

What longitudinal studies tell us about

## **Women's employment**

Longitudinal data has enabled researchers to understand more about a wide range of issues relating to women's employment, including the impact of education and family responsibilities on their careers. In particular, the CLOSER studies have been used to track progress in gender equality by comparing the wages and career opportunities of women and men over time.

### **Women's employment rates and career progression**

Comparison of the MRC National Survey of Health and Development (1946 cohort), the 1958 National Child Development Study (NCDS) and the 1970 British Cohort Study (BCS70) has illustrated the dramatic change in women's position in the labour market across three generations. At age 26, just under half of women born in 1946 were working, compared to more than three-quarters of women from the 1970 cohort nearly a quarter of a century later. The researchers suggest that the increase in employment rates is due to women of younger generations having children later and being more likely to work when they do.

The average career break for mothers after having their first child fell from six years for the 1946 cohort to two years for the 1958 cohort and one year for the 1970 cohort. Around half of mothers in the Millennium Cohort Study had returned to work by the time their child was 9 months old. These patterns have also been found among women of a broad range of ages in the British Household Panel Study, the precursor of Understanding Society.

Another comparison of the three cohorts found that women in each generation entered the labour market at a significantly lower occupational level than men. However, the average occupational level of women at almost all ages has increased for each cohort, particularly among women in their early twenties up to age 34. In addition, women who worked full-time until they were 34 moved upwards at a much steeper rate in all cohorts than women who had periods of part-time employment. Women also tended to climb higher on the career ladder by age 34 if they had more work experience and if they had held more jobs.

## Women's wages

Researchers comparing the 1958 National Child Development Study (NCDS), the 1970 British Cohort Study (BCS70) and Understanding Society found that while the pay gap between the 'average woman' and 'average man' has decreased over the past 50 years, the differences in earnings between women from different social classes remain far greater than the differences between men.

Among members of the 1946 cohort who were working full-time at age 43, women were paid on average 48 per cent per hour less than men born in the same year. For full-timers born in 1958, women still earned almost 35 per cent less than men at age 41-42. These pay gaps had widened since the men and women were in their twenties. However, professional women earned nearly three times as much as women of the same age who were in unskilled jobs. In comparison, professional men earned just under one and a half times more than men in unskilled jobs.

The pay gap between men and women born in 1970 dropped to 29 per cent (at age 38-39), but professional women still earned on average 80 per cent more than unskilled women, compared to a difference of 61 per cent between professional and unskilled men.

Findings from the 1946, 1958 and 1970 cohort studies and the British Household Panel Survey have also shown how the gender pay gap increases as people get older. The researchers found that this is associated with women taking career breaks to raise children, returning to employment part-time, and getting fewer pay rises and promotions.

## Education and women's employment

Educational opportunities expanded for the post-War generation, and the few women who were able to take advantage of this ended up earning far more than their less-educated peers. But education was not the only factor linked to higher earnings for women of this generation. Advantaged family background, good early educational achievement, and having a well-educated mother were among the other predictors of higher wages among women.

Other longitudinal evidence suggests that having a degree is a bigger advantage to women in the workplace than it is to men. Research using data from the 1958 National Child Development Study (NCDS) and the 1970 British Cohort Study (BCS70) found that women born in 1958 who had university degrees earned 34 per cent more at age 41-42 than those without. Similarly, women born in 1970 who were university-educated earned 32 per cent more than those who were not. In contrast, men from the 1958 generation earned on average 14 per cent more for having a degree, while those in the 1970 cohort were likely to earn 17 per cent more.

Another study based on the NCDS found that women who had achieved at least A-Level qualifications had a significantly higher employment rate than their lower-educated peers (84 per cent compared to 78 per cent). Research has indicated that qualifications have a greater effect on occupational level for women than men, both at entry into the labour market and in their mid-thirties.

NCDS data has also revealed that women's wages were on average 5 per cent higher if they attended an all-girls school rather than a co-educational school. This was accounted for by better exam results at age 16 in the girls' schools.

## **Family life and working hours**

Longitudinal evidence from the 1958 National Child Development Study, the 1970 British Cohort Study, the MRC National Survey of Health and Development (1946 cohort) and Understanding Society shows that women's employment status is strongly linked to family, marriage and health. Researchers found that, at age 33, the careers of low-educated women were limited by being married, having children who were under the age of 16, or suffering from chronic diseases. Their family duties reduced their labour market participation and likelihood of working full-time. In contrast, the careers of women who reached at least A-Level education were less affected by the number of children they had. Overall, women who postponed having children earned higher wages than those who became mothers at an early age. Among women in the 1946 cohort, researchers also found that employment had generally been beneficial for those with poor health, rather than imposing a 'double burden'.

Evidence from Understanding Society has shown that women are less likely to work long hours than men. Only 7 per cent of female employees work more than 48 hours a week, compared to 21 per cent of their male counterparts. Women who work long hours suffer are also more likely to suffer from higher levels of job-related anxiety than men.

## **Aspirations in early life and women's employment outcomes**

Women's employment outcomes are linked to their aspirations in earlier life. A study using data from the 1970 British Cohort Study found that women who aspired to higher occupational positions when they were teenagers were both more likely to achieve a higher social status and earn more in adult life. Among men, teenage aspiration was linked to adult social status but not earnings.

The researchers found that a significantly higher proportion of teenage girls than boys aspired to professional or managerial jobs (36 per cent compared to 29 per cent), although boys valued being challenged in a job more than girls did. Teenage girls from higher income families were likely to place more importance on getting

ahead than those from lower income families, although this association was not significant for teenage boys.

**Studies used:**

MRC National Survey of Health and Development, 1970 British Cohort Study, 1958 National Child Development Study, Understanding Society