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Learning and the lifecourse: The acquisition of qualifications in adulthood

Andrew Jenkins

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**Learning and the lifecourse:
The acquisition of qualifications
in adulthood**

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Abstract

Policy makers have placed much emphasis on the importance of people continuing to obtain qualifications in adulthood in order to adapt to changing conditions in the labour market, and on the need for a highly skilled workforce if the UK is to remain a competitive economy. In this paper I analyse the extent to which people acquired qualifications in adulthood and also whether they upgraded to higher levels of qualification than they previously held, using data from the 1958 National Child Development Study. This group were last interviewed in 2008 so it is feasible to construct estimates of the extent of qualification acquisition and upgrading for this cohort through to age 50.

The adult education phase of the lifecourse was defined as lasting from ages 23 to 50, and some 71 per cent of the sample obtained at least one qualification during this period, while 52.5 per cent did so in mid-life, between the ages of 33 and 50. The breakdown by gender revealed that women were more likely than men to obtain qualifications in mid-life, with 48 per cent of men and 57 per cent of women obtaining at least one qualification during this phase of the lifecourse. There was also considerable evidence of progression to higher levels of qualification in adulthood. At age 16 some 23 per cent had no qualifications at all. This proportion had fallen to less than ten per cent by age 33, and to just under six per cent by the age of 50. Those with qualifications at Level 4 and above comprised 21 per cent of the sample at the age of 23, nearly 29 per cent by age 33, and close to 37 per cent by the time the cohort members were fifty years old.

On the basis of this new evidence it is argued that previous analyses by educational researchers may have been overly pessimistic about the extent to which individuals engage in accredited learning over the adult lifecourse. The implications for research and policy are discussed.

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1. Introduction

This paper uses longitudinal data from the National Child Development Study (NCDS) to analyse the extent to which people acquired qualifications in adulthood and whether they upgraded to higher levels of qualifications than previously held.

The importance of a highly skilled and well-qualified workforce to the modern economy has been repeatedly emphasised by policy makers. Skills, and the continual upgrading of skills, are widely regarded as essential both for individuals to make progress in their own careers and for the health and vigour of the national economy in competitive global markets (OECD, 2012). In the UK there has long been a perception that the workforce is less skilled than many of its major competitors (Sanderson, 1988; Wolf, 1998). Because skills are hard to measure and compare, qualifications are often used as a proxy for skill levels. International comparisons of the qualifications profile of the workforce have tended to show the UK in a poor light (National Commission on Education, 1993; Layard *et al*, 1995). The next logical step was then to advocate the setting of targets for the improvement of qualification levels among the working-age population (Layard *et al*, 1995; Gorrard *et al*, 2002) and this approach has indeed been taken up enthusiastically by policy makers. In the present century the Leitch Review of Skills (2006) has been particularly important and influential. This recommended that the UK commit to becoming a world leader in skills by 2020, by benchmarking against the upper quartile of the OECD economies. Targets were to be set across a range of levels in the hierarchy of qualifications. For example, the targets included exceeding 90 per cent of adults qualified to at least Level 2, an increase from 69 per cent in 2005. Progress towards the targets has been monitored by a body called the Commission for Employment and Skills (UK CES).

The rationale underlying this whole approach, as well as the specifics of UK policy on skills, has been much debated among academics, educationalists and policy researchers (Wolf, 2002; Brown and Hesketh, 2004; Keep *et al*, 2006). From an empirical perspective, a key question is whether individuals are actually behaving in the ways required for such policies to have any prospect of success. That is, are people participating in the types of learning which will lead to qualifications, and are significant numbers of them actually obtaining qualifications at higher levels than they have previously held? While it is clear that younger cohorts have remained in education for longer and acquired more and higher qualifications than previous generations, that alone is not sufficient if the ambitious targets for the qualifications profile of the workforce outlined in the Leitch Review are to be met. In setting such targets Leitch observed that 70 per cent of those who would be in the labour force at the time of reckoning in 2020 were already present in 2006. Therefore progress towards the targets requires that adults must both obtain qualifications and upgrade to higher qualification levels. Whether, and to what extent, that has occurred is less readily apparent than for young labour market entrants. The best sort of evidence to address this question is longitudinal data at the individual level. This enables the tracking of respondents over time to observe any engagement in learning, whether the learning resulted in qualifications and, if so, how the level of qualification compared with those already held by that individual. Existing longitudinal studies carried out by educational researchers have concluded that not many individuals acquire qualifications in adulthood and very few indeed move to higher levels in the hierarchy of qualifications. These results have provided fuel for, and shaped the form of, critiques of adult skills and qualifications policy.

Based on an analysis of the rich and detailed educational data in the NCDS, I argue that previous longitudinal studies, while containing much of value and interest, may have been unduly pessimistic on the extent of qualification acquisition by adults in Britain. The paper proceeds as follows. In the next section I review relevant literature, focusing on research which has used large-scale, longitudinal data to track individuals and the extent of their acquisition of qualifications over time. The generally very pessimistic findings emerging from these studies are documented. In Section 3 data from the 1958 birth cohort study, which will be used in this paper, is described. The preparation and cleaning of the data are also outlined. Sections 4 and 5 contain the empirical results. The extent to which individuals obtained qualifications is discussed in Section 4, while Section 5 analyses how much progress respondents made along the qualifications hierarchy over time. Section 6 discusses the findings and compares them with previous literature. Section 7 concludes the paper.

2. Literature review

In order to determine the extent to which adults are acquiring qualifications and improving their highest level of qualification, the best source of information is longitudinal data on individuals. It takes time to obtain qualifications and so there is a need to track people over substantial periods of time observing a sequence of learning episodes and whether they involve obtaining qualifications and movement up the qualifications ladder. If the aim is to reach conclusions about the learning outcomes of a working population of a country then the sample needs to be large enough to be representative of that population as a whole or at least of some well-defined sub-group within it such as a particular region or age group. Clearly, these requirements are challenging. In the last 20 years or so two major studies in Britain might reasonably claim to meet these criteria. In what follows I refer to them as the work of the Cardiff Group and the Learning Lives Group respectively. Both projects were funded, at least in part, by the Economic and Social Research Council (ESRC) and both were mixed methods projects with a substantial quantitative component.

A group of social scientists at Cardiff University carried out several distinct but related projects on learning across the lifecourse in the late 1990s. Firstly there was 'Patterns of Participation in Adult Education and Training' which was funded by ESRC as part of its 'Learning Society' programme. The major components of the project included a quantitative survey at three sites in Wales. The survey gathered data retrospectively on learning from 1,104 respondents aged 16 to 65, and the researchers also conducted 110 qualitative interviews. There was a second project on the targets which were then in place for adult learning, conducted for the Welsh National Assembly which mainly drew on data from the Labour Force Survey (LFS). A third piece of research, 'Adult Learning in the Digital Age', looked specifically at the potential role of ICT in extending participation in adult learning. This project also involved a retrospective survey of learning over the lifecourse among a sample of respondents based at four locations in Wales and the west of England.

The results of these projects were summarised in a large number of publications, notably in Gorard and Rees (2002) and Selwyn *et al* (2006). The broad picture which emerged from the work of the Cardiff Group was of extended episodes of initial education amongst younger age groups. Young people were staying on in school and college and gaining more, and higher levels of, qualifications on average than had been the case for earlier generations. But this was accompanied by an apparent decline in learning participation in later life. There was a risk that policy makers were engaged in 'robbing Peter to pay Paul' by concentrating resources on learning in the early phases of the lifecourse (Gorard, 2000; Gorard and Rees, 2002). On the topic of qualification trajectories over the life cycle specifically, the analyses of the Cardiff Group were based on secondary analysis of cross-sectional data rather than results from their own surveys (Gorard *et al*, 2002). Using data for Wales from the Labour Force Survey for the years 1996 to 1999, they showed that insofar as there was progress towards larger numbers of the working population qualified to levels 2, 3 and 4 this was very largely, and perhaps wholly, due to well-qualified young people entering the workforce to replace older adults moving into retirement. They termed this 'the conveyor belt effect'.

