

RESEARCH REPORT

Work or Study?

*Post-16 Pathways, Degree Attainment
and Adult Life at 32*

Report for Nuffield Foundation

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Contents

Executive Summary	4
1. Work or Study: Introduction	8
2. The Winding Ways from School to Work	15
Ages 17-20: a period of rapid transition and diverging trajectories	15
Routes and degree attainment: Seven pathway types to age 32.....	20
What follows.....	23
3. Predictors of Transition Pathways	25
Predictors of the seven pathways.....	25
Multivariate regression results	27
What follows.....	31
4. From transition pathways to adult outcomes	33
Adult outcomes across transition pathways	34
Gender differences in adult outcomes.....	39
What follows.....	41
5. Summary: Transition pathways and their wider returns ..	43
References	51
Appendices	57
Appendix 1: Post-16 transition pathway allocation protocol.....	57
Appendix 2: Measurement of the key variables	60
Appendix 3: Composition of the seven routes (Descriptive subgroup analysis).....	64
Appendix 4: Multinomial logistic regression for pathway outcomes	70
Appendix 5: Descriptive results for age 32 outcomes	71
Appendix 6: Regression results for age 32 outcomes.....	72

Executive Summary

Progressing through education and into a good job is key to the prosperity and wellbeing of young adults and society at large. In this final stage of our research, we provide longitudinal evidence on the factors associated with differences in school-to-work trajectories, labour market outcomes, and wider life outcomes among men and women who followed academic and more vocational pathways into work.

This report builds directly on our earlier analysis of post-16 pathways (Jenkins & Schoon, 2025), and extends it in three ways. First, it combines what young people did between 17 and 20 with whether they held a degree by 32, producing a classification that distinguishes those who reached the same destination by different routes. Second, it moves from descriptive breakdowns to multivariate analysis of what predicts each route and what follows from it. Third, it widens the outcomes examined beyond earnings and job quality to include employment, home ownership, life satisfaction and psychological distress.

We address three core topics:

- 1) mapping the multiple pathways from school into work between ages 17 to 20 alongside subsequent degree attainment by age 32;
- 2) what are the predictors of the pathways young people take through the education system and into their early career;
- 3) how do diverse trajectories shape adult life outcomes by age 32, spanning labour market success and personal wellbeing?

Quantitative data were used from *Next Steps* – a longitudinal study of individuals born in England in 1989/90 (previously known as the *Longitudinal Study of Young People in England*). This cohort reached age 16 around twenty years ago, and post-16 provision has changed considerably since, with the expansion of higher education, reforms to vocational and technical qualifications, and shifts in apprenticeship participation. We focus on this cohort because it is the most recent to have been followed to age 32, when early career trajectories are becoming more established. Although the distribution of routes may have shifted among more recent cohorts, the broader patterns identified here are likely to be more durable.

Key Findings

(1) School-to-work transition and degree attainment

- **The conventional academic route was a minority experience.** Only 30% of young people followed the route from A Levels at 17 and 18, into higher education (HE) by 19 or 20, and on to a degree by 32. Over two-thirds followed one of six other pathways, combining academic study, vocational education, apprenticeships and work in other ways.
- **Work routes are the most common experience.** More than two in five spent their late teens mainly in employment, apprenticeships or vocational study leading to work.

Most of them (36% of the cohort) had no degree at 32, making this the largest single group, while 6% went on to obtain a degree later.

- **Many graduates took non-traditional routes.** Of the 41% of the cohort holding a degree at 32, around a quarter had not followed the A Levels to HE route, and almost one in five had not been in HE at 19 or 20 at all.
- **A sizable minority stalled or disengaged.** One in six (17%) spent their late teens in education at Level 3 or below without progressing, or mainly unemployed or out of the labour force. Most of them (15% of the cohort) had no degree at 32.
- **Entering HE did not guarantee a degree.** 7% of the cohort entered HE by age 20 but had no degree at 32. Completion reached 87% among those who entered through A Levels, compared with 57% among those who entered through vocational or mixed qualifications.

(2) What predicts the pathways young people take to age 32?

- **Prior attainment is the strongest predictor.** A one-standard-deviation increase in GCSE score was associated with a 28 percentage-point higher probability of following the academic route to a degree, and with lower probabilities of the work route without a degree (-15.7 points) and the disengaged route without a degree (-11.0 points).
- **Family background matters over and above attainment.** Young people with a degree-educated parent were 4.8 percentage points more likely to follow the academic route to a degree, and those with a parent in a professional or managerial occupation 2.0 points more likely. Those living in more deprived areas were 3.5 to 6.0 points less likely to take this route, and those in the most deprived areas were 4.9 points more likely to follow the disengaged route without a degree.
- **Gender was not independently associated with transition pathways** once prior attainment, socioeconomic background, educational expectations, parental support, health, and other factors were taken into account. This suggests that observed gender differences largely reflect broader academic, family, and social circumstances.
- **Ethnic minority young people were more likely to reach a degree.** Compared with White peers, ethnic minority young people were 11.2 points more likely to follow the academic route to a degree, 2.0 points more likely to take the vocational route to a degree, and 16.5 points less likely to follow the work route without a degree.
- **Own and parental expectations shape routes.** Each one-point increase in young people's expectations of applying to university (measured on a four-point scale at age 14) was associated with a 4.8 percentage-point higher probability of following the academic route to a degree. Where parents expected an apprenticeship or trade rather than full-time education, the probability of the academic route with a degree fell by 7.8 points and that of the work route without a degree rose by 10.8 points. Paying for private tuition was associated with higher probabilities of both the academic (+3.2 points) and vocational

(+2.1 points) routes to a degree and a lower probability of the work route without a degree (-7.3 points).

(3) Labour market outcomes and wider returns

- **Early disengagement marks the most lasting disadvantage.** At age 32, employment ranged from 95% for those on the academic route to a degree, 88% among those on the work route without degree to 59% for those on the disengaged route without a degree. Home ownership among the disengaged without degree was 21%, compared to 51% among those on the work route without degree and 67% among those on the academic route to a degree. After accounting for background and early characteristics, those on the disengaged route without a degree had 65% lower odds of employment and 61% lower odds of home ownership than those on the academic route.
- **A later degree does not fully close the employment gap.** Young people on the disengaged routes who later obtained a degree still had 55% lower odds of being employed at 32 than academic-route graduates, although their earnings and job quality did not differ significantly once they were employed.
- **Alternative routes to a degree lead to similar outcomes.** Once background was taken into account, those who reached a degree through vocational qualifications or after entering work did not differ significantly from academic-route graduates in home ownership, employment, earnings, and job quality.
- **Not completing a degree carries earnings and job quality penalties, partly through the jobs people hold.** Among those in work, HE dropouts and those on the work route without a degree earned around 13% less than academic-route graduates, and those on the disengaged route without a degree around 19% less. Roughly half of these gaps reflected differences in occupation, industry, sector and firm size, but meaningful differences remained after accounting for them.
- **Wellbeing and job satisfaction differ less than economic outcomes.** After adjustment, life satisfaction was lower only on the disengaged route without a degree (by about half a point on a 0 to 10 scale), and job satisfaction varied little across route.
- **Gender gaps are significant in age 32 outcomes.** Women had around half the odds of being employed compared with men with similar pathways, backgrounds and family circumstances, almost nine times the odds of working part-time, and higher odds of psychological distress. Among those in work, women earned around 14% less per hour, and around a third of this gap reflected differences in the jobs women and men held.

Policy Implications

- **Policy should recognise and support diverse routes into adulthood.** The direct A-Level-to-university pathway was a minority experience and only one of several routes through which young people progress into higher education and employment, and some return to education and attain a degree at a later stage. The majority routes involving vocational

training, apprenticeship, and work-based routes should therefore be treated as integral components of the post-16 system, with attention to their quality, progression opportunities, and longer-term viability. Recognising these diverse routes does not mean that they lead to the same outcomes. Therefore, young people should have access to clear progression opportunities and high-quality guidance within and across pathways, including opportunities to return to education or move into further training where appropriate.

- **Policy should address inequalities early and prioritise sustained engagement.** GCSE attainment, family socioeconomic circumstances, and expectations formed by age 14 are major predictors of subsequent pathway membership, indicating that inequalities in post-16 opportunities are already substantially established by the time young people reach age 16. Reducing disparities in attainment and access to educational resources during childhood and secondary school therefore remains central to widening opportunity. The poorer adult outcomes associated with prolonged disengagement also highlight the importance of early identification and timely support to help young people remain engaged in education, training, or employment. Flexible opportunities for re-entry and progression are important for those whose trajectories are disrupted, so that early disadvantage or temporary disengagement does not become a lasting constraint on later opportunities.
- **Policy should adopt a broader life-course perspective on educational and labour-market progression.** Immediate progression at ages 18-20 provides an incomplete measure of successful transitions. Young people may enter employment and subsequently return to education or experience disengagement before later attaining qualifications. Policy and accountability frameworks should therefore recognise delayed and non-linear progression, while also considering the quality of participation and early employment. In practice, this means measuring educational attainment well beyond age 20 rather than relying on participation at 18 or 19 and supporting completion rather than entry alone. Expanded part-time and modular provision, stronger progression routes from apprenticeships and vocational qualifications into advanced education and training, employer-supported study, and the Lifelong Learning Entitlement can help young people continue their education and build on earlier learning at different stages of adulthood. This requires stronger coordination across schools, further and higher education, careers services, employers, and employment support to ensure that young people can sustain engagement, navigate different routes, and access opportunities for progression throughout early adulthood.
- **Policy should address the gender gaps that persist after the transition.** Young women and men followed similar routes but diverged not just in employment, working hours, pay and job quality by age 32 but also in wellbeing, so equal access to post-16 routes is not sufficient on its own. Accessible childcare, good-quality part-time and flexible work with genuine progression opportunities, and attention to occupational segregation are likely to matter for narrowing these gaps.

1. Work or Study: Introduction

Individuals with a degree at age 32 may have arrived at it by very different routes. Some may have progressed directly from A Levels into higher education at 18, some might combine work, vocational education and academic study, while others may have returned to study after several years in work. Likewise, individuals without a degree may have spent their late teens in very different circumstances, some in sustained employment or apprenticeship, while others may have been largely disengaged from both education and work. Yet research and policy have tended to examine routes and attainment separately. Studies of post-16 transitions often end in the early twenties, before the longer-term outcomes of those transitions become clear, while studies of the returns to education typically start from qualifications, treating the pathways through which they were obtained as incidental. Examining routes and attainment together reveals the diversity of experiences within each outcome and brings into view groups what either approach alone may overlook. Building on our earlier analysis of post-16 routes (Jenkins & Schoon, 2025), this report follows the same cohort to age 32 to examine what shapes different route-to-destination pathways and how these pathways are associated with outcomes in early adulthood.

Background

(1) School-to-work transition in England and the “forgotten half”

Compared with other European countries, the UK has had, and still has, a relatively high proportion of young people with below upper secondary education (OECD, 2024b) who enter the labour market directly after compulsory schooling, taking on jobs with or without training (Schoon & Bynner, 2019; Tomaszewski et al., 2025). This pattern persists despite the raising of the participation age (RPA), which by 2015 required young people to remain in some form of education or training until age 18 (Dickson et al., 2025; Duckworth et al., 2025). Yet research and policy have tended to focus disproportionately on participation in higher education, with much less attention paid to the “forgotten half”, referring to those who do not enter or complete university (Birdwell et al., 2011). This is important not only because many young people enter work through vocational, apprenticeship, or other non-university routes, but also because concerns about graduate underemployment and skills mismatch have raised broader questions about the relationship between educational pathways and the labour market (OECD, 2018, 2024a; ONS, 2019). These concerns have renewed interest in the role and potential of vocational and technical education. For example, the 2019 Augar Review recommended a rebalancing of resources towards further and vocational education (DfE, 2019). Despite this growing policy interest, we know relatively little about why young people follow vocational rather than academic pathways into work, how these pathways develop over time, and what their longer-term consequences are for employment and wider adult outcomes.

(2) Inequalities in educational attainment

Educational attainment has changed substantially across recent cohorts, with women now surpassing men in both attainment and participation in higher education. This shift has occurred across many Western societies. Female undergraduates outnumber male undergraduates in 30 of the 36 OECD countries (OECD, 2023), and in the UK around 1.3 women enrol in an undergraduate degree for every man (DfE, 2023; Hillman & Robinson, 2016). Women have also, on average, left school with more qualifications than men in recent cohorts. Given the importance of educational qualifications in shaping access to employment, these changes might be expected to have reduced or even reversed some of the gender inequalities observed among earlier cohorts. Indeed, concerns have increasingly been raised about the educational position of boys and young men, particularly those from disadvantaged backgrounds (Blower, 2025).

Meanwhile, family socioeconomic background also remains one of the strongest predictors of post-16 educational choices. Young people from advantaged family backgrounds, who benefit from greater economic, cultural, and social resources, disproportionately follow the conventional academic route towards HE (Dickerson et al., 2023; Duckworth et al., 2025; Schoon & Lyons-Amos, 2016). In contrast, those from socioeconomically disadvantaged backgrounds, including young people living in rented accommodation or in more deprived neighbourhoods, are overrepresented in vocational education, direct entry into employment, and disengagement from education and employment (Dickerson et al., 2023; Duckworth et al., 2025; Schoon & Lyons-Amos, 2016). While educational expansion was anticipated to equalise opportunities, socioeconomic origin continues to govern not only prior academic performance but also the capacity to translate qualifications into degree attainment, reinforcing intergenerational inequality (Bukodi et al., 2021; Farquharson et al., 2022).

Ethnic differences add a further dimension to these patterns. In England, many ethnic minority groups have higher rates of post-16 educational participation and progression to higher education than their White British counterparts, even after controlling for prior attainment and other socioeconomic backgrounds (Crawford & Greaves, 2015; Dickerson et al., 2023). These patterns have been linked to differences in educational expectations and aspirations across ethnic groups. The concepts of “immigrant optimism” and the “ethnic aspiration premium” have been used to describe the particularly high educational expectations observed in some minority communities (Fernández-Reino, 2016; Modood & Khattab, 2016; Sikora & Pokropek, 2021). However, ethnicity does not operate in isolation from other dimensions of inequality. Increasing attention has therefore turned to how ethnicity intersects with gender and socioeconomic position, as illustrated by the comparatively low educational attainment of White British pupils from low-income households (House of Commons Education Committee, 2021; Prior et al., 2025).

(3) Employment, earnings, and multidimensional job quality

Young people entering the labour market in the twenty-first century have done so against a challenging economic backdrop, characterised by periods of relatively high youth unemployment and difficulties in securing good-quality jobs that match their qualifications (Schoon, 2012). Existing evidence suggests that the transition into employment may be less difficult than securing a job that provides an appropriate match between qualifications and work. Using mainly

qualitative evidence from Britain, Hoskins et al. (2018) compared graduates and school leavers who were either in or out of work. They found that, while most young people were able to obtain employment, finding work at an appropriate level was more challenging. School leavers were more likely to be in work than graduates, although this difference needs to be interpreted in light of the age at which participants were interviewed: at around 22 or 23, some graduates had only recently completed university and were still making the transition into the labour market. Quantitative evidence similarly suggests that vocational qualifications may be associated with higher rates of employment among young adults (Shao, 2022).

Employment, however, provides only a partial picture of how different educational pathways translate into labour-market outcomes. Earnings are another important indicator of economic returns, but the evidence on early-career earnings is mixed. While some studies observe minimal initial wage gaps among young adults entering entry-level employment (McMullin & Kilpi-Jakonen, 2014), longitudinal research more often identifies early and widening wage advantages for men (Leoncini et al., 2024; Macmillan et al., 2024). Examining British cohorts born in 1946, 1958, 1970, and 1989/90, Foliano et al. (2024) demonstrate that the gender wage gap has expanded over time among young graduates while narrowing among non-graduates, driven primarily by occupational sorting rather than differences in formal human capital. For non-graduates, returns to vocational credentials vary widely by sector, qualification level, and delivery mode (Cavaglia et al., 2020; Dearden et al., 2002; Matthewes & Ventura, 2022; McIntosh & Morris, 2021). These findings suggest that assessing the consequences of different educational routes requires attention to how returns develop over time and across different forms of employment, rather than focusing only on initial labour-market entry.

More broadly, whether young people are employed and how much they earn do not fully capture the quality of their working lives. Research on job quality has emphasised its multidimensional nature, encompassing factors such as opportunities to use skills and exercise discretion, career prospects, working conditions, the social environment, work intensity, and working-time quality (Clark, 2005; Green & Mostafa, 2012; Piasna et al., 2019). These dimensions are particularly important in early adulthood, when employment experiences can have lasting implications not only for future labour market success but also for overall wellbeing (Green et al., 2024). Recent evidence further suggests that the returns to higher education vary across dimensions of job quality. Lee and Burga Idrogo (2025), for example, find substantial variation in graduate premiums across six dimensions of job quality among European countries. A degree may therefore be associated with advantages in some aspects of working life without necessarily translating into better outcomes across all dimensions.

(4) Broader outcomes of school to work transitions

The consequences of school-to-work transitions extend beyond employment to wider dimensions of personal wellbeing. A growing body of research has therefore called for transitions to be examined from a broader life-course perspective, recognising that conventional indicators of labour-market success do not necessarily capture individuals' lived experiences or longer-term wellbeing (Masdonati et al., 2022; Pallas, 2006; Thouin et al., 2023). Employment, for example, may provide economic security but differ substantially in the extent to which it offers satisfaction and a sense of fit with one's aspirations and circumstances (Schokkaert et al., 2009). More

generally, educational or occupational pathways that appear successful according to conventional indicators may not necessarily translate into positive subjective evaluations, while less conventional routes may yield divergent, often nuanced consequences for individuals' subjective outcomes (Galve-González et al., 2024; Ryan & Lőrinc, 2018; Tesi et al., 2025).

This broader perspective has encouraged researchers to consider a range of subjective and psychosocial outcomes alongside conventional labour-market indicators. Studies have considered career and job satisfaction (Pinquart et al., 2003; Thouin et al., 2023; Zhang et al., 2022), life satisfaction (Dietrich et al., 2022; Jongbloed & Giret, 2022; Reuter et al., 2022; Schoon et al., 2012), and satisfaction with the transition process itself (Hirschi, 2010; Ruschoff et al., 2022). These outcomes provide a complementary perspective on the consequences of different school-to-work pathways, capturing dimensions of young people's lives that may remain hidden when success is assessed solely through employment status or income.

Project Aims

Against this background, this report provides comprehensive longitudinal evidence on the antecedents and long-term consequences of school-to-work transitions among young people in England. This report builds on our earlier report, which identified eight distinct routes through the post-compulsory period and documented who followed each of them (Jenkins & Schoon, 2025). The present report extends that work in three respects.

First, it combines those routes with degree attainment at age 32, so that young people who reached the same destination by different routes can be distinguished from one another. Combining the two is necessary because neither is sufficient on its own. Degree attainment carries considerable weight in the labour market but says nothing about how it was reached. A pathway typology that closes its observation window at 20 cannot see those who obtained a degree later, those who entered higher education without completing, those who continued working without completing a degree, or those who disengaged from education and work.

Second, this report moves from descriptive breakdowns to multivariate analysis of what predicts each route and what follows from it. This allows differences in adult outcomes to be assessed net of the background characteristics that shape who takes which route, and to be decomposed into the part operating through the jobs people hold and the part that persists within them.

Third, this report widens the outcomes examined beyond earnings and job quality to include employment, home ownership, life satisfaction and psychological distress. As the literature reviewed above suggests, conventional labour market indicators capture only part of what a transition implies, and routes that appear successful on one measure may not be so on another. Including outcomes observed for the whole cohort rather than only for those in work is also important, since it allows the position of those who are not employed at 32 to be examined rather than excluded from the analysis by construction.

In this report we thus address three core research issues:

1. **Mapping transition pathways:** How do post-16 transitions unfold between ages 17 to 20, and how do these transitions intersect with degree attainment by age 32?

2. **Predictors of pathway allocation:** Taking a multivariate approach, we assess the relative and independent contributions of individual, socioeconomic, academic, and relational factors in shaping young people's movement into different academic, vocational, employment, and disengaged trajectories.
3. **Adult returns and penalties at age 32:** How are different transition pathways associated with adult outcomes, including objective indicators of socioeconomic position (employment, earnings, job quality, and home ownership) and subjective well-being (life satisfaction, job satisfaction, and psychological distress)? To what extent do these differences reflect occupational sorting into different types of jobs, and to what extent do disparities persist beyond differences in observed job characteristics?

Data and Methods

Data sources

We draw on data from *Next Steps* (formerly known as the *Longitudinal Study of Young People in England*), a cohort of over 15,000 individuals born in 1989/1990 (Wu et al., 2024). They were first surveyed at age 13/14 in 2004 with annual follow-ups until 2010 (age 19/20) and then an additional survey in 2015, when the cohort had reached the age of 25, and in 2022, when they were 32 years old.

This cohort reached age 16 around twenty years ago, and the policy landscape has changed considerably since then. Higher education has expanded, alongside foundation years and other widening participation initiatives. Overall apprenticeship uptake has declined, while degree apprenticeships have grown. Following the Wolf Review, lower-level qualifications were reformed, while T Levels and Higher Technical Qualifications have been introduced and mixed academic and vocational study at Level 3 has become more common. Labour market demand has also shifted, with local and regional skills bodies taking on new roles in responding to changing skills needs.

We nevertheless focus on this cohort because it is the most recent to have been followed to age 32, when early career trajectories become more established and outcomes can be assessed with greater confidence than in the early twenties. Shorter follow-ups cannot readily distinguish temporary positions from more durable outcomes, nor capture those who obtain a degree later than the conventional timetable, a substantial group in this cohort. Although the distribution of routes is likely to have shifted among more recent cohorts, and the value attached to particular qualifications may have changed, broader patterns are likely to persist. For example, two recent DfE reports using data from the Longitudinal Study of Young People in England born in 2000 (LSYPE2) found that by age 20 one third (34%) of the cohort had spent two years in sustained higher education studying for a first degree following a conventional A-levels route, while two thirds took different pathways over the same period (Duckworth et al., 2026; Ross et al., 2026). Other patterns include the social gradient in access to the academic route, the diversity of pathways through which young people obtain a degree, and the lasting disadvantage associated with early disengagement.

Next Steps contains detailed information on young people's family backgrounds, including parental education, occupation and housing tenure, as well as parents' expectations for their

children's education and careers. It also records young people's own educational expectations, school experiences, academic self-concept, early orientations towards work, and health, together with gender and ethnicity. Survey responses are linked to the National Pupil Database (NPD), providing administrative records of school attainment. This allows us to use standardised Key Stage 4 (GCSE) scores as a measure of prior attainment when examining the routes young people follow after age 16. The annual surveys between ages 17 and 20 record young people's main activity each year, and the age 32 survey provides information on educational attainment, employment, job characteristics and wellbeing in adulthood.

