1981 survey was a face-to-face interview with respondents. Self-completion of the malaise inventory took place

after the face-to-face interview was completed. In 1996, the survey was conducted by post with no interviewer present. To check whether or not these differences in the setting could have affected the tendency of respondents to reply positively to these questions in 1996, we took advantage of the 1991 survey of 10 per cent of the 1970 birth cohort. This group participated in a face-to-face interview that was essentially the same as that experienced by the 1958 birth cohort in 1981. The malaise inventory was administered to this subgroup of the 1996

respondents. Analysis of the responses to the malaise inventory in 1991 and 1996 showed that the recorded rise in depression was evident in 1991 among the 1970 birth cohort. In other words, the difference in data collection methodologies did not appear to be a factor behind the recorded rise in depression between the two cohorts, and the rise in depression was in evidence at age 21 in the younger cohort. If early experiences of unemployment were a factor behind part of this increase, then this observation would fit with the fact that much of the rise in unemployment experienced by those in the 1970 birth cohort with low education qualifications was experienced before the age of 21.

Summary

It was shown in Chapter 1 that there have been some significant changes in the transition from school to work made by young people. In this chapter, we attempted to answer a simple question. Are young people today better off than their counterparts were 15 years ago?

As with most questions of this nature, the answer is far from simple. This chapter has explored the relationship between the changing pattern of earnings of young people, their

transitions from full-time education to the labour market and their psychological well-being. In terms of their earnings, we note that qualifications, particularly those at a high level, continue to provide a very significant boost to the earnings of young people. Given the general rise in qualification levels among young people, this should have helped to improve their general situation in terms of earnings. However, it also appears to be the case that the benefit from a degree-level education in 1996 was not so marked as it was 15 years earlier. On the negative side, the experience of substantial spells of unemployment during the transition from education to work continues to have a downward effect on later earnings, and the experience of such unemployment is much wider in the younger birth cohort. These influences appear to have combined to accentuate the disparity in earnings by widening the gap between those on relatively low earnings and those with high earnings.

We also note that there has been a very significant increase in the indication of non-clinical depression among young people over the last 15 years, particularly for women. This is less easy to explain. Again, we suspect that the experience of unemployment is implicated in this rise.

5 From childhood poverty to labour market disadvantage

Abigail McKnight

Introduction

In this chapter the focus of attention is directed at young people growing up in low-income households. Their experience is contrasted with that of young people from more prosperous households in terms of educational attainment, the transition from school to work and later employment outcomes. The motivation for focusing on young people from low-income households stems from a growing concern about increases in child poverty, increases in inequality and the longer-term detrimental effects of child poverty.

It was shown in Chapter 1 that, over the last two decades, the transition from school to work has elongated, with a much greater proportion of young people staying on at school after age 16 and a higher share of school leavers going on to further and higher education. The increasing importance of educational attainment in shaping individuals' working lives has put greater pressure on young people and encouraged parents to direct resources at enabling their children to achieve within the education system. In addition, it is not uncommon for young people to take a 'gap year' between school and higher education; some even take additional time off after completing their education and before entering a chosen career. Consequently, young people now tend to enter employment later than in the past, and this extends the time to economic independence. These longer transitions between school and work are likely to create an additional financial burden on parents (Jones and Bell, 2000). If the cost of assisting young people into 'good jobs' has increased over time the link between parental income and labour market success may have strengthened.

If parental income is an important determinant of educational attainment, successful entry into the

labour market and labour market outcomes in the longer term, the increase in inequality and the growth in the number of children living in poverty are greater causes for concern than if labour market success is independent of parental income. Parents on high incomes will endeavour to improve the life-chances of their children and, if earnings inequality continues to increase, then inequality will not only perpetuate across generations but will result in rich and poor dynasties.

This chapter provides a portrait of the early experience of children who grew up in low-income households, looking at their achievements at school and their transition from school to work, and contrasts their experience with children from higher-income households. The main objective is to establish whether a link exists between low-income background and later labour market disadvantage. Comparing the experience of the 1970 cohort with the 1958 cohort allows us to assess whether or not any penalty associated with growing up in poverty has changed over time.

Previous research

There are a number of existing studies that have exploited the richness of the data from the 1958 cohort to explore intergenerational transmission of economic and social outcomes. Dearden *et al.* (1997) adopted and refined the methodology used in an earlier study of intergenerational mobility conducted by Atkinson (Atkinson, 1981) and applied it to a much larger, more representative, sample of fathers and sons.¹ They also extended the analysis to fathers and daughters. They found that the extent of mobility is limited in terms of both earnings and education. Their results support an earlier finding of Atkinson's that an asymmetry exists, with upward mobility from the bottom of

the earnings distribution more likely than downward mobility from the top. Hobcraft (1998) looked at how experiences during childhood are linked to a wide variety of outcomes in adulthood. He focused on the issue of social exclusion and looked particularly at the effect of financial hardship, family disruption and contact with the police during childhood on adult outcomes. Adult outcomes at age 33 were divided into demographic, psychological, welfare dependence, educational qualifications and economic. He concluded that:

There is little doubt that social exclusion, as captured by the adult outcomes and childhood factors, is transmitted across the generations and through the life course. (Hobcraft, 1998, p. 95)

Hobcraft's measure of childhood poverty is derived from responses to a question on whether or not the child's family experienced financial difficulties when the child was aged 7, 11 and 16 and whether or not any child in the family received free school meals² when the cohort member was aged 11 and 16. He found that low income in adulthood is related to indicators of childhood poverty, along with poor performance at school and lack of parental interest in schooling.

Machin (1998) 'unpacks' some of the linkages between the transmission of earnings and education across generations. Once again using the NCDS, he showed that the cognitive achievement of children in their early years is significantly related to labour market earnings of their parents and consequently affects the child's earnings in adulthood.

Some recent analysis comparing the experience of the two birth cohorts has started to explore some of these issues looking at a number of childhood factors and their relationship with adult outcomes. Bynner *et al.* (2000) found that childhood poverty was an intermediate factor in poor educational achievement, and comparison between the two cohorts identified a lower pay-off in terms of occupational attainment for the later cohort. The

probability of unemployment among men who received free school meals as children was higher in the more recent cohort. Breen and Goldthorpe (2001) also compared the experience of the two cohorts. They were interested in testing whether or not British society could now more accurately be described as a meritocracy than in the past. In terms of social class mobility they found (after controlling for merit, using measures of ability, motivation and educational attainment) a social gradient in mobility rates in both cohorts and no evidence to support the theory that Britain has moved further towards a meritocracy.

All of these previous studies have sought to establish a link between the economic and social status of parents and that of their children. Together they suggest that the linkage runs from parental earnings to childhood educational achievement to adulthood earnings, and so on, across generations. Although they are informative in terms of identifying a link across generations, in terms of economic and social factors, it is not possible to generalise from these findings and state that the same relationships exist for other age cohorts. The strength of the present study is the ability to identify the extent of intergenerational transmission within a cohort and then to compare the experience between cohorts to see whether the degree of transmission has changed over time.

Low-income households

The present study is concerned with assessing the impact of household income on a selection of outcome variables: highest level of educational attainment, economic activity and earnings. Household income³ is measured for both cohorts at age 16 but the variable in the 1958 cohort is net monthly income, while the 1970 cohort only contains a measure for gross monthly income. This means that the 1958 cohort provides a better measure of the resources available to the household after payment of taxes associated with earnings.

However, in the following analyses, comparisons are made on the basis of whether incomes are above or below the average for their cohort, allowing for direct comparison. Household income is adjusted for household size and composition using McClement's equivalence scale.⁴ Three levels of household income are defined: households with at least average income (higher-income households); households with below-average income (low-income households) and households with below-half average income (poor households). The decision to use a measure of income at age 16 was partly driven by data availability but mainly in recognition of the fact that the availability of resources at this age is likely to be crucial. When young people reach the age of 16 they, along with their parents, face their first major labour market decision: whether or not to stay on in post-compulsory education. Low household income at age 16 is also assumed to proxy for lack of resources available during childhood as well as the lack of future available resources to finance continuing educational investments and ease the transition from school to work.

Table 18 shows the change in household income distribution at age 16 between the 1958 and 1970 cohorts. The figures show a rise in the proportion of 16-year-olds in low-income households (below-average income), from 56 to 60 per cent, and a dramatic rise in the proportion in the poorest households (below-half average income), from 11 to 24 per cent. This finding is consistent with previous evidence on the increase in child poverty between 1968 and 1996 (Gregg *et al.*, 1999).

Table 18 Household income at age 16

Household income	1958 cohort (%)	1970 cohort (%)
Above average	44	40
Below average	56	60
50% below average	11	24
Total valid cases (no.)	7,076	7,180

Additional analysis showed that this measure of poverty was highly correlated with alternative indicators of financial hardship at age 16 and at younger ages, such as receipt of free school meals, living in overcrowded conditions and the experience of financial hardship in the preceding 12-month period. Young people in low-income households were more likely to live in rental accommodation, particularly social housing, than individuals in higher-income households. Their mothers were also more likely to have been under the age of 20 when they were born. The relationship between alternative measures of financial hardship and household income both at age 16 and at younger ages provides validity for this measure as an indicator of poverty and potential hardship. The following sections look at how the experiences of individuals from different income backgrounds differ and how they have changed through time.

From school to work

In this section the achievement of young people at school and their transition to the labour market is examined. The profile of young people growing up in above-average income households is contrasted with those of young people in low-income households, in terms of staying on after compulsory schooling and highest level of qualification obtained. A contrast between the two cohorts shows how inequalities between high- and low-income groups have changed over time.

From school ...

Children in low-income households are known to perform less well, on average, in school tests and examinations than children from higher-income households. How much of this is due to access to additional schooling (this may be in the form of private-funded schooling, extra tuition or pre-school education), peer group pressure, the value placed on education within the family, lack of

resources such as books and computers, access to a quiet room at home for homework or help and support provided by the parent is difficult to judge.

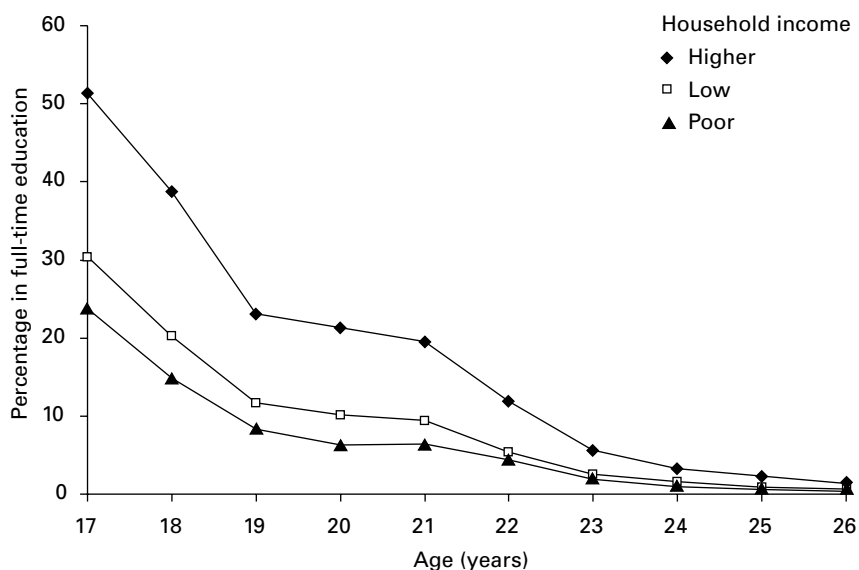
Higher household income is also linked to a higher propensity to continue in education after completing compulsory schooling. Figure 24 plots out the percentage of individuals in the 1958 cohort in full-time education from age 17 to age 26 by household income at age 16. As one would expect, there is a falling share of individuals remaining in full-time education as a cohort ages. What is striking is the association between household income at age 16 and staying-on rates. While more than half of all individuals from households with above-average income are still in full-time education at age 17, this is true for only 30 per cent of individuals from households with below-average income and less than one-quarter of individuals from households with below-half average income.