Many episodes of extended initial education are instead of, not additional to, the episodes of later-life learning that occurred for some in previous generations...there is no progress in participation and qualifications for adults while they are adults'.

Each successive age cohort leaving initial education tends to have a longer education and a higher mean level of qualifications. However, each age cohort also tends to simply retain, rather than improve, their initial education over the remainder of their lives. Thus, the incidence of education among the population and the workforce as a whole increases, but only through the “conveyor belt effect.” (Gorard and Selwyn, 2005: 1213).

The point is also made in the same, or very similar, words in Gorard and Rees (2002: 151), and in Gorard (2000).

More recently the *Learning Lives* project adopted a longitudinal approach to the analysis of learning over the lifecourse. It was funded by the ESRC’s Teaching and Learning Research Programme. This was a major project involving a large team of researchers from a number of British universities and utilising a range of methods, both qualitative and quantitative (Biesta *et al*, 2011). Summarising the rich set of findings from the project is beyond the scope of this paper and the focus here is just the results on the topic of adults obtaining qualifications. The quantitative component of the project used data from the British Household Panel Study (BHPS) to track participation in part-time, vocationally-oriented training courses over a 14 year period from 1992 to 2005 amongst adults who were of working age at the start of the period. The researchers looked at qualifications acquired during these part-time vocational training episodes, assigning levels to these qualifications and then comparing them to the highest level qualification that the individual previously held.

Over the 14-year period covered by their data about two-thirds of respondents did at least one vocational training course. Most participation spells did not lead to a formal qualification. There was some upward trend from about one-sixth of such spells leading to a qualification in the early 1990s, increasing to about one-quarter by 2004/05. When participants did obtain accreditation as a result of a course, quite often the qualifications were not such as to fit into the National Qualifications Framework. That is they were in-house qualifications which were only relevant to the current employer and would presumably have no general value in the labour market. And when qualifications could be assigned to a point in the hierarchy, they were ‘almost invariably either at the same level or a lower level’ than the highest qualification already held by the respondent (Biesta *et al*, 2011: 35). It can be calculated that negligible proportions (less than two per cent) of the qualifications obtained were at a higher level than those already held.

These results have fed into critiques of some of the assumptions underpinning government policy. The Learning Lives Group have argued that, while policy makers assume that adult students should progressively climb a qualifications ladder, with any new qualifications taken being at a higher level than earlier ones, in fact the results of the Learning Lives project revealed that the actual attainment in adulthood did not follow such tidy sequences. In fact it seems that trajectories of participation in formal episodes of learning may follow much more ‘complex and highly differentiated patterns’ which do not fit well with current policy (Biesta *et al*: 35-6).

So, these two sets of educational researchers, the Cardiff Group and the Lifelong Learning Group, both in different ways reach the conclusion that qualification progression in adulthood has been very static. But there is sufficient evidence from various other sources to at least raise some doubts about this. Firstly, in recent decades there has been very substantial growth in the numbers of mature students in higher education. According to Fuller (2001), the number of mature students participating in courses intended to lead to higher education

qualifications rose from 255,000 in 1970 to roughly 1.5 million by 2000. The growth of participation in part-time courses, which are mainly taken by mature students, out-stripped the growth of full-time participation in the 1990s and the first decade of the current century. Almost two-thirds of entrants to part-time courses were aged 30 and above (Ramsden, 2006; 2010). Of course, not all mature students complete their degrees but, nonetheless, the figures would imply considerable acquisition of higher level qualifications in adulthood.

Secondly, some research has been more optimistic in its interpretation of Labour Force Survey data. The analysis of LFS by Wilson and Bosworth (2006) shows that there has been a large increase in the number of people in the labour market with formal qualifications. The predominant effect here has been a cohort effect due to young people who have qualifications at a higher level emerging into the labour force, but it has also 'been reinforced to some extent by increasing qualification rates for older people as well' which they refer to as an 'upskilling' effect.

Thirdly, since the launch of the *Skills for Life* strategy in 2001 and as part of efforts to address the problem of low-level skills considerable resources have been put into helping those without qualifications to gain some qualifications at level 1 or level 2. Now, in practice it would seem that many of those who have obtained qualifications are those in the 16 to 19 age group but nonetheless there has probably been some improvement in the numbers of adults who previously had no qualifications obtaining some qualifications (NIACE, 2011).

To summarise, the upgrading of qualifications is an important topic, not least because policy has set objectives for the improvement of the qualifications profile of the workforce. As to whether people are actually moving up the qualifications ladder during their adult lives, two major educational research projects have addressed this issue. Both have produced highly pessimistic results. In these accounts rather few people obtained qualifications and very few indeed obtained them at a level which was above the highest level they had reached earlier on in their lives. However, a range of other sources raise some questions about these findings. Given that longitudinal data might be thought of as the gold standard here, it is clear that further evidence derived from longitudinal sources on qualifications would strengthen the evidence base.

3. Data preparation

The data source is the National Child Development Study (NCDS). This began as a perinatal mortality survey of every baby born in Britain in a single week in 1958. Originally, over 17,000 babies were in the sample. Follow-up data collection took place at several points in childhood up to age 16 and in adulthood at ages 23, 33, 42, 46 and 50. During the cohort members' childhoods, data were collected by health visitors from the parents and from the children through educational and medical assessments. Some information was also gathered from teachers. In adulthood, data have been obtained directly from cohort members themselves via structured interviews. As for information specifically on qualifications, in 1978, exam results were gathered from all the schools attended by cohort members about the qualifications which they had obtained up to that point. This is the 1978 Exams File and it provides objective information about qualifications obtained by the end of compulsory schooling at age 16 and in the four years immediately after that. Each wave of the NCDS in adulthood (from wave 4 at age 23 onwards) has asked respondents for quite detailed information about the qualifications they have acquired, usually since the previous wave. This information was used to map qualifications obtained, and the highest level of qualification, of respondents at ages 16, 23, 33, 42 and 50.

The qualifications obtained by cohort members were coded to the levels of the National Qualifications Framework (NQF). Highest qualification was measured on a six-point scale where:

0 = no qualifications

1 = NVQ level 1 or equivalent /low-grade GCSE/O levels

2 = qualifications at O level A-C grade /NVQ level 2 or equivalent

3= A level(s) /NVQ level 3 or equivalent

4 = degree /NVQ level 4 or equivalent

5 = higher degree/NVQ level 5 or equivalent

It was useful to distinguish between academic (or general) and vocational qualifications and so I disaggregated to construct a six point scale for each of these two types of qualification. The qualifications obtained in compulsory schooling (O levels, CSEs and their Scottish equivalents) were assumed to be academic qualifications regardless of subject.

It was not entirely straightforward to allocate qualifications consistently to a hierarchy. Moreover, substantial changes have occurred to the education system in Britain during the lifetime of cohort members, including the replacement in England and Wales of O levels/CSEs by GCSEs and the introduction of NVQs. Assigning qualifications consistently within the hierarchy over time was not a simple matter. The CLS Working Papers by Jenkins and Sabates (2007) and Dodgeon *et al* (2011) were used to guide decisions about where qualifications should be placed in the National Qualifications Framework. See Appendix 1 for details of the coding scheme.