Analytical sample and missing data strategy

Analysing longitudinal trajectories across nine survey waves spanning nearly two decades presents challenges arising from both panel attrition and item non-response. We therefore adopt an analysis-specific missing-data strategy that distinguishes between the requirements of descriptive trajectory mapping and those of multivariate modelling.

▪ **Descriptive trajectory analyses:** The construction of post-16 pathways from ages 17 to 20 requires an unbroken sequence of activity states across Waves 4-7. **8,381 respondents** have complete activity records over this period. This sample is used to describe activity at each age and to construct the eight transition pathways (Figures 1 to 4). Descriptive analyses of route-attainment categories and adult outcomes (Table 1, Figures 5 to 6) are restricted to the **5,139 respondents** in the age 32 sample with complete information on transition pathway and degree attainment, representing 71% of the age 32 sample.

▪ **Multivariate regression models:** For regression analyses, we use Multiple Imputation by Chained Equations (MICE) to reduce the loss of observations and potential selection bias associated with complete-case analysis. Missing values in baseline characteristics, early-life measures, pathway types, adult covariates and outcomes are imputed across five imputed datasets. Continuous variables are imputed using linear regression or predictive mean matching, while categorical variables are imputed using logistic or multinomial regression models, as appropriate. Estimates and standard errors are then combined across imputed datasets using Rubin's rules (Rubin, 1987).

The regression analyses using the imputed data comprise two analytical samples:

- **Full sample (N = 7,204):** Used to examine the predictors of pathways (Chapter 3) and adult economic and well-being outcomes observed for the cohort as a whole, including employment, home ownership, life satisfaction, and psychological distress (Chapter 4).
 - **Employed subsample (N = 6,251):** Restricted to respondents in employment at Wave 9 and used to examine outcomes defined conditional on employment, including part-time work, log net hourly earnings, multidimensional job quality, and job satisfaction (Chapter 4).
- **Survey weights:** Longitudinal survey weights are incorporated throughout the descriptive and regression analyses to account for differential panel attrition and improve the representativeness of estimates for the target cohort.

Analytical strategy

The empirical analysis proceeds in three sequential stages. First, we map trajectories, describing the main activity sequences followed by young people between ages 17 and 20. We identify distinct pathways encompassing academic study, vocational education, apprenticeships, direct employment, and economic disengagement, and examine how these early routes are associated with degree attainment by age 32.

Second, we model pathway allocation. We use multinomial logistic regression to examine the individual, familial, academic, and relational characteristics associated with membership in different route-attainment categories. Results are reported as average marginal effects (AME), allowing us to quantify differences in the predicted probability of following each pathway across socioeconomic origins, prior academic attainment and other characteristics.

Third, we assess the adult consequences of these pathways. At age 32, we examine a range of objective socioeconomic outcomes, including employment, net earnings, part-time employment, multidimensional job quality, and home ownership, alongside measures of subjective well-being, including life satisfaction, job satisfaction, and psychological distress. Binary outcomes are estimated using logistic regression and reported as odds ratios with 95% confidence intervals, while continuous outcomes are estimated using Ordinary Least Squares (OLS) regression.

To examine whether differences in adult labour-market outcomes are associated with the types of jobs individuals enter, or persist beyond differences in observed job characteristics, employment-related outcomes are estimated using a two-stage sequential specification. Model 1 adjusts for a common set of individual and family characteristics, including gender, ethnicity, socioeconomic origin, standardised GCSE attainment, early years characteristics, family structure, and geographic region. Model 2 retains all Model 1 covariates and additionally adjusts for detailed job characteristics, including Standard Occupational Classification 2020, industry sector (Standard Industrial Classification 2007), public versus private sector, and employer firm size. Comparing estimates across the two specifications indicates the extent to which pathway differences are attenuated after accounting for the types of occupations, industries, and firms in which individuals are employed.

The rest of this report is divided into four chapters. Chapter 2 maps the transition pathways young people followed between ages 17 and 20 and combines them with degree attainment at age 32. Chapter 3 examines the predictors of these route-attainment categories, and Chapter 4 examines how they are associated with outcomes at age 32, including employment, earnings, home ownership, job quality, job satisfaction and wellbeing. Chapter 5 summarises the main findings, discusses their policy implications and sets out the limitations of the study.

2. The Winding Ways from School to Work

In this chapter, we follow a cohort of young people born in 1989/90 who attended secondary school in England. We trace their main activity between ages 17 and 20 and link these pathways to whether they held a degree at age 32. Combining routes taken in the late teens with later degree attainment identifies seven route-attainment types. The conventional pathway, from A Levels through higher education (HE) to a degree, was followed by fewer than one in three young people. The largest group moved into work or work-based training in their late teens and had no degree at age 32. A substantial minority reached a degree, or started one without finishing, by routes that standard measures of access and attainment do not capture.

KEY FINDINGS

- Only **30%** of the cohort followed the conventional route from A Levels at 17-18, into HE at 19-20, and on to a degree by 32.
- The largest single group (**36%**) moved into employment or apprenticeships in their late teens and had not obtained a degree by 32. A further 15% spent those years in lower-level study or mainly unemployed or out of the labour force and also had no degree at 32.
- **Entering HE did not guarantee a degree.** 7% of the cohort entered HE by age 20 but held no degree at 32. Completion reached 87% among those who entered HE through A Levels, compared with 57% among those who entered through vocational or mixed qualifications.
- **Two in five (41%)** held a degree at 32, and **more than a quarter** of these graduates took a route other than A Levels straight into HE. Most of them did not enter HE until after age 20, following spells in work, vocational study or other activities.

Ages 17-20: a period of rapid transition and diverging trajectories

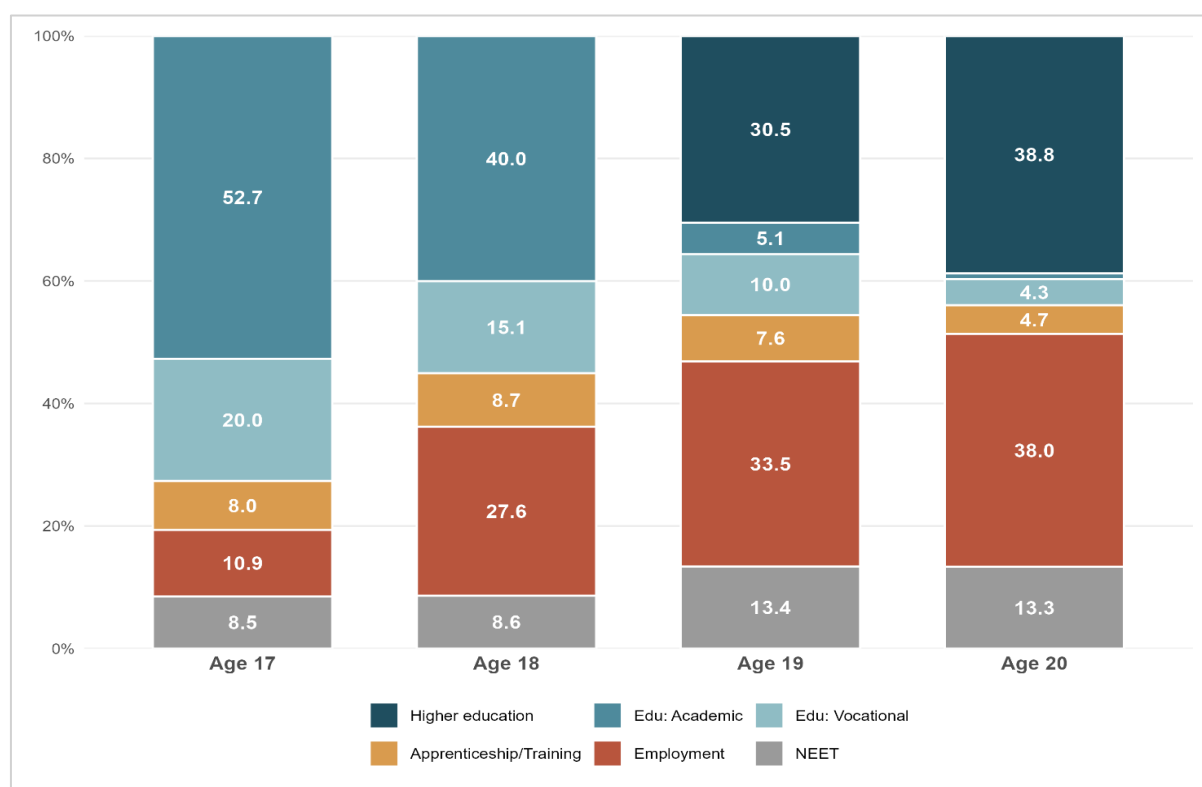
Education and work transitions between age 17 and 20 capture a critical developmental window, setting the structural trajectory for most individuals. Early decisions - such as continuing in further or higher education, entering an apprenticeship, or starting work early - create compounding advantages or disadvantages, following the principle of path dependency (Bernardi et al., 2019). Linking post-16 transitions to degree attainment at age 32 allows us to observe the medium-term returns to those early decisions. It enables us to identify individuals who took non-linear paths

right after high school, such as working for a couple of years or doing an apprenticeship before finishing a degree, as well as those who disengage from education or work. From a policy perspective, understanding the precursors of later transitions and associated outcomes allows governments to design early interventions. It is often more cost-effective to fix structural leaks in the education and training pipeline at age 18 than to fund retraining programs at age 30.

In a first step we examine the eight post-16 transitions between ages 17-20 established in our earlier report (Jenkins & Schoon, 2025) in more detail, mapping how they unfold over time. We find that young people's circumstances changed markedly from year to year. Figure 1 shows the distribution of young people's main activity between the ages of 17 and 20. At age 17, the vast majority were still in some form of education. Just over half were studying for A Levels and a fifth were taking vocational or mixed academic-vocational qualifications. Only 11% were in employment at this age, while 8% were in an apprenticeship or training and a further 9% were not in education, employment or training (NEET). By age 18 the picture had already begun to shift, as the share in academic or vocational education fell to 55% and the share in employment rose sharply to 28%.

[Figure 1] Share of main activity at ages 17-20

Academic and vocational education include all levels below HE. Source: Next Steps, sweeps 4-7.



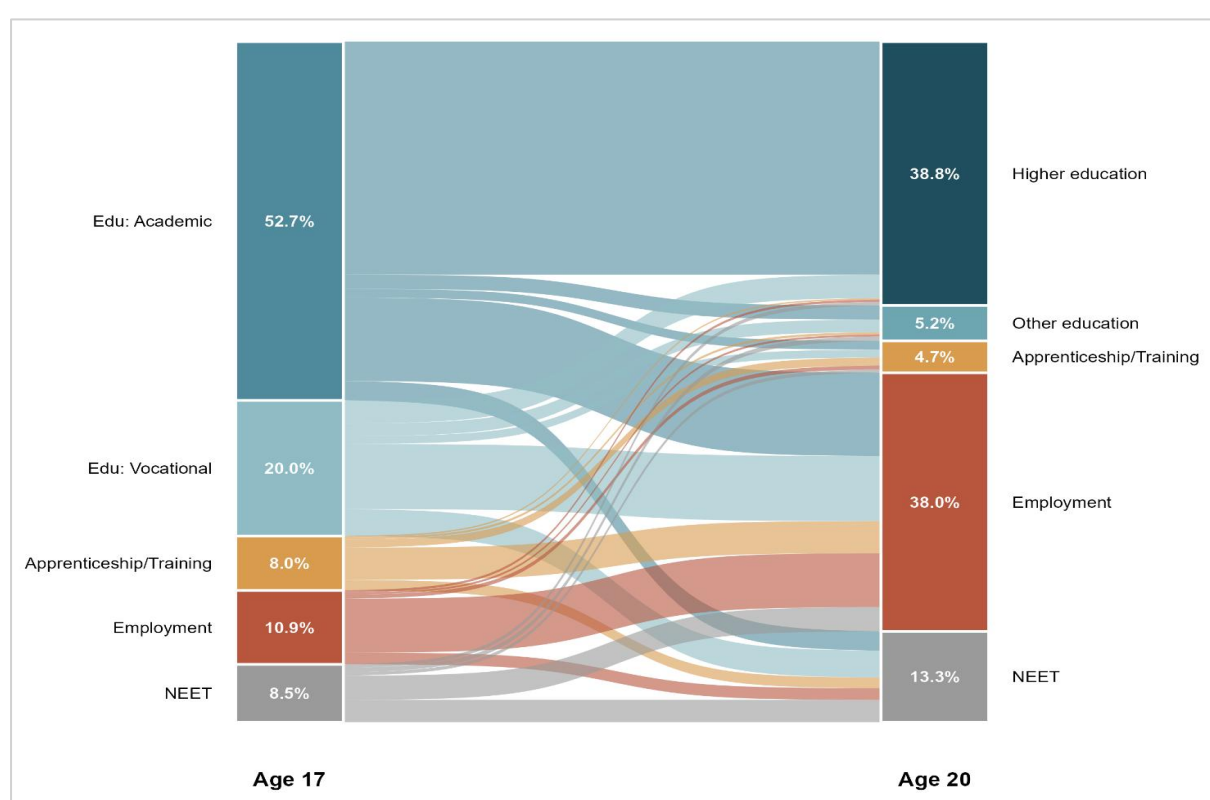
The most pronounced change occurred between ages 18 and 19, when some young people progressed into HE (31%), and employment became the single most common activity (33.5%). By age 20, HE (39%) and employment (38%) had become the dominant destinations, together accounting for more than three quarters of the cohort. Participation in school-level education and apprenticeships or training had fallen to less than 5%. Notably, the share of young people who

were NEET rose from around 9 % at ages 17 and 18 to more than 13% at ages 19 and 20, suggesting that the period following the completion of compulsory education and training is associated with an increased risk of disengagement for a substantial minority.

These snapshots show where young people were at each age, but not how they got there. Two young people counted as “in employment” at 20 may have arrived there by very different routes — one straight from school at 16, the other after doing A levels or an apprenticeship. Figure 2 traces individual pathways between main activity at age 17 and main activity at age 20, revealing the extent to which early positions shape later outcomes.

[Figure 2] Transitions from ages 17 to 20

Academic, vocational, other education include all levels below HE. Source: Next Steps, sweeps 4 and 7.



The two ends of the distribution behave very differently. Just over half the cohort (53%) were in academic education at age 17, and most progressed into HE by age 20. Because this pathway began with the largest group and led consistently to a common destination, it accounts for much of the higher-education total. At the other end, movements are more fluid. Employment at age 20 drew from every starting point, including many who began in vocational education or apprenticeships. The experience of NEET is particularly dynamic, with some who were NEET at 17 moving into work or education, and others who were active at 17 (either in employment or vocational study), became NEET by 20. The NEET group at 20 is therefore partly a persistent core and partly young people who slipped out of more precarious activities.

These patterns underline the importance of economic activity at 17 in shaping subsequent destinations. The academic route provides the clearest and most consistent pathway,

predominantly leading to HE, whereas the trajectories of those moving between work, vocational learning, and disengagement are more varied and less predictable.

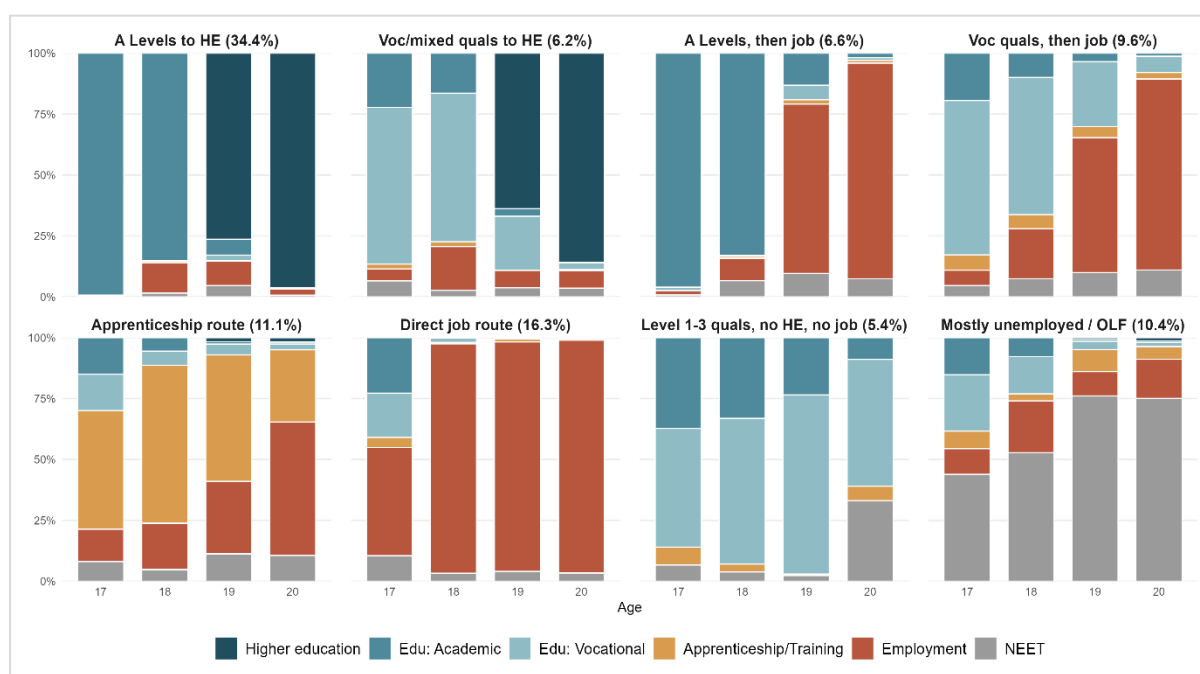
Start and end points alone cannot distinguish these journeys, so we classified young people by their complete sequence of activities across the four ages. This yields eight distinct post-16 routes (Figure 3).

How the classification was constructed

The eight post-16 routes described here are those established in our earlier report (Jenkins & Schoon, 2025). In this report we map how these routes unfold over time before examining how they intersect with degree attainment at age 32. Young people's main activity was observed annually at ages 17, 18, 19 and 20. Individuals were assigned to one of eight routes based on their sequence across these four observation points. The classification was guided by key features that differentiate transitions through the post-16 system: (a) whether HE was entered by 19 or 20, (b) whether education participation was mainly academic or vocational, (c) whether an apprenticeship was undertaken, and (d) whether the pathway culminated in employment, continued education, or neither (see **Appendix 1** for the detailed classification protocol). The approach is descriptive rather than model-based. The eight identified routes are, however, substantively interpretable, and each corresponds to a recognisable route through the English post-16 system.

[Figure 3] Main activity at each age, by post-16 route

Source: *Next Steps, sweeps 4-7.*



- 1) **A Levels to HE (34% of the cohort).** This is both the largest and the most uniform route. Almost all (97%) were studying for two or more A or AS levels at age 17, and all entered HE at 19 or 20. This is the only route characterised by a single dominant activity at every age,

representing the conventional academic route from school to university. Notably, in a cohort born in 1990, the Longitudinal Study of Young People in England 2 (LSYPE2), the same proportion (34% of the cohort) followed this academic route while two thirds of the sample took different pathways combining work, vocational education and training (Duckworth et al., 2026; Ross et al., 2026).

- 2) **Vocational/mixed route to HE (6%).** These young people also reached HE by age 19 (61%) or 20 (87%), but through a more diverse educational trajectory. Most began in vocational education (around two-thirds at age 17 and just over 60% at age 18), although a minority followed academic programmes at either age 17 (20%) or age 18 (13%). Vocational qualifications, particularly BTECs and related awards, formed the predominant route before transition into HE. This route illustrates that entry to university is not confined to the traditional A-Level route.
- 3) **A Levels to employment (7%).** These young people initially followed an academic route but entered employment rather than HE. Most were studying A Levels at ages 17 and 18 (94% and 84%, respectively), but by ages 19 and 20, the vast majority were in work (68% and 89%, respectively). It represents a clear transition from academic study directly into the labour market.
- 4) **Vocational education to employment (10%).** Young people on this route typically pursued vocational qualifications at ages 17 and/or 18 (62% and 56%, respectively) before moving into employment. Over half (53%) were employed by age 19, rising to nearly four in five (79%) at age 20. None progressed into HE, indicating that vocational study in this route served primarily as preparation for labour-market entry.
- 5) **Apprenticeship (11%).** The defining feature of this route is participation in an apprenticeship at some point between ages 17 to 20. The duration of apprenticeships varied considerably, with some young people remaining in training for several years and others participating only briefly. By age 20, most had moved into employment (52%), while some remained in training (30%), became unemployed/OLF (10%), or progressed to HE (3%).
- 6) **Direct employment (16%).** These young people spent little time in full-time education after compulsory schooling (beyond the age of 16) and moved rapidly into work. Employment became the dominant activity from age 18 onwards, making this the most direct transition from education to the labour market. Notably, many combined work with some form of training.
- 7) **Extended education without HE (5%).** These young people moved between academic and vocational programmes below HE, although vocational study became increasingly dominant over time. At Waves 4 and 5 about one-third of young people in this group were studying for academic qualifications and around a half for vocational qualifications. By Wave 6 two-thirds were studying for vocational qualifications and only just over a fifth for academic qualifications. By Wave 7 about one-half were studying for vocational qualifications, only one in ten for academic qualifications, while approximately a third were unemployed or out of the labour force (OLF) by this point.

- 8) **Persistent NEET/economic inactivity (10%).** These young people were unemployed or out of the labour force (OLF) for all or most of the timepoints between ages 17 to 20. About 40% were unemployed/OLF or else on a training scheme at age 17, rising to about half at age 18 and more than 80% by age 19/20. Economic inactivity often reflects caring responsibilities or other barriers to participation. Over time, unemployment and inactivity became increasingly dominant, making this the most disadvantaged and least connected route to education or employment.

The route from academic qualification to HE is the single most common pathway, yet it is far from the majority experience. Nearly two-thirds of young people followed other routes combining academic study, vocational education, apprenticeships and employment in different ways, and some routes involved repeated movement between education, work and inactivity.

Routes and degree attainment: Seven pathway types to age 32

The eight routes describe young people's activities between 17 and 20, but they do not reveal their longer-term attainment. *Next Steps* followed the same individuals to age 32, making it possible to assess their eventual outcomes in early adulthood. By age 32 some young people who had not entered HE at ages 19 or 20 had subsequently obtained a degree, while others who had initially entered HE had left without completing a degree.