For the 1970 cohort detailed event histories are only available for a 10 per cent sample of the cohort

at age 21, after which their status is not known until they were interviewed at age 26, so an exact comparison cannot be made. In addition, the 21-year follow-up was conducted in England and Wales only. Examination of the available data showed that a similar pattern of differential staying-on rates by household income background existed for the 1970 cohort, although staying on in post-16 full-time education increased for all groups.

It is not surprising, given the higher staying-on rates post-compulsory schooling, that young people from higher-income families attain higher levels of qualifications than individuals from low-income households. Table 19 shows the share of individuals gaining different levels of education⁵ by household income at age 16 in the 1958 cohort. Approximately 10 per cent of individuals from higher-income households gained an undergraduate degree, more than twice the rate for individuals from low-income households and more than three times the rate for individuals from poor households. In the 1958 cohort, nearly a third of

Figure 24 Percentage of the 1958 cohort in full-time education by age and household income at age 16



Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

Source: 1958 cohort (event history file)

Table 19 Highest qualification attained by age 23, 1958 cohort

Highest qualification	Household income at age 16		
	Higher income	Low income	Poor
Degree	9.6	3.9	2.7
Higher qualification	10.2	6.0	4.5
A-level	11.1	5.4	3.5
O-level	46.7	42.4	38.0
CSE	13.4	20.3	19.3
No qualification	9.1	21.9	32.0
Total (%)	100	100	100

Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

young people from poor households left school with no formal qualifications and less than a half gained more than CSE-level⁶ qualifications.

Comparison with the 1970 cohort (Table 20) highlights the overall expansion in educational attainment over time. Three times as many young people from higher-income households in the 1970 cohort compared with the 1958 cohort gained at least an undergraduate degree, comprising one-third of all young people from this income group. The growth in higher educational attainment was also found among individuals from low-income and poor households, with around 9 per cent of individuals from poor households gaining a

degree. However, individuals from higher-income households were still more than three times as likely to attain a degree than individuals from poor households. Fewer young people, from any income group, in the 1970 cohort left school without any qualifications, making up less than 2 per cent of young people from higher-income households but still accounting for more than one in ten young people from poor households. The 1970 cohort therefore gained more educational qualifications than the 1958 cohort but educational inequalities between children from high- and low-income households persisted.

Table 20 Highest qualification attained by age 26, 1970 cohort

Highest qualification	Household income at age 16		
	Higher income	Low income	Poor
Degree	33.4	13.1	9.3
Higher qualification	5.9	4.1	3.7
A-level	13.6	9.3	8.2
O-level	35.4	45.1	43.6
CSE	10.0	20.9	23.1
No qualification	1.7	7.4	12.1
Total (%)	100	100	100

Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

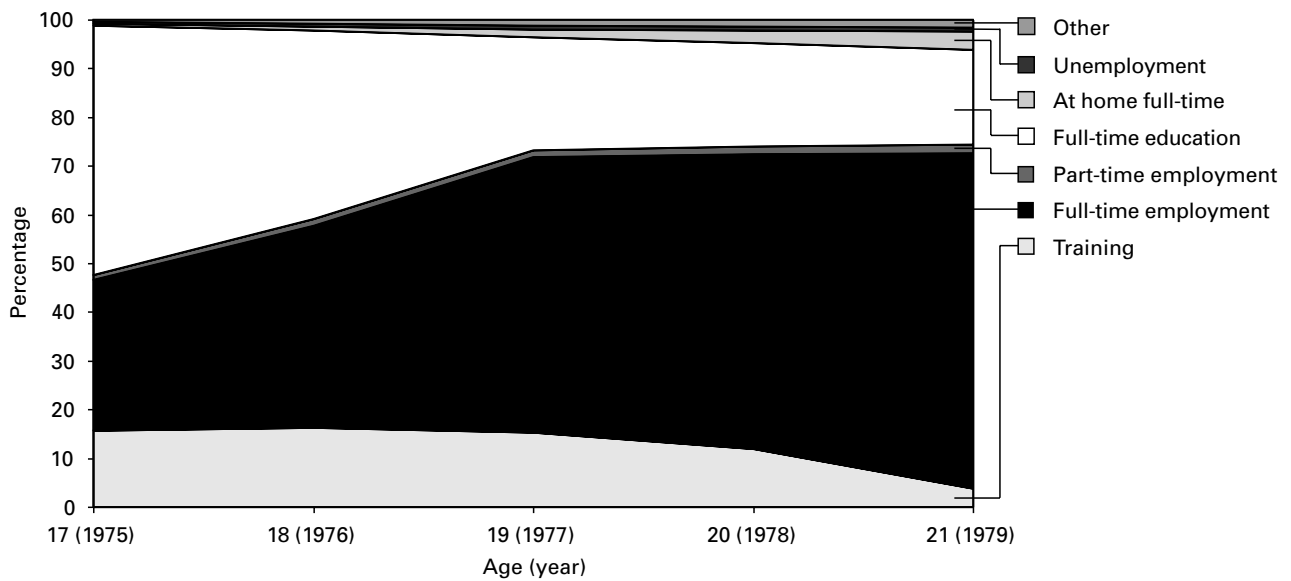
Young people's changing routes to independence

... to work

In this section the early career paths of the two cohorts are contrasted to see how the experience of young people from higher-income households differs from young people from poor households within a cohort and between cohorts. The analysis

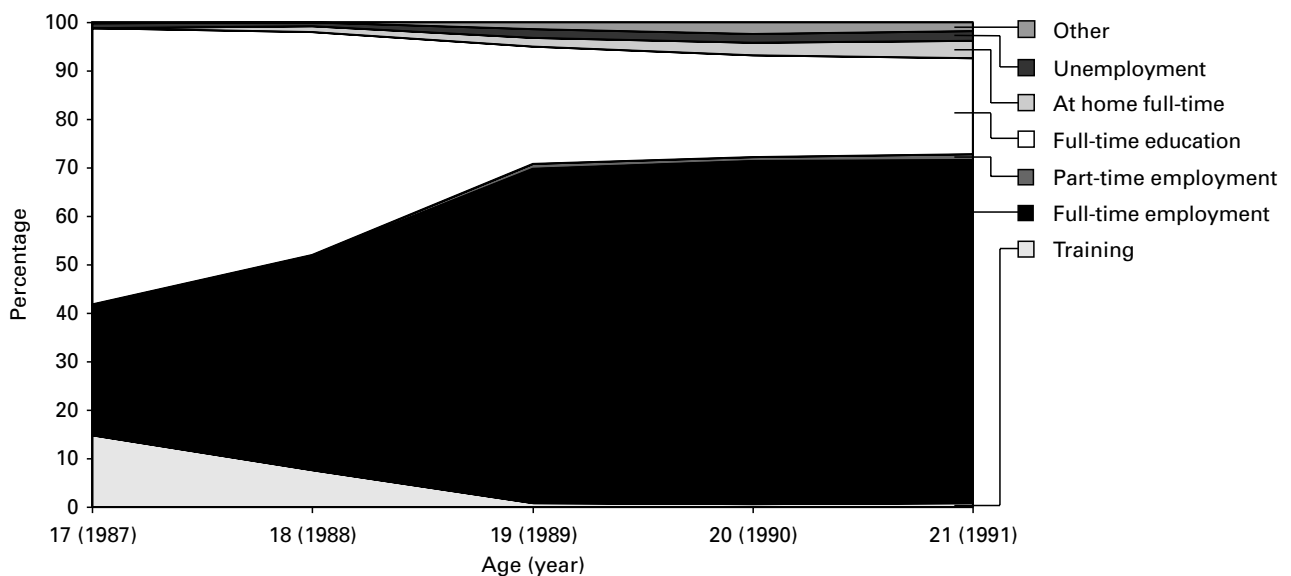
mainly concentrates on the transitional years between 16 and 21. This restriction means that the event histories collected from the 1958 cohort and the 10 per cent sample of the 1970 cohort can be used. The advantage is that the two cohorts can be compared at the same age, the disadvantages are

Figure 25 Economic activity profiles at ages 16–21 for individuals from higher-income households, 1958 cohort



Source: 1958 cohort (event history file)

Figure 26 Economic activity profiles at age 16–21 for individuals from higher-income households, 1970 cohort



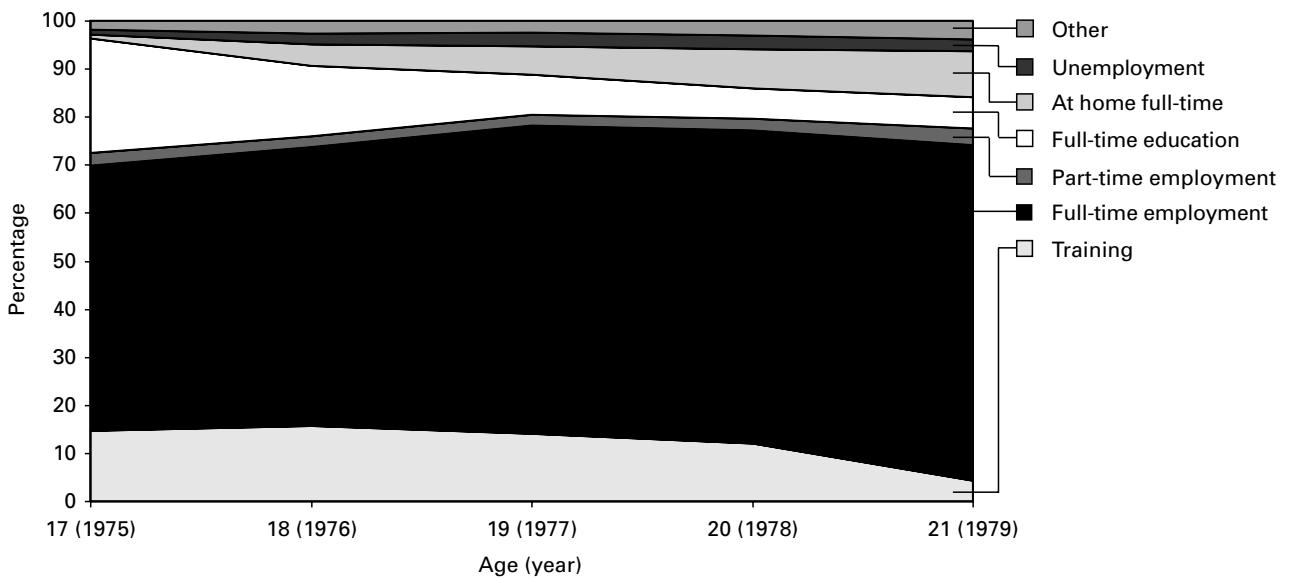
Source: 1970 cohort (10 per cent 21-year follow-up event history file)

that the 1958 cohort members were recalling a period some time earlier⁷ and the 1970 cohort sample was greatly reduced as only a 10 per cent sample was followed up at age 21.