In order to construct plausible results on qualification acquisition it was important to reconcile some inconsistencies between different waves of the NCDS data. For example, some cases moved rapidly from only having low-level qualifications at one wave to high qualifications at the next wave, which may not be plausible. More commonly, individuals sometimes had inconsistent qualification data at different waves. For example, a basic assumption is that if someone was qualified to Level 3 at age 33, say, they could not be at Level 2 later in life,

that is individuals cannot lose their highest qualification. Yet highest qualification did sometimes appear to move downwards. Cases where this occurred were first flagged as requiring further investigation. Then, in reconciliation work it was assumed that the Exams file, as an objective source, had priority in all matters where highest qualification levels were inconsistent. So respondents who were at Level 2, say, in the Exams file but had Level 0 or 1 given as their highest ever qualification in waves 4 or 5, were recoded so that their highest level qualification was Level 2. This assumption ironed out many data reconciliation problems. Other issues of inconsistent data were resolved on a case by case basis. The situation where individuals had ascended from very low levels to very high levels between two waves was uncommon. When it occurred such cases were checked against the employment histories available in NCDS to see whether the respondent had spent substantial periods of time in full- or part-time education. For the majority of cases it did appear to be plausible that they had obtained the qualifications, but a handful of improbable cases were recoded so as not to have obtained the high-level qualifications claimed. From wave 6 of the survey, that is age 42 onwards, respondents have only been asked about qualifications acquired since the last time interviewed rather than ever acquired, and this means that issues of inconsistency cannot arise.

The objective of the research was to track the qualifications obtained up to the age of 50. So the main constraint, in terms of sample size, is that people must have been present in wave 8, the age 50 wave of the survey. People who dropped out permanently before then must be excluded. There were 9,790 cases present at wave 8, which imposes the upper limit on sample size. In order to construct a full qualifications profile from age 16 through to age 50 the ideal situation is that respondents were present in the 1978 Exams File and in all five adult waves of the survey. There were some 5,524 cases meeting this criterion. However, for some people who were absent at one or more waves of the survey, but had returned by age 50, it was still possible to derive a full qualifications profile. This was done by using later waves to address data missing at one or more previous waves. For example, in wave 5 (age 33) respondents were asked about qualifications attained before and after age 23. Hence for those respondents missing at wave 4 (age 23) but present at wave 5, patterns of attainment and qualifications achieved by age 23 could be recorded using the wave 5 data. Similarly questions about academic qualifications asked in wave 4 were used, in the absence of data in the Exams file, to infer the likely highest academic qualification at age 16. At wave 6, age 42, questions were asked about qualifications obtained since age 16, and so this information was used for those who had not responded in one or several of the previous waves. At wave 7, age 46, questions were asked about qualifications since 1991 (if not present at wave 6). This information was used to fill in any blanks back to age 33. At wave 8 information on qualifications data since 2000 was gathered and this could be used to fill in gaps for those missing at wave 7. By this process, the number of cases for which a full qualifications profile could be constructed was boosted to 8,939. Patterns of response for which a full qualifications profile was derived are shown in Table 1 below. Discussion of how representative this sample of nearly 9,000 cases is takes place in Section 6 below, with some detailed comparative estimates presented in Appendix 2.

Table 1: Patterns of response for which it was feasible to construct a full qualifications profile

Present and with qualifications data (√)		Absent or lacking qualifications data (X)						
Pattern	Exams file	Wave 4 (age 23)	Wave 5 (age 33)	Wave 6 (age 42)	Wave 7 (age 46)	Wave 8 (age 50)		
1	√	√	√	√	√	√	5,524	
2	X	√	√	√	√	√	790	
3	√	X	√	√	√	√	625	
4	√	√	√	√	X	√	581	
5	√	√	X	√	√	√	505	
6	√	X	X	√	√	√	200	
7	√	√	√	X	√	√	180	
8	√	√	X	√	X	√	118	
9	X	√	√	√	X	√	92	
10	√	X	√	√	X	√	82	
11	X	√	X	√	√	√	65	
12	√	X	X	√	X	√	52	
13	X	X	X	√	√	√	38	
14	√	X	√	X	√	√	34	
15	X	√	√	X	√	√	30	
16	X	√	X	√	X	√	16	
17	X	X	X	√	X	√	7	
							8,939	

4. The acquisition of qualifications in adulthood

4.1 Defining terms

The phase of adult education begins once initial education has been completed. There is scope for debate about when exactly initial education comes to an end. It is usually assumed to be somewhere in the early or mid-twenties. Since NCDS cohort members were interviewed at age 23 it is convenient to take that age as the terminal point of initial education. The phase of adult education therefore occurs from age 23 onwards and, with the data available in NCDS, it is possible to observe whether people obtain qualifications between the ages of 23 and 50. This period of adult education can be broken down into an immediate post-initial phase, from ages 23 to 33, and mid-life learning which occurs between ages 33 and 50. It may also be useful to divide mid-life learning into two roughly equal periods, from ages 33 to 41 inclusive and from ages 42 to 50 inclusive. These definitions are summarised in the table below.

Table 2: Educational phases: defining terms

Age	Phase
Age 16	End of compulsory schooling
All education up to age 23	Initial education
All education from age 23 onwards	Adult education
Ages 23 to 32 inclusive	Post-initial education
Ages 33 to 50	Mid-life learning

4.2 Obtaining qualifications in adulthood

During the adult education phase of the lifecourse (ages 23 to 50) some 71 per cent of the sample obtained at least one qualification, and 52.5 per cent did so in mid-life (ages 33 to 50). The proportions that obtained one or more qualifications in each phase of the lifecourse after compulsory schooling through to age 50 are shown in the last column of Table 3.

Table 3: Obtaining qualifications during different phases of the lifecourse

	Academic Qualification	Vocational Qualification	Any Qualification
	%	%	%
Aged 17 to 22 incl.	37.6	36.8	61.0
Aged 23 to 32 incl.	16.1	36.1	45.0
Aged 33 to 41 incl.	12.9	30.3	36.0
Aged 42 to 50 incl.	5.3	29.5	32.3
N: 8,939			