[Figure 4] Degree attainment at 32 by post-16 route

Categories are ordered from highest to lowest share of degree attainment. Confidence intervals at 95%.

Source: Next Steps, sweeps 4-9.

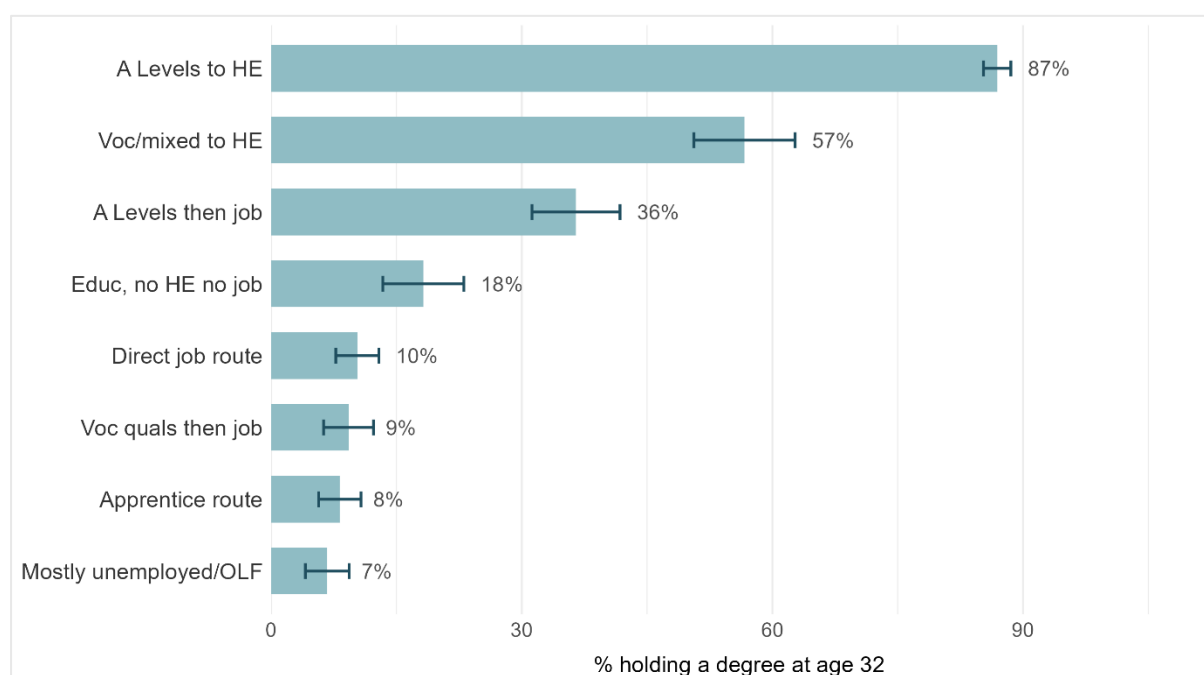


Figure 4 shows that degree attainment at age 32 varied substantially by pathway from ages 17 to 20, in ways that are not apparent from the age-20 picture alone. Among those who took A Levels and entered HE at 19 or 20, 87% held a degree at 32. It means that around one in eight who followed the conventional route had not graduated. Among those who entered HE through vocational or mixed qualifications, 57% held a degree, with a gap of 30 percentage points despite similar ages of entry. Meanwhile, 36% of those who took A Levels but moved into work had obtained a degree by 32, as had 18% of those who remained in education at Level 3 or below by age 20. On the remaining pathways, from vocational education to employment, apprenticeship, direct employment and persistent NEET, between 7% and 10% had gained a degree. Continued engagement with education, even without immediate progression to university, may therefore keep open opportunities that early exit from education generally does not.

Because neither the pathway from ages 17 to 20 nor degree status at 32 alone captures the whole picture of young people's school to work transitions, we combine the two into a single typology. A full-cross tabulation would produce sixteen groups, several of which are too small for robust analysis. Thus, we consolidate them into seven types, which retain distinctions that are substantively meaningful.

The two pathways leading to participation in HE by age 20 are retained as separate groups when they result in a degree by age 32, reflecting the important distinction between academic and vocational routes into HE. In addition, we identified a pathway characterised as "HE dropout" when HE was entered by age 20 but no degree was obtained by age 32. The remaining pathways, which had not progressed to HE by age 20, are consolidated into two broader groups. The first comprises routes centred on employment and work-related training, including apprenticeships and direct labour-market entry. The second encompasses pathways characterised by continued lower-level study or prolonged disengagement from both education and employment. Each of these broad categories is then divided according to whether or not a degree had been attained by age 32, allowing us to distinguish between those whose later educational progression altered their eventual destination and those whose early trajectories remained largely unchanged. Table 1 summarises the resulting typology.

[Table 1] Cases of route-attainment categories

Type	Transition route 17-20	Degree at 32	N	%
Academic route, degree	A Levels to HE	Yes	2,101	30.4
Vocational route, degree	Vocational/Mixed to HE	Yes	215	3.4
Early HE entry, drop-outs	Either HE-bound pathway	No	444	7.2
Work route, degree	Employment or vocational pathway	Yes	310	5.8
Disengaged route, degree	Continued education or mostly unemployed	Yes	109	1.9
Work route, no degree	Employment or vocational pathway	No	1,448	35.9
Disengaged route, no degree	Continued education or mostly unemployed	No	512	15.3

Note: Numbers of observations are unweighted. Percentages are survey-weighted and calculated from 5,139 cases with complete data (28.7% of the valid sample at wave 9 is excluded).¹

Although degree attainment was common, the academic route was not the dominant trajectory. By age 32, 41% of the cohort held a degree, yet the conventional academic route pursuing A-levels and culminating in a degree accounted for only 30% of the cohort. The largest single pathway was instead the work route without a degree, comprising 36% of the cohort. These young people had moved into employment or work-based training during their late teens and had not subsequently obtained a degree. Around 14% of them held a vocational qualification at Level 4 or above, while the majority held Level 3 or below. Their prevalence highlights the importance of looking beyond degree attainment when describing the transition from school into adulthood. For a substantial share of the cohort, the transition was centred on employment rather than progression through HE.

At the same time, the graduate population was considerably more diverse than the conventional route suggests. Around one in four of all degree holders had reached this outcome through routes other than the traditional progression from A levels to HE. Of the 41% of the cohort who held a degree by age 32, 5.8% had followed employment- or vocationally oriented pathways during ages 17-20, 3.4% had entered HE via vocational qualifications, and 1.9% had come from routes involving neither HE nor stable work by age 20. Taken together, these alternative routes account for a sizeable share of graduates and show that eventual degree attainment was not confined to those who followed the conventional academic pathway.

A further 7% of the cohort entered HE but did not obtain a degree by age 32. This group is larger than either of the two non-traditional graduate categories and occupies an ambiguous position in

¹ Complete-case analysis may be subject to bias due to systematic non-response. The 5,139 retained cases at age 32 do not differ significantly from the full Wave 9 sample in terms of gender, ethnicity, parental socioeconomic status (education, occupation and housing tenure), current partnership status, number of children, region or employment status. However, the retained sample is slightly more likely to have attained a degree (42% versus 38%), suggesting that the findings may somewhat overrepresent degree holders and should be interpreted with this potential selection bias in mind.

standard indicators. They are counted as HE participants in access statistics but as non-graduates in attainment statistics. As a result, their trajectory is largely invisible when participation and degree completion are examined separately.

The other major non-graduate type was the disengaged route without a degree, which accounted for 15% of the cohort. These young people reached age 32 without a degree after spending their late teens without progressing to HE or establishing sustained employment, with most being mainly unemployed or out of the labour force. Their trajectory therefore differed substantially from that of the much larger work route without a degree. Both groups had no degree, but they represent different forms of transition. One is centred on early labour-market attachment and the other is on prolonged disengagement from education or employment. Distinguishing these pathways is important because the absence of a degree alone obscures substantial differences in young people's experiences between school and adulthood.

What follows

- 1** In recent years, policy has increasingly emphasised advanced technical and vocational provision, including T Levels, Higher Technical Qualifications and apprenticeship reform (DfE et al., 2025). Our findings reinforce the importance of this shift. Only 30% of this cohort followed the conventional route from A Levels through higher education to a degree, while the largest single group (36%) entered work or work-based training in their late teens and had not attained a degree by age 32. For this substantial group, whose transitions to adulthood centre on employment and work-based training rather than HE, a key policy priority is to ensure that these pathways offer meaningful opportunities for further progression and sustained success.
- 2** Around one in sixteen young people reached HE through vocational or mixed qualifications rather than the conventional A-Level pathway. The findings underline the importance of recognising vocational and mixed pathways as important progression routes rather than second-best alternatives (see also Dilnot et al., 2022). These routes make a meaningful contribution to graduate attainment, yet they remain less visible in policy discussions and receive comparatively limited institutional recognition and support.
- 3** Entry to HE is an imperfect proxy for eventual degree attainment. 7% of the cohort entered HE by 20 but had no degree at 32 (HE drop-outs). Among vocational entrants HE completion was 57% compared with 87% among A-Level entrants (see also Dilnot et al. (2022). Policies that focus solely on widening access to HE therefore provide only a partial picture; supporting successful completion, particularly among students entering through vocational routes, is equally important.
- 4** A significant share of degrees is obtained later in life. More than a quarter of graduates at 32 did not take the conventional route, and many of them entered HE after age 20. This finding highlights the limitations of participation measures that focus on entry at ages 18 or 19, as they fail to provide a complete picture of higher education access and progression, particularly for adult and part-time learners. In this context, the *Lifelong*

Learning Entitlement reflects an important recognition of the need for more flexible study options, and our findings suggest that the demand for such opportunities is substantial rather than marginal.

- 5 Young people who do not attain a degree by age 32 are not a homogeneous group. Some (36%) transitioned directly into work or training during their late teens, while others (15%) remained in lower-level study or spent time outside the labour market. Collapsing these groups into a single "non-graduate" category masks important differences in their trajectories, labour-market engagement, and support needs.

Overall, the findings challenge the notion of a single dominant pathway to adulthood. Academic routes provide the clearest route to degree attainment, but work-based pathways are more common and represent a major component of young people's transitions. The evidence highlights the importance of recognising multiple pathways to successful adult outcomes and ensuring that vocational, apprenticeship and employment routes offer opportunities for continued progression throughout early adulthood.

3. Predictors of Transition Pathways

Social background and the routes young people take from school to age 32

The previous chapter identified seven transition groups at age 32, defined by the route a young person took between 17 and 20 and whether they held a degree by their early thirties. This chapter asks who ends up where. It examines which adolescent characteristics, including social background, school experiences, family support and early orientations towards education and work, predict membership of each category when considered together.

KEY FINDINGS

- **GCSE attainment** is the strongest predictor of routes. A one-standard-deviation higher GCSE score was associated with a 28 percentage-point higher probability of the academic route to a degree.
- **Family background** matters even among young people with similar attainment. A degree-educated parent raised the probability of the academic route to a degree by 5 points, and a parent in a professional or managerial occupation by 2 points.
- **Area deprivation** shapes both access and disengagement. Young people in more deprived areas were 3.5 to 6 points less likely to follow the academic route to a degree, and those in the most deprived areas were 5 points more likely to follow the disengaged route without a degree.
- **Ethnic minority** young people were more likely to reach a degree, and **gender** had no independent effect. Ethnic minority young people were 11 points more likely than similar White peers to follow the academic route to a degree.
- **Expectations** and **parental investment** steer routes. Each one-point increase in expectations of applying to university at age 14 raised the probability of the academic route to a degree by 5 points, while parental expectations of an apprenticeship or trade lowered it by 8 points and raised the probability of the work route without a degree by 11 points. Private tuition was linked to higher chances of a degree through both academic and vocational routes.

Predictors of the seven pathways

What are the factors that predict the different transition pathways? To gain a comprehensive understanding of the underlying drivers of transition decisions, we assess the relative role of different sets of factors. The outcome variable is membership in one of the seven route-attainment

categories identified in the preceding analysis. Predictors are drawn primarily from Waves 1 and 2, when cohort members were aged approximately 14-15, thereby capturing characteristics and circumstances that precede the post-16 transition period (see **Appendix 2** for detailed information about measurements).

- a) **Socioeconomic and demographic characteristics:** The first set of predictors captures young people's socioeconomic and demographic circumstances. These include parental education, parental occupation measured using the National Statistics Socio-Economic Classification (NS-SEC), housing tenure, and area-level disadvantage measured using the Index of Multiple Deprivation (IMD) score. We also adjust for gender and ethnic minority status to account for demographic differences in pathway allocation.
- b) **Health:** Young people's health is assessed at Wave 2 (age 14/15) using two measures. The first is a measure of general health, based on respondents' assessment of their health over the previous 12 months, with responses ranging from *very good* to *not good at all*. The second is the General Health Questionnaire (GHQ-12), a widely used self-reported measure of psychological distress. The GHQ-12 was originally developed for use in community and non-psychiatric clinical settings (Goldberg & Williams, 1988), and has been extensively applied in psychological, epidemiological, economic, and other social research because of its brevity and established psychometric properties (Baksheev et al., 2011; Cornaglia et al., 2015).
- c) **School experiences:** School experiences are measured at Wave 1 (age 13/14) using four indicators, namely emotional engagement with school, expectations of attending university, academic self-concept, and truanting. Emotional engagement captures the extent to which young people feel positively connected to school, while academic self-concept is measured through young people's perceptions of whether they are good at schoolwork. University expectations capture early educational orientations towards higher education, and truanting provides an indicator of disengagement from formal schooling.
- d) **Parental support:** Support from parents is also measured at Wave 1 and is captured through parents' educational expectations for their child and whether parents pay for private tuition. These measures reflect two different forms of parental educational involvement: expectations regarding future educational attainment and the provision of additional educational resources. The latter is particularly relevant as an indicator of families' capacity to supplement formal schooling through privately purchased educational support.
- e) **Career orientation:** We examine young people's early career orientation, measured at Wave 1 through four domains: career advice, work experience, work values, and expectations of success. These measures capture not only the information and experiences available to young people as they begin to think about their futures, but also their orientations towards work and their perceived relationship between effort, opportunity, and future success.

Career advice is measured using two sets of indicators, namely whether respondents had received advice from a career adviser, teacher, or family member, and whether they considered the advice useful. Work experience is captured by whether respondents reported having a paid job during term time, coded as a binary indicator (yes/no). This

measure provides an early indication of young people's exposure to paid employment before the post-16 transition.

Work values are measured using four questions asking how important different characteristics are when choosing a job: having an interesting job; having a job that helps other people; having a well-paid job; and being one's own boss or having one's own business. Responses are coded on a three-point scale ranging from 1 (*does not matter*) to 3 (*matters a lot*). These measures capture different dimensions of young people's preferences regarding the nature and rewards of future employment.

Expectations of success are measured using three statements concerning the perceived relationship between individual effort, social opportunity, and future outcomes: "*Working hard in school will help me get on later in life (reverse coded)*"; "*People like me don't have much of a chance in life*"; and "*How well you get on in this world is mostly a matter of luck.*" Responses are recorded on a four-point Likert scale ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). Together, these items capture young people's beliefs about the extent to which educational effort is consequential and future success is shaped by personal agency versus structural constraints or chance.

Multivariate regression results

We use multinomial logistic regression to estimate associations between these predictors and membership in the seven transition pathways (see **Appendix 3** for bivariate descriptive results). The analysis proceeds by examining socioeconomic and demographic characteristics alongside health, school experiences, parental support, and career orientation. This allows us to assess whether differences in pathway allocation are associated with social background alone or remain evident after accounting for young people's health, school experiences, family support, and early orientations towards education and work. Because all predictors are measured before the post-16 transition period, the analysis provides a temporally ordered account of the characteristics associated with subsequent pathway membership, while not implying that these associations are necessarily causal. The multivariate results (see Table 2) are reported as average marginal effects, representing percentage-point differences in the predicted probability of following each pathway (see **Appendix 4** for the corresponding relative risk ratio results).

Academic performance. The findings highlight the importance of both prior GCSE attainment and social background in shaping transition pathways. GCSE attainment by age 16 was by far the strongest predictor of pathway membership. A one-standard-deviation increase in the GCSE score was associated with a 28.0 percentage-point higher probability of following the academic route to a degree. At the same time, higher attainment substantially reduced the likelihood of following the work route without a degree (-15.7 percentage points) and the disengaged route without a degree (-11.0 percentage points). Higher GCSE scores were also associated with a lower probability of following a pathway characterised by early disengagement but eventual degree attainment (-0.9 percentage points). These results suggest that educational performance at age

16 remains a powerful predictor of subsequent educational and labour-market trajectories, even after accounting for family background and other adolescent characteristics.

Gender and ethnicity. Sociodemographic characteristics were also associated with pathway membership, although these associations were concentrated in specific pathways rather than distributed evenly across all routes. Ethnic minority young people were 11.2 percentage points more likely than their White peers to follow the academic route to a degree and 2.0 percentage points more likely to follow the vocational route to a degree. They were also 2.8 percentage points more likely to obtain a degree following a period of disengagement. Correspondingly, they were 16.5 percentage points less likely to follow the work route without a degree and 1.6 percentage points less likely to follow the work route with a degree.

The pattern for gender was notably different. Although there are modest gender differences in the raw distribution (see **Appendix 3**), gender was not statistically significant in the fully adjusted models. In other words, once differences in prior attainment, socioeconomic circumstances, educational expectations, parental support, health, and other measured characteristics were taken into account, there was no clear independent association between gender and pathways. This suggests that the gender differences observed in young people's transitions are not readily captured by a simple gender effect and may instead operate through differences in the academic attainment, family and social circumstances.

Socioeconomic backgrounds. Family resources remained influential even after accounting for prior attainment and other adolescent characteristics. Having a degree-educated parent was associated with a 4.8 percentage-point higher probability of following the academic route to a degree and a 5.2 percentage-point reduction in the likelihood of following the work route without a degree. Parental occupation showed a similar but smaller association. Having a parent in a professional or managerial occupation increased the probability of following the academic route by 2.0 percentage points and reduced the probability of the work route without a degree by 3.5 percentage points. Young people whose parents owned their home were 4.2 percentage points less likely to follow the disengaged route without a degree.

Area deprivation was also strongly associated with conventional academic progression. Relative to young people living in the least deprived areas, those in Q2, Q3 and Q4 were respectively 3.5, 6.0 and 5.6 percentage points less likely to follow the academic route to a degree. Moreover, the most deprived areas were 4.9 percentage points more likely to follow the disengaged route without a degree. That is, local area deprivation was associated with a lower probability of the conventional academic-to-degree route and, at the highest level of deprivation, a higher probability of prolonged disengagement without a degree.

[Table 2] Predictors of route-attainment categories

Average marginal effects from multinomial logistic regression. Source: Next Steps, sweeps 1-9.

Predictor	Academic route with degree	Vocational route, degree	Early HE entry, drop-outs	Work route with degree	Disengaged route with degree	Work route, no degree	Disengaged route, no degree
Socioeconomic factors							
Female	1.14	-0.22	0.09	-0.57	-0.31	-0.96	0.83
Ethnic minority	11.20***	2.02*	2.26	-1.58*	2.78*	-16.50***	-0.18
Parent with degree	4.81***	0.35	-0.48	0.25	1.05	-5.22*	-0.75
Parent in prof/mng occupation	1.98*	0.40	0.70	-0.69	-0.24	-3.50*	1.35
Parents' home ownership	2.02	-0.43	0.90	-0.56	-0.04	2.33	-4.22**
IMD (ref: Q1 Least deprived)							
IMD - Q2	-3.45**	1.05	0.57	-0.72	-0.03	1.59	0.98
IMD - Q3	-6.04***	1.51*	0.85	0.30	-0.45	2.03	1.81
IMD - Q4	-5.64***	1.44	2.81	-2.10	-0.14	-1.24	4.86*
Health							
General health (W2)	-0.25	0.50	0.42	0.05	-0.42	-1.46	1.16
Psychological distress (W2)	-1.17	0.59	0.37	1.62	-0.22	-3.71*	2.52
School experiences							
GCSE score	28.02***	-0.25	-0.62	0.44	-0.91**	-15.69***	-10.99***
Ability concept	-0.16	-0.42	0.11	1.01	0.04	-0.62	0.05
School engagement	0.51	-0.09	2.79*	-1.30	-0.94*	0.41	-1.38
Truanting	0.86	-0.45	-2.02	-0.02	0.66	1.46	-0.51
University expectation	4.76***	-0.01	0.36	0.04	0.37	-3.96***	-1.55*
Parental support							
Parent expectation (ref: FT education)							
Apprenticeship/trade	-7.81***	-0.22	0.86	-0.40	0.09	10.82***	-3.35*
Getting FT paid job	-0.22	-2.07	0.38	-3.73*	-1.86**	9.15**	-1.66
Don't know	-1.24	-1.52	0.79	-1.98	-0.91	5.51	-0.65
Pay for private tuition	3.16*	2.11*	1.14	-0.99	-0.02	-7.32*	1.93
Career advice							
Advice from career advisor	0.04	0.04	0.39	-0.28	0.05	-0.48	0.24
Advice from teachers	-0.53	0.29	-0.15	0.23	-0.01	0.04	0.13
Advice from family	0.22	-0.04	-0.34	0.1	0.12	0.86	-0.92
Work experience							
Work experience during terms	-1.12	0.22	-0.17	-0.46	0.2	4.46*	-3.14*
Job values							
Helping others	-0.28	-0.44	0.64	0.68	0.01	-0.46	-0.16
Good pay	0.23	-0.04	-0.78	-0.04	0.33	0.44	-0.13
Being own boss	0.24	0.27	0.48	0.07	-0.11	0.17	-1.12
Interesting jobs	0.75	-0.06	0.17	0.5	0.28	-1.58	-0.07
Attitude toward success (high score = positive expectations about the role of effort in achieving success)							
Work hard in school	1.11	0.57	0.72	-0.53	-0.16	-0.97	-0.73
Don't have a chance	-0.25	0.36	0.73	-0.02	-0.2	1.77	-2.39**
Matter of luck	0.55	0.26	-0.78	0.31	-0.06	0.19	-0.47

Note. N = 7204. * p<.05, ** p<.01, *** p<.001.

Educational expectations and parental support. Educational expectations of both young people and their parents were also associated with pathway membership. Although expectations are endogenous, shaped by family socioeconomic status, prior academic performance and ability concept, they retain an independent association with post-16 trajectories. Each one-point increase in young people's expected likelihood of applying to university, measured on a four-point scale from not at all likely to very likely, was associated with a 4.8 percentage-point higher probability of following the academic route to a degree. Higher expectations were correspondingly associated with a lower probability of following the work route without a degree (-4.0 percentage points) or the disengaged route without a degree (-1.6 percentage points).