Figures 25 and 26 illustrate the experience of individuals from higher-income households at age

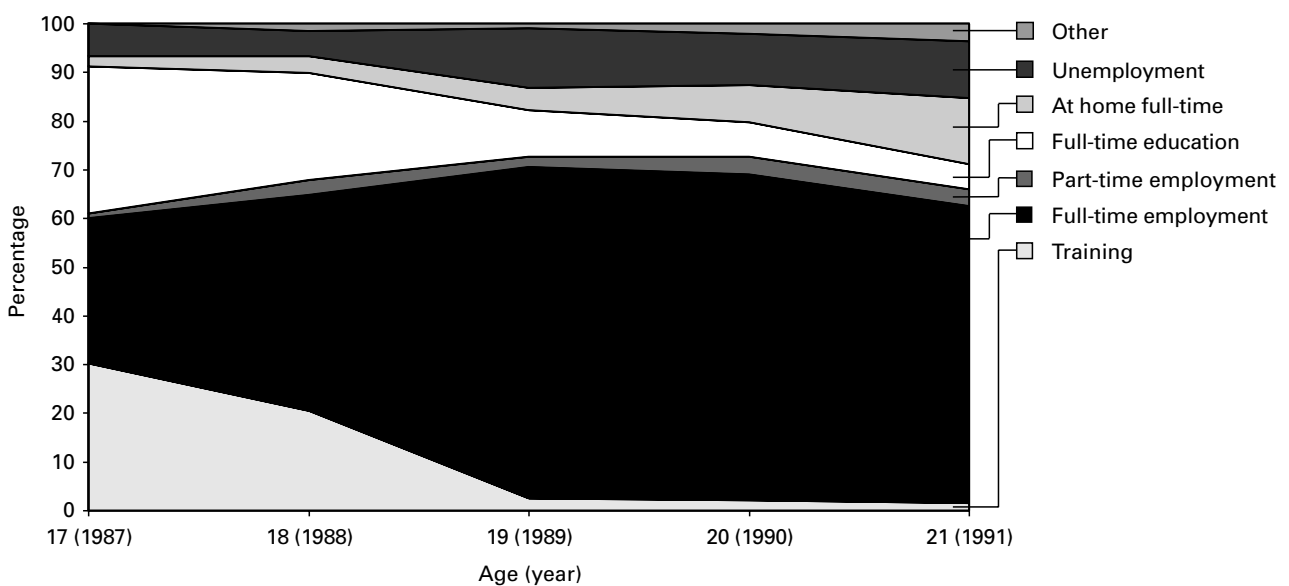
16 for the 1958 (Figure 25) and 1970 (Figure 26) cohorts. They show the distribution between training, employment, full-time education, being at home full-time, unemployment and some other activity from 17 to 21 years. Figure 25, for the 1958 cohort, shows the movement out of education into

Figure 27 Economic activity profiles at age 16–21 for individuals from poor households, 1958 cohort



Source: 1958 cohort (event history file)

Figure 28 Economic activity profiles at age 16–21 for individuals from poor households, 1970 cohort



Source: 1970 cohort (10 per cent 21-year follow-up event history file)

employment as the cohort ages, and a tail-off in the share in training schemes after age 20. Figure 25 shows very low levels of unemployment and economic inactivity among this group. Comparisons with the 1970 cohort show a similar pattern but with a slightly higher share in unemployment (Figure 26). The most striking difference is the share of young people in training schemes and the virtual non-existence of training after age 19. It is worth noting that the type of training captured by the two surveys differed (see Chapter 2). Some of the observed difference is likely to be due to changes in the definition of training used in the two surveys, but this is also likely to be a result of the type of training available at the time the surveys were conducted. The overall change is likely to reflect the demise of the old apprenticeship training schemes, which lasted, on average, five years, and the introduction of shorter government-funded training schemes in the 1980s. The 1970 cohort members who left school at 16 with low-level qualifications or no qualifications were most likely to enter a two-year YTS, which ran between 1983 and 1990.

Figures 27 and 28 illustrate the experience of individuals from poor households (below-half average income) in the 1958 (Figure 27) and 1970 (Figure 28) cohorts. Individuals from poor households at age 16 in the 1958 cohort were much more likely to move earlier into employment than their counterparts from higher-income households. The main differences were a higher share of individuals from poor households at home full-time or unemployed and a much lower share in full-time education post-16 years.

The profile for individuals from poor households in the 1970 cohort highlights some fairly dramatic changes (Figure 28). A much higher proportion of individuals from poor households in

the 1970 cohort than in the 1958 cohort were in training schemes (30 per cent compared with 15 per cent), which ended by the age of 19, and as a consequence fewer were in full-time employment. There was also greater experience of unemployment between the ages of 17 and 21 compared with individuals from higher-income households and with their counterparts in the 1958 cohort.

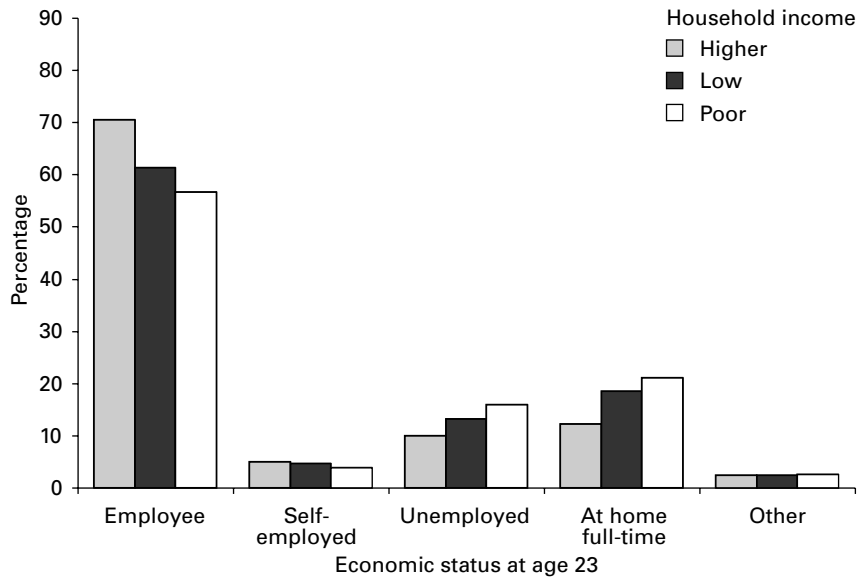
The changing relationship between childhood poverty and adult employment outcomes

In this section the link between childhood poverty and early adult labour market disadvantage is explored in more detail. To begin with, a simple comparison is made between the economic status of individuals from households with above-average income and those from households with below-average income and below-half average income. The comparison here is made between the 1958 cohort at age 23 and the 1970 cohort at age 26. The two birth cohorts were interviewed at these ages. In an ideal situation the birth cohorts would be compared at the same age, but given the changes in the transition from school to work over the 12 years that separate these two observations the difference in age may be less problematic than would first appear. It may well be the case that while 23 and 26 are clearly not the same chronological age, they are comparable in terms of career age. It may also be less problematic for the present study where the focus is on the relative situation of individuals from different household income backgrounds.

Childhood poverty and adult economic activity

Figure 29 shows the distribution of economic activity at age 23 (1981) by household income at age 16 (1974) for the 1958 cohort. It is clear that individuals from low-income households were less

Figure 29 Economic activity at age 23 by household income at age 16, 1958 cohort



Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

Source: 1958 cohort

likely to be employed and more likely to be unemployed or at home full-time than 23-year-olds from higher-income households. Higher levels of household income were associated with an increased likelihood of being in employment. More than 70 per cent of 23-year-olds who were in higher-income households at age 16, compared with 61 per cent of those from low-income households and 56 per cent of those from poor households, were in employment at age 23.

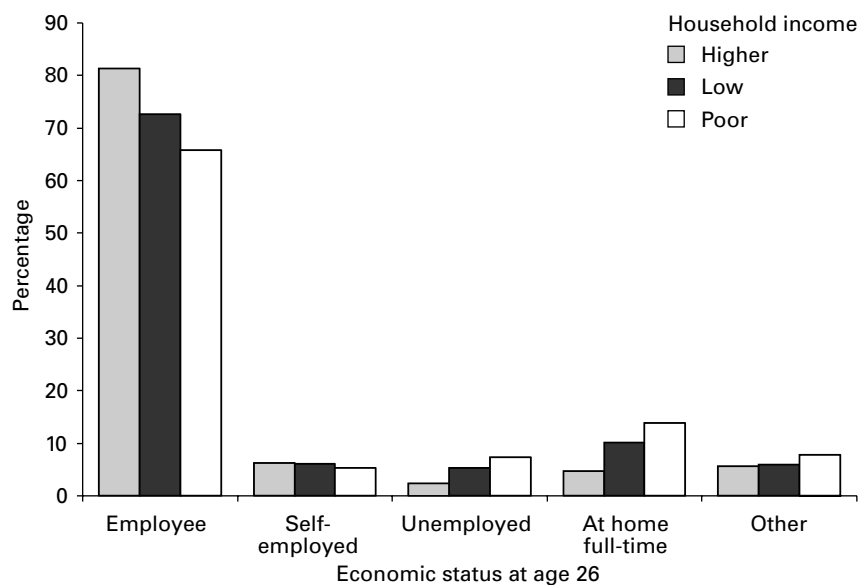
The positive association between unemployment at age 23 and a low-income background was also found between the experience of long-term unemployment and low-income background. Only 7 per cent of individuals from higher-income households at age 16 had experienced a spell of unemployment lasting one year or more by the age of 23, compared with 16

per cent of individuals from low-income households and nearly one-quarter (24 per cent) of all individuals from poor households.

For the 1970 cohort, Figure 30 shows the distribution of economic activity at age 26 by household income at age 16. Although a higher proportion of the 1970 cohort members was in employment than the 1958 cohort, individuals from low-income households were still less likely to be in employment at age 26 than individuals from higher-income households. Individuals from low-income households were more likely to be unemployed or at home full-time. Less than two-thirds of individuals from poor households were employees at age 26, compared with more than 80 per cent of individuals from households with above-average income.

Young people's changing routes to independence

Figure 30 Economic activity at age 26 by household income at age 16, 1970 cohort



Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

Source: 1970 cohort

Gender differences

The data in Figures 24–30 have combined outcomes for men and women, but economic activity patterns are very different for men and women. Women are more likely than men to be at home full-time caring

for children or working part-time, and in Britain men are more likely than women to register as unemployed. Table 21 shows the distribution of economic activity by household income for men and women separately in the 1970 birth cohort.

Table 21 Economic activity of the 1970 cohort at age 26 by household income at age 16 and gender

Economic activity age 26	Household income at age 16					
	Higher	Men Low	Poor	Higher	Women Low	Poor
Full-time work	88.5	82.8	76.1	74.2	59.1	45.7
Part-time work	2.4	2.9	3.4	10.3	14.2	19.0
Unemployed	3.5	8.2	12.3	1.2	2.9	3.4
Full-time education	3.0	2.8	3.1	2.5	1.8	1.0
At home full-time	0.3	0.4	0.8	8.4	17.6	23.8
Other	2.2	2.8	4.2	3.4	4.4	7.2
Total (100%)	907	1,092	381	1,070	1,423	501

Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

Source: 1970 cohort

In the 1970 cohort 26-year-old men from low-income households were less likely to be in full-time work and more likely not to be in any type of work than 26-year-old men from households with above-average income at age 16. More than one-fifth of 26-year-old men from poor households were not in work. The majority of these young men were unemployed (60 per cent) but a significant share were in full-time education (15 per cent) or long-term sick (14 per cent) (included in the 'other' category).

Women from poor households were 62 per cent less likely to be in full-time work at age 26 than women from households with above-average income. Women from low-income households were more likely to be in part-time work and much more likely to be at home full-time. Overall, these results suggest that childhood poverty is particularly associated with adult unemployment for men and an increased likelihood of being at home full-time for women.

One major change that occurred between the points at which we observed the two cohorts in their early twenties (1981 and 1996) was the overall rise in labour force participation of women irrespective of household income background. Table 22 shows the distribution of economic activity for all women in the two cohorts in 1981 and 1996. Table 22 highlights the reduction in the proportion of young women at home full-time and the corresponding increase in the proportion of women in work between the 1958 and 1970 cohorts irrespective of household income background.