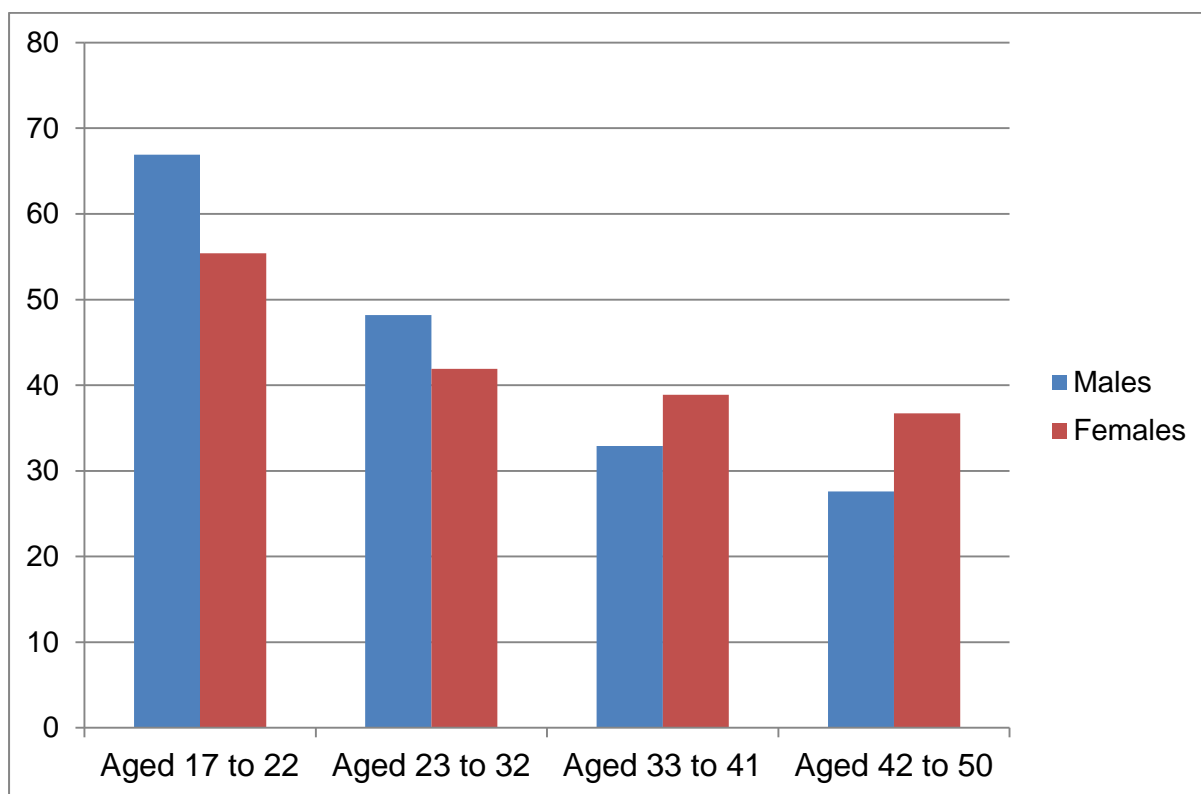
It can be seen that, as the cohort grew older, there was a gradual decline in the proportions obtaining qualifications. The decline was much more marked for academic qualifications (from about 16 per cent who obtained a qualification between ages 23 and 32 compared to only around five per cent between ages 42 and 50) than for vocational qualifications. Almost 30 per cent of cohort members obtained a vocational qualification between ages 42 and 50.

The picture that emerges is, nonetheless, of substantial numbers obtaining qualifications in adult phases of the lifecourse, with a strong tendency for these qualifications to be mainly vocational, rather than academic.

4.3 Obtaining qualifications in adulthood, by prior attainment and gender

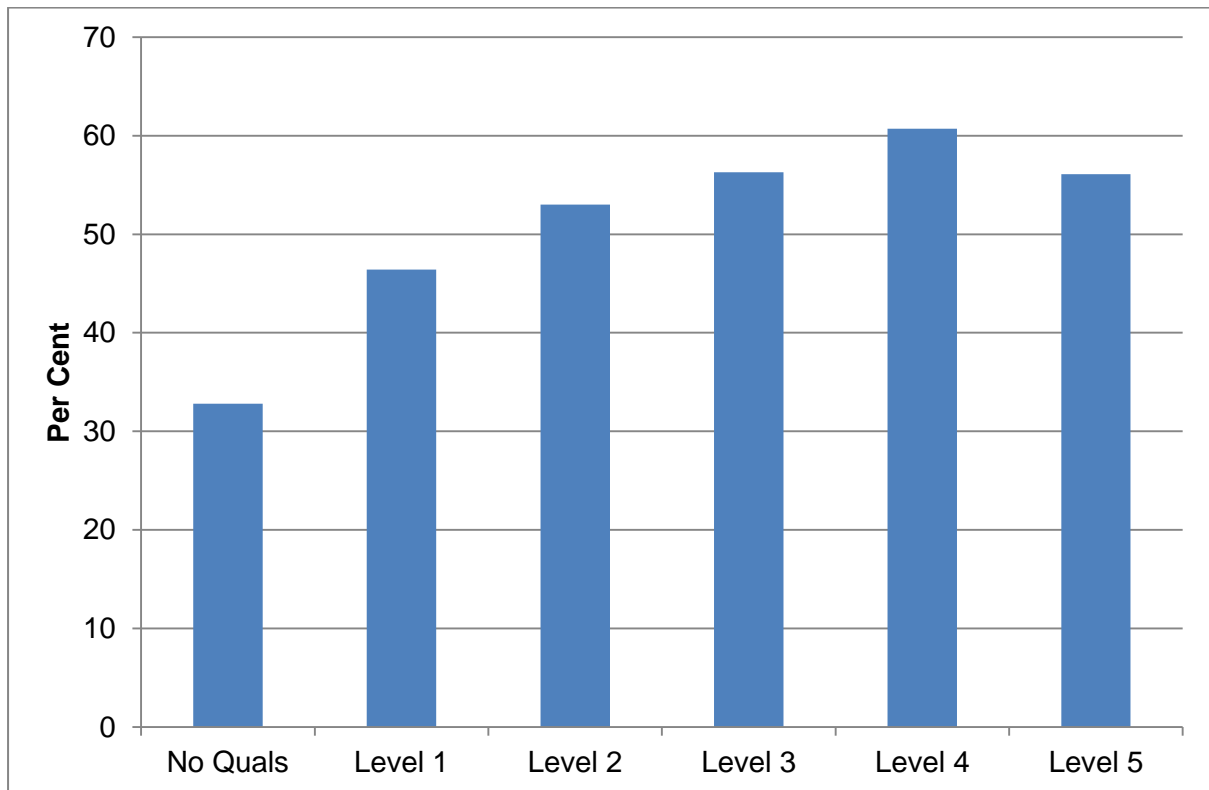
The breakdown by gender revealed that men were more likely than women to obtain qualifications in the early phases of adulthood (up to age 33) but that women were more likely than men to obtain qualifications in mid-life, between the ages of 33 and 50. Between the ages of 17 and 22 over two-thirds of men obtained a qualification while about 55 per cent of women did so. In mid-life 48 per cent of men and 57 per cent of women obtained at least one qualification.

Figure 1: Obtaining qualifications across the adult lifecourse to age 50, by gender



The likelihood of obtaining qualifications in mid-life tended to increase with the highest level of qualification already held at age 33. However, those who already had a Level 5 qualification by age 33 were somewhat less likely to obtain a qualification in mid-life than those who had a level 4 qualification (Figure 2).

Figure 2: Obtaining a qualification between ages 33 and 50, by highest qualification at 33



5. Progression

At age 16, the age at which compulsory schooling came to an end for this cohort, nearly a quarter (23.2 per cent) had no qualifications at all. This proportion had fallen to less than ten per cent by age 33, and to just under six per cent by the age of 50.

But it was not just in the diminishing proportion of people with no qualifications that progress was made in adulthood. There was steady upward progress, across all the levels of the qualifications hierarchy, as the cohort aged (Table 4). The percentage of people whose highest qualification was at Level 2 or below fell from 62 per cent at age 23 to 55 per cent at age 33, and to 46 per cent by age 50. Conversely, those with qualifications at Level 4 and above comprised 21 per cent at the age of 23; nearly 29 per cent by age 33, and close to 37 per cent by the time the cohort members were fifty years old.

