

What longitudinal studies tell us about **Higher education**

Longitudinal studies have been used by researchers to explore a wide range of issues relating to higher education, including the value of having a degree and how family background affects the likelihood of going to university.

Participation in higher education

The number of people in the UK with higher qualifications is rising. In the Medical Research Council National Survey of Health and Development (the 1946 British birth cohort), 21 per cent of men and 10 per cent of women had obtained a diploma, teaching certificate, degree or post-graduate qualification by their 30s. In the 1958 National Child Development Study, 26 per cent of men and 25 per cent of women had obtained such a qualification. In the 1970 British Cohort Study, the numbers were even higher – 31 per cent of men and 32 per cent of women.

Analysis of Understanding Society also shows how participation in higher education has increased. Researchers looked at households across the country and compared the qualifications of people who were age 22 to 34 in 2012 with those aged 37 to 49. They found that 34 per cent of men and women in the younger age group had a degree, in contrast to 26 per cent in the older group.

In Next Steps, a study that follows the lives of 16,000 people born in 1989/90, 40 per cent of participants were in higher education at age 19 and a further 2 per cent had applied to start in 2010 or 2011.

Access to higher education

Research based on Next Steps, which follows the lives of 16,000 people born in 1989-90, found that young people from disadvantaged backgrounds are five times less likely to enter university than their more advantaged peers. Additionally, a comparison of the 1970 British Cohort Study (BCS70) and the 1958 National Child Development Study (NCDS) revealed that the links between parental income, parental social class and participation in higher education have strengthened over time. Family background, rather than early ability, played a more important role in determining whether a person obtained a degree for those born in 1970 than for those born in 1958.

Data from Understanding Society shows that although participation in higher education has risen by 8 per cent overall for the generation aged 22-34 in 2012 compared to those aged 37-49, the increase has not been consistent for all social groups.

The rise in participation was greatest (11 per cent) among people whose parents had 'intermediate occupations', including working in clerical or sales jobs or running small businesses. Similarly, for those with parents who had managerial and professional jobs, there was a rise of 10 per cent. However, the increase among those whose parents had routine or manual occupations was just 5 per cent, suggesting that more needs to be done to provide access to higher education for children from less advantaged social backgrounds.

Other research studies have provided further evidence that increased higher education participation in recent decades has not been equal for people from different backgrounds. An analysis of Understanding Society, BCS70 and NCDS found that the expansion of the higher education system has disproportionately benefited those from richer backgrounds and widened the participation gap between rich and poor children.

Month of birth can also affect chances of going to university, according to an analysis of data from the Millennium Cohort Study, the Avon Longitudinal Study of Parents and Children, the Labour Force Survey, Next Steps, the National Pupil Database and Understanding Society. The study by Crawford et al. found that school pupils born in August achieve lower exam results on average than those born 11 months earlier in September, and are less likely to go on to university.

Benefits of higher education

An influential study using data from the 1958 National Child Development Study (NCDS) found that men born in 1958 who had a degree earned 17 per cent more at age 33 than they would have done if they had not obtained a degree, while women with a degree earned 37 per cent more. The researchers also found that men who started their first degree course at age 21 or over earned less than those who started before this age.

A similar analysis of the 1970 British Cohort Study (1970) found that the returns to a degree remained largely unchanged for men born in 1970, with those who had a degree earning on average 14 per cent more at age 30 than if they had not gone to university. However, the wage return to a degree was significantly less for women in this generation than for their counterparts in NCDS, dropping to 18 per cent.

The study also revealed that wage returns to social science degrees, such as economics, politics, law and business, were higher than for other subjects. In social science, the returns were similar for both higher and lower degree classifications,

while in other subjects higher class degrees generally resulted in a significantly greater return on investment.

A comparison of men in NCDS, BCS70 and the MRC National Survey of Health and Development (1946 cohort) found those with a degree in the 1946 generation were 30 per cent more likely to go on to a professional or managerial job than those with secondary level qualifications (A-levels or at least 5 O-levels). However, this advantage decreased by a third to 20 per cent for men born in 1970 as those with secondary qualifications became increasingly likely to work in professional or managerial roles due to the growing availability of these jobs.

A study of the 1946 British birth cohort found that those who had obtained a university degree or equivalent by age 26 were more likely to have better cognitive function at age 53 than their peers with lower qualifications. They were also nearly 4 times more likely to engage in continuing education in their 30s and 40s than those who had not received any qualifications in early adulthood.

A study of data from NCDS and BCS70 has linked higher education to a range of other outcomes, including health behaviours. The researchers found that graduates were less likely to smoke, be obese, or show signs of depression than their peers. Significantly, in the 1958 cohort, those who started but didn't complete a higher education course showed a downturn in indicators of good health compared to those who went on to gain a degree. The study also found that graduates were consistently less likely to be unemployed than non-graduates between the ages of 25 and 30.

However, findings from the 1946 British birth cohort demonstrate that the relationship between higher education and healthy behaviours is not clear cut. In the 1946 cohort, those with good educational attainment also had the healthiest diets, however some highly-educated women also drank more heavily than their peers. Another study of the 1946 cohort found women who had achieved a high level of educational attainment by age 26 also reported more symptoms of anxiety and depression at age 53 than their less qualified peers.

Aspirations to higher education

A study using data from Next Steps has shown that one in five able pupils does not apply to university. The researchers found that 76 per cent of pupils who had done well in Key Stage 2 tests at age 11 had applied for a university place by age 20. However, this figure dropped to 66 per cent for able children from less advantaged backgrounds, compared to 85 per cent from more affluent homes.

The study also revealed that girls had higher aspirations than boys throughout adolescence and were more likely to have applied to university by the time they left school. White teenagers were the least likely to expect to go on to higher education,

and less than half had applied by age 17. Black African and Indian young people were the most likely to aspire - and apply - to university.