Women from low-income households were less likely to be in employment and more likely to be at home full-time than women from higher-income households. However, although increases in female labour force participation were reflected in the higher employment rates for women from low-income households in their early to mid-twenties in 1996 than in 1981, the share of women at home full-time did not fall by as much for women from low-income households. The share of all women at

Table 22 Economic activity of young women in 1981 (1958 cohort) and 1996 (1970 cohort)

Economic activity	1958 cohort	1970 cohort
	Age 23 (1981)	Age 26 (1996)
In work	58.2	78.1
Not in work	8.5	6.0
At home full-time	30.2	13.7
Other	3.0	2.2
Total (100%)	2,738	2,493

home full-time fell by 55 per cent, but by 50 per cent for women from low-income households and by 38 per cent for women from poor households.

An important factor in determining individuals' economic activity is the overall economic climate. The unemployment rate in 1996 (8.3 per cent) was over one percentage point lower (the time at which we observed the 1970 cohort) than in 1981 (9.6 per cent) (the time at which we observed the 1958 cohort), and, more importantly, unemployment was falling in 1996 but rising in 1981 (Nickell, 1999). Overall, the improved economic climate in 1996 compared with 1981 meant that unemployment was much lower among the 1970 cohort than the 1958 cohort. While the unemployment prospects of the whole group are of interest, the focus here is on the relative prospects of the lower-income groups compared with the higher-income groups.

A more rigorous analysis of the trends can be conducted by modelling the probability of being in employment at age 23/26 and its association with household income at age 16. The results from a very simple logistic regression for the two cohorts, men and women separately and for the two lowest levels of household income, are shown in Table 23. Concentrating first on men, the top portion of Table 23 shows the negative correlation between low household income background and the probability of being employed. Comparison of the 1958 cohort with the 1970 cohort showed that the relative odds of being employed for men from low-income

Young people's changing routes to independence

Table 23 Estimating the effect of childhood poverty on adult employment

	Low income			Poor	
	1958 cohort Age 23 (1981)	1970 cohort Age 26 (1996)		1958 cohort Age 23 (1981)	1970 cohort Age 26 (1996)
Men					
Low income	-0.461** (0.111)	-0.517** (0.145)	Poor	-0.445** (0.155)	-0.853** (0.152)
Model χ^2	17.76**	13.25**	Model χ^2	7.77**	29.18**
Observations	2,495	1,999	Observations	2,495	1,999
Women					
Low income	-0.484** (0.080)	-0.685** (0.104)	Poor	-0.482** (0.118)	-0.877** (0.110)
Model χ^2	37.14**	45.95**	Model χ^2	16.78**	60.84**
Observations	2,738	2,493	Observations	2,738	2,493

Notes: **Statistical significance at the 5 per cent level. Standard errors are shown in parentheses. Models include a constant term. Low income is defined as below-average income and poor as below-half average income.

households had decreased over time. The same was true for men from poor households, suggesting that, in terms of employment, the relative penalty of growing up in low-income households had increased over time. Young men living in poor households at age 16 had a 36 per cent lower odds of being in employment aged 23 in the 1958 cohort, while similar young men in the 1970 cohort had a 57 per cent lower odds of being in employment aged 26 than comparable young men from higher-income households. The lower portion of Table 23 contains the results for women. A similar increase in the penalty of growing up in a low-income household was observed. Young women living in poor households at age 16 had a 38 per cent lower odds of being in employment aged 23 in the 1958 cohort, while similar young women in the 1970 cohort had a 58 per cent lower odds of being in employment aged 26 than comparable young women from higher-income households.

Education has a strong influence on the employment prospects of individuals, and the relationship between low household income and low levels of education was established earlier. To

understand how much of the difference in employment prospects was due to education a separate model was estimated including education as an explanatory variable. There are, of course, a range of factors that affect the employment prospects of individuals and factors that influence household income background. It is not the intention here to identify all of these factors or separate out the different components of disadvantaged backgrounds. The objective is to identify association between childhood poverty and later adult employment outcomes and to assess the role of education.

It is clear from the results contained in Table 24 that higher levels of qualification were associated with higher relative odds of employment at age 23/26. For example, for 1958 cohort men at age 23, having at least an A-level qualification increased the odds of being employed by 20 per cent relative to having no qualifications. Likewise, qualifications above A-level but below degree level were associated with a 43 per cent higher odds of being employed among this cohort. The result for degree-level qualifications was not statistically significant.

From childhood poverty to labour market disadvantage

This was probably due to the small number of the 1958 cohort who gained degree-level qualifications but could also be explained by a proportion of these graduates continuing in education beyond their first degree. The influence of education on the likelihood of being employed appeared to be stronger for women than for men. The results show that, even after controlling for education, household income background continued to have a separate and significant influence on the relative

probability of being employed at age 23/26. Even after controlling for the fact that individuals from low-income households had lower levels of education, they had a lower probability of being employed at age 23/26.

Comparisons between the two cohorts suggest that the decrease over time in the relative odds of being employed for men from low-income households could be explained by differences in education. This may be because the increases in

Table 24 Estimating the effect of childhood poverty and education on adult employment

	Low income		Poor	
	1958 cohort Age 23 (1981)	1970 cohort Age 26 (1996)	1958 cohort Age 23 (1981)	1970 cohort Age 26 (1996)
Men				
Household income				
Low income	-0.431**	-0.419**		
Poor			-0.346**	-0.741**
Highest qualification				
No qualifications	Reference	Reference	Reference	Reference
CSE/other	0.561**	0.530	0.564**	0.464
O-levels	0.835**	0.949**	0.876**	0.891**
A-levels	1.202**	0.991**	1.275**	0.929**
Higher qualifications	1.426**	0.947**	1.506**	0.894**
Degree	-0.325	0.578**	-0.196	0.535
Model χ^2	97.10**	35.78**	87.81**	48.69**
Observations	2,495	1,999	2,495	1,999
Women				
Household income				
Low income	-0.185**	-0.385**		
Poor			-0.177	-0.564**
Highest qualification				
No qualifications	Reference	Reference	Reference	Reference
CSE/other	0.561**	1.312**	0.560**	1.238**
O-levels	1.159**	1.800**	1.175**	1.717**
A-levels	2.167**	2.220**	2.206**	2.159**
Higher qualifications	2.137**	2.255**	2.163**	2.200**
Degree	1.755**	2.260**	1.790**	2.207**
Model χ^2	294.86**	169.81**	292.22**	179.81**
Observations	2,738	2,493	2,738	2,493

Notes: **Statistical significance at the 5 per cent level. Models include a constant term and variables capturing missing values. Low income is defined as below-average income and poor as below-half average income.

educational attainment had not been evenly distributed across individuals, as illustrated in Table 20. However, for men from poor households there remained a decrease in the odds of being in employment between the two cohorts even after accounting for differences in education.

For women, the decrease in the odds of being employed at age 23/26 remained for both thresholds of low household income even after controlling for the level of education.

The relationship between childhood poverty and adult earnings

In the previous section, it was shown that young people from low-income backgrounds are less likely to find employment than young people from more prosperous backgrounds. In this section the earnings of those who found work are contrasted for young people by household income background to test whether or not there exists an earnings penalty associated with childhood poverty.

To obtain an estimate of the penalty associated with a low-income background and how it has changed through time, the mean (net) hourly earnings were estimated for individuals according to household income background (Table 25).

The results in Table 25 show that individuals from low-income households who find work received lower earnings relative to individuals from higher-income households. At age 23 members of the 1958 cohort from low-income households received, on average, 4 per cent lower hourly earnings than their peers from higher-income households. Individuals from the poorest households faced an even higher average earnings penalty of 9 per cent. The earnings penalty associated with a low-income background was roughly equal for men and women. An earnings penalty was also found among individuals from low-income and poor households in the 1970 cohort and there appears to have been an increase in the penalty through time. On average, individuals from low-income households experienced a 16 per cent earnings penalty and individuals from poor households experienced an earnings penalty of 20 per cent. The earnings penalty was higher among women than men in the 1970 cohort. Part of the increase in the observed earnings penalty may be because the 1970 cohort was observed at age 26 but the 1958 cohort at age 23. This means that the 1970 cohort could potentially have gained three additional years of work experience. This is particularly an issue for

Table 25 Mean hourly earnings by household income background

Household income	All		Men		Women	
	Mean	Penalty (%)	Mean	Penalty (%)	Mean	Penalty (%)
1958 cohort						
Higher income	1.88		1.99		1.74	
Low income	1.80	4	1.91	4	1.65	5
Poor	1.71	9	1.80	10	1.59	9
1970 cohort						
Higher income	5.61		5.91		5.33	
Low income	4.73	16	5.07	14	4.44	17
Poor	4.47	20	4.83	18	4.15	22

Notes: Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

From childhood poverty to labour market disadvantage

graduates, whose earnings between the ages of 23 and 26 were likely to increase by more than lower-educated workers. It was shown earlier that individuals from higher-income households were more likely to gain higher-level qualifications and this may partly explain the widening between the earnings of individuals from higher-income backgrounds with individuals from low-income and poor households. However, it is unlikely to explain all of the increase.

To estimate the role education plays in shaping differences in earnings between these three groups,

a model of earnings was estimated that included educational qualifications and literacy and numeracy test scores. The results from this exercise, shown in Table 26, showed the positive influence of higher levels of qualifications on male earnings. Relative to men with no qualifications, men whose highest qualification was equivalent to A-levels earned on average an additional 13 per cent, qualifications higher than A-levels but lower than a degree an additional 20 per cent. It is interesting to note that the returns to a degree had not been realised by age 23, as the earnings premium was

Table 26 Estimating the effect of childhood poverty and education on adult hourly earnings, men

	1958 cohort Age 23 (1981)	1958 cohort Age 23 (1981)	1970 cohort Age 26 (1996)	1970 cohort Age 26 (1996)
Household income, 16 years				
Higher income	Reference	Reference	Reference	Reference
Low income	0.000	Reference	-0.084**	Reference
Poor		-0.061**		-0.063**
Highest qualification				
No qualifications	Reference	Reference	Reference	Reference
CSE/other	0.063**	0.057**	0.051	0.071
O-levels	0.143**	0.138**	0.122**	0.147**
A-levels	0.124**	0.117**	0.160**	0.193**
Higher qualifications	0.179**	0.173**	0.144**	0.174**
Degree or above	0.128**	0.120**	0.252**	0.289**
Literacy test, 10/11 years				
Lowest quartile	Reference	Reference	Reference	Reference
Second quartile	-0.002	-0.000	0.065*	0.065*
Third quartile	0.016	0.015	0.052	0.056
Highest quartile	0.022	0.022	0.064	0.075*
Numeracy test, 10/11 years				
Lowest quartile	Reference	Reference	Reference	Reference
Second quartile	0.013	0.013	0.034	0.033
Third quartile	0.009	0.007	0.026	0.029
Highest quartile	0.013	0.011	0.062	0.064
Adjusted R ²	0.024	0.034	0.091	0.084
Observations	1,834	1,834	1,539	1,539

Notes: **Statistical significance at the 5 per cent level, *10 per cent level. Models include a constant term and variables capturing missing values. Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

roughly equivalent to A-levels. After controlling for highest level of qualification and household income background, literacy and numeracy test scores had no independent effect on male hourly earnings. There appears to be no earnings penalty associated with a low-income background after controlling for differences in educational attainment. However, men from poor households had an additional earnings penalty of 6 per cent.