Figure 3: Proportion with no qualifications in NCDS to age 50

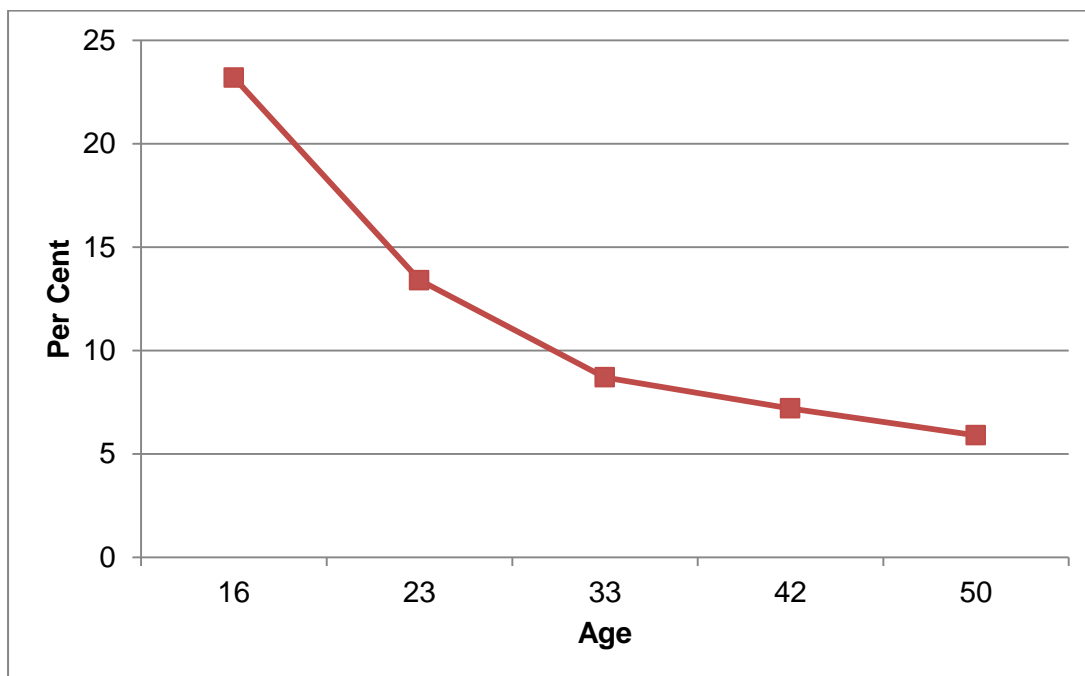


Table 4: Highest overall level of qualification, by age

	Age 23	Age 33	Age 50
	%	%	%
No qualifications	13.4	8.7	5.9
Level 1	14.7	13.9	11.5
Level 2	34.3	32.5	28.8
Level 3	16.7	16.3	17.1
Level 4	20.2	17.8	21.5
Level 5	0.7	10.8	15.2
ALL	100.0	100.0	100.0
N: 8,939			

Many patterns of progression along the qualifications ladder are possible, from no progress, to very steep ascent over a short time frame, to gradual progress over long periods of time. To simplify, and focusing now on mid-life learning from ages 33 to 50, the various learning pathways were grouped into a small number of learning trajectories. Four trajectories were distinguished, with each member of the sample fitting into one of the four categories. *Non-learners* refer to those who obtained no qualifications at all between the ages of 33 and 50. *Stayers* are those who obtained qualifications but only at or below the level which they had already attained by the age of 33. *Incremental learners* moved up one level in mid-life, either academically and/or vocationally, from the level which they had reached by age 33. *Transformational learners* also obtained qualifications in mid-life. But they either moved up two or more levels on the academic and/or vocational scales or else they obtained a level 4 qualification, having not held one before. Obtaining a degree-level (level 4) qualification can be regarded as such a substantial upward step that it should automatically be defined as transformational.

Table 5: Mid-life learning trajectories (acquiring qualifications between ages 33 and 50 inclusive)

Term	Definition	%
Non-learner	<i>No qualifications</i>	47.4
Stayer	<i>Obtained qualifications but only at or below level previously attained</i>	21.2
Incremental	<i>Moved up one level (either academic and/or vocational)</i>	13.0
Transformational	<i>Moved up two or more levels (academic and/or vocational); or obtained level 4 qualification for first time</i>	18.4
NCDS data. N=8,939.		100.0

As shown in Table 5, rather less than half (47 per cent) of the NCDS sample were non-learners in mid-life (ages 33 to 50 inclusive), while almost a third (31 per cent) were in either the incremental or transformational categories. In terms of covariates which might predict which category particular cohort members belonged to, most striking was the breakdown by gender (Table 6). The numbers of men and women in the *stayer* and *incremental* categories were quite similar, but men were much more likely than women to be *non-learners* (52 per cent and 43 per cent respectively), while women were far more likely than men to be in the *transformational* category. Over 23 per cent of women but only 13 per cent of men were classified as *transformational* learners.

Table 6: Mid-life learning trajectories, by gender

	Males	Females
Non-learner	2,267 (52.2%)	1,974 (43.0%)
Stayer	979 (22.5%)	914 (19.9%)
Incremental	532 (12.2%)	626 (13.6%)
Transformational	567 (13.1%)	1,080 (23.5%)
Total number	4,345 (100.0)	4,594 (100.0)
NCDS data total = 8,939		

6. Discussion of results

Many people returned to study after the completion of initial education, undertaking courses which led to qualifications. That is the main theme of the results presented here. Most of the qualifications were vocational, suggesting that career development was a key motivation for study. In mid-life nearly a third (31 per cent) made progress to a higher academic or vocational qualification level than they had held by the age of 33. Most of these were in the category termed 'transformational', that is moving to a substantially higher level than previously attained. Women were more likely than men to obtain qualifications in mid-life and they were also more likely to be in the transformational group.

These results on the extent of qualification acquisition and progression contrast rather sharply with the previous work of educational researchers. Major studies, such as the work of the Cardiff Group (Gorard and Rees, 2002) and the Learning Lives Group (Biesta *et al*, 2011), have tended to reach very pessimistic conclusions. They argue that relatively few courses undertaken by adults lead to qualifications and found very little evidence of progression up the hierarchy of qualifications. Given the emphasis in economic and policy discourses on the need to continually update skills and knowledge, a set of research findings in which substantial numbers acquired new qualifications could be regarded as more plausible than the findings from previous research where very few people appeared to upgrade to higher qualification levels as adults.

However, before accepting that conclusion, the representativeness of the results presented here would need to be carefully considered. One issue is that there is inevitably some attrition over time from longitudinal surveys. How far can the sample of approximately 9,000 cases used here be considered representative of all those who participated at the start of the study? Previous research on attrition from the NCDS, for example at ages 23 and 33, has suggested that the sample remained reasonably representative at those points albeit with some degree of higher dropout amongst those from lower social classes and from poorer backgrounds (Shepherd, 1993). By age 50 there was a smaller sample and my research has used a subset consisting of those cases for which a full qualifications profile could be constructed. To check the representativeness I made comparisons with the larger sample available at earlier waves, and with some previous research on qualifications at ages 33 and 42 (see Appendix 2). These comparisons suggest that the survey at age 50, as might be expected, shows some under-representation of people without qualifications but not to any very marked extent. Further work would be needed to check the impact of attrition more formally using statistical techniques such as attrition weights and/or methods for imputing missing data.

The second issue with respect to representativeness is that the analyses here have used birth cohort data rather than a dataset which encompasses people of many different ages such as the LFS or the BHPS. Clearly it cannot be claimed that a single birth cohort is representative of the working population as a whole. Strictly the NCDS can be thought of as representative of those born in Britain in 1958. Even on this strict interpretation, the results can be of considerable value given the objective of probing previous research which has suggested that very few people obtain qualifications in adulthood. Moreover, it can be argued that a birth cohort represents more than a single year group but rather can be seen as more broadly representative of a generation. Indeed there is a good deal of educational research centred on the notion of generation, which suggests similarities in the educational

experiences of people born around the same time (Antikainen *et al*, 1996). Nonetheless, there is scope for more research utilising other longitudinal sources as well as comparisons with earlier and later birth cohorts.