Parental expectations showed a more differentiated pattern. Compared with parents who expected their child to remain in full-time education, expectations of an apprenticeship or trade were associated with a substantially lower probability of the academic route (-7.8 percentage points) and a higher probability of the work route without a degree (+10.8 percentage points). Interestingly, these expectations were also linked to a reduced likelihood of following the disengaged route without a degree (-3.4 percentage points). Parental orientations towards work-based options therefore appear to steer young people into employment rather than away from both education and work. Parental expectations of entering full-time paid employment were similarly associated with a higher likelihood of the work route without a degree (+9.2 percentage points), and with lower probabilities of obtaining a degree later on, whether after early employment (-3.7 percentage points) or after a period of disengagement (-1.9 percentage points). However, it showed no statistically significant relationship with the non-degree disengaged route.

Parental investment in education also differentiated pathways. Paying for private tuition was associated with higher probabilities of following both the academic route to a degree (+3.2 percentage points) and the vocational route to a degree (+2.1 percentage points), alongside a 7.3 percentage-point lower probability of following the work route without a degree. This suggests that parental resources may matter not only for access to the conventional academic-to-degree pathway, but also for the capacity to remain engaged in education and ultimately attain a degree through different routes.

Work experience and school engagement. Some characteristics were associated more specifically with the distinction between employment and disengagement, the two main destinations for young people who did not reach HE by age 20. Working part-time during term time was associated with a higher probability of the work route without a degree (+4.5 percentage points) and a lower probability of the disengaged route without a degree (-3.1 percentage points). Early exposure to paid work may thus ease the move into employment and reduce the risk of prolonged disengagement (see also Britton and Waltmann, 2025; Dickson et al., 2025). School engagement was positively associated with early HE entry followed by non-completion (+2.8 percentage points) and negatively associated with degree attainment following disengagement (-0.9 percentage points).

Health. General health and psychological distress showed relatively few statistically significant associations once other characteristics were taken into account. One exception was psychological distress, which was associated with a 3.7 percentage-point lower probability of following the work route without a degree. Overall, health indicators appeared to play a more limited role in differentiating pathway membership than prior attainment, socioeconomic circumstances, and educational expectations.

Career advice, job values and attitudes. Careers advice, job values and attitudes towards success showed limited associations with route membership. Most coefficients in these domains were small and statistically non-significant. One exception was the belief that one has a chance of success, which was associated with a 2.4 percentage-point lower probability of following the disengaged route without a degree. Overall, these characteristics appear to add relatively little explanatory power once prior attainment, socioeconomic circumstances, educational expectations and other adolescent characteristics are considered.

Taken together, the results show that pathway membership was associated with several distinct sets of characteristics. Prior academic attainment was by far the strongest correlate of pathway membership, particularly in distinguishing the conventional academic-to-degree route from pathways involving early employment or disengagement. Yet attainment did not eliminate the role of social background. Parental education, occupational class, housing tenure, area deprivation, parental expectations, and educational investment remained associated with pathway membership after adjustment for GCSE attainment and other adolescent characteristics. These patterns indicate that young people's post-16 trajectories are structured not only by what they had achieved by age 16, but also by the family and socioeconomic resources surrounding those achievements.

The findings also suggest that different forms of disadvantage operate at different points in the transition process. Some characteristics, particularly prior attainment and educational expectations, strongly differentiate access to the academic-to-degree pathway. Others are more closely associated with entering employment without a degree or experiencing prolonged disengagement. At the same time, the lack of an independent gender association in the fully adjusted models indicates that observed gender differences in pathway membership may be largely accounted for by other characteristics included in the model. Overall, the results reinforce the importance of considering transition pathways as the product of intersecting educational, socioeconomic, and family circumstances rather than as the outcome of any single individual characteristic.

What follows

- 1** Raising attainment alone will not close the gap in access to the academic route. GCSE results are the strongest predictor of routes, but parental education, occupation and

area deprivation remain associated with pathways among young people with similar attainment. Policy should therefore focus not only on raising attainment but also on broadening opportunities and supporting informed choices. Strengthening vocational and work-based routes, improving progression opportunities from them, and ensuring that aspirations are not constrained by family background are all likely to be important levers for reducing inequalities in educational and labour-market outcomes.

- 2** Expectations formed by age 14 are closely tied to later routes. Both young people's own university expectations and their parents' expectations are associated with the routes taken, independently of attainment. Guidance that reaches young people and their families early in secondary school, and that presents vocational and work-based options alongside university, may help them make informed decisions about their future. This aligns with current policy priorities, including the Gatsby Benchmarks for good career guidance.
- 3** Sustained disengagement is a distinct form of disadvantage with its own predictors. Living in the most deprived areas and growing up in non-owner-occupied housing were associated with prolonged disengagement, while early paid work and parental expectations of an apprenticeship or trade were associated with moving into employment rather than disengagement. Support aimed at this group needs to be targeted differently from support aimed at widening access to HE.

4. From transition pathways to adult outcomes

Employment outcomes and wider returns to transition pathways

The previous chapters showed that young people follow markedly different routes through education, work and disengagement between adolescence and early adulthood, and that these routes are socially patterned. The next step is to examine the long-term consequences of these trajectories. This chapter explores how the seven transition pathways are associated with different employment outcomes, material circumstances, job quality and wellbeing in adulthood.

We focus on four dimensions of adult outcomes. First, we examine employment outcomes at age 32, including whether individuals are in work and whether their employment is full-time or part-time. Second, we assess material returns, using earnings and home ownership as indicators of economic position and asset accumulation. Third, we examine job quality, recognising that the benefits of employment extend beyond having a job or earning a particular wage to include the quality of work and levels of job satisfaction. Finally, we consider wider returns in the form of life satisfaction and mental wellbeing, recognising that the consequences of early educational and employment trajectories extend beyond economic outcomes.

KEY FINDINGS

- **Adult outcomes differ markedly across transition pathways.** The routes young people take between education and work have lasting consequences for their economic and social circumstances in adulthood. Employment rates at age 32 range from 95% among those who followed the academic route to a degree to just 59% among those on the disengaged route without a degree. Similarly, levels of home ownership vary widely, from 67% to 21%, indicating substantial differences in economic security and asset accumulation.
- **Early disengagement** is associated with weaker labour-market attachment in adulthood. Young people who reached neither HE nor stable employment by age 20 fared less well at 32. Those who later obtained a degree were still less likely to be employed than academic-route graduates, although they did not differ significantly on earnings and job quality once they were employed.
- Among those in work, pathway differences are particularly pronounced for **earnings** and **job quality**. Adult earnings and the overall quality of work vary substantially across routes, with the lowest outcomes observed among those who followed the disengaged pathway without obtaining a degree. By contrast,

differences in job satisfaction are less pronounced, and those on the work route without a degree, the largest group, reported the highest satisfaction of all, indicating that subjective evaluations of work do not always mirror objective indicators of labour-market success.

- Part of the gap reflects **differences in the jobs people obtain**, but not all of them. Adjusting for occupation, industry, sector and firm size substantially reduces disparities in earnings and job quality across pathways, suggesting that transition routes influence the types of jobs young people enter. However, significant differences remain even after accounting for job characteristics, indicating that pathways have consequences that extend beyond occupational sorting alone.
- Although gender did not predict pathway membership, **women** at 32 had around **half the odds of being employed**, almost nine times the odds of **working part-time**, and **earned around 14% less** than men similar pathways and backgrounds including parenthood status.

Adult outcomes across transition pathways

The seven transition pathways are associated with substantially different outcomes by age 32. The academic route to a degree is generally associated with the most favourable outcomes, while the disengaged route without a degree is **associated** with the least favourable outcomes. Notably, vocational and work routes to degree attainment yield favourable outcomes, often comparable to those of the traditional academic pathway, particularly in terms of employment and material well-being.

For each outcome, we first describe the observed differences between pathways (full descriptive results are reported in **Appendix 5**) and then examine whether they remain after accounting for socioeconomic background and early-life characteristics, including school performance, educational aspirations and school engagement. We also account for current circumstances, such as family structure and region. The models predicting employment, home ownership, life satisfaction and psychological distress use the full sample. Models of part-time employment, earnings, job quality and job satisfaction are restricted to those in work at age 32 (Wave 9). For the latter outcomes, we estimated a second set of models additionally controlling for job sector, firm size, occupation and industry. All results in Figures 5 to 8 are presented relative to the academic route with a degree (see **Appendix 6** for the full multivariate results).

Employment and homeownership. Employment at age 32 was high on most pathways. It ranged from 95.3% on the academic route to a degree to between 91.5% and 93.8% on the other degree routes, and around nine in ten HE dropouts were in work. Employment was relatively lower on the disengaged routes, at 80.4% among those who later obtained a degree and just 58.5% among those who did not, compared with 87.6% on the work route without a degree. Home ownership

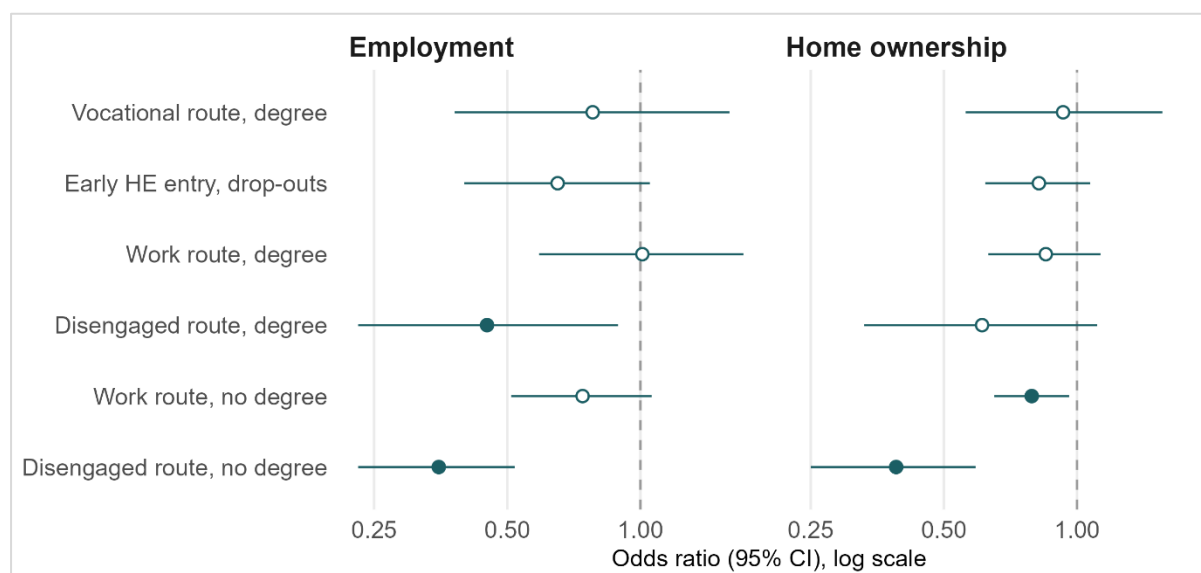
followed a similar but steeper gradient, from 67.1% on the academic route to a degree to 51.2% on the work route without a degree and just 21.3% on the disengaged route without a degree. Although this cohort reached age 32 in a housing market very different from that facing young adults today, the findings reveal substantial differences in homeownership across pathways.

Figure 5 shows that, once social background and early characteristics were taken into account, the strongest differences in employment were concentrated among those who had experienced prolonged disengagement during the post-16 transition. Young people on the disengaged route with no degree had around 65% lower odds of employment at age 32 than those on the academic degree route (OR = 0.35). Those who had followed a disengaged route but subsequently obtained a degree also had lower odds of employment, around 55% lower than the academic degree group (OR = 0.45). The other routes did not differ significantly from the academic degree route.

A similar pattern emerged for home ownership. Those on the disengaged route without a degree had around 61% lower odds of home ownership than the academic degree group (OR = 0.39). Those on the work route without a degree had around 21% lower odds (OR = 0.79). The alternative degree routes did not differ significantly from the academic degree route. Thus, after accounting for background and early characteristics, the clearest material disadvantage was associated with routes characterised by prolonged disengagement during the post-16 transition, particularly where disengagement was not followed by degree attainment.

[Figure 5] Pathways as predictors of employment and home ownership

Models control for socioeconomic background, early-years characteristics, family structure, and region. Hollow circles indicate statistically non-significant parameters. Source: Next Steps, sweeps 1-9.



Life satisfaction and psychological distress. Life satisfaction was highest on the vocational (7.13 on a 0 to 10 scale) and academic (7.09) routes to a degree, and lowest on the disengaged route without a degree (5.93), followed by those who obtained a degree after a period of disengagement (6.38). Psychological distress followed a similar pattern. Around one in four academic-route graduates met the GHQ-12 threshold for distress (26.9%), compared with almost four in ten on both disengaged routes (38.9% without a degree and 38.4% with one).

These differences were substantially attenuated after adjustment (see Figure 6). Life satisfaction remained significantly lower only on the disengaged route without a degree, by around 0.52 points. Although both disengaged groups showed higher estimated odds of distress, none of the pathway differences reached statistical significance. This suggests that the descriptive differences in distress largely reflect family background, early-life characteristics and current adult circumstances. Pathway differences in wellbeing are therefore more modest than those in economic outcomes.

[Figure 6] Pathways as predictors of life satisfaction and psychological distress

Models control for socioeconomic background, early-years characteristics, family structure, and region. Hollow circles indicate statistically non-significant parameters. Source: Next Steps, sweeps 1-9.



Part-time work and earnings. Among those in work at age 32, part-time employment was least common among those who obtained a degree after entering work (8.6%) and on the academic route to a degree (10.3%). It was somewhat more common on the vocational route to a degree (13.8%), among HE dropouts (14.8%) and among those who obtained a degree after disengagement (16.6%), and highest on the work route without a degree (19.4%) and the disengaged route without a degree (26.5%).

Earnings broadly followed the reverse pattern. Academic-route graduates had the highest net hourly earnings, at around £14.90 per hour, while graduates who followed less direct routes earned between 9% and 13% less, at around £12.90 to £13.60. Earnings were lower still among HE dropouts (around £11.60) and those on the work route without a degree (around £11.30), roughly 22 to 24% below academic-route graduates, and lowest on the disengaged route without a degree (around £9.30), 38% below.

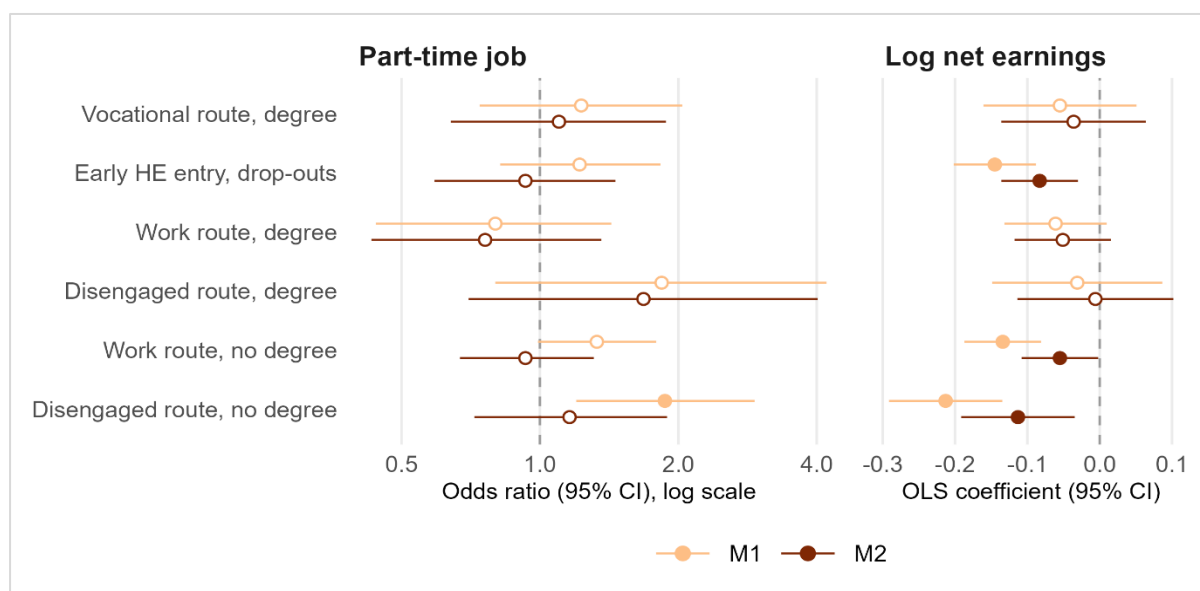
Figure 7 shows that these differences were largely associated with the kinds of jobs people hold. Before accounting for job characteristics (M1), only the disengaged route without a degree had significantly higher odds of part-time work than the academic route to a degree (OR = 1.87), and this difference was no longer significant once job characteristics were added (OR = 1.16). The

higher incidence of part-time work on non-degree routes therefore largely reflects differences in occupation and sector.

For earnings, HE dropouts earned around 13.5% less than academic-route graduates in M1 ($\beta = -0.145$), those on the work route without a degree 12.5% less ($\beta = -0.134$), and those on the disengaged route without a degree 19.2% less ($\beta = -0.213$). Earnings differences for the alternative degree routes were small and not statistically significant. Adjusting for occupation, industry, sector and firm size (M2) reduced these gaps to around 8% for HE dropouts ($\beta = -0.083$), 5% for the work route without a degree ($\beta = -0.055$) and 11% for the disengaged route without a degree ($\beta = -0.113$), although all three remained statistically significant. A considerable share of the earnings disparities therefore reflects the occupations, industries, sectors and organisations in which people work, but meaningful differences persist among those in seemingly similar jobs.

[Figure 7] Pathways as predictors of part-time job and earnings

M1 controls for socioeconomic background, early-years characteristics, family structure, and region. M2 additional controls for job characteristics. Hollow circles indicate statistically non-significant parameters. Source: Next Steps, sweeps 1-9.



Job quality and job satisfaction. Job quality reflects not only earnings but also the broader economic, social and psychological characteristics of work, including employment security, working conditions, work-life balance, and opportunities for career development (Clark, 2005; Green & Mostafa, 2012; Piasna et al., 2019). These dimensions are particularly important in early adulthood, when employment experiences can have lasting implications not only for future labour market success but also for overall wellbeing (Green et al., 2024).

How job quality is measured

The job quality index is constructed by drawing on Stephens (2023) and utilising the information that is available in the *Next Steps* data at age 32. The index runs from 0 to 1, with higher scores indicating better jobs. Earnings carry the largest weight (30%). Four non-

pecuniary dimensions each account for 17.5%: pensions, job security (job-loss risk, temporary contracts and zero-hours contracts), work-life balance (stress, excessive hours and shift work), and prospects (managerial responsibilities and opportunities for advancement).

Job quality broadly followed the same pattern as earnings. It was highest on the academic route to a degree (0.74), followed by the work (0.71) and vocational (0.69) routes to a degree, and lowest on the disengaged route without a degree (0.56). The work route without a degree occupied an intermediate position (0.63). One notable deviation concerns those who obtained a degree after disengagement. Their hourly earnings were close to those of other graduates, but their job quality (0.66) was no higher than that of HE dropouts.

Job satisfaction showed a different pattern. Scores varied little across pathways, from 3.96 among those who obtained a degree after disengagement to 4.25 on the work route without a degree (on a scale of 1 to 5), with no clear hierarchy between routes. It is notable that the largest group, whose earnings and job quality were relatively low, reported the highest satisfaction, suggesting that evaluations of work may reflect the expectations formed along each route as well as the objective features of the job.

[Figure 8] Pathways as predictors of job quality and job satisfaction

M1 controls for socioeconomic background, early-years characteristics, family structure, and region. M2 additional controls for job characteristics. Hollow circles indicate statistically non-significant parameters.
Source: Next Steps, sweeps 1-9.

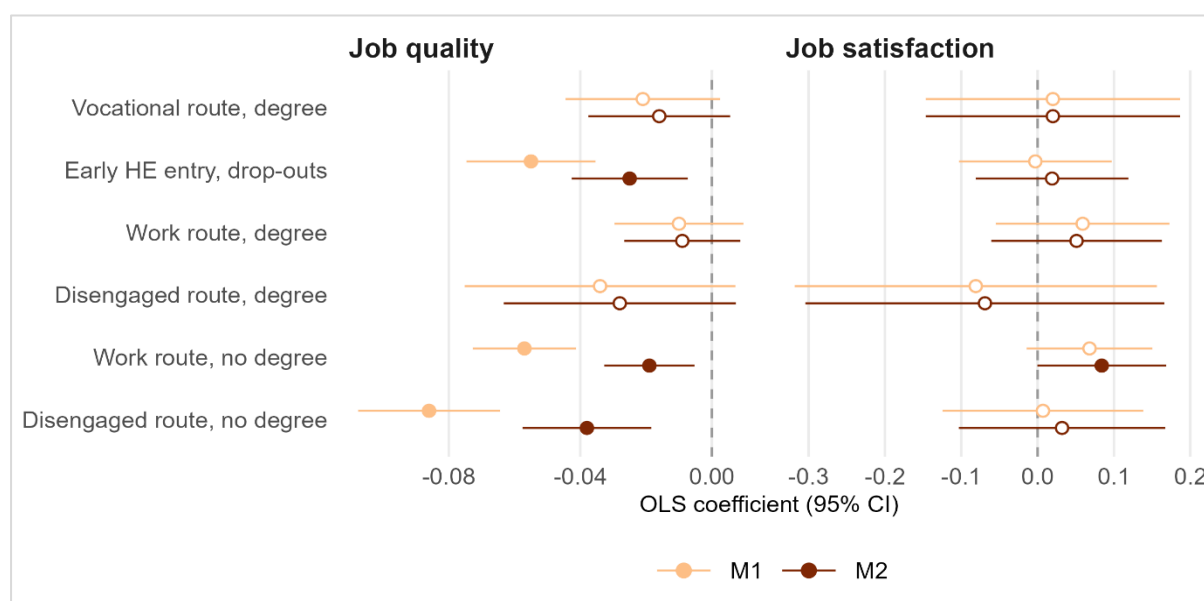


Figure 8 shows the adjusted results. Before accounting for job characteristics, HE dropouts and those on the work and disengaged routes without a degree all had significantly lower job quality than academic-route graduates. These gaps narrowed substantially once job characteristics were added, to between around 0.02 points for the work route without a degree and 0.04 points for the disengaged route without a degree, but remained statistically significant. Job satisfaction showed

little systematic variation across pathways. The only significant difference was a small positive association for the work route without a degree in the fully adjusted model.