In the 1970 cohort, a similar relationship between higher levels of qualifications and higher earnings was found. There appears to be an increase in the premium associated with degree-level qualifications compared with no qualifications, but caution must be applied to interpreting this coefficient in this way. It was shown that a much smaller proportion of the 1970 cohort left school with no qualifications than in the 1958 cohort and the heterogeneity of this group in terms of skill and ability is likely to have diminished. It is also worth noting that the 1970 cohort was observed at age 26 and consequently had three additional years of potential work experience. Perhaps more interesting is the reduction in the return to qualifications above A-level but below degree level. Numeracy test scores appeared to have no independent effect on earnings although literacy test scores appeared to have some effect: men scoring above the lowest quartile in their literacy test at age 10 received around 7 per cent higher earnings.

The earnings penalty associated with household income background, after controlling for

differences in educational attainment and literacy and numeracy for men from low-income households was 9 per cent and 6 per cent for men from poor households.

The earnings penalty associated with household income background for women (Table 27) born in 1958 could be explained in terms of differences in educational attainment (highest level of qualification, literacy and numeracy test scores). It is interesting to note that for women numeracy test scores had an independent effect on earnings. Compared with women who scored in the bottom quartile of the numeracy test, women who scored in the third quartile received an earnings premium of 9 per cent and women who scored in the top quartile received an additional earnings premium of 13 per cent.

The earnings premium associated with a degree compared with no qualifications appeared to have increased for women in the 1970 cohort, but once again caution must be applied in interpreting this as an increase in the 'rate of return' to a degree. In fact, the earnings premium of a degree relative to A-level qualifications had not increased. Numeracy test scores continued to have an independent influence on women's earnings. A numeracy test score above the median was associated with a 7 per cent earnings premium. Literacy test scores in the top quartile were also associated with an earnings premium of 7 per cent. Even after controlling for educational attainment women from low-income and poor backgrounds faced an earnings penalty of 8 per cent.

Table 27 Estimating the effect of childhood poverty and education on adult hourly earnings, women

	1958 cohort Age 23 (1981)	1958 cohort Age 23 (1981)	1970 cohort Age 26 (1996)	1970 cohort Age 26 (1996)
Household income, 16 years				
Higher income	Reference	Reference	Reference	Reference
Low income	-0.013	Reference	-0.074**	Reference
Poor		-0.029		-0.072**
Highest qualification				
No qualifications	Reference	Reference	Reference	Reference
CSE/other	0.061*	0.059*	-0.041	0.048
O-levels	0.089**	0.089**	0.089**	0.182**
A-levels	0.167**	0.168**	0.225**	0.323**
Higher qualifications	0.229**	0.228**	0.182**	0.284**
Degree or above	0.281**	0.281**	0.311**	0.417**
Literacy test, 10/11 years				
Lowest quartile	Reference	Reference	Reference	Reference
Second quartile	-0.028	-0.026	0.026	0.023
Third quartile	-0.018	-0.017	0.035	0.032
Highest quartile	-0.017	-0.015	0.068**	0.066*
Numeracy test, 10/11 years				
Lowest quartile	Reference	Reference	Reference	Reference
Second quartile	0.040	0.040	0.026	0.024
Third quartile	0.085**	0.083**	0.067**	0.071**
Highest quartile	0.124**	0.123**	0.061*	0.061*
Adjusted R ²	0.084	0.085	0.180	0.184
Observations	1,476	1,476	1,749	1,749

Notes: **Statistical significance at the 5 per cent level, * 10 per cent level. Models include a constant term and variables capturing missing values. Higher income is defined as average income or above; low income as below-average income; poor as below-half average income.

Summary

- This study has shown that above-average household income at age 16 is associated with higher levels of educational attainment, greater levels of employment and higher levels of subsequent pay for young adults compared with

those from lower-income households. Increases in earnings inequality suggest that more households at the bottom end of the earnings distribution now have relatively fewer means at their disposal than previously, and this may well be behind the dramatic increases in child poverty in Britain since the end of the 1960s.

- The findings presented here suggest that there is a substantial labour market 'penalty' associated with childhood poverty. Young people in low-income households at age 16 are much more likely to be unemployed, or out of the labour force in their early twenties, than young people from higher-income households.
- Young people from poor backgrounds who are in employment in their early twenties are found disproportionately in the lower end of the earnings distribution. Children who grow up in poverty are more likely to be employed in low-paid jobs than individuals from higher-income backgrounds.
- The association of parents' income with the level of qualifications gained by their children is evident. Individuals from households with above-average income are more than three times as likely to have gained a degree than individuals from poor households (below-half average income).
- Although it was unusual for any of the 1970 cohort to have no formal qualifications by the age of 26, this was the case for 13 per cent of individuals from poor households (below-half average income) compared with 2 per cent of individuals from households with at least average income.
- Although differences in the level of education 'explain' some of the observed labour market disadvantage associated with low income in childhood, there remains a significant negative influence associated with growing up in poverty.
- As well as identifying the labour market penalty associated with growing up in poverty, a comparison of the experience of these two cohorts has revealed an increase in this penalty

over time. Young adults from low-income backgrounds in the 1970 cohort face a greater relative disadvantage in the labour market than those born in 1958. This disadvantage is observed in terms of the relative chance of being in employment and the relative earnings of the employed, even though the labour market was more favourable for the younger cohort.

The policy implications are clear. The rise in the proportion of children growing up in poverty is alarming, not just because of the disadvantages these children inevitably suffer in their childhood but because they carry this disadvantage into their adult working lives. One way that policy can be directed at this problem is to ensure that all children receive good quality education and that any barriers to academic success faced by children living in poverty are identified and eroded. However, the analysis conducted here suggests that education is not enough. The second message is that the poverty of the parents must be directly addressed by ensuring that periods of low income do not lead to long-term poverty traps. New initiatives such as the Working Families' Tax Credit must be accompanied by further labour market policies which help recipients move from 'poverty in work' to full economic independence.

Previous studies have highlighted the link between poverty and lone parenthood. The findings in this chapter suggest that welfare to work programmes targeted at lone parents, such as the New Deal for Lone Parents, aimed at helping lone parents move from means-tested benefits to employment, can have significant effects, not only in terms of improving their current circumstance but also on the long-term prospects of their children. If these issues are not addressed then the cycle of deprivation will continue.

6 Youth transitions and policy issues

Demographics, economic restructuring and education

Over the last 30 years the youth labour market in Britain has changed almost beyond recognition. Compared with the situation in the early 1980s, when most young people left school at 16 with many gaining vocational training and experience in skilled craft or secretarial/ clerical occupations, the majority now stay on in full-time education past the minimum school leaving age. Well over a third of 18-year-olds now gain university entrance qualifications and move on into higher education. Demographic changes have also been pronounced, with the population of 16–24-year-olds falling rapidly over this period due to the decline in the birth rate in the 1970s.

The combination of these changes led many commentators to predict that employers would find themselves left in a situation of labour shortage, bidding against each other to recruit young people into their workforces. This potential predicament, termed the demographic time-bomb, was widely publicised in an attempt to raise employer awareness of the need to recruit from among different groups and/or to raise their labour retention rates. The outcome, though, was not as predicted. Other forces, notably the structural shift in employment away from manual craft and office-based clerical jobs, i.e. jobs where skills were acquired on the job, towards technical and professional work has radically shifted employer recruitment patterns away from unqualified young people. The relative earnings of young people fell sharply and, despite the longest sustained period of economic growth in the last 30 years and a massive decline in the numbers of young people available for work, a 'core' of unemployment among young people remains stubbornly present.

Polarisation of employment prospects

These signs indicate that a process of 'polarisation' has been developing within the youth labour market. Those who can benefit from a higher education will join the labour market in their early twenties and are likely to prosper. Those who fail to benefit from the expansion of education are likely to find themselves increasingly marginalised. The 'middle road' for the transition to working life, leaving school at age 16 or 17 and via a lengthy period of work-based training, no longer appears a viable alternative route into a 'beneficial job'.

It is not just in their economic lives that young people do things differently nowadays. Partnership formation patterns are also changing. Marriage has become unfashionable and cohabitation before marriage, if marriage occurs at all, is becoming the norm. Family formation plans are similarly delayed for many, and divorce/separation rates have increased. Such changes are driven in part by the extension of the transition in the economic sphere. As young people have to delay their entry into full-time adult employment, while they acquire qualifications and gain work experience that will enhance their employability in the longer term, the commitments involved in marriage and family formation are inevitably postponed. While this experience is becoming the norm for most young people, the minority who still pursue the traditional routes of leaving school at 16 to seek jobs similarly accelerate their transitions in the domestic sphere. This is particularly the case for young women who leave education at 16, without qualifications. Having relatively more limited access to the white-collar jobs that they typically seek, many opt for the alternative career of motherhood. For young men who leave school at 16 without qualifications, their experience on the

margins of the labour market often places them in a kind of limbo between adolescence and adulthood. They stay on at home, supported by their families.

Comparing birth cohorts: transitions to adulthood

This study attempts to benchmark these changes. We were able to do this because we had access to a unique resource in Britain to investigate the transitions to adulthood. The two birth cohorts that provided the data for this study present an extremely rich and productive source of information about youth transitions. The older cohort, born in 1958, moved out of education and into work and family life from 1974 onwards. The younger cohort, born in 1970, started this process 12 years later, in 1986. The former cohort entered a world of work where jobs at 16, with or without qualifications, were the norm for two-thirds of the population. Twelve years later in 1986, when those in the younger cohort were in a position to leave school, the youth labour market in many parts of the country had collapsed. Instead of work, young people faced a mixture of youth training schemes, casual jobs or unemployment.

The empirical results reported in Chapter 2 of this study display these cohort differences in graphic form. Using the period of time when young people pass from age 16 to 26 to chart the main transitions in their lives, we can see that, for the 1958 cohort, the route to employment was reasonably well secured for those who embarked on apprenticeships at age 16 or entered employment. Nine out of ten young men who had entered apprenticeship or employment directly after leaving school were in full-time employment at age 26, the same proportion as of those who had continued with their education post-16. In the 1970 cohort, the relatively small proportion who got a job at age 17 were at least as likely as the 1958 cohort to be employed at age 26; but of those that had entered youth training, or stayed on in

education, the proportions holding full-time jobs at age 26 were smaller (for men). For women, the difference was much larger between these categories and between cohorts. The women that were most likely to be in full-time employment were those who had continued with their education, while those who had entered jobs or training were less likely to be employed: in the case of the 1958 cohort, fewer than half.

These results reinforce the view that the route to full-time employment has become more precarious for the 1970 cohort. The relatively secure niches available to young people in jobs or apprenticeships, soon after leaving school for the 1958 cohort in 1974, have given way to a variety of low-prestige training experiences and unemployment, leading to a less assured position in the adult labour market. Even if many of the 1958 cohort members lost their jobs through the recession of the early 1980s, they had at least acquired the basic work experience on which their future employability would be assured.

The transition to independent living reinforced the indications of a prolonged transition for some and an accelerated transition for others. Those who had entered partnerships early (by age 19) tended to be in partnerships later. Though a higher proportion of these early partnered individuals were single parents, by age 26 the proportion overall who had achieved parenthood by this age was remarkably small. One-third of the 1958 cohort men and one-fifth for the 1970 cohort men were parents. For women the comparable proportions were not very much higher: half for the 1958 cohort, and one-third for the 1970 cohort.

For those in the 1958 and 1970 cohorts who had not achieved partnership early, the proportions entering this status and that of parenthood by age 26 were even smaller, especially in the 1970 cohort. For example, only one-sixth of these men in the 1970 cohort were parents and only one-quarter of the women.

Notably, the trends revealed in the 1970 cohort, of postponing the commitments involved in marriage and family formation, have gone on accelerating since. The age of having a first child is now in the late twenties for women and even later for men. It also represents a remarkable increase from a mean age of marriage at under 25, which prevailed until 20 years ago. Clearly there are great attractions of being single, particularly when a student or in affluent working life. A problem may arise when the extension of single life postpones such a transition indefinitely. Young women particularly face this dilemma under the twin pressures of career development and motherhood.