I turn now from issues of representativeness to the implications of the findings, and their interpretation and explanation. A question of much concern and interest to educationalists is whether patterns of learning in adulthood mirror, or even exacerbate, inequalities which arise in initial education, or whether adult education is able to offset some of that inequality as the relatively disadvantaged take up learning opportunities in mid- or later-life. The picture which emerges from the analysis of the 1958 birth cohort is a rather mixed one. On the one hand, it is clear that those most likely to obtain qualifications between the ages of 33 and 50 were those who were already more highly qualified by 33. On the other hand, the 'transformational learners' who made most progress in mid-life were those who were lagging, relatively, at 33. In part this must be a 'ceiling effect' – those who were already at level 4 or 5 on the academic or vocational qualifications scales at 33 had limited scope for major progression thereafter. But among those most likely to be in this transformational group were women, while those who came from working class backgrounds were also strongly represented in the transformational group.

If, as seems to be the case, substantial numbers in this cohort obtained new qualifications in their 30s and beyond then, it might reasonably be asked, why did they do so? In broad terms the context for this commitment to accredited learning has been provided by the major changes in the types of skills in high demand since this cohort left initial education. The years since then have seen a huge growth in service sector employment. In the early 1970s information technology in the workplace was still largely the domain of white-coated boffins and specialist programmers but has since become entirely ubiquitous. This has had major implications for the availability and nature of clerical jobs. There have been other changes too, such as the introduction of flexible work patterns, implying the need for a broader range of skills. Of course, changing patterns of demand for skills is a complex and contested topic. While no-one disputes that there has been much change at work, the extent to which this has involved up-skilling is disputed. Many service sector organisations in Britain have selected low value-added product market strategies and it can be argued that their labour demand is often essentially for a compliant, rather than a highly skilled, workforce (Keep *et al*, 2006). There has been debate too about the over-supply of graduates and the prevalence of over-education more generally (Sutherland, 2012). But on balance it seems plausible that some degree of upskilling of the workforce has occurred in recent decades and certainly that the types of skills in demand have changed. This might well motivate members of the cohort to seek additional qualifications.

Some explanation needs to be attempted too for the predominance of women and those whose fathers had been manual workers in 1958 among the transformational learners. Some young people from working class backgrounds may not have realised their potential in initial education due to low parental aspirations and the expectation that they would leave school at the minimum leaving age (Sabates *et al*, 2007). As for gender differences, previous analyses of the 1958 cohort at ages 23 and 33 have shown that the major gaps between men and women at those ages were at levels 2 and 3 in the qualifications hierarchy. It was especially the case that women were less likely than men to have acquired intermediate vocational qualifications in their 20s and early 30s. Women with family care responsibilities were particularly unlikely to have obtained these qualifications (Bynner and Fogelman, 1993; Makepeace *et al*, 2003). This evidence then would suggest that sizeable numbers of women

who had the ability and potential to obtain intermediate, and subsequently higher-level, qualifications did not do so in early adulthood but have taken the opportunity to catch up later on, in their 30s and 40s. This is consistent with analysis of BHPS data (Biesta et al, 2011: 41, 45-6) which showed that young males were significantly more likely than young females to return to formal adult learning in their late teens and early twenties. This was connected to parenthood and domestic responsibilities. The women who made an early transition into parenthood were then significantly more likely to return to formal learning later on. There is also some confirmation of these hypotheses in the qualitative research literature including interviews with some NCDS respondents conducted by Preston (2004) and people of roughly the same generation, such as the mature entrants to higher education interviewed by Fuller (1999). Here too there was the strong implication that economic and social change over the last 30 years had opened up opportunities for some people, including those disadvantaged in initial education by class and/or gender inequalities (Fuller, 2007).

From the classic research by Aslanian and Brickell (1980) through to recent studies such as Biesta *et al* (2011) a consistent theme is the association between major transitions and disruptions in people's lives and willingness to participate in learning. A wish to change to a new occupation, a better job, or forced changes in circumstances such as redundancy may then provide additional explanatory factors for the pursuit of qualifications (Bimrose and Brown, 2010). For women who have left the labour force for a time due to childcare responsibilities especially, acquiring qualifications may be part of a strategy for boosting their chances of finding paid work (Jenkins, 2006). As for non-participation, a lack of interest in obtaining qualifications, this can be explained, at least to some extent, as the obverse of the reasons for participation already discussed. Non-participants in higher education, according to Fuller *et al* (2008) were likely to be 'characterised by relative economic and employment stability, and saw little need to disturb their current employment and domestic circumstances through pursuing Level 4 qualifications'. Some well-qualified people among the NCDS respondents, having achieved their professional qualification as surveyor or accountant in their 20s, may have had little time or motivation to obtain more qualifications (Preston, 2004). In addition, it is clear that the barriers to learning can remain very high for some people in their 40s, such as the NCDS respondent interviewed in Preston (2004) who was combining a low-paid job, which provided few opportunities for training, with time-consuming family care responsibilities for both her own children and a grandchild. These insights from qualitative research could be pursued in further quantitative analyses of the rich data available in the NCDS.

What about policy? The highly pessimistic conclusions derived in research by, notably, the Cardiff Group and the Lifelong Learning Group led, logically enough, to critiques of some of the assumptions underlying the policies of both current and recent governments. It was argued, for instance, that the lack of people acquiring qualifications and moving to higher levels in the qualifications framework as adults demonstrated that 'front-loading' into initial education weakened opportunities and incentives to return to education later on in life. At the very least, the findings in this paper cast considerable doubt on the notion that adults simply do not acquire qualifications or upgrade to higher qualification levels. This evidence, then, must substantially weaken any argument which relies on the unwillingness of adults to engage in learning leading to qualifications as the basis of its critique.

However, it should be emphasised that there are broader concerns about the policy framework. Recent policy has focused on economic value in the labour market, with increasing emphasis on qualifications and on adults needing to upgrade their qualifications. There are a number of potential flaws with this. A good deal of evidence has accumulated

that certain qualifications, especially NVQ level 1 and equivalents appear not to be associated with higher earnings. There may be very little, if any, economic reward for the time and effort which learners put into acquiring qualifications of this type (Wolf et al, 2006; Jenkins et al, 2007).¹ A further criticism of policy is that it has too often concentrated on the supply side, neglecting considerations of demand for skills (Cabinet Office, 2001). Even the Leitch Review recognised this, arguing that ‘previous approaches to delivering skills have been too “supply driven”, based on the Government asking employers to articulate their needs and then planning supply to meet this. This approach has a poor track record.’ (Leitch, 2006:49). There is also the much broader point that a certificated society is not at all the same thing as a learning society (Coffield, 2000; Wolf et al, 2006). Both the Cardiff Group (Gorard and Rees, 2002) and the Lifelong Learning Group (Biesta et al, 2011) along with many others have stressed the importance of other kinds of learning including the non-accredited and the informal. Even at work, informal learning can be of great significance. A narrow focus on qualification acquisition could be harmful for other types of learning. Moreover, many types of learning will have personal, social and civic benefits as well as narrowly economic ones (Schuller *et al*, 2004). Full consideration of these issues is well beyond the intended scope of this paper. All I wish to do here is to stress that, while the new evidence from the 1958 cohort raises questions about any critique of policy based on the idea that people are simply not upgrading their qualifications in adulthood, it leaves open, and does not affect, many other parts of the complex and multi-faceted policy debate around skills.