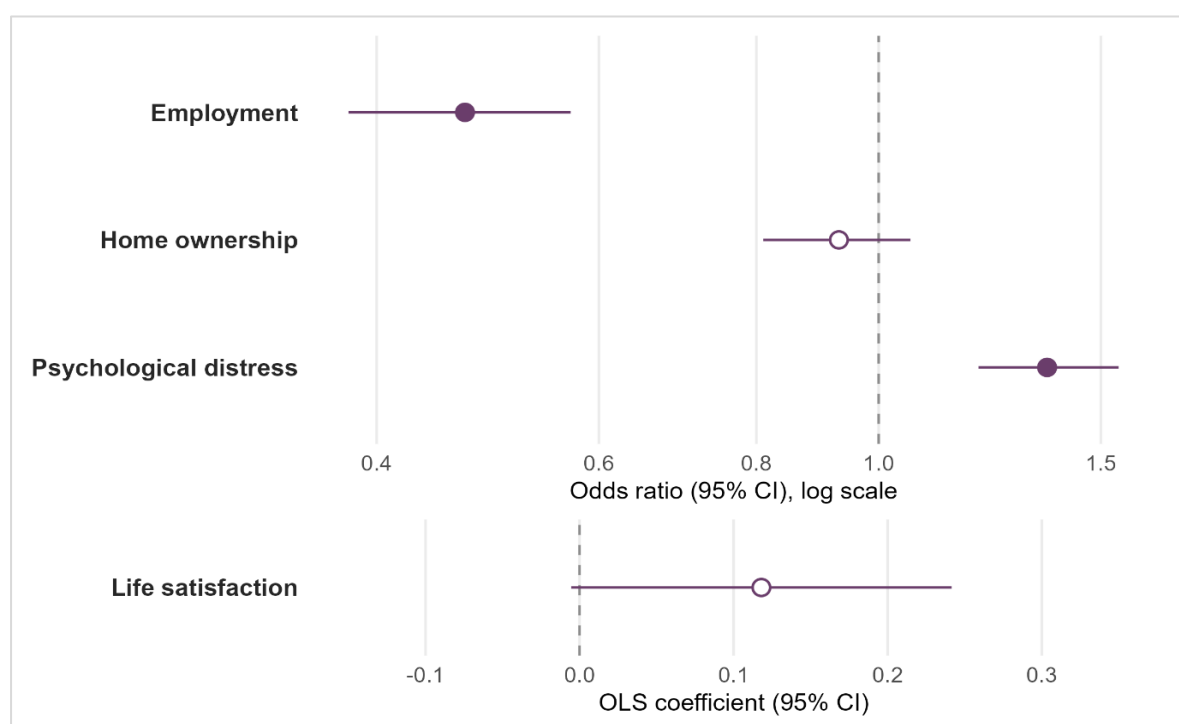
Overall, the multivariate regression results indicate that pathway differences are concentrated in specific domains rather than evident across all outcomes. The most persistent differences concern employment and material circumstances, particularly among those whose trajectories involved sustained disengagement and the absence of a degree. Among those in work, pathway differences are most apparent for earnings and job quality, whereas job satisfaction varies little across routes. Much of the advantage associated with particular pathways appears to operate through access to different types of jobs, although some meaningful differences remain even after accounting for job characteristics.

Gender differences in adult outcomes

The previous chapter found that gender had no independent association with pathway membership once other characteristics were taken into account. Young women and men with similar backgrounds and prior attainment were similarly likely to follow each path. This does not mean, however, that they fared similarly well in adulthood. We therefore examine whether women and men following the same pathway, with similar backgrounds, early-life characteristics and current family circumstances, including partnership and parenthood, reached different outcomes at age 32. Figures 9-10 report the parameters for the female indicator, based on the same model specifications as Figures 5-8 (see **Appendix 5** for descriptive results).

[Figure 9] Female as a predictor of age 32 outcomes (Whole sample)

Models control for pathways, socioeconomic background, early-years characteristics, family structure, and region. Hollow circles indicate statistically non-significant parameters. Source: Next Steps, sweeps 1-9.

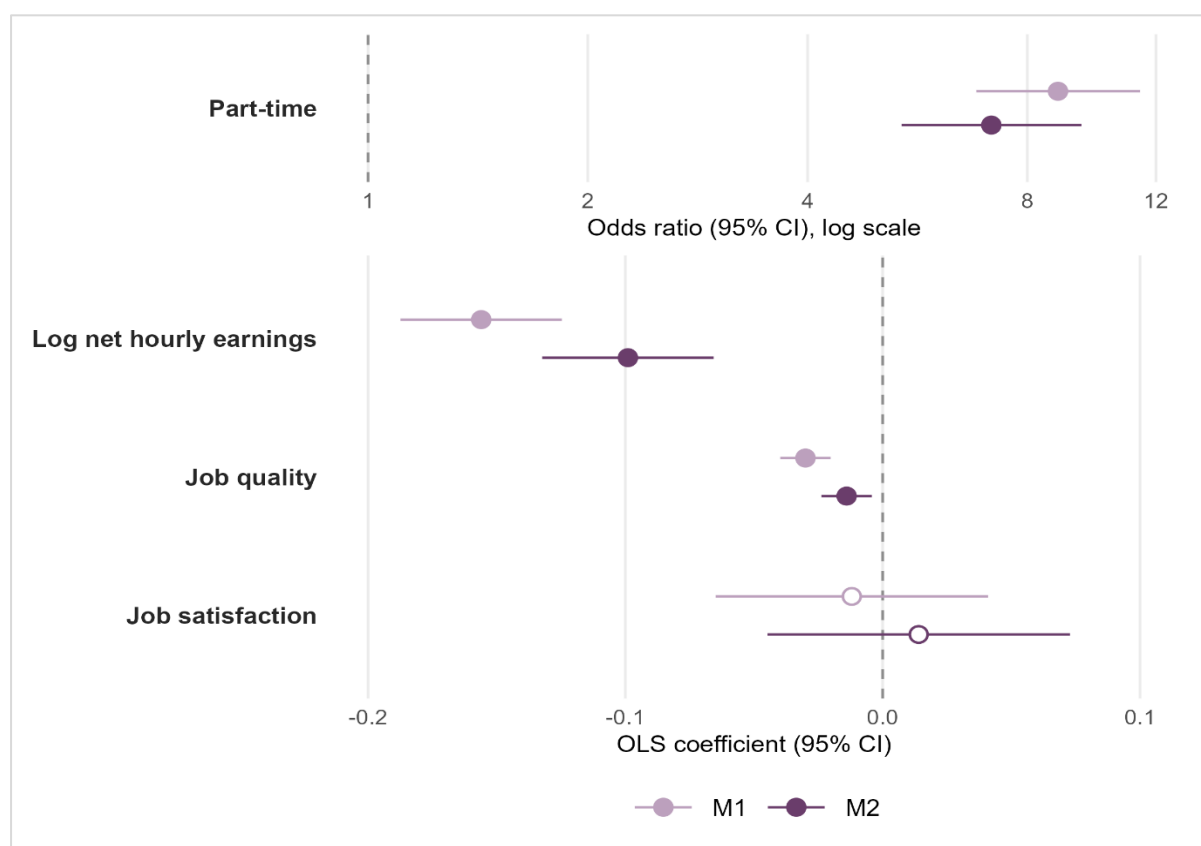


Employment and material circumstances. Women had around 53% lower odds of being employed at age 32 than men (OR = 0.47). This gap persists after accounting for partnership and the number of young children, both of which were strongly associated with employment. By contrast, there was no significant gender difference in home ownership (OR = 0.93), which may reflect the fact that home ownership is usually a household rather than an individual outcome.

Life satisfaction and psychological distress. Once other characteristics were taken into account, women and men reported similar levels of life satisfaction. However, women had around 36% higher odds of meeting the GHQ-12 threshold for psychological distress (OR = 1.36). This is notable given that none of the pathway differences in distress reached statistical significance. Gender was therefore a more consistent correlate of psychological distress at 32 than the route taken between 17 and 20.

[Figure 10] Female as a predictor of age 32 outcomes (Employed only)

M1 controls for pathways, socioeconomic background, early-years characteristics, family structure, and region. M2 additional controls for job characteristics. Hollow circles indicate statistically non-significant parameters. Source: Next Steps, sweeps 1-9.



Outcomes among those in work. Among those employed at 32, gender differences were substantial for part-time employment, earnings and job quality. Women had almost nine times the odds of working part-time (OR = 8.81), and this gap narrowed only modestly after adjustment for job characteristics (OR = 7.14). Women's net hourly earnings were around 14% lower than men's ($\beta = -0.156$). Adjusting for job characteristics reduced the gap to around 9% ($\beta = -0.099$), but it remained highly significant. In the fully adjusted model, the gender gap in earnings was larger than

the gaps associated with the work route without a degree (5%) and with HE dropouts (8%), and close to that associated with the disengaged route without a degree (11%).

A similar pattern is observed for job quality. Women's jobs scored 0.030 points lower on the job quality index than men's. The gap more than halved to 0.014 points after adjustment for job characteristics, but it remained statistically significant and comparable in size to the gap for the work route without a degree (0.019). Because earnings account for 30% of the index, part of this difference reflects the earnings gap. Job satisfaction, by contrast, showed no significant gender difference in either model. This echoes the pathway results, where subjective evaluations of work varied little despite clear differences in objective job characteristics.

Overall, the gender results complement those for pathways. Gender did not shape which route young people took, but it was strongly associated with their circumstances at 32. Compared with men on the same pathway and with similar social backgrounds and family circumstances (partnership and parenthood), women were less likely to be employed, far more likely to work part-time, more likely to report psychological distress, and earned less and held lower-quality jobs when in work. Around a third of the earnings gap and more than half of the job quality gap reflect differences in the occupations, industries, sectors and firm sizes in which women and men work, but significant gaps remain among those in seemingly similar jobs. That the gender gap in earnings is comparable to some of the largest pathway penalties suggests that gender and pathway are two distinct sources of inequality in early adulthood.

What follows

- 1** Adult outcomes at age 32 differ substantially according to young people's transition pathways. The strongest contrast is between sustained engagement and prolonged disengagement, not simply between graduates and non-graduates. Those who experienced stalled progression or prolonged disengagement between 17 and 20 and had no degree by 32 fared worst on almost every indicator. They had the lowest employment, home ownership, earnings and job quality, and the poorest wellbeing. Substantial disadvantages remained even after accounting for family background, prior attainment, aspirations and other characteristics.
- 2** The traditional academic pathway is associated with the most favourable outcomes overall. However, those who reached a degree through vocational or work-based routes had employment rates above 90%, home ownership approaching that of academic graduates, and equally strong wellbeing. Once background was taken into account, they did not differ significantly from academic-route graduates. These findings suggest that the benefits associated with degree attainment are not confined to the traditional university pathway and that later educational progression can deliver substantial returns.
- 3** The largest single group (36%), who entered employment or work-related training in their late teens and had not obtained a degree, had lower earnings and job quality than academic-route graduates. Nevertheless, they achieved high levels of employment

(88%) and home ownership (51%), indicating relatively successful labour market integration.

- 4 Although gender did not shape which route young people took, women at 32 were less likely than men with similar pathways and backgrounds to be employed, far more likely to work part-time, and earned around 14% less. Equal access to post-16 routes is therefore not sufficient on its own. Narrowing gender gaps in adulthood also depends on childcare, flexible working and opportunities to progress in part-time work.

Overall, the findings challenge a simple university versus non-university narrative. The academic route remains the pathway most strongly associated with economic advantage, particularly in relation to earnings and job quality. However, work-based and vocational routes, which are followed by a much larger share of young people, provide secure labour market integration and can lead to strong adult outcomes, especially when they provide opportunities for later educational progression. By contrast, sustained disengagement during the transition to adulthood emerges as the clearest predictor of long-term disadvantage, irrespective of background characteristics. Finally, gender cuts across all of these routes. Even when young women and men followed similar pathways, women's employment, working hours and pay lagged significantly behind men's.

5. Summary: Transition pathways and their wider returns

This report has examined the pathways young people in England take from compulsory schooling into education, training, employment, and, for some, periods of disengagement. Moving beyond a simple distinction between academic and vocational routes, the analysis identified seven route–attainment categories that capture both the activities young people undertake between ages 17 and 20 and whether they subsequently attain a degree by age 32. We then examined the factors associated with pathway membership and assessed how these different trajectories are associated with economic circumstances and wider well-being in adulthood. Three important findings emerged:

Diverse pathways into adulthood

First, the transition from education to employment is substantially more diverse than a conventional school-to-university model suggests. Only 30% of the cohort followed the conventional route from A Levels into HE and on to a degree by age 32. The largest single group (36%) moved into employment, apprenticeships or vocational study in their late teens and had no degree at 32, while a further 15% spent those years in lower-level study or largely out of the labour market and also had no degree. At the same time, substantial numbers reached a degree through routes that diverged from the conventional sequence, including vocational routes into HE, work-based routes followed by later degree attainment, and routes involving early disengagement followed by subsequent educational progression. Together, these alternative routes account for more than a quarter of those holding a degree at 32, many of whom entered HE after age 20.

The findings point to both the lasting significance of early educational pathways and the potential for later change. The route young people follow during the late teenage years is associated with their educational and socioeconomic position more than a decade later. By age 32, substantial differences are evident in employment, earnings, job quality, and home ownership across pathways. Yet early destinations do not fully determine later educational attainment. Young people can return to education or progress through alternative routes after entering work, vocational education, or periods of disengagement, highlighting the importance of life-long learning and upskilling throughout one's career. Conversely, entering HE does not guarantee a degree: 7% of the cohort entered HE by age 20 but had no degree at 32, and completion was markedly lower among those who entered through vocational or mixed qualifications (57%) than among those who entered through A Levels (87%).

The findings challenge an overly linear conception of educational progression in which immediate progression from A Levels to university is treated as the standard against which other routes are judged. Young people may develop valuable skills and qualifications through vocational education, apprenticeships and employment-based training, as well as through higher education. The important question is whether their routes provide opportunities to develop skills, progress into sustainable and rewarding employment, and to pursue further learning when needed.

Recognising this diversity is essential to understanding both the different ways young people navigate the transition to adulthood and the opportunities available to them over the longer term.

Transitions are socially patterned long before labour-market entry

Second, transition pathway is strongly structured by prior educational attainment and socioeconomic circumstances. GCSE attainment at age 16 was by far the strongest predictor of subsequent pathway membership. Higher attainment was strongly associated with the academic route to a degree and with a substantially lower probability of work or disengagement without a degree. This highlights the extent to which post-16 transitions reflect inequalities that have accumulated well before young people enter the labour market.

Importantly, attainment did not explain these differences completely. Parental education, parental occupation, housing tenure, area deprivation, parental expectations, and parental investment in education remained associated with pathway membership after accounting for GCSE attainment and other adolescent characteristics. Young people's own educational expectations were also associated with subsequent pathways, as were parents' expectations for their children. These patterns are consistent with the view that transitions are shaped not only by academic achievement, but also by the resources, expectations, information, and opportunities available to young people as they make post-16 decisions.

The analysis also highlights the importance of distinguishing different forms of disadvantage. Socioeconomic inequalities were particularly pronounced in access to the conventional academic-to-degree pathway, while some family and adolescent characteristics were more closely associated with entering employment without a degree or experiencing prolonged disengagement. Gender, in contrast, did not show an independent association with pathway membership once other observed characteristics were taken into account. This does not imply that young men's and young women's experiences of education and work are identical, but rather that gender differences in pathway allocation were substantially accounted for by the other characteristics included in the models.

Wider returns of pathways

Third, the longer-term associations of transition pathways are particularly pronounced for economic outcomes. By age 32, individuals who followed pathways involving sustained engagement in education, training, or employment generally had higher employment rates, greater home ownership, higher earnings, and better job quality than those who experienced prolonged disengagement. The economic disadvantage associated with the disengaged pathways was particularly marked.

These differences should not, however, be interpreted as evidence that pathway membership itself causally determines adult outcomes. Young people do not enter these pathways at random. The same family circumstances, prior attainment, health, and other characteristics that are associated with pathway allocation may also influence later labour-market outcomes. Nevertheless, the persistence of pathway differences after extensive adjustment indicates that the

post-16 transition is an important stage at which inequalities become differentiated into distinct educational and employment trajectories.

The analysis of job characteristics provides further insight into these differences. Part of the variation in adult labour-market outcomes is associated with sorting into different occupations, industries, sectors, and firm sizes. However, meaningful differences remain after these characteristics are taken into account. This suggests that pathway disparities cannot be understood simply as a consequence of individuals entering different types of jobs. Differences in earlier educational and employment trajectories may continue to matter for adult labour-market position even among individuals working in observably similar settings.

The pattern for subjective well-being is more nuanced. Descriptively, individuals following sustained-engagement pathways tend to report higher life satisfaction and lower psychological distress, while those experiencing disengagement report poorer well-being. However, these differences are substantially attenuated after accounting for family background, early-life characteristics, and adult circumstances. Life satisfaction remains significantly lower among those who experienced disengagement and did not subsequently obtain a degree, whereas differences in psychological distress are no longer statistically significant in the adjusted models.

Gender differences follow a different pattern from pathway differences. Although gender was not associated with the routes young people took, it was strongly associated with both material and non-material outcomes at 32. Compared with men with the same pathway and with similar backgrounds, women had around half the odds of being employed, almost nine times the odds of working part-time, and higher odds of psychological distress. When in work, they earned around 14% less per hour and held lower-quality jobs. Around a third of the earnings gap and more than half of the job quality gap reflect differences in the occupations, industries, sectors and firms in which women and men work, but significant gaps remain among those in seemingly similar jobs. The gender gap in earnings is comparable in size to some of the largest pathway differences, suggesting that gender and transition pathways represent two different sources of inequality in early adulthood.

Taken together, these findings suggest that the long-term consequences of transition pathways are more consistently visible in economic position than in subjective well-being. The association between prolonged early disengagement and later economic disadvantage appears particularly persistent, while its relationship with adult psychological well-being is more closely intertwined with the broader accumulation of social and economic disadvantage across the life course. Gender inequalities, by contrast, do not arise through the routes young people take but persist, in employment, working hours, pay and psychological well-being.

Policy implications

The findings have several implications for education, skills, and employment policy. However, they should be interpreted in the context of substantial changes since this cohort moved through post-16 education between 2007 and 2010. The participation age has been raised to 18, and higher education has expanded alongside foundation years and other widening participation initiatives, while tuition fees have increased considerably. Apprenticeships have undergone reform, with overall uptake declining even as degree apprenticeships have grown. Following the Wolf Review,

lower-level vocational qualifications have been reformed, while T Levels and Higher Technical Qualifications have been introduced and mixed academic and vocational study at Level 3 has become more common. Policy priorities have also evolved, with greater emphasis on qualifications at Level 4 and above rather than degree attainment alone, alongside a stronger role for local and regional skills bodies in responding to labour market demand. However, evidence from LSYPE2, a cohort born in 2000, points to lower rates of young people who move early into the labour market in more recent cohorts (Duckworth et al., 2025; Ross et al., 2025). However, despite changes in the policy landscape, the broader patterns identified here. are likely to remain relevant for more recent cohorts. These include the strong social gradient in access to the academic route, the diversity of pathways leading to a degree, and the lasting disadvantages associated with early disengagement (see Duckworth et al., 2025 and Ross et al., 2025).

■ **Recognise, support and fund diverse pathways.** The findings challenge the notion that a traditional academic route is the only pathway to positive adult outcomes. Most young people follow work-based, vocational, apprenticeship or mixed pathways, and many achieve positive adult outcomes comparable to those on the academic pathways. Our findings thus provide evidence for the recent Department for Education’s post-16 pathways reforms aiming to establish a more diverse qualifications landscape through the expansion of apprenticeships and T Levels and creating greater parity between academic, vocational and technical routes. Policy should move beyond a binary distinction between “university success” and “non-university alternatives”. Instead, England’s post-16 system should be viewed as a set of multiple progression pathways, each requiring clear opportunities for advancement. This supports continued investment in apprenticeships and high-quality vocational qualifications; performance measures that value progression into skilled employment as well as progression to HE, and greater parity in funding as well as esteem. Persistent differences in per-student funding between academic and vocational provision (Drayton et al., 2025) highlight the limits of recognition alone in addressing inequalities between pathways.

■ **Support continuous engagement.** The clearest and most consistent marker of poor adult outcomes is not the absence of a degree but prolonged disengagement from both education and work during the late teens. Even after accounting for socioeconomic background and prior attainment, individuals on disengaged pathways experienced lower employment, lower home ownership and poorer labour-market outcomes, and obtaining a degree later did not fully offset these disadvantages, especially in securing employment. Remaining engaged in education, training or work between 17 and 20 is associated with substantially better adult outcomes, over and above the qualifications eventually obtained. Preventing sustained disengagement should therefore be a central objective of post-16 policy, and is likely to be more effective than remediating its consequences later. This points to the early identification of young people at risk of disengagement; minimising breaks between school, training and employment; targeted transition support after Key Stage 4 and Key Stage 5; integrated employment, education, health and welfare services; stronger re-engagement programmes for young people who leave education or work; and structured entry routes and progression opportunities from employers. The findings suggest that reducing disengagement may generate larger gains than simply increasing HE participation rates. The findings also speak to an ongoing policy debate about how school and college success should be measured. Historically, progression to higher education has been a prominent indicator of educational success. However, if multiple pathways can produce successful adult outcomes,

then accountability systems should recognise progression into skilled employment, apprenticeships and advanced vocational qualifications at levels 4 and 5, alongside university entry.

■ **Intervene early to reduce inequalities in opportunity.** The strong association between GCSE attainment and subsequent pathway membership highlights the importance of addressing educational inequality before young people reach the transition point at age 16. By the time post-16 choices are made, differences in academic attainment and family resources are already substantial. Policies aimed at reducing educational inequalities in childhood and secondary school therefore remain central to widening access to positive post-16 pathways and later opportunities. This includes not only academic support, but also access to enrichment, information, careers guidance, and other resources that may be unequally distributed across families and schools.

■ **Improve guidance during the transition years.** The diversity of routes highlights the importance of effective, high-quality careers education, mentoring and transition support. Young people and their families must navigate a complex system involving academic qualifications, vocational education, apprenticeships, employment and routes back into education. Access to reliable information should not depend disproportionately on family resources or prior knowledge of the education and employment system. Careers guidance should therefore provide balanced information about the requirements, costs, progression opportunities and longer-term implications of different routes, while supporting young people to make choices that reflect their interests, aspirations, skills and circumstances. Support should not end once young people enter work. Those on the work route without a degree achieved high employment but lower earnings and job quality than academic-route graduates, and much of this gap reflected the kinds of jobs they entered rather than the pathway itself. The policy challenge is therefore not simply getting young people into work but helping them progress into good work. This calls for greater attention to job quality alongside employment rates; investment in technical and professional progression pathways; stronger links between apprenticeships, further education and higher-level qualifications; support for in-work training and career development.