In Chapter 3, the attempt was made to unravel some of the factors in earlier life that appear to be implicated in the transition statuses achieved by age 26. We were interested particularly in the extent to which educational level determines transition outcomes and the extent to which its effects are moderated by other variables. Notably, early family background factors, including social class, maintained a small independent effect on adult outcomes, as did evidence of childhood poverty. In relation to occupational outcomes, i.e. having a full-time job at age 26, however, educational attainment at the end of primary school and highest qualification were dominant. For the independence statuses, at age 26 the other economic and social factors appeared to play a bigger part. Notably, in relation to early marriage and childbearing the experience of the cohort members' own mothers also appeared to have a significant and independent role. There was intergenerational continuity in the tendency to have children early regardless of the educational level achieved.

Comparing earnings and psychological health

Chapter 4 examined whether or not the varying experiences and transitions made by these two birth cohorts are reflected in terms of their economic and psychological well-being. Using

earnings as a measure of economic well-being, we show that there is much continuity between the cohorts in terms of the factors that contribute to higher earnings. However, two sets of influences stand out as different. First, there is some evidence that, in the later cohort, qualifications do not yield quite the same earnings premium as they did for the group born 12 years earlier. Second, the experience of unemployment generally has a negative effect on earnings. While this effect has been well established in other studies, the finding here shows that the wider experience of unemployment among the 1970 birth cohort has significantly affected the distribution of their earnings at age 26. Those who have experienced difficulties in making the transition from school to work face a further penalty later in their lives in terms of lower earnings. The wider extent of unemployment in the early work histories of the younger cohort means that this has now had an effect on the earnings of a significant number of young people.

In terms of psychological well-being, we made use of the malaise inventory, a simple yet well tried and tested method of determining levels of self-esteem and depression among survey respondents. The measurements made at ages 23 for the 1958 birth cohort and 26 for the 1970 cohort show a very significant indication of increased levels of depression over the 12-year period. Statistical techniques were used to unravel these changes. These show that there are again two main sets of factors at work here. First, there is a clear association between the experience of unemployment and indications of depression. Causality is unclear, but it is reasonable to postulate that the link between unemployment and reduced earnings is indicative of poorer employment circumstances than desired, and that this in turn leads to indications of depression. Second, the general rise in qualifications also appears to be implicated in this increase in malaise. In the 1958 cohort, high-level qualifications, such as a degree,

acted as a powerful deterrent to expressions of poor psychological health. In the 1970 cohort, with its generally higher levels of qualifications, their deterring influence was weakened. Possibly this indicates that, while qualifications are undoubtedly beneficial in terms of their ability to provide access to better jobs, the expectations they create among young people nowadays are not fully realised.

The penalty of childhood poverty

Chapter 5 turns the spotlight on to the experiences of young people growing up in low-income households. By identifying and classifying the household income of the birth cohort members at the time each was 16 years old, it was possible to explore and compare the subsequent educational and labour market outcomes across the two cohorts. This analysis revealed important inequalities in educational achievement by household income background. Individuals from poor households (below-half average income) left school earlier than individuals from higher-income households and by their early to mid-twenties held significantly lower levels of educational qualifications. This relationship persisted over time even though educational attainment increased between the two cohorts. In both cohorts, individuals from high-income households (above average income) were at least three times as likely to gain a degree level qualification than individuals from poor households (below-half average income). The big change between the two cohorts was the reduction in the proportion of young people leaving school without any qualifications, from 17 per cent in the 1958 cohort to 5 per cent in the 1970 cohort. However, while only 2 per cent of young people from high-income households (above-average income) left school with no qualifications, around one in eight (12 per cent) young people from poor households (below-half average income) did so.

The trajectories from school to work for young people from different household income backgrounds highlighted the greater difficulties faced by young people from low-income households. In particular the demise of alternative routes into the labour market via high-quality youth training programmes has been very harmful for young people from low-income households leaving school at age 16 with low levels of qualifications. In the 1958 cohort similar proportions of young people from high- and low-income households entered work via training programmes, in the 1970 cohort training was largely concentrated among young people from poorer backgrounds and was usually short-lived. Young people from low-income backgrounds in the 1970 cohort were considerably more likely to be unemployed between the ages of 17 and 21 than either their peers from higher-income households or young people from low-income backgrounds in the 1958 cohort.

In terms of labour market outcomes, a substantial labour market 'penalty' associated with childhood poverty emerged. Young people from low-income households at age 16 were much more likely to be unemployed or out of the labour force in their early twenties than young people from higher-income households, a difference that cannot be explained by differences in educational attainment. This 'employment penalty' was found to increase over time; there was a greater relationship between childhood poverty and adult non-employment in the 1970 cohort than in the 1958 cohort. For those who were in work, individuals from low-income households received lower earnings than individuals from higher-income households, the 'earnings penalty'. With the exception of men from poor households, differences in earnings in the 1958 cohort could be accounted for in terms of differences in highest level of educational attainment and results from literacy and numeracy tests taken at age 10/11. In the 1970 cohort the earnings penalty cannot be

explained by differences in education. The earnings penalty was found to increase between the two cohorts and could not be explained by differences in education by household income background.

Policy conclusions

These then are our main findings. For some they will come as no surprise. Those whose day-to-day work brings them into contact with the disadvantaged youth of today know full well how difficult it is to achieve the integration or inclusion of people who feel let down or have been alienated by their experiences of education and work. Part of the problem stems from earlier childhood experiences. Families with the least resources have little to draw upon to nurture their children, and little to give by way of exemplary experiences. However, part must also reflect the growing competitiveness within the labour market, where additional qualifications are seen by many as one of the best ways to keep ahead. Some young people are now pushed towards a learning process that was originally created to provide specialist knowledge for entry into specialised university courses. Unsurprisingly, a significant core has rejected this path and is significantly disadvantaged in a highly competitive labour market.

Social and economic inclusion are not simply new buzzwords, they point to a set of complex and interrelated problems for which there is no short-term solution. There is no 'new deal' that can simply cure this rise in inequality in our social and economic lives. What young people lack on the downward path towards social exclusion is the kind of support taken for granted in the more affluent and educated family.

Resources come in a variety of forms of which, as our analysis shows, financial support is critical. The repetition of financial disadvantage across the generations, and its impact on the foundations of educational and occupational achievement, as

shown in Chapter 5, cannot be left to the vagaries of markets. Financial support for families and young people directly, especially those who no longer have their families to turn to, would appear vital. The withdrawal of benefits in 1988, and the forcing of young people to rely on their families for help that in many cases simply is not there, seems likely to have done as much as anything to drive the increased disaffection displayed by many young people and its consequence for some: adult social exclusion.

But financial support is not the only way in which young people need assistance. The complexity of modern life choices demands assistance from experienced adults in ensuring that the best choices are made. Failure to make the right choices can bring psychological distress. Again, parents are usually the first adults young people turn to for advice about jobs and emotional support (Banks *et al.*, 1992). When parents are absent, ineffective or simply lack the information young people need, they rely on the state to fill the gap. The new ConneXions Service as set out in the Social Exclusion Unit's report *Bridging the Gap* (Social Exclusion Unit, 1999a) appears to be a step in the right direction. However, its targeting, within a universal service, of 'those young people most in need of support' risks a degree of stigmatisation, which has to be avoided (Britton *et al.*, 2002). In addition, young people move in and out of risk situations, which raises problems for highly specific targeting. In the USA, such a service would be described as 'counselling' and in the broadest sense that is clearly what is needed here. Employment choices are just one of the sets of choices that young people have to make, each of which impacts upon the other. Help across the domains of family life, employment and leisure is needed to support young people's transitions and to help them resist the negative effects of those that are failing to work out satisfactorily.

Another area is more directly related to young people's experience in the labour market and in the

market place. In Britain there is a set of cultural assumptions based on the routes young people took into the labour market in the past. The traditional (working class) route to manual work involved direct entry from school into a job, an elite got specialised training in the form of an apprenticeship and the super-elite continued with education and went on to university and the professions. The key transition period was at the age of 16–19. For today's young people the opportunities and their outcomes are more fluid. Possibly one thing we can learn from continental models and experience is that young people need an extended period of support in the first steps towards employment. Employers need to be recruited to the task of vocational training for all

young people entering first jobs. New policies, like New Deal, partly recognise this through the 'gateway' and what follows, but need to go much further in an educational direction. The critical period is between the ages of 15–25, when laying the foundations for successful adaptation to the demands of adulthood is achieved. Certainly, youth transitions cannot just be left to happen, they need backup over the whole period.

Finally, we conclude that radical shifts in resources in the three areas we have considered represent the way forward. Hopefully this process has now started, as the government of the day places a greater emphasis on a more inclusive approach for those aged over 14. But clearly there is still a long way to go.

Notes

Chapter 1

- 1 While a considerable proportion of full-time participants in education find work or are seeking employment, the jobs they take are typically part-time.
- 2 Similar information for 16–17-year-olds reflects that shown for 18–24-year-olds.
- 3 This somewhat surprising finding was checked against other age groups, for men and women separately, and studied over a longer time period (1977–2000). This further investigation revealed that youth unemployment (16–19-year-olds) is much less responsive to the economic cycle than is unemployment in other age groups, and this is true for both young men and young women.

Chapter 2

- 1 Forty-seven per cent of women graduates in the 1958 cohort had not had a child by age 37 (Bynner and Egerton, 2001).

Chapter 3

- 1 This finding is in line with previous research by Kiernan (1995) using the 1958 cohort. Here we show that the intergenerational effect she demonstrated extends to the 1970 cohort.

Chapter 4

- 1 Developed originally from the Cornell Medical Index Health Questionnaire, the malaise inventory has been validated in a number of studies, including Hirst (1982) and Rodgers *et al.* (1999).

- 2 Logarithms are used for technical reasons. As a result, the coefficients reported in Appendix C, Tables C.1 and C.2, can be interpreted as the percentage increase or decrease in the log of earnings associated with a particular characteristic relative to the reference category.
- 3 A cumulative score of eight positive responses or more is generally taken as indicative of a tendency towards non-clinical depression (Hirst, 1982).

Chapter 5

- 1 Atkinson's study was based on a sample of low-income families living in York in 1950. Dearden *et al.* (1997) used the 1958 cohort, which provided 1,565 father/son pairs and 747 father/daughter pairs.
- 2 In Britain, children from low-income households receiving Income Support qualify for free school meals.
- 3 Many previous studies have used proxy indicators for low income such as reported financial hardship, receipt of free school meals and through the use of social classifications. All of these measures, including household income, suffer from some measurement error. The advantage of using household income is that different degrees of financial hardship can be considered.
- 4 There is a degree of approximation in the 1958 cohort because only grouped information is available for age of household members.
- 5 Qualifications different from those shown are converted into equivalent levels to aid comparison.

- 6 In 1988, a single general certificate of secondary education (GCSE) replaced the general certificate of education ordinary level (O level) and the certificate of secondary education (CSE). This change occurred after both the 1958 and 1970 birth cohorts had left school.
- 7 Previous studies (Paull, 1997; Dex and McCulloch, 1998; Elias, 1997) have shown that

individuals tend to under-report events that took place a long time ago and in particular under-report spells of unemployment.

Appendix A

- 1 Reports of the most recent surveys are given in Ferri (1993) and Bynner *et al.* (1997).