¹ This is the conventional wisdom on the earnings returns to low-level qualifications at least in the short-term. There is some emerging evidence (Patrignani and Conlon, 2011), and a need for more research, on whether these sorts of qualifications yield returns in the long-run and/or lead on to the acquisition of further qualifications which yield positive returns.

7. Conclusion

Educational trajectories over the lifecourse constitute an important topic for social science researchers, with implications for individual progression during careers as well as inequality by social background. Previous literature has tended to concentrate on young people making initial transitions into further and higher education (Pallas, 2002). In Britain, there have been only a handful of genuinely longitudinal studies analysing participation and non-participation in learning during the adult lifecourse, the most notable examples being the work of the Cardiff Group (Gorard and Rees, 2002) and the Learning Lives Group (Biesta *et al*, 2011).

This paper contributes to the longitudinal analysis of education in adulthood. Focusing on qualification trajectories I have argued that previous longitudinal studies may have been too pessimistic about the extent to which people acquire qualifications in adulthood. Data from the 1958 cohort suggest that, amongst a sample of almost 9,000 respondents, some 71 per cent obtained a qualification between the ages of 23 and 50, and that 52.5 per cent did so in mid-life, between the ages of 33 and 50. Moreover, there was considerable evidence of progression up the ladder of qualifications. In mid-life nearly a third (31 per cent) of the sample made progress to a higher qualification level, either academically or vocationally, than they had held at age 33. Most of these people were in the category which I have called transformational, that is making a very substantial move to a higher level. Movement between levels of qualifications is often summarised by the crossing of particular thresholds which are regarded as important in policy terms. Some 2,509 cases from the sample were below level 2 at age 23. By age 33, almost 20 per cent of these had reached at least level 2 and by age 50, 38 per cent had done so. Higher up the spectrum of qualifications, among people who were at level 4 or above at age 50, 57 per cent had already attained this level by age 23, but some 43 per cent had reached this level only in the post-initial (ages 23 to 33) or mid-life (ages 33 to 50) phases of the lifecourse. In whichever way the data are summarised then, the picture is a much more dynamic one than might have been expected given the very static results which have emerged from previous longitudinal analyses.

Gender differences in learning participation over the lifecourse were striking. In initial education and in early adulthood (up to age 33) men were more likely to obtain qualifications than women, but in mid-life markedly higher proportions of women obtained qualifications than men. Moreover, in mid-life women were much more likely to make large upward steps in their level of highest qualification. Almost twice as many women as men were in what has been termed the category of transformational learner. In this cohort women had tended to fall behind men, on average, particularly after the completion of compulsory schooling. The nature of the youth labour market in the mid-1970s and prevailing assumptions about gender roles meant that women were less likely than men to have acquired intermediate vocational qualifications in their 20s and early 30s. But there was clearly a strong tendency for women to catch up on educational experience and qualifications in mid-life.

So this research portrays an optimistic picture of one type of learning participation. Large numbers of the cohort obtained qualifications after the completion of initial education and some groups who had tended to miss out early in life have been able to catch up, to some extent at least, later on. But qualifications represent only one facet of learning activity as a whole. Indeed it may be that this aspect of learning is the one bright spot in an otherwise rather gloomy landscape (Fullick, 2010). The shift in policy focus towards qualifications from

about 2004 onwards, as exemplified by the Leitch Review, may well have been detrimental to other forms of learning. Moreover, longitudinal research is inherently somewhat backward-looking and at best can only yield answers about what has happened in the recent past. It cannot necessarily be assumed that younger cohorts will continue to engage in learning and obtain qualifications to the same extent as they move through their 30s and 40s.

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Appendix 1: Coding of qualifications to academic and vocational levels in each wave of NCDS

NCDS waves 6, 7 and 8 (ages 42, 46 and 50)

Academic level 5: Higher degree

Academic level 4: First degree/HE Diploma

Academic level 3: A level/AS level/Advanced GNVQ/Scottish Highers/Scottish Certificate of 6th Year Studies

Academic level 2: GCSE grades A*-C/Intermediate GNVQ/Scottish standard grades 1-3/Scottish lower/ordinary grades

Academic level 1: GCSE grades D-G/Foundation/other GNVQ/Scottish standard grades 4 and 5/other Scottish school qualifications

Vocational level 5: NVQ level 5/PGCE/Professional degree level qualification

Vocational level 4: NVQ level 4/Nursing/paramedic qualification/BTEC Higher Certificate Diploma/HNC/HND/Other teaching training qualification/City & Guilds Part 4/Career Extension/Full Technology/RSA Higher Diploma

Vocational level 3: NVQ level 3/BTEC National Diploma/ONC/OND/City & Guilds Part 3/Final/Advanced Craft/RSA Advanced Diploma/Pitmans level 3

Vocational level 2: NVQ level 2/Apprenticeships/BTEC First Certificate/First Diploma/City & Guilds Part 2/Craft/Intermediate/RSA First Diploma/Pitmans level 2

Vocational level 1: NVQ level 1/other NVQ/units toward NVQ/RSA Certificate/Other/Pitmans level 1/HGV/other vocational qualifications

NCDS wave 5 (age 33)

Academic level 5: University or CNAA Higher Degree

Academic level 4: University or CNAA First Degree incl. B.Ed/Polytechnic Diploma or Certificate (not CNAA validated)/University or CNAA Diploma or Certificate, including Dip HE and teacher training college certificate

Academic level 3: A level / Scottish Higher Grade/ Scottish Certificate of Sixth Year Studies

Academic level 2: CSE grade 1/O level grades A-C/GCSE grades A-C /Scottish O grade – pass or grades A-C/Scottish standard grade grades 1-3

Academic level 1: CSE grades 2-5

Vocational level 5: Full Professional Qualifications/membership awarded by a professional institution/ University or CNAA Postgraduate Diploma

Vocational level 4: Part of a Professional Qualification, e.g. Part I of a two-part course/Nursing qualifications/HNC or HND/TEC/BEC/BTEC: Higher National Certificate or Diploma/City & Guilds Full Technological

Vocational level 3: ONC or OND/ TEC/BEC/BTEC National/General Certificate or Diploma/City & Guilds: Advanced/final/part 2 or 3/RSA stage 3

Vocational level 2: JIB/NJC or other craft/technician certificate/City & Guilds operative/City & Guilds craft/intermediate/ordinary/part1/City & Guilds other/can't say which/ Insignia Award in Technology/RSA stage 2

Vocational level 1: RSA stage 1/Other technical or business qualification/Any other qualification

NCDS wave 4 (age 23)

Academic level 5: Higher Degree

Academic level 4: First degree/CNAA or university diploma/Non-CNAA diploma/postgraduate diploma

Academic level 3: A level/Scottish Higher Grade

Academic level 2: O levels/Scottish O grades

Academic level 1: CSEs

Vocational level 5: professional level 3 qualifications

Vocational level 4: City & Guilds Full Tech Cert/HNC/HND/professional level 1 or 2, nursing qualification/TEC/BEC Higher

Vocational level 3: City & Guilds Advanced/ONC/OND/RSA level 3/TEC/BEC Cert

Vocational level 2: City & Guilds Operative/Craft, RSA level 2, JIB-NJC

Vocational level 1: RSA level 1/other tech/business qualification/other qualification

1978 Exams File

Academic level 3: A level/Scottish Highers

Academic level 2: O level grades A-C/CSE grade 1/Scottish O grades A-C

Academic level 1: O level below grade C/CSE grades 2-5/Scottish O grades below C

Appendix 2: Comparisons

In this appendix the aim is to explore the accuracy and representativeness of the results on the NCDS at age 50. This is done by seeing how the sample at age 50 compares with the larger samples available at earlier ages, by comparing with previous studies which have used NCDS, and by comparing with data from another source, the Labour Force Survey.