■ **Adopt a life-course approach.** The findings support a broader shift from evaluating transitions as discrete events to understanding them as part of longer educational and employment trajectories. Young people can enter employment and later return to education; they can experience temporary disengagement and subsequently recover; and they can attain qualifications through routes that are not visible in conventional measures of immediate post-16 progression. One of the most striking findings is that substantial numbers of individuals obtained degrees after initially entering work, and that their adult outcomes were often comparable to those of traditional graduates. Higher education policy should place greater emphasis on lifelong and flexible learning rather than focusing predominantly on progression at age 18. Our evidence points to the importance of mixed and non-linear trajectories. Many young people combine education, work and training over time, rather than following a single coherent pathway. This suggests a need for more flexible movement between academic and vocational routes. This should include expanded part-time and modular learning, improved progression routes from apprenticeships and vocational qualifications into HE, better careers guidance that presents multiple pathways as normal and valuable further development of the Lifelong Learning Entitlement and other mechanisms supporting study later in life such as funding and support arrangements that accommodate transitions rather than

assuming a single route from age 16 onwards, and better employer-supported learning opportunities.

▪ **Address gender gaps in adult outcomes.** Gender did not shape which routes young people took, but it was strongly associated with their circumstances at 32. Compared with men with similar pathways, backgrounds and family circumstances, women were less likely to be employed, far more likely to work part-time, and earned around 14% less per hour. The findings suggest that equal access to educational pathways is a necessary but insufficient condition for gender equality in adulthood. While women and men follow broadly similar post-16 routes, substantial differences emerge by age 32 in employment, working hours and earnings. Efforts to reduce these gaps should therefore focus on the factors that shape women's labour market progression after education, including accessible and affordable childcare; high-quality part-time and flexible jobs with progression opportunities; attention to occupational segregation within apprenticeships and vocational routes; and monitoring of gender gaps in outcomes, not just participation, across post-16 pathways. Policies aimed solely at widening participation are unlikely to eliminate gender inequalities unless they also address the unequal returns that women receive from similar educational and vocational pathways.

Limitations and directions for further research

Several limitations should be considered when interpreting these findings. First, educational attainment is measured here by whether a degree had been obtained by age 32. This marks one threshold rather than educational success more broadly. Qualifications below degree level vary considerably in their labour-market value, with Level 4 and 5 qualifications potentially offering returns quite different from those associated with Levels 1 to 3. The distinction is particularly important given current policy priorities, including higher technical qualifications, the Lifelong Learning Entitlement and addressing skills shortages at Levels 4 and 5. However, the classification used here does not distinguish between these qualification levels. A similar limitation applies to aggregating post-16 route. Four distinct routes, namely A Levels followed by employment, vocational qualifications followed by employment, apprenticeships, and direct entry to work, are combined into a single work route. This consolidation reflects sample-size constraints rather than an assumption that these routes are equivalent. A related constraint concerns the measurement of ethnicity; due to sample sizes, ethnic minority groups were combined into broad categories, which may mask notable differences in transition experiences and outcomes across specific ethnic groups. Larger samples or linked administrative data would allow these routes, qualification levels and more fine-grained ethnic classifications to be examined separately. Future research should prioritise this distinction to provide a more complete account of progression through different educational and occupational pathways.

Second, the analysis is based on observational longitudinal data. Although the temporal ordering of predictors, pathways, and adult outcomes strengthens the analysis, the results cannot establish that pathway membership causes the differences observed at age 32. Unobserved characteristics, including cognitive ability, family processes, local institutional and labour market conditions, or other forms of support, may contribute both to pathway allocation and later outcomes. The adjusted associations should therefore be interpreted as evidence of patterned differences rather than causal effects.

Third, the seven route-attainment categories necessarily simplify complex individual trajectories. Young people may move between education, employment, unemployment, and other activities several times within a relatively short period, and individuals classified within the same category may nevertheless have experienced quite different sequences. Future research could use finer-grained sequence or multi-state methods to examine the timing, duration, and ordering of transitions in greater detail.

Fourth, the analysis focuses on outcomes at age 32. This provides a sufficiently long follow-up to identify substantial differences in adult socioeconomic position, but it remains relatively early in the life course. It is also a phase at which many people are having children or raising young children, making it particularly important to consider how gender differences in employment, earnings and working patterns may reflect the interaction between career development and family responsibilities. The findings therefore capture gender inequalities at a significant phase of adulthood but cannot establish whether these differences persist, widen or narrow later in life. Longer-term follow-up would allow researchers to examine whether pathway-related differences persist into mid-life, including differences in earnings growth, occupational mobility, pension accumulation, health, and family formation.

Finally, further research should examine why some young people are able to recover from disrupted or non-linear transitions while others experience persistent disadvantage. The existence of later degree attainment following employment or disengagement suggests that educational trajectories are not fixed at age 16. Understanding the social and institutional conditions that facilitate successful re-engagement, including flexible qualifications, financial support, employer practices, access to guidance, and opportunities to accumulate transferable credits, could help identify where policy can most effectively support mobility and recovery.

Conclusion

This report demonstrates that the transition from education to employment is neither linear nor uniform. Young people enter adulthood through multiple pathways, and these pathways are strongly patterned by prior attainment, socioeconomic background, family expectations, and the resources available to them. The consequences of these pathways extend well beyond the immediate post-16 period, with significant differences in outcomes by age 32. While gender did not shape the routes young people took, women's employment, working hours and pay at 32 lagged significantly behind men's.

The central lesson is that the greatest policy divide is not between university and non-university routes, but between pathways characterised by sustained engagement and those characterised by prolonged disengagement or stalled educational progression. While the traditional academic route remains associated with the strongest economic returns, work-based and vocational pathways can also support successful transitions into adulthood, particularly when they provide opportunities for continued learning and progression. At a time of renewed concern about the number of young people who are not in education, employment or training, this finding underlines the long-term stakes of preventing disengagement in the late teens.

The central policy challenge is to ensure that all young people have access to high-quality, connected routes into adulthood, and that which route they take is not determined by social origin

or accumulated educational disadvantage. Meeting this challenge requires action at every stage of the transition. It means reducing inequalities before age 16, strengthening guidance at the point of choice, and preventing disengagement during the late teens. After the transition, it means improving the quality of vocational and work-based routes, supporting progression into good work and later learning, and addressing the gender gaps that open up in early adulthood. Rather than promoting a single preferred pathway, policy should recognise the value of diverse set of pathways, including combinations of educational and employment, and ensure that funding, guidance and accountability systems give these routes comparable support and status. This requires sustained investment in high-quality vocational and work-based provision, alongside clear opportunities for further learning and advancement across all pathways.

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Appendices

Appendix 1: Post-16 transition pathway allocation protocol

Overview

Pathways were assigned deterministically from main activity status recorded at four annual observations (waves 4 to 7, ages 17 to 20). The procedure is rule-based rather than model-based. A first stage applies a set of hierarchical rules based on summary indicators of the four-wave sequence, and classifies approximately 80 per cent of cases. Two further stages resolve the remainder, drawing on more detailed qualification information at wave 5 where the summary indicators are insufficient.

Summary indicators

Six indicators were constructed from the sequence of main activity states.

Indicator	Definition
Higher education	In higher education at wave 6 or wave 7
Sustained A level study	A level study at two consecutive waves (4 and 5, or 5 and 6)
Sustained vocational study	Vocational study or a training scheme at two consecutive waves (4 and 5, or 5 and 6)
Employment at 19-20	In a job, with or without training, at wave 6 or wave 7
Employment count	Number of waves observed in a job, with or without training
Sustained non-employment	Unemployed or out of the labour force at both waves 6 and 7, or at two or more waves overall

- Apprenticeship was identified separately, from a wave 7 item recording whether the respondent had ever undertaken an apprenticeship.

Stage 1: Primary rules

Cases meeting the following conditions were assigned directly. Rules were applied in the order shown.

Pathway	Assignment rule
1. A Levels to HE	Sustained A level study and higher education
2. Vocational/mixed to HE	Higher education and sustained vocational study, without sustained A level study
3. A Levels, then job	Sustained A level study and employment at 19–20, without higher education

Pathway	Assignment rule
4. Vocational quals, then job	Sustained vocational study and employment at 19–20, without higher education or sustained A level study
5. Apprenticeship route	Ever undertook an apprenticeship
6. Direct job route	In a job at wave 4 or wave 5 and employed at three or more waves
8. Mostly unemployed or OLF	Sustained non-employment

Two features of this stage are notable:

- **Apprenticeship takes precedence.** The apprenticeship rule was applied without restriction to unassigned cases, so respondents who had ever undertaken an apprenticeship were assigned to pathway 5 even where they also met the conditions for pathways 1 to 4. The typology therefore treats apprenticeship as a defining feature of the transition rather than one activity among several.
- **Rules 6 and 8 apply only to cases not already assigned.** Unlike rules 1 to 5, these were restricted to residual cases, so they capture respondents whose transitions were dominated by employment or by non-employment without meeting any of the more specific conditions above.

This step allocated 78.2% of the whole sample (6,553 out of 8,381 cases) to a category.

Stage 2: Cases with A Level study at 17 but no sustained A Level sequence

A group of respondents were studying for A levels at wave 4 but did not meet the two-consecutive-waves criterion, frequently because they were working or studying part-time by wave 5. For these cases, detailed wave 5 qualification items were used to establish whether the respondent's study at that point was academic, vocational, or both, and this was combined with higher education and employment status to assign a pathway.

Wave 5 study	Subsequent status	Pathway
Academic only	Higher education	1. A Levels to HE
Any vocational	Higher education	2. Vocational/mixed to HE
Academic only	Employment at 19-20, no HE	3. A Levels, then job
Vocational only	Employment at 19-20, no HE	4. Vocational quals, then job

A second group entered higher education at wave 6 or 7 after a gap, and so met the higher education condition without any sustained study sequence. These were assigned on the basis of main activity at wave 4: A level study to pathway 1, vocational study to pathway 2, and any other status to pathway 2.

This step allocated further 11% of the whole sample (894 cases).

Stage 3: Remaining cases

The residual cases were predominantly respondents observed in education across several waves (e.g., academic, vocational, or both) without reaching higher education at any point. These were assigned according to the type of qualification studied and whether any employment was observed.

Qualification studied	Employment observed	Pathway
Any	None	7. Continued study, no HE or job
A level only	Any	3. A Levels, then job
Any vocational	Any	4. Vocational quals, then job
Neither recorded	Any	6. Direct job route

This step allocated the remaining 11% (934 cases).

Appendix 2: Measurement of the key variables

Socioeconomic factors: All adolescent socioeconomic characteristics were measured at Wave 1 unless otherwise stated.

- **Gender:** Coded 1 for female and 0 otherwise, based on biological sex.
- **Ethnicity:** Coded 0 for respondents identifying as White and 1 for all other ethnic groups.
- **Parental education:** Coded 1 if at least one parent had a university degree and 0 otherwise.
- **Parental occupation:** Coded 1 if at least one parent was in a higher or lower professional or managerial occupation, based on the National Statistics Socio-Economic Classification (NS-SEC), and 0 otherwise.
- **Parental home ownership:** Coded 1 if the household owned its home outright, with a mortgage, or through shared ownership, and 0 otherwise.
- **Area deprivation:** Measured at Wave 2 using the 2004 Index of Multiple Deprivation (IMD). The IMD score was divided into quartiles, with the quartile measure capturing relative levels of neighbourhood deprivation. The bottom quartile (Q1) represents the least deprived areas, while the top quartile (Q4) represents the most deprived areas.

Health: The following measures were collected at Wave 2.

- **General health:** Respondents were asked how they would describe their health over the previous 12 months. Responses ranged from 1 (*not good at all*) to 4 (*very good*), with higher scores indicating better self-reported health.
- **Psychological distress:** Measured using the 12-item General Health Questionnaire (GHQ-12). A GHQ-12 score of 4 or above was coded 1, indicating psychological distress, and scores below 4 were coded 0.

School experiences: The following measures were collected at Wave 1, except GCSE attainment, which was derived from administrative records.

- **GCSE attainment:** Measured using the capped GCSE and equivalent new-style point score from the National Pupil Database (NPD). The score was standardised to have a mean of 0 and a standard deviation of 1, with higher values indicating higher attainment.
- **Ability concept:** Measured using agreement with the statement “*I get good marks for my work*”. Responses ranged from 1 (*strongly disagree*) to 4 (*strongly agree*), with higher scores indicating a more positive perception of one’s academic ability.
- **School engagement:** Measured using five statements capturing enjoyment of school, perceived value of school, willingness to attend, liking school and boredom in lessons. Items were coded so that higher values represented greater engagement and were averaged to form a composite scale. The scale demonstrated good internal consistency (Cronbach’s $\alpha = 0.77$).
- **School truancy:** Coded 1 if the young person reported having played truant during the previous 12 months and 0 otherwise.

- **University expectation:** Measured by the perceived likelihood that the young person would apply to university. Responses ranged from 1 (*not at all likely*) to 4 (*very likely*), with higher scores indicating stronger expectations of applying to university.

Parental support: These characteristics were measured at Wave 1.

- **Parental expectation:** Measured by parents' expectations about what the young person would do after reaching school-leaving age. Responses distinguished between continuing in full-time education, starting an apprenticeship or learning a trade, obtaining a full-time paid job, and *don't know/something else*.
- **Paid private tuition:** Coded 1 if parents had paid for private classes in subjects also taught at the young person's school during the previous 12 months and 0 otherwise.

Career orientations: These characteristics were measured at Wave 1.

- **Career advice:** Three variables captured career advice received from a careers adviser, a teacher and a family member respectively. For each source, two items were combined into a single measure, namely whether the young person had received career advice from that source and, where advice was received, how useful they found it. Each measure ranged from 0 (*never received advice*) to 5 (*very useful*), with higher values indicating more useful career advice.
- **Work experience:** Coded 1 if the young person had a paid job during term time and 0 otherwise.
- **Job values:** Four indicators captured what young people valued when choosing a job. Respondents were asked how much each of the following mattered: *having a job where I help other people*, *having a job which pays well*, *being my own boss or having my own business*, and *having a job that is interesting and not routine*. Each item was rated from 1 (*doesn't matter*) to 3 (*matters a lot*), with higher scores indicating greater importance attached to the characteristic when choosing a job.
- **Attitudes to success:** Three items captured young people's views about the extent to which effort, social circumstances and luck shape success. Respondents were asked *whether they agreed that working hard at school now will help me get on later on in life*, *people like me don't have much of a chance in life*, and *how well you get on in this world is mostly a matter of luck*. Responses ranged from 1 (*strongly agree*) to 4 (*strongly disagree*). The first item was reverse coded so that, where appropriate, higher scores consistently represented more positive expectations about the role of effort in achieving success.

Family structure and region at age 32: These characteristics were measured at Wave 9.

- **Partnership status:** Coded 1 if the respondent had a cohabiting partner and 0 otherwise.
- **Number of children:** Measured as the number of the respondent's own children living in the household. Children aged 0-4 and 5-11 were measured separately.

- **Region:** Based on Government Office Region at Wave 9 and grouped into six categories: North, Midlands, East of England, London, South, and Wales/Scotland/Northern Ireland.

Job characteristics at age 32: These measures refer to respondents' main jobs at Wave 9.

- **Job sector:** Categorised as private sector (including private firms, companies, PLCs and self-employment), public sector (including nationalised industries, central and local government, universities, the NHS and armed forces), or other sectors (including charities, voluntary organisations and trusts).
- **Firm size:** Categorised into five groups according to the number of employees: 1-9, 10-49, 50-249, 250-499, and 500 or more.
- **Occupation:** Current occupation was based on three-digit SOC2020 codes and grouped into the nine major occupational groups: managers, directors and senior officials; professional occupations; associate professional occupations; administrative and secretarial occupations; skilled trades occupations; caring, leisure and other service occupations; sales and customer service occupations; process, plant and machine operatives; and elementary occupations.
- **Industry:** Current industry was based on three-digit SIC2007 codes and grouped into nine broad sectors: agriculture, forestry and fishing; industry (mining, manufacturing and utilities); construction; trade, transport, accommodation and food; information and communication; finance and insurance; real estate, professional and administrative services; public administration, education, health and social work; and other services.

Outcomes at age 32: All age 32 outcomes were measured at Wave 9.

- **Employment:** Coded 1 if the respondent was in work and 0 otherwise.
- **Home ownership:** Coded 1 if the respondent owned their home outright, with a mortgage, or through shared ownership, and 0 otherwise.
- **Life satisfaction:** Measured using an 11-point scale ranging from 0 (*not at all satisfied*) to 10 (*completely satisfied*), with higher scores indicating greater life satisfaction.
- **Psychological distress:** Measured using the GHQ-12. A score of 4 or above was coded 1, indicating psychological distress, and lower scores were coded 0.
- **Part-time employment:** Among those in work, coded 1 if the respondent's main job was part-time and 0 otherwise.
- **Earnings:** Measured as hourly net earnings and log transformed to account for the skewed distribution of earnings. To reduce the influence of extreme observations, earnings were winsorised at the bottom and top 1% of the distribution.
- **Job quality:** Measured using a Job Quality Index (JQI), drawing on Stephens (2023) and adapted to the measures available in the Next Steps data at age 32. The index combines five dimensions of job quality:

- *Earnings*, measured by the respondent's quintile in the earnings distribution, weighted at 30%.
- *Pensions*, ranging from no pension provision to contributing to an employer pension scheme.
- *Job security*, incorporating perceived likelihood of losing the job within the next 12 months, whether the job was temporary or permanent, and whether the respondent was on a zero-hours contract.
- *Work-life balance*, based on work-related stress, excessive working hours and shift work.
- *Prospects*, based on managerial responsibilities and opportunities for advancement.

The four dimensions other than earnings were each weighted at 17.5%. The resulting index therefore captures several complementary aspects of job quality rather than focusing solely on pay, with higher scores indicating better-quality jobs.

- **Job satisfaction:** Measured among respondents in work using a five-point scale ranging from 1 (*very dissatisfied*) to 5 (*very satisfied*), with higher scores indicating greater satisfaction with the current job.

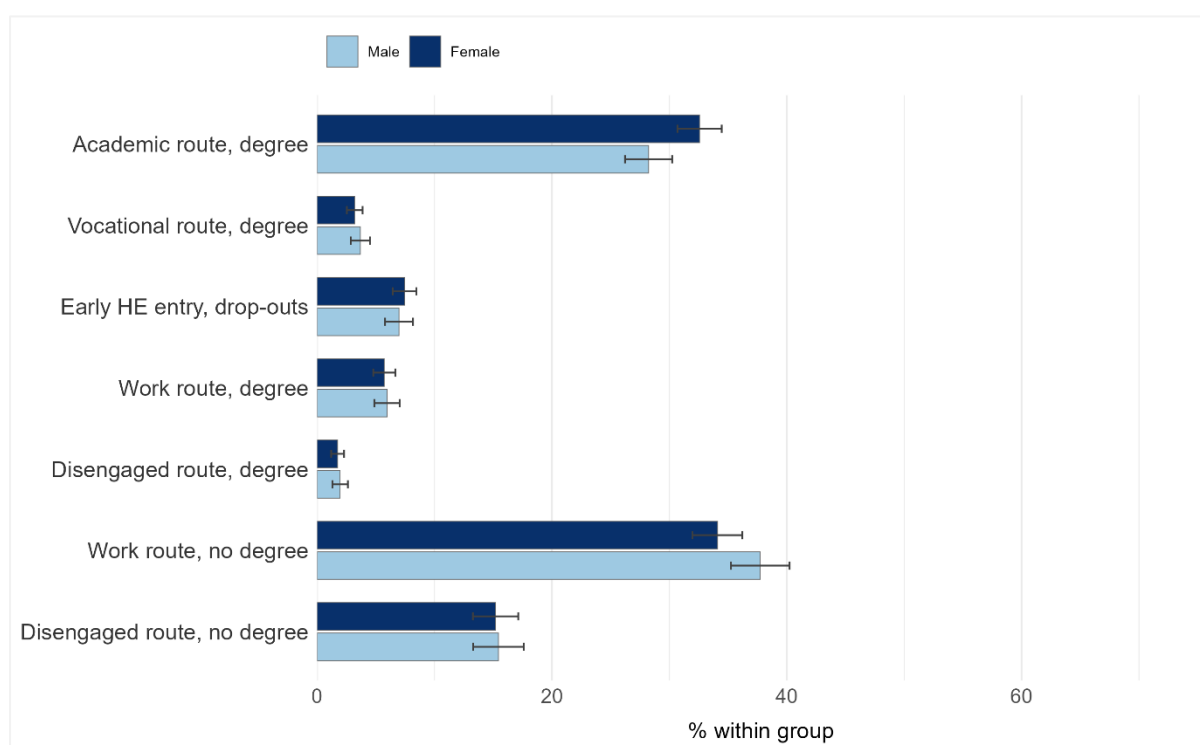
Appendix 3: Composition of the seven routes (Descriptive subgroup analysis)

Gender. There are no large gender differences in the pathways taken. Young women were somewhat more likely than young men to follow the academic route to a degree (33% versus 28%) and somewhat less likely to follow the work route without a degree (34% versus 38%), although the latter difference was not statistically significant at the 5% level. For the rest of pathways, gender differences were minimal, amounting to less than one percentage point.

These relatively modest differences are striking given the prominence of gender in debates about educational participation and attainment. The main distinction lies in the traditional academic pathway, where young women are more likely than young men to progress from school to university and ultimately obtain a degree. Beyond this route, however, gender plays a much smaller role. Young men and women were similarly likely to enter HE without completing a degree and were equally represented in the alternative pathways leading to degree attainment. This suggests that gender differences are concentrated in access to the conventional academic route rather than in progression through later or non-traditional pathways.

[Figure A1] Route-attainment composition by gender

Confidence intervals at 95%; Source: Next Steps, sweeps 4-9.