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Appendix A

Data sources and methodology

Data sources

The study compares and contrasts information from the two British birth cohort studies: the 1958 National Child Development Study (NCDS) and the 1970 British Cohort Study (BCS70). We refer to these throughout this report as the 1958 cohort and the 1970 cohort, respectively. Each study has involved following, into adulthood, large samples of up to 16,000 people born in single weeks in 1958 and 1970, respectively. In the case of the 1958 cohort, surveys of the whole cohort were conducted at birth and at ages 7, 11, 16, 23, 33 and 42. In the case of the 1970 cohort, data were collected at birth, and at ages 5, 10, 16, 26 and, most recently, 30. For the purpose of this enquiry we make use of data available in the 1958 cohort on the 11,400 adults participating at age 33, and in the 1970 cohort on approximately 9,000 adults participating at age 26.¹

In the early stages, parents provided information on these children and the children were tested and medically examined. At the age of 16, cohort members in both studies supplied information about their lives by filling in a questionnaire. At ages 23 and 33 for the 1958 cohort, respondents took part in comprehensive interviews, covering the main areas of their lives including employment, education and training, housing, partnerships, family formation, health and social and political participation. In the 1970 cohort a postal questionnaire was used at age 26 that mirrored, as much as possible, the coverage of the 1958 cohort interview survey but did not include detailed labour market and family event histories, which were a central feature of the surveys at ages 23 and 33 for the 1958 cohort. The most recent surveys, for which data became available in 2001, were carried out on both cohorts in the year 2000. Further research utilising the more recent data and extending the findings of this study, is forthcoming (Elias, *et al.*, forthcoming).

There have been numerous surveys based upon subsamples of the cohort studies, including studies based on 10 per cent samples directed at adult basic skills assessment at age 37 in the 1958 cohort and age 21 in the 1970 cohort. This latter survey included labour market and family event histories back to age 16 for 1,640 of the 1970 cohort members and is used for some of the analysis on transitions reported here.

It is inevitable that, over the long period through which individuals have been tracked, contact has been lost with some of them. However, the evidence suggests that the current participating sample approaching 12,000 in both studies is representative of the original birth cohort with respect to key demographic characteristics such as social class, geographical location and gender. Insofar as there are biases, they are directed towards under-representation of the lowest educational achievers, especially boys and ethnic minority young people. Full details are provided in Ferri (1993) and Bynner *et al.* (1997).

Most of the earlier research on transitions to adulthood has been carried out on the NCDS. The study described in this report is one of the first to analyse life experiences against the same markers in both studies. It is also unique in matching the transition period precisely across the two studies, leading up to labour market and family statuses achieved by age 26 in both of them.

Methodology

Comparing and contrasting information from these two large and rich sources is simple in concept but quite difficult to achieve with accuracy. Our first task was to construct a common data file containing variables that described each cohort member (1958 and 1970) in a consistent manner. Given that the 1970 cohort was observed at age 26, we had to recreate the situation at age 26 from work history

information provided at age 33 from 1958 cohort members. Most of the analyses described used in Chapters 2 and 3 make use of this common data set.

In Chapter 4 the comparison is made between earnings at age 23 from the 1958 cohort (1981 survey) and at age 26 from the 1970 cohort (1996 survey). This is because earnings data (and information from the test of psychological well-being also described in this chapter) were only collected at the time of survey. No retrospective accounts of earnings (or well-being) are available given the unfeasibility of collecting such information by recall techniques. To assist with this comparison, the chapter uses earnings information from the Labour Force Survey to determine the impact of comparison of earnings made at age 23 with those at age 26.

Chapter 4 draws upon regression results, which are shown in detail in Appendix C. The methodology consisted first of estimating ordinary least squares (OLS) regressions for men and women separately. We distinguished between men and women because there are significant gender differences in labour market behaviour. In particular, although we can consider nearly all men as likely to participate in the labour market, the participation decision of women is a more complex phenomenon. This selection (into employment) effect may bias the OLS results for women because the characteristics of the women who decide to take part in employment may be different from those who decide to stay out of the labour force. To address this problem we used the method of correcting for selection popularised by Heckman. The method consists of modelling the decision to participate, taking into account the possibility that this decision may be dependent on unobserved variables captured by the error term of the wage equation. In order to estimate such a model we needed a variable that determines the employment participation decision, but not earnings, for women

in work. For this purpose, we used an indicator of whether or not the mother of the female cohort member worked when the cohort member was 16 years old. Intuitively, it can be argued that, other things being equal, women who have been used to seeing their mother going to work are more likely to expect to participate in the labour market than those who had a mother who was a housewife. We found that the employment of the mother is not statistically significant in the wage equation but that it is highly significant in the participation equation: having a working mother at 16 years old is found to increase the probability of being in employment at 23 (1958 cohort) or 26 (1970 cohort). We considered this variable suitable for these estimations and we proceeded to use the Heckman selection model for both cohorts. The results are reported in Appendix C, Table C.1 for men and Table C.2 for women, for the OLS and Heckman regressions. The Heckman correction did not appear to be necessary for the 1958 cohort sample, while it was useful in the 1970 cohort sample. The results for the 1958 cohort appeared largely unaffected by the correction but this was not the case for the 1970 cohort. For the latter, the Heckman correction showed that the returns to having a father staying on at school after 18 were overestimated. In contrast, returns to educational qualification and to living with a partner were found to be downward biased in the OLS regressions. The review of the results presented in Figures 18 and 19 in Chapter 4 use the Heckman corrected coefficients for women.

Chapter 5 makes use of much of the earlier data from cohort members to construct estimates of the household income at the time the cohort member was 16 years old. This chapter also makes use of the 10 per cent sample of the 1970 cohort undertaken at age 21 to develop a more complete picture of the transitions made between these cohort study members between the ages of 16 and 21.

Appendix B

Logistic regression results from Chapter 3

Table B.1 Full-time employment at age 26, odds ratios

Predictor	Young men		Young women	
	1958 cohort	1970 cohort	1958 cohort	1970 cohort
Young mother (not = 1)*				
Yes, 20 or under	0.87	0.93	1.20	1.14
Father's social class (I–III non-manual = 1)*				
IIIM–V	1.14	0.86	1.14	0.99
Unemployed	0.25	0.92	0.91	0.46
Retired/no male	2.19	0.74	0.99	1.45
Father's age on leaving school (<16 = 1)*				
16–17	1.13	1.10	1.36	1.11
18 or after	0.73	0.69	0.87	0.83
Mother's age on leaving school (<16 = 1)*				
16–17	0.92	1.09	0.97	0.85
18 or after	0.96	1.03	1.18	0.97
Receipt of free school meal (no = 1)*				
Yes	0.58	0.70	0.76	0.91
Housing tenure in CH (owned = 1)*				
Rented	0.97	0.94	1.06	0.79
Person/room in CH (<=1.5 = 1)*				
Over 1.5	0.83	0.90	1.08	1.10
Quartile maths scores (0–25% = 1)*				
25–50%	1.27	1.21	0.95	1.07
50–75%	2.03	1.21	1.01	1.23
75–100%	1.39	1.83	1.08	1.50
Quartile reading scores (0–25% = 1)*				
25–50%	1.02	1.00	1.09	1.14
50–75%	0.98	1.00	1.08	1.00
75–100%	0.87	0.80	1.07	0.86
Age left education (<16 = 1)*				
16–17	1.25	1.73	0.73	2.18
18 or over	1.19	0.83	0.89	1.53
Qualification (no = 1)*				
CSE 2–5/NVQ1	1.46	3.08	1.00	2.19
O-level/NVQ2	2.14	3.93	1.44	2.97
A-level/NVQ3	1.90	6.10	1.43	3.97
Higher qualification/NVQ4	3.45	5.64	1.73	4.17
Higher qualification/NVQ5, 6	2.85	4.61	1.25	2.92
Has own child (no = 1)*				
Yes	0.72	0.72	0.04	0.04
In partnership (no = 1)*				
Yes	1.56	2.69	0.64	1.38

Notes: Number of cases included in the analysis: 1958 cohort, 5,182; 1970 cohort, 4,050. Statistically significant odds ratios ($P < 0.05$) are in bold. *Reference category; CH, cohort member household.

Young people's changing routes to independence

Table B.2 Has own child at age 26, odds ratios

Predictor	Young men		Young women	
	1958 cohort	1970 cohort	1958 cohort	1970 cohort
Young mother (not = 1)*				
Yes, 20 or under	1.26	1.36	1.88	1.46
Father's social class (I-III non-manual = 1)*				
IIIM-V	1.19	1.12	1.36	1.02
Unemployed	2.80	1.42	1.64	0.70
Retired/no male	1.91	1.43	0.82	1.39
Father's age on leaving school (<16 = 1)*				
16-17	0.86	0.78	1.05	0.98
18 or after	0.65	0.68	0.61	0.69
Mother's age on leaving school (<16 = 1)*				
16-17	0.85	0.87	0.72	0.77
18 or after	0.69	0.63	0.66	0.96
Receipt of free school meal (no = 1)*				
Yes	1.33	1.36	1.27	1.37
Housing tenure in CH (owned = 1)*				
Rented	1.21	1.14	1.09	1.18
Person/room in CH(<=1.5 = 1)*				
Over 1.5	1.27	1.21	1.10	1.18
Quartile maths scores (0-25% = 1)*				
25-50%	1.25	1.08	0.98	0.98
50-75%	1.15	1.13	0.96	1.25
75-100%	1.13	1.37	1.05	1.23
Quartile reading scores (0-25% = 1)*				
25-50%	0.96	1.09	0.97	1.07
50-75%	0.88	0.80	0.95	0.87
75-100%	0.74	0.76	0.88	0.70
Age left education (<16 = 1)*				
16-17	0.90	0.50	0.48	0.70
18 or over	0.40	0.31	0.33	0.34
Qualification (no = 1)*				
CSE 2-5/NVQ1	0.86	0.77	0.85	0.87
O-level/NVQ2	0.76	0.58	0.68	0.83
A-level/NVQ3	0.56	0.37	0.38	0.65
Higher qualification/NVQ4	0.60	0.29	0.52	0.61
Higher qualification/NVQ5, 6	0.31	0.13	0.14	0.14
Full-time employment (no = 1)*				
Yes	0.89	1.09	0.03	0.05

Notes: Number of cases included in the analysis: 1958 cohort, 5,387; 1970 cohort, 3,776. Statistically significant odds ratios ($P < 0.05$) are in bold. *Reference category; CH, cohort member household.

Table B.3 No partner, no child and living with parents at age 26, odds ratios

Predictor	Young men		Young women	
	1958 cohort	1970 cohort	1958 cohort	1970 cohort
Young mother (not = 1)*				
Yes, 20 or under	0.58	0.66	0.69	0.69
Father's social class (I-III non-manual = 1)*				
IIIM-V	0.96	1.15	0.93	1.15
Unemployed	0.24	1.04	0.03	0.50
Retired/no male	0.68	1.38	0.69	0.57
Father's age on leaving school (<16 = 1)*				
16-17	0.99	1.21	0.83	0.93
18 or after	0.84	0.77	0.96	0.91
Mother's age on leaving school (<16 = 1)*				
16-17	0.96	1.05	1.07	1.04
18 or after	1.08	0.82	0.59	0.97
Receipt of free school meal (no = 1)*				
Yes	0.97	0.94	1.22	0.67
Housing tenure in CH (owned = 1)*				
Rented	0.83	0.92	0.84	1.02
Person/room in CH (<=1.5 = 1)*				
Over 1.5	0.98	1.07	1.00	1.10
Quartile maths scores (0-25% = 1)*				
25-50%	0.81	0.74	0.90	0.88
50-75%	0.75	0.77	0.81	0.70
75-100%	0.82	0.64	0.64	0.59
Quartile reading scores (0-25% = 1)*				
25-50%	0.91	0.88	0.90	0.74
50-75%	0.99	1.05	0.96	0.83
75-100%	0.85	0.90	0.82	0.74
Age left education (<16 = 1)*				
16-17	1.18	2.76	1.28	3.15
18 or over	1.72	3.23	1.69	4.31
Qualification (no = 1)*				
CSE 2-5/NVQ1	0.84	1.61	0.56	0.93
O-level/NVQ2	0.88	1.62	0.69	0.89
A-level/NVQ3	0.71	1.88	0.59	0.95
Higher qualification/NVQ4	0.77	1.86	0.74	0.81
Higher qualification/NVQ5, 6	0.37	1.37	0.40	0.79
Full-time employment at 26 (no = 1)*				
Yes	0.72	0.55	8.15	3.19

Notes: Number of cases included in the analysis: 1958 cohort, 4,735; 1970 cohort, 3,231. Statistically significant odds ratios ($P < 0.05$) are in bold. *Reference category; CM, cohort member; CH, cohort member household.