A2.1: Comparisons with earlier NCDS waves

In the datasets which I constructed whilst working on this project, there were almost 11,000 people with data on their highest qualification level at age 33. A similar number had such data at age 42. In thinking about the representativeness of the age 50 sample, then, it is possible to derive some insights by comparing the highest levels of qualification among these larger samples at ages 33 and 42, with the highest qualification which those remaining in the survey to age 50 had attained by ages 33 and 42. Substantial differences here would imply that the age 50 sample has become less representative than was the case for earlier waves of NCDS.

Table A2.1: Comparing estimates of highest qualifications level in the NCDS at age 33 (own estimates)

	NCDS wave 5 (age 33) sample	NCDS wave 6 (age 42) sample	Current sample (up to age 50)
<i>Highest qualification at age 33</i>			
	%	%	%
None	9.9	10.6	8.7
NVQ1	14.6	14.4	13.9
NVQ2	32.9	32.6	32.5
NVQ3	15.8	15.7	16.3
NVQ4	16.2	16.4	17.8
NVQ5	10.7	10.3	10.8
ALL	100.0	100.0	100.0
Total number	10,873	10,951	8,939

Table A2.1 reports the results of these comparative exercises for age 33, while Table A2.2 reports similarly for age 42. In Table A2.1 it can be observed that those who had no qualifications at age 33 were a little more likely to drop out of the survey before age 50, and conversely those with higher-level qualifications at age 33 were a little more likely to stay in. However, these differential rates of dropout appear slight, and the composition of the different samples, in terms of highest qualification, are quite similar. This also tends to be the case in Table A2.2 – there is some, modest, degree of under-representation of those with no qualifications by age 42 in the sample which remains in the survey to age 50, but in all other respects the percentages in each group are very similar.

Table A2.2: Comparing estimates of highest qualifications level in the NCDS at age 42 (own estimates)

	NCDS wave 6 (age 42) sample	Current sample (up to age 50)
Highest qualification at age 42		
	%	%
None	8.8	7.2
NVQ1	13.5	12.8
NVQ2	29.9	29.8
NVQ3	16.0	16.5
NVQ4	18.9	20.0
NVQ5	13.0	13.8
ALL	100.0	100.0
N	10,951	8,939

A2.2 Comparisons with previous research on NCDS

There has been some previous research assessing the highest level of qualification held in NCDS and it is instructive to make some comparisons with that work. Thorough accounts appeared as chapters in some of the ‘cohort books’, that is the books which aimed to serve as introductions to new results from certain waves of the cohort studies as the data became available. At age 33 the work of Bynner and Fogelman, and at age 42 the work of Makepeace *et al*, provide useful summaries of the qualifications held by NCDS cohort members by those ages. Both Makepeace *et al* and Bynner and Fogelman present their results separately for males and females. They combine levels 4 and 5 in the qualifications hierarchy. So that is the form in which the comparisons will be presented here too.

In comparing my results with these results from previous research, there will be differences arising from the fact that my sample of people still in the survey at age 50 is smaller than the sample used by previous researchers. There will also be differences arising from differences in the way the estimates were constructed and the coding scheme used to map qualifications to levels. I can make allowance for the first source of difference by using the larger samples for ages 33 and 42 from my own work, rather than just those who were still there at age 50. So here I present estimates for both my smaller sample and the larger sample, as in the previous section.

Table A2.3. Comparing estimates of qualifications levels in the NCDS at age 33

	Bynner/Fogelman		Makepeace		Jenkins		Jenkins	
					Sample 1		Sample 2	
	Men	Women	Men	Women	Men	Women	Men	Women
	%	%	%	%	%	%	%	%
No quals	11	14	11	14	8	9	10	11
NVQ1	16	19	16	15	12	16	13	16
NVQ2	26	35	20	32	30	35	31	35
NVQ3	19	8	27	14	19	13	18	13
NVQ4-5	27	25	26	25	31	27	28	25
N	5,495	5,647	5,543	5,765	4,345	4,594	5,375	5,576

Sample 1: those with data to age 50

Sample 2: those with data at age 42

Compared to previous estimates, my results show larger percentages with higher level qualifications at NVQ-equivalent levels 4 and 5, and fewer with no qualifications. That is apparent in both Tables A2.3 and A2.4. This must be partly due to differences in sample as the gaps with previous estimates lessen when using my larger sample. But it must also be partly due, therefore, to different approaches to construction of the estimates. In terms of construction, the most obvious difference is that I have used multiple waves of data (for example data from the Exams file and waves 4, 5 and 6) in deriving the estimates at age 42, while Bynner/Fogelman used just wave 5 (age 33) data in deriving the estimates at age 33 and Makepeace *et al* used data for waves 5 and 6 (ages 33 and 42) to derive estimates at age 42. So, if there was under-reporting at ages 33 or 42 my results would be more likely to overcome that by drawing on what people had reported earlier, at age 23, or had been recorded in the Exams file at age 20. There must also be some differences in the way qualifications are coded in my work compared to previous estimates. Notably, Makepeace *et al* have coded in such a way as to have much lower percentages of men at level 2 and much higher percentages at level 3 than in my results.

Table A2.4. Comparing estimates of qualifications levels in the NCDS at age 42

	Makepeace		Jenkins		Jenkins	
			Sample1		Sample2	
	Men	Women	Men	Women	Men	Women
	%	%	%	%	%	%
No quals	11	13	7	8	8	9
NVQ1	13	13	11	14	12	15
NVQ2	20	30	28	32	28	32
NVQ3	26	14	19	14	19	14
NVQ4-5	30	30	35	32	33	31
N	5,620	5,778	4,345	4,594	5,375	5,576

Sample 1: those with data to age 50

Sample 2: those with data at age 42

A2.3 Comparison with estimates from the Labour Force Survey

Estimates from the spring 2008 quarter of LFS were compared with the NCDS results. I selected a sample of people who were aged 45 to 54 in the LFS as the relevant group to compare with the NCDS cohort, who were aged 50 in 2008.

Table A2.5. Comparing estimates of qualifications levels in the NCDS and the LFS

	LFS	NCDS
	%	%
No quals	14.9	5.9
NVQ1	12.6	11.5
NVQ2	21.2	28.8
NVQ3	21.4	17.1
NVQ4-5	29.9	36.7
N	15,681	8,939

Note: LFS quarterly data from 2008 for people aged 45-54
For NCDS, the sample is those aged 50 in 2008.

The results of this exercise show a substantial difference between the two datasets. The discrepancy is not so great if a very broad comparison is made. The proportion at level 2 or below in the LFS sample is reasonably similar to that among the NCDS group at 50. However, at particular levels the differences are large, especially so for the percentage with no qualifications, as can be observed in Table A2.5.

These numbers suggest that the NCDS may not be fully representative of the broader population with, as might be expected in a longitudinal study, some under-representation of the low qualified. There are several other possible explanations for the difference. Coding differences, I would suspect to be a relatively minor explanation, as would the differences in age between the two groups. There may also be under-reporting of qualifications among the LFS sample, as well as some over-reporting of qualifications among the NCDS sample. With the information currently available, it is not possible to be certain about the magnitude of the respective contributions of these various potential explanations other than to say that each of them is likely to be playing some role.

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