Ethnicity. Ethnicity matters. Young people from ethnic minority backgrounds were more likely than their White peers to follow routes that ultimately led to a degree. Four in ten followed the academic pathway to degree attainment, compared with fewer than three in ten White young

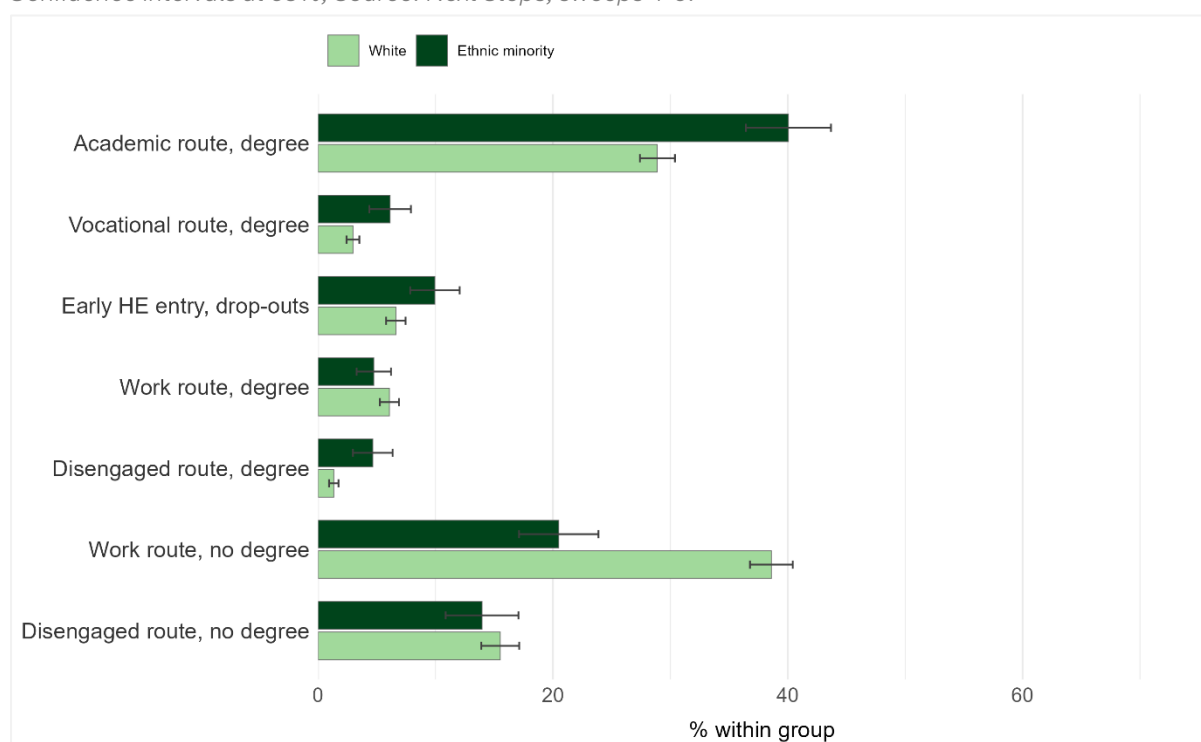
people. They were also twice as likely to obtain a degree through vocational or mixed qualifications (6.1% versus 3.0%), and more than three times as likely to do so through pathways involving neither HE nor stable work at age 20 (4.7% versus 1.3%).

However, higher participation in HE did not translate uniformly into degree completion. One in ten ethnic minority young people had entered HE but did not obtain a degree by age 32, compared with fewer than seven in 100 White young people. This highlights that inequalities are not confined to access to HE but also extend to successful completion.

The pattern differs markedly for non-degree employment routes. Just one in five ethnic minority young people reached age 32 without a degree after spending their late teens primarily in employment or vocational training, compared with nearly two in five White young people. By contrast, ethnic differences were much smaller among those following routes characterised by prolonged disengagement from both HE and stable employment, where the proportions were broadly similar (14.0% and 15.5%, respectively).

[Figure A2] Route-attainment composition by ethnicity

Confidence intervals at 95%; Source: Next Steps, sweeps 4-9.



Parental education. Parental education is the strongest marker of inequality in access to the conventional route to degree attainment. Nearly two-thirds (64.0%) of young people with a degree-educated parent followed the academic route to a degree, compared with just 23.0% of those whose parents did not hold a degree, a gap of 41 percentage points.

This advantage is largely confined to the conventional route rather than extending across alternative routes to a degree. Young people from degree-educated and non-degree-educated

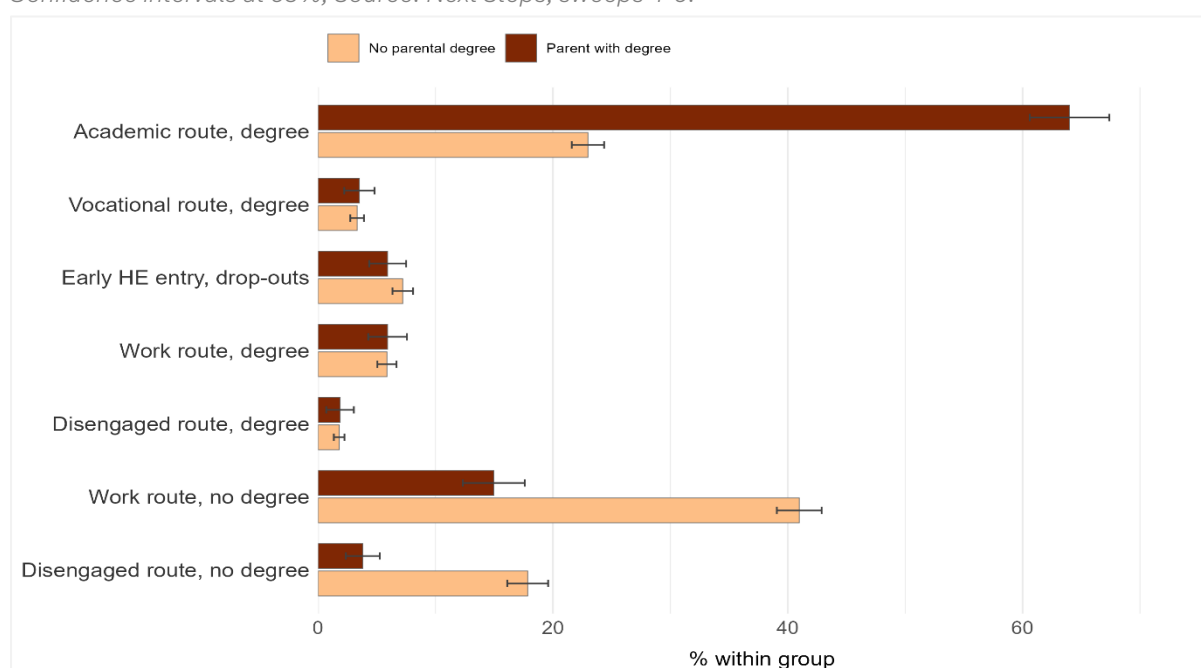
families were represented in remarkably similar proportions on vocational routes to degree attainment (3.5% versus 3.3%), delayed degree attainment following entry to work (5.9% in both groups), and delayed degree completion following disengagement (1.9% versus 1.8%). Likewise, differences in HE non-completion were modest (5.9% versus 7.2%) and not statistically significant.

The social gradient re-emerges strongly, however, among those who did not obtain a degree. Young people whose parents did not hold a degree were almost three times more likely to follow a work-based route without attaining a degree (41.0% versus 15.0%) and more than four times more likely to follow a route characterised by sustained disengagement from both HE and stable employment (17.9% versus 3.8%).

Taken together, parental education appears to shape access to the conventional academic pipeline far more strongly than it shapes alternative routes to graduate attainment. While young people from less advantaged backgrounds are much less likely to follow the traditional path to a degree, they are about as likely as their more advantaged peers to reach a degree through vocational, employment-based or delayed routes. This suggests that alternative routes may play an important role in broadening educational opportunities and reducing the long-term consequences of social disadvantage.

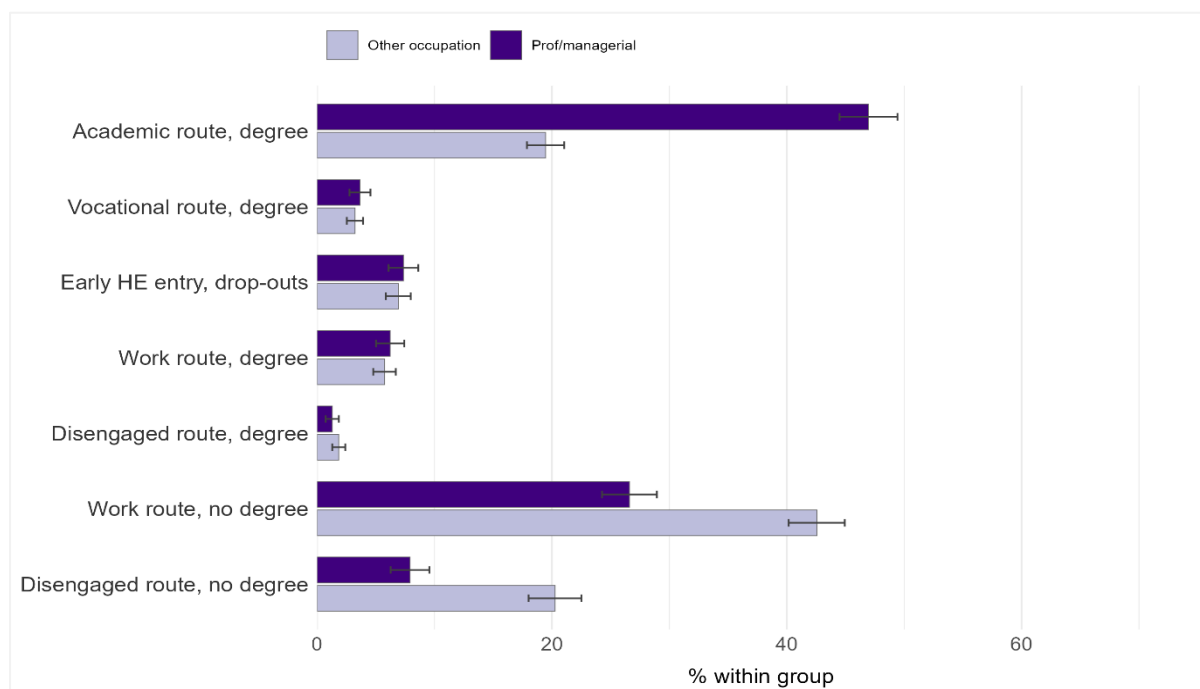
[Figure A3] Route-attainment composition by parental education

Confidence intervals at 95%; Source: Next Steps, sweeps 4-9.



[Figure A4] Route-attainment composition by parental occupation

Confidence intervals at 95%; Source: Next Steps, sweeps 4-9.



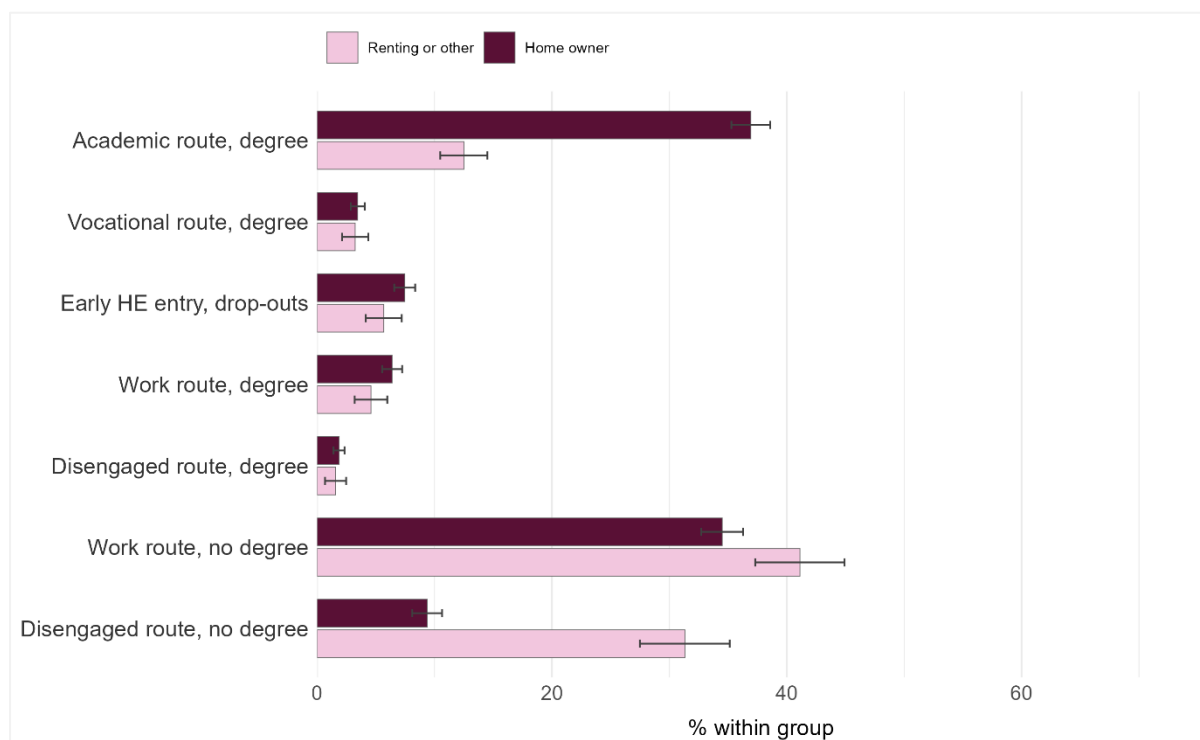
Parental occupation. Parental occupation shows a similar, though somewhat weaker, pattern of stratification. Young people from professional or managerial families were more than twice as likely to follow the academic route to degree attainment than those from other occupational backgrounds (47.0% versus 19.5%). In contrast, alternative routes to a degree showed relatively little differentiation. Progression to a degree through vocational pathways was almost equally common among young people from professional/managerial and other occupational backgrounds (3.7% versus 3.2%), while delayed degree attainment via work-based routes accounted for 6.2% and 5.7%. Rates of entering HE without ultimately obtaining a degree were also virtually identical (7.4% versus 6.9%).

The social gradient was far more pronounced among those who did not attain a degree. Young people from non-professional backgrounds were substantially more likely to follow a work-based route without degree attainment (42.6% versus 26.6%) and more than twice as likely to follow a pathway characterised by prolonged disengagement from both HE and stable employment (20.3% versus 7.9%).

Overall, as with parental education, occupational advantage is concentrated in access to the conventional academic pathway rather than in alternative routes to degree attainment. While young people from professional and managerial families are much more likely to progress through the traditional school-to-university pipeline, differences are considerably smaller among those who reach degree-level qualifications through vocational, employment-based, or delayed routes. This suggests that alternative pathways may provide important opportunities for progression outside the conventional academic track.

[Figure A5] Route-attainment composition by home ownership

Confidence intervals at 95%; Source: Next Steps, sweeps 4-9.

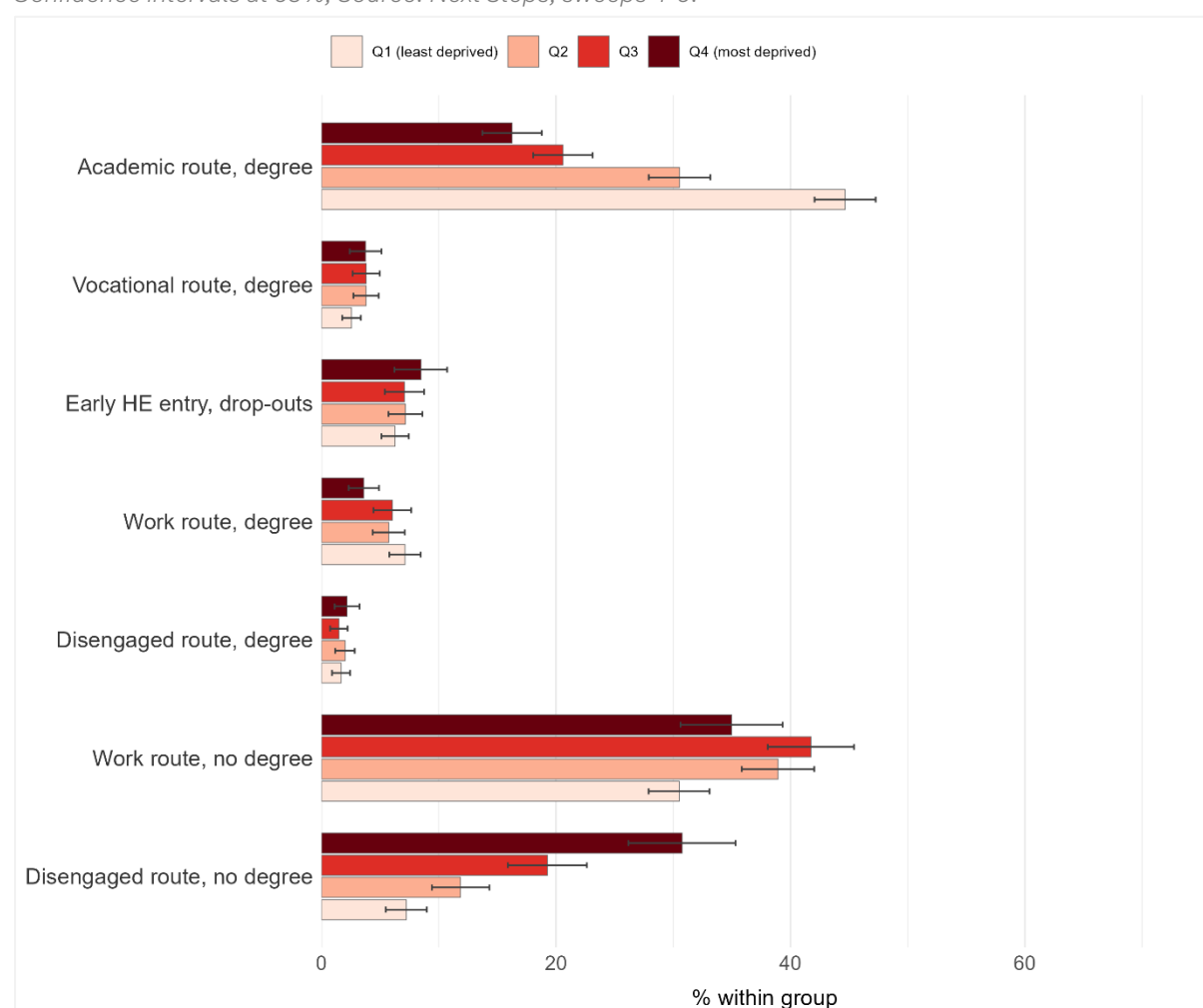


Housing tenure. Housing tenure reveals a similar pattern of inequality, although the contrasts are particularly pronounced at the more disadvantaged end of the distribution. Young people growing up in owner-occupied households were nearly three times as likely to follow the academic route to a degree as those from renting or other households (36.9% versus 12.5%). Yet, as with parental education and occupation, differences were much smaller across the alternative routes to a degree. Progression through vocational pathways was almost identical in the two groups (3.5% versus 3.2%), as was degree attainment following earlier disengagement from education and employment (1.9% versus 1.6%). Young people from homeowner households were only modestly more likely to obtain a degree after following these unconventional routes. More substantial differences emerged among those who did not attain a degree. While the work-based route without a degree was common in both groups, it was somewhat more common for young people from renting households (41.1% versus 34.5%). The starkest contrast concerned the disengaged route. Nearly one-third (31.3%) of young people from renting households reached 32 without a degree after spending their late teens without reaching either HE or stable employment, compared with fewer than one in ten (9.4%) from homeowner households.

Overall, housing tenure appears to be particularly strongly associated with the risk of long-term disengagement from both education and work. While tenure differences in alternative routes to degree attainment are relatively modest, growing up in a rented household is associated with a substantially greater likelihood of following pathways characterised by weaker labour-market attachment and lower educational attainment.

[Figure A6] Route-attainment composition by area deprivation

Confidence intervals at 95%; Source: Next Steps, sweeps 4-9.



Area deprivation. Area deprivation was strongly associated with participation in the conventional academic pathway to a degree. The proportion following this route declined steadily with increasing deprivation, from 44.7% in the least deprived quartile (Q1) to 30.5% in Q2, 20.6% in Q3 and 16.3% in the most deprived quartile (Q4), a gap of more than 28 percentage points.

By contrast, alternative routes into HE showed much weaker socioeconomic patterning. Vocational routes remained relatively stable across Q2 to Q4 at 3.8%, compared with 2.6% in Q1. Degree completion following the work-based route fell from 7.1% in Q1 to 3.6% in Q4, while early exit from HE increased only modestly, from 6.3% to 8.5%.

The steepest deprivation gradient was observed for disengagement. The proportion following the disengaged route without obtaining a degree rose more than fourfold, from 7.2% in Q1 to 30.8% in Q4, increasing at each successive quartile. In contrast, the work route without a degree peaked in the middle of the distribution (38.9% in Q2 and 41.7% in Q3) before falling to 35.0% in Q4. These findings suggest that young people from the most deprived areas are not simply more likely to enter employment instead of education, but are substantially more likely to experience sustained disengagement from both.

Appendix 4: Multinomial logistic regression for pathway outcomes

Table A1: Route to age 32 -- pathway at 17-20 and degree attainment

Predictor	Vocational route, degree	Early HE entry, drop-outs	Work route with degree	Disengaged route with degree	Work route, no degree	Disengaged route, no degree
Socioeconomic factors						
Female	0.87	0.94	0.83	0.79	0.90	0.98
Ethnic minority	0.79	0.56**	0.32***	1.04	0.18***	0.27***
Parent with degree	0.80	0.66*	0.74	1.05	0.53***	0.55**
Parent in prof/mng occupation	0.99	0.94	0.76	0.74	0.75**	0.90
Parents' home ownership	0.75	0.96	0.78	0.80	0.84	0.56**
IMD quartile (ref: Q1-Least deprived)						
IMD - Q2	1.85*	1.37*	1.11	1.3	1.43**	1.53*
IMD - Q3	2.51***	1.69**	1.59*	1.27	1.83***	2.09**
IMD - Q4 (Most deprived)	2.42*	2.06***	0.94	1.48	1.66**	2.58***
Health						
General health (W2)	1.20	1.07	1.02	0.82	0.98	1.11
Psychological distress (W2)	1.27	1.12	1.41*	0.96	0.97	1.30
School experiences						
GCSE score	0.12***	0.11***	0.13***	0.05***	0.04***	0.02***
Ability concept	0.87	1.02	1.22	1.02	0.98	1.00
School engagement	0.93	1.35	0.74	0.57**	0.93	0.81
Truancing	0.82	0.72	0.96	1.30	1.00	0.93
University expectation	0.70**	0.72***	0.70***	0.79	0.54***	0.51***
Parental support						
Parent expectation (ref: FT education)						
Apprenticeship/trade	1.70	2.03*	1.72	2.07	2.84***	1.76*
Getting FT paid job	0.38	1.12	0.37	0.00	1.48	1.07
Don't know	0.59	1.23	0.74	0.65	1.40	1.19
Pay for private tuition	1.39	0.89	0.63	0.74	0.57***	0.78
Career advice						
Advice from career advisor	1.01	1.05	0.94	1.02	0.98	1.01
Advice from teachers	1.14	1.02	1.08	1.04	1.05	1.06
Advice from family	0.97	0.94	1.01	1.04	1.00	0.91
Work experience						
Work experience during terms	1.16	1.06	0.99	1.20	1.23	0.85
Job values						
Helping others	0.88	1.09	1.15	1.02	0.99	0.99
Good pay	0.98	0.9	0.98	1.17	1.00	0.99
Being own boss	1.07	1.03	0.98	0.91	0.95	0.86
Interesting jobs	0.92	0.96	1.03	1.07	0.87	0.89
Attitude toward success						
Work hard in school	1.11	1.00	0.82	0.82	0.85	0.81
Don't have a chance	1.13	1.10	1.00	0.89	1.03	0.80*
Matter of luck	1.05	0.87	1.02	0.93	0.95	0.91

Note: N = 7204. Relative risk ratios, reference = academic route with degree, * p<.05, ** p<.01, *** p<.001.