Appendix C

Earnings regression results from Chapter 4

Table C.1 Factors associated with men's hourly earnings: a comparison of 23-year-olds in 1981 with 26-year-olds in 1996

Factor	1958 cohort (23 years in 1981)			1970 cohort (26 years in 1996)		
	Coefficient	T-ratio	Mean	Coefficient	T-ratio	Mean
Mother aged 20 or under	0.021	1.19	0.09	0.025	1.14	0.12
Age father left school						
16–17	–0.001	–0.04	0.10	0.046	2.56	0.22
After 18	–0.038	–1.53	0.05	0.094	4.28	0.16
Missing	0.026	0.84	0.26	0.040	1.02	0.03
Parental housing when respondent was 16						
Tenants	0.017	1.35	0.37	–0.089	–2.86	0.06
Missing	–0.010	–0.32	0.24	0.018	1.13	0.61
Math's tests score at 11/10						
25–50%	0.021	1.12	0.18	0.018	0.68	0.16
50–75%	0.046	2.42	0.19	0.020	0.80	0.21
75–100%	0.029	1.44	0.19	0.069	2.66	0.29
Missing	0.030	1.75	0.31	0.042	1.63	0.20
Qualification by 23/26						
Degree	0.211	7.84	0.09	0.292	6.84	0.22
Highest vocational	0.201	9.52	0.09	0.184	3.64	0.04
A-levels/middle vocational	0.182	8.46	0.23	0.217	4.88	0.10
O-levels/lower vocational	0.137	7.73	0.30	0.154	3.96	0.37
Other	0.053	2.76	0.14	0.074	1.85	0.17
Missing				0.063	1.32	0.05
Number of jobs (including current job)						
Two	0.002	0.15	0.25	0.011	0.43	0.17
Three	0.015	0.95	0.17	0.068	2.62	0.17
Four	0.018	0.95	0.11	0.027	0.98	0.14
Five or more	–0.002	–0.11	0.15	0.018	0.74	0.38
Length of longest unemployment spell						
1–3 months	–0.014	–1.03	0.21	–0.039	–2.11	0.27
4–6 months	–0.061	–3.18	0.08	–0.069	–2.89	0.12
7 or more months	–0.081	–4.04	0.08	–0.166	–7.30	0.15
Missing				–0.006	–0.10	0.02
Respondent spent time out of labour force	–0.001	–0.05	0.27	–0.002	–0.08	0.14
Length of current job						
2 years or more	0.043	3.35	0.67	0.024	1.42	0.69
Missing	–0.216	–0.92	0.00	–0.053	–0.63	0.01
Respondent's hours of work						
Part-time	0.324	7.27	0.01	–0.016	–0.31	0.02
Missing				–0.134	–1.66	0.01
Partnership status						
Live with partner	0.134	11.57	0.42	0.071	4.69	0.53
Missing	–0.032	–0.32	0.003			
Number of natural children						
One	0.033	1.99	0.13	–0.004	–0.19	0.12
Two or more	0.042	1.63	0.04	0.036	1.14	0.06
Missing				–0.005	–0.17	0.06
General health						
Poor/fair	–0.049	–2.55	0.07	–0.071	–2.57	0.07
Missing or don't know	–0.104	–0.32	0.0002	–0.191	–1.40	0.003
Unemployment rate in region	–0.009	–5.08	11.50	–0.010	–1.22	8.14
Constant	0.464	13.66		1.431	17.07	
Number of observations		4,335			2,623	
Adjusted R ²		0.105			0.125	

Dependent variable is the natural logarithm of net hourly pay (OLS regression).

Table C.2 Factors associated with women's hourly earnings: a comparison of 23-year-olds in 1981 with 26-year-olds in 1996

Factor	1958 cohort (23 years in 1981)				1970 cohort (26 years in 1996)			
	Coefficient	T-ratio	Mean 1	Mean 2	Coefficient	T-ratio	Mean 1	Mean 2
Mother aged 20 or under	-0.038	-2.02	0.09	0.08	-0.007	-0.34	0.12	0.12
Age father left school								
16-17	-0.002	-0.13	0.09	0.11	0.024	1.40	0.21	0.24
After 18	-0.004	-0.18	0.05	0.06	0.036	1.71	0.14	0.16
Missing	0.030	1.03	0.28	0.27	-0.089	-2.34	0.06	0.03
Parental housing when respondent was 16								
Tenants	-0.005	-0.37	0.38	0.33	-0.073	-3.06	0.09	0.09
Missing	-0.046	-1.51	0.25	0.24	0.016	1.18	0.51	0.47
Math's tests score at 11/10								
25-50%	0.029	1.51	0.19	0.19	0.048	2.05	0.20	0.19
50-75%	0.071	3.62	0.21	0.24	0.118	5.10	0.24	0.26
75-100%	0.106	5.06	0.17	0.21	0.124	4.91	0.19	0.22
Missing	0.033	1.76	0.29	0.26	0.049	2.05	0.21	0.19
Qualification by 23/26								
Degree	0.315	11.72	0.09	0.11	0.325	6.89	0.18	0.21
Highest vocational	0.268	11.09	0.08	0.11	0.244	4.57	0.04	0.05
A-levels/middle vocational	0.192	8.24	0.11	0.14	0.219	4.61	0.11	0.12
O-levels/lower vocational	0.124	6.32	0.38	0.40	0.122	2.80	0.41	0.43
Other	0.067	3.18	0.18	0.15	0.030	0.66	0.15	0.14
Missing					-0.036	-0.68	0.06	0.03
Number of jobs (including current job)								
Two	-0.033	-2.45		0.25	0.037	1.48		0.16
Three	-0.049	-3.11		0.18	0.058	2.35		0.17
Four	-0.017	-0.91		0.12	0.060	2.39		0.16
Five or more	-0.057	-2.93		0.13	0.018	0.77		0.39
Length of longest unemployment spell								
1-3 months	-0.035	-2.65	0.19	0.20	-0.071	-4.54	0.26	0.27
4-6 months	-0.096	-5.25	0.09	0.09	-0.133	-5.97	0.10	0.10
7 or more months	-0.110	-5.46	0.13	0.07	-0.135	-5.80	0.15	0.09
Missing	-0.078	-1.67	0.04	0.02				
Respondent spent time out of labour force	0.012	1.08	0.59	0.41	0.019	1.06	0.37	0.24
Length of current job								
2 years or more	0.050	3.84		0.63	0.042	2.82		0.67
Missing					0.074	1.06		0.01
Respondent's hours of work								
Part-time	0.201	9.95		0.10	0.003	0.15		0.15
Missing					-0.083	-1.71		0.02
Partnership status								
Live with partner	0.019	1.86	0.63	0.54	0.055	3.73	0.62	0.62
Missing	0.038	0.39	0.002	0.003				
Number of natural children								
One	0.018	0.61	0.20	0.07	-0.155	-6.19	0.17	0.12
Two or more	0.060	1.39	0.15	0.03	-0.288	-8.32	0.14	0.06
Missing					0.030	0.96	0.05	0.05
General health								
Poor/fair	-0.039	-2.17	0.11	0.09	-0.095	-3.88	0.10	0.08
Missing or don't know	-0.034	-0.12	0.00	0.00	-0.012	-0.11	0.005	0.004
Unemployment rate in region	-0.015	-8.81	11.63	11.42	-0.013	-1.70	8.17	8.17
Constant	0.427	12.10			1.255	15.14		
Number of censored (all) observations		2,216	(5,765)	(3,549)		1,295	(4,266)	(2,971)
Number of uncensored observations		3,549				2,971		
Log likelihood		-3,099.84				-3,126.44		
Rho (correlation between residuals)		-0.003				0.680		
Mean of 'mother works'			0.49	0.51			0.42	0.45

Dependent variable is the natural logarithm of net hourly pay (Heckman selection regression).

Appendix D

The malaise inventory

Table D.1 lists the 24 questions that were used to compile the malaise inventory, showing the proportions responding positively to each item in the 1981 and 1996 surveys. Table D.1 indicates that the increase in positive responses is spread across a range of questions that are indicative of the psychological and physical state of the individual

(for example backache, feeling tired, getting worried, people annoy or irritate, easily upset or irritated). In other words, the increase in the total of positive responses to these questions is not simply due to the fact that the younger cohort are more likely to report physical ailments than their older counterparts.

Table D.1 The malaise inventory: a comparison of item responses from the 1958 birth cohort at age 23 with the 1970 birth cohort at age 26

Question	1958 cohort (age 23 in 1981)		1970 cohort (age 26 in 1996)		% change	
	Male	Female	Male	Female	Male	Female
1 Often have backache?	14.7	23.2	25.3	33.0	10.6	9.8
2 Feel tired most of time?	11.9	22.6	28.9	41.1	17.0	18.5
3 Often feel miserable or depressed?	10.2	18.7	17.5	25.9	7.3	7.2
4 Often have bad headaches?	6.0	19.8	11.3	30.1	5.3	10.3
5 Often get worried about things?	30.4	54.3	44.1	65.3	13.7	11.0
6 Usually have difficulty sleeping?	9.6	11.5	18.0	18.3	8.4	6.8
7 Usually wake unnecessarily early?	15.0	16.5	21.3	18.9	6.3	2.4
8 Worry about health?	1.8	3.1	4.1	5.8	2.3	2.7
9 Often get into violent rage?	4.6	7.1	7.7	8.3	3.1	1.2
10 People often annoy or irritate?	24.5	29.0	41.8	45.2	17.3	16.2
11 Had twitching of face or shoulders?	8.0	7.9	14.2	9.8	6.2	1.9
12 Often become scared for no good reason?	3.8	13.1	5.7	11.7	1.9	-2.4
13 Often scared to be alone?	2.2	16.9	3.1	9.9	0.9	-7.0
14 Easily upset or irritated?	14.5	31.9	20.6	38.0	6.1	6.1
15 Frightened going out alone/meeting people?	3.3	12.1	6.0	12.1	2.7	-
16 Constantly keyed up and jittery?	3.3	4.4	5.0	5.0	1.7	0.6
17 Suffer from indigestion?	12.4	10.2	16.5	13.3	4.1	3.1
18 Suffer from an upset stomach?	9.1	11.2	11.6	14.4	2.5	3.2
19 Appetite poor?	3.7	5.1	5.2	7.3	1.5	2.2
20 Every little thing gets on your nerves?	1.4	3.3	3.6	6.0	1.2	2.7
21 Heart often races like mad?	6.0	8.2	8.4	9.8	2.4	1.6
22 Bad pains in your eyes?	4.7	5.3	5.0	6.9	0.3	1.6
23 Trouble with rheumatism/fibrositis?	2.7	5.1	2.0	3.9	-0.7	-1.2
24 Ever had a nervous breakdown?	1.2	2.1	2.2	2.8	1.0	0.7