Appendix 5: Descriptive results for age 32 outcomes

Table A2: Outcomes at age 32 by route-destination category

Outcome	Academic route, degree	Vocational route, degree	Early HE entry, drop-outs	Work route with degree	Disengaged route with degree	Work route, no degree	Disengaged route, no degree
Whole sample							
Employed (%)	95.30	91.47	90.31	93.81	80.44	87.62	58.47
Home ownership (%)	67.11	59.60	55.27	57.30	42.75	51.15	21.25
Life satisfaction (0-10)	7.09	7.13	6.84	6.92	6.38	6.69	5.93
Psychological distress (%)	26.85	27.28	31.01	24.32	38.38	30.38	38.87
Among those in work							
Part-time (%)	10.26	13.78	14.83	8.61	16.60	19.38	26.50
Log net hourly earnings	2.70	2.58	2.45	2.56	2.61	2.42	2.23
Net hourly earnings (£, exponentiated)	14.88	13.20	11.59	12.94	13.60	11.25	9.30
Job quality index (0-1)	0.74	0.69	0.66	0.71	0.66	0.63	0.56
Job satisfaction (1-5)	4.12	4.19	4.13	4.23	3.96	4.25	4.18

Table A3: Outcomes at age 32 by gender

Outcome	Male	Female
Whole sample		
Employed (%)	89.20	80.38
Home ownership (%)	51.52	50.28
Life satisfaction (0-10)	6.66	6.75
Psychological distress (%)	26.85	34.12
Among those in work		
Part-time (%)	4.77	28.19
Log net hourly earnings	2.58	2.44
Net hourly earnings (£, exponentiated)	13.20	11.47
Job quality index (0-1)	0.68	0.66
Job satisfaction (1-5)	4.20	4.17

Appendix 6: Regression results for age 32 outcomes

Table A4: Employment and homeownership at age 32

Predictor	<i>Employment</i>	<i>Home ownership</i>
(Intercept)	14.05*** (5.68, 34.78)	0.38** (0.20, 0.73)
Pathways (ref: Academic route, degree)		
Vocational route, degree	0.78 (0.38, 1.59)	0.93 (0.56, 1.56)
Early HE entry, drop-outs	0.65 (0.40, 1.05)	0.82 (0.62, 1.07)
Work route, degree	1.01 (0.59, 1.71)	0.85 (0.63, 1.13)
Disengaged route, degree	0.45* (0.23, 0.89)	0.61 (0.33, 1.11)
Work route, no degree	0.74 (0.51, 1.06)	0.79* (0.65, 0.96)
Disengaged route, no degree	0.35*** (0.23, 0.52)	0.39*** (0.25, 0.59)
Socioeconomic factors		
Female	0.47*** (0.38, 0.57)	0.93 (0.81, 1.06)
Ethnic minority	0.87 (0.68, 1.11)	0.80* (0.67, 0.95)
Parent with degree	0.69* (0.51, 0.93)	1.04 (0.86, 1.25)
Parent in mng/prof occupation	1.19 (0.96, 1.49)	1.11 (0.95, 1.30)
Parents' home ownership	1.22 (0.97, 1.52)	2.25*** (1.91, 2.66)
Early years characteristics		
Psychological distress (W2)	0.68** (0.52, 0.89)	0.75** (0.63, 0.90)
Ability concept (W1)	0.88 (0.74, 1.06)	0.89 (0.76, 1.03)
GCSE score	1.77*** (1.54, 2.03)	1.54*** (1.35, 1.76)
School engagement (W1)	1.08 (0.89, 1.32)	1.18* (1.02, 1.37)
School truanting (W1)	1.02 (0.77, 1.36)	0.99 (0.79, 1.22)
University expectation (W1)	1.04 (0.93, 1.16)	0.94 (0.86, 1.02)
Family structure		
Partner	2.38*** (1.92, 2.95)	4.13*** (3.58, 4.75)
Number of children (Age 0-4)	0.63*** (0.55, 0.72)	1.46*** (1.31, 1.63)
Number of children (Age 5-11)	0.72*** (0.63, 0.82)	0.78*** (0.70, 0.86)
Region (ref: North)		
Midlands	1.03 (0.79, 1.36)	1.06 (0.87, 1.28)
East of England	1.08 (0.77, 1.51)	1.02 (0.81, 1.28)
London	1.01 (0.73, 1.40)	0.47*** (0.38, 0.59)
South	1.16 (0.90, 1.50)	0.80* (0.67, 0.95)
Wales/Scotland/Ni	0.46* (0.22, 0.93)	0.55* (0.33, 0.93)
N	7,204	7,204

Note: Odds ratios (95% CI). * p<.05, ** p<.01, *** p<.001.

Table A5: Life satisfaction and psychological distress at age 32

Predictor	<i>Life satisfaction</i>	<i>Psychological distress</i>
(Intercept)	6.433*** (0.395)	0.68 (0.34, 1.36)
Pathways (ref: Academic route, degree)		
Vocational route, degree	0.066 (0.169)	0.97 (0.66, 1.44)
Early HE entry, drop-outs	-0.082 (0.115)	1.12 (0.89, 1.42)
Work route, degree	-0.108 (0.135)	0.85 (0.61, 1.18)
Disengaged route, degree	-0.146 (0.279)	1.27 (0.76, 2.12)
Work route, no degree	-0.192 (0.105)	1.00 (0.82, 1.21)
Disengaged route, no degree	-0.517** (0.157)	1.17 (0.84, 1.64)
Socioeconomic factors		
Female	0.118 (0.063)	1.36*** (1.20, 1.55)
Ethnic minority	0.027 (0.095)	0.89 (0.74, 1.08)
Parent with degree	0.191* (0.084)	1.06 (0.89, 1.27)
Parent in mng/prof occupation	0.063 (0.093)	0.91 (0.77, 1.07)
Parents' home ownership	0.125 (0.083)	0.85 (0.71, 1.00)
Early years characteristics		
Psychological distress (W2)	-0.618*** (0.089)	1.88*** (1.59, 2.23)
Ability concept (W1)	0.030 (0.072)	0.97 (0.85, 1.12)
GCSE score	0.050 (0.059)	0.94 (0.84, 1.04)
School engagement (W1)	0.241** (0.084)	0.91 (0.78, 1.04)
School truanting (W1)	-0.003 (0.115)	0.99 (0.80, 1.22)
University expectation (W1)	-0.093* (0.042)	1.06 (0.98, 1.14)
Family structure		
Partner	1.241*** (0.078)	0.60*** (0.51, 0.69)
Number of children (Age 0-4)	0.168*** (0.050)	0.92 (0.83, 1.02)
Number of children (Age 5-11)	0.012 (0.052)	0.95 (0.86, 1.05)
Region (ref: North)		
Midlands	0.006 (0.093)	0.95 (0.79, 1.14)
East of England	-0.007 (0.110)	0.85 (0.68, 1.07)
London	-0.096 (0.112)	0.85 (0.68, 1.06)
South	-0.098 (0.091)	1.00 (0.83, 1.19)
Wales/Scotland/NI	-0.528* (0.237)	2.15** (1.31, 3.53)
N	7,204	7,204

Note: OLS regression coefficients (SE) for life satisfaction, odds ratios (95% CI) for psychological distress.

* p<.05, ** p<.01, *** p<.001.

Table A6: Part-time job at age 32

Predictor	M1	M2
(Intercept)	0.04*** (0.01, 0.11)	0.01*** (0.00, 0.11)
Pathways (ref: Academic route, degree)		
Vocational route, degree	1.23 (0.74, 2.04)	1.10 (0.64, 1.88)
Early HE entry, drop-outs	1.22 (0.82, 1.83)	0.93 (0.59, 1.46)
Work route, degree	0.80 (0.44, 1.43)	0.76 (0.43, 1.36)
Disengaged route, degree	1.84 (0.80, 4.20)	1.68 (0.70, 4.02)
Work route, no degree	1.33 (0.99, 1.79)	0.93 (0.67, 1.31)
Disengaged route, no degree	1.87** (1.20, 2.93)	1.16 (0.72, 1.89)
Socioeconomic factors		
Female	8.81*** (6.81, 11.41)	7.14*** (5.38, 9.49)
Ethnic minority	1.10 (0.85, 1.43)	1.12 (0.85, 1.47)
Parent with degree	1.21 (0.92, 1.58)	1.19 (0.90, 1.59)
Parent in mng/prof occupation	0.95 (0.76, 1.19)	0.96 (0.76, 1.22)
Parents' home ownership	0.92 (0.72, 1.17)	1.06 (0.82, 1.37)
Early years characteristics		
Psychological distress (W2)	1.06 (0.85, 1.33)	1.04 (0.83, 1.30)
Ability concept (W1)	1.02 (0.84, 1.22)	0.97 (0.80, 1.18)
GCSE score	0.74*** (0.63, 0.88)	0.85* (0.72, 1.00)
School engagement (W1)	0.90 (0.72, 1.11)	0.94 (0.75, 1.19)
School truanting (W1)	0.88 (0.62, 1.24)	0.99 (0.69, 1.43)
University expectation (W1)	0.97 (0.86, 1.09)	1.03 (0.91, 1.17)
Family structure		
Partner	0.70*** (0.57, 0.87)	0.78* (0.62, 0.96)
Number of children (Age 0-4)	2.11*** (1.85, 2.39)	2.15*** (1.88, 2.47)
Number of children (Age 5-11)	1.94*** (1.71, 2.19)	1.85*** (1.62, 2.10)
Region (ref: North)		
Midlands	0.70** (0.54, 0.91)	0.71* (0.54, 0.94)
East of England	1.10 (0.82, 1.48)	1.21 (0.88, 1.67)
London	0.69* (0.48, 0.98)	0.74 (0.52, 1.06)
South	0.98 (0.77, 1.24)	1.01 (0.79, 1.30)
Wales/Scotland/NI	0.98 (0.45, 2.16)	0.83 (0.36, 1.89)
Job characteristics		
Sector (ref: Private sector)		
Public sector	—	0.88 (0.64, 1.20)
Others	—	1.24 (0.94, 1.64)
Firm size (ref: 1-9)		
10-49	—	0.80 (0.57, 1.12)
50-249	—	0.59*** (0.43, 0.80)
250-499	—	0.50** (0.31, 0.82)
500 or more	—	0.40*** (0.29, 0.56)
Occupation (ref: Managers, directors, senior officials)		
Professional	—	1.42 (0.97, 2.09)
Associate professional	—	2.27*** (1.51, 3.41)

Administrative, secretarial	—	2.84*** (1.88, 4.31)
Skilled trades	—	2.80** (1.49, 5.26)
Caring, leisure, service	—	3.27*** (2.11, 5.09)
Sales, customer service	—	8.41*** (5.26, 13.44)
Process, plant, machine	—	2.28* (1.07, 4.86)
Elementary	—	10.58*** (6.53, 17.13)
Industry (ref: Agriculture, forestry, fishing)		
Mining, manufacturing, utilities	—	0.92 (0.12, 6.86)
Construction	—	1.16 (0.14, 9.85)
Trade, transport, accommodation, food	—	1.80 (0.28, 11.76)
Information/Communication	—	1.11 (0.15, 8.20)
Finance/insurance	—	1.27 (0.17, 9.57)
Real estate, professional/administrative	—	1.74 (0.26, 11.74)
Public admin/education/health and social work	—	2.48 (0.33, 18.65)
Others	—	2.69 (0.38, 19.30)
N	6,251	6,251

Note: Employed at wave 9 only. Odds ratio (95% CI). * p<.05, ** p<.01, *** p<.001.

Table A7: Log net hourly earnings at age 32

Predictor	M1	M2
(Intercept)	2.376*** (0.075)	2.282*** (0.150)
Pathways (ref: Academic route, degree)		
Vocational route, degree	-0.055 (0.054)	-0.036 (0.051)
Early HE entry, drop-outs	-0.145*** (0.029)	-0.083** (0.027)
Work route, degree	-0.061 (0.036)	-0.051 (0.034)
Disengaged route, degree	-0.031 (0.060)	-0.006 (0.055)
Work route, no degree	-0.134*** (0.027)	-0.055* (0.027)
Disengaged route, no degree	-0.213*** (0.040)	-0.113** (0.040)
Socioeconomic factors		
Female	-0.156*** (0.016)	-0.099*** (0.017)
Ethnic minority	0.041 (0.033)	0.039 (0.031)
Parent with degree	0.005 (0.022)	0.005 (0.021)
Parent in mng/prof occupation	0.056** (0.018)	0.055** (0.017)
Parents' home ownership	0.025 (0.023)	0.004 (0.021)
Early years characteristics		
Psychological distress (W2)	-0.046* (0.022)	-0.042* (0.021)
Ability concept (W1)	0.021 (0.016)	0.021 (0.016)
GCSE score	0.090*** (0.015)	0.057*** (0.015)
School engagement (W1)	0.012 (0.018)	0.005 (0.017)
School truanting (W1)	0.060* (0.027)	0.035 (0.026)
University expectation (W1)	0.010 (0.011)	0.000 (0.010)
Family structure		
Partner	0.101*** (0.020)	0.072*** (0.019)
Number of children (Age 0-4)	0.010 (0.015)	0.013 (0.014)
Number of children (Age 5-11)	-0.040** (0.015)	-0.016 (0.015)
Region (ref: North)		
Midlands	0.012 (0.026)	0.007 (0.025)
East of England	0.041 (0.031)	0.028 (0.029)
London	0.122*** (0.034)	0.103** (0.033)
South	0.082** (0.025)	0.072** (0.024)
Wales/Scotland/NI	-0.120 (0.068)	-0.104 (0.066)
Job characteristics		
Sector (ref: Private sector)		
Public sector	—	-0.149*** (0.035)
Others	—	-0.106** (0.033)
Firm size (ref: 1-9)		
10-49	—	0.050 (0.027)
50-249	—	0.066* (0.031)
250-499	—	0.088* (0.039)
500 or more	—	0.172*** (0.027)
Occupation (ref: Managers, directors, senior officials)		
Professional	—	-0.010 (0.029)
Associate professional	—	-0.110*** (0.031)

Administrative, secretarial	—	-0.251*** (0.031)
Skilled trades	—	-0.217*** (0.052)
Caring, leisure, service	—	-0.267*** (0.045)
Sales, customer service	—	-0.330*** (0.045)
Process, plant, machine	—	-0.253*** (0.046)
Elementary	—	-0.298*** (0.045)
Industry (ref: Agriculture, forestry, fishing)		
Mining, manufacturing, utilities	—	0.262 (0.136)
Construction	—	0.260 (0.148)
Trade, transport, accommodation, food	—	0.156 (0.138)
Information/Communication	—	0.282* (0.140)
Finance/insurance	—	0.324* (0.147)
Real estate, professional/administrative	—	0.262 (0.140)
Public admin/education/health and social work	—	0.196 (0.141)
Others	—	0.019 (0.141)
N	6,251	6,251

Note: Employed at wave 9 only. OLS coefficients (SE). * p<.05, ** p<.01, *** p<.001.

Table A8: Job quality at age 32

Predictor	M1	M2
(Intercept)	0.598*** (0.025)	0.628*** (0.042)
Pathways (ref: Academic route, degree)		
Vocational route, degree	-0.021 (0.012)	-0.016 (0.011)
Early HE entry, drop-outs	-0.055*** (0.010)	-0.025** (0.009)
Work route, degree	-0.010 (0.010)	-0.009 (0.009)
Disengaged route, degree	-0.034 (0.021)	-0.028 (0.018)
Work route, no degree	-0.057*** (0.008)	-0.019** (0.007)
Disengaged route, no degree	-0.086*** (0.011)	-0.038*** (0.010)
Socioeconomic factors		
Female	-0.030*** (0.005)	-0.014** (0.005)
Ethnic minority	-0.023* (0.008)	-0.026** (0.007)
Parent with degree	-0.007 (0.007)	-0.004 (0.006)
Parent in mng/prof occupation	0.012* (0.006)	0.009 (0.005)
Parents' home ownership	0.012 (0.007)	0.002 (0.007)
Early years characteristics		
Psychological distress (W2)	-0.013 (0.007)	-0.013* (0.006)
Ability concept (W1)	0.001 (0.005)	0.001 (0.004)
GCSE score	0.038*** (0.004)	0.020*** (0.004)
School engagement (W1)	0.011 (0.006)	0.006 (0.005)
School truanting (W1)	0.017 (0.009)	0.005 (0.009)
University expectation (W1)	0.006 (0.003)	0.000 (0.003)
Family structure		
Partner	0.050*** (0.006)	0.038*** (0.005)
Number of children (Age 0-4)	0.002 (0.004)	0.003 (0.003)
Number of children (Age 5-11)	-0.014*** (0.004)	-0.004 (0.004)
Region (ref: North)		
Midlands	0.021** (0.007)	0.018** (0.006)
East of England	0.027** (0.009)	0.020* (0.008)
London	0.056*** (0.009)	0.048*** (0.008)
South	0.028*** (0.007)	0.024** (0.007)
Wales/Scotland/NI	-0.041* (0.019)	-0.032 (0.018)
Job characteristics		
Sector (ref: Private sector)		
Public sector	—	-0.014 (0.009)
Others	—	-0.013 (0.008)
Firm size (ref: 1-9)		
10-49	—	0.008 (0.008)
50-249	—	0.017* (0.008)
250-499	—	0.034** (0.011)
500 or more	—	0.054*** (0.007)
Occupation (ref: Managers, directors, senior officials)		
Professional	—	-0.026** (0.008)
Associate professional	—	-0.082*** (0.009)

Administrative, secretarial	—	-0.129*** (0.010)
Skilled trades	—	-0.133*** (0.015)
Caring, leisure, service	—	-0.152*** (0.010)
Sales, customer service	—	-0.172*** (0.013)
Process, plant, machine	—	-0.160*** (0.016)
Elementary	—	-0.198*** (0.012)
Industry (ref: Agriculture, forestry, fishing)		
Mining, manufacturing, utilities	—	0.090* (0.037)
Construction	—	0.059 (0.037)
Trade, transport, accommodation, food	—	0.045 (0.037)
Information/Communication	—	0.084* (0.038)
Finance/insurance	—	0.102** (0.038)
Real estate, professional/administrative	—	0.071 (0.037)
Public admin/education/health and social work	—	0.044 (0.037)
Others	—	0.001 (0.038)
N	6,251	6,251

Note: Employed at wave 9 only. OLS coefficients (SE). * p<.05, ** p<.01, *** p<.001.

Table A9: Job satisfaction at age 32

Predictor	M1	M2
(Intercept)	3.710*** (0.136)	4.319*** (0.182)
Pathways (ref: Academic route, degree)		
Vocational route, degree	0.020 (0.085)	0.020 (0.085)
Early HE entry, drop-outs	-0.003 (0.051)	0.019 (0.051)
Work route, degree	0.059 (0.058)	0.051 (0.057)
Disengaged route, degree	-0.081 (0.121)	-0.069 (0.120)
Work route, no degree	0.068 (0.042)	0.084* (0.043)
Disengaged route, no degree	0.007 (0.067)	0.032 (0.069)
Socioeconomic factors		
Female	-0.012 (0.027)	0.014 (0.030)
Ethnic minority	0.026 (0.038)	0.031 (0.037)
Parent with degree	0.001 (0.037)	-0.005 (0.037)
Parent in mng/prof occupation	-0.023 (0.032)	-0.026 (0.031)
Parents' home ownership	-0.013 (0.036)	-0.030 (0.036)
Early years characteristics		
Psychological distress (W2)	-0.178*** (0.040)	-0.168*** (0.040)
Ability concept (W1)	0.026 (0.027)	0.040 (0.028)
GCSE score	-0.040 (0.025)	-0.055* (0.025)
School engagement (W1)	0.132*** (0.032)	0.131*** (0.032)
School truanting (W1)	0.068 (0.048)	0.058 (0.048)
University expectation (W1)	-0.008 (0.017)	-0.011 (0.017)
Family structure		
Partner	0.117*** (0.031)	0.102*** (0.031)
Number of children (Age 0-4)	0.005 (0.021)	0.009 (0.021)
Number of children (Age 5-11)	0.059** (0.022)	0.065** (0.022)
Region (ref: North)		
Midlands	-0.038 (0.038)	-0.036 (0.037)
East of England	-0.092* (0.045)	-0.103* (0.045)
London	-0.116* (0.048)	-0.145** (0.048)
South	-0.103** (0.037)	-0.107** (0.037)
Wales/Scotland/NI	-0.300* (0.151)	-0.278 (0.153)
Job characteristics		
Sector (ref: Private sector)		
Public sector	—	0.027 (0.046)
Others	—	0.002 (0.041)
Firm size (ref: 1-9)		
10-49	—	-0.052 (0.045)
50-249	—	-0.072 (0.046)
250-499	—	-0.095 (0.065)
500 or more	—	-0.097* (0.044)
Occupation (ref: Managers, directors, senior officials)		
Professional	—	-0.059 (0.044)
Associate professional	—	-0.025 (0.047)

Administrative, secretarial	—	-0.221*** (0.062)
Skilled trades	—	-0.206** (0.068)
Caring, leisure, service	—	-0.056 (0.065)
Sales, customer service	—	-0.271*** (0.076)
Process, plant, machine	—	-0.062 (0.082)
Elementary	—	-0.219** (0.074)
Industry (ref: Agriculture, forestry, fishing)		
Mining, manufacturing, utilities	—	-0.424** (0.127)
Construction	—	-0.389** (0.126)
Trade, transport, accommodation, food	—	-0.581*** (0.130)
Information/Communication	—	-0.373** (0.135)
Finance/insurance	—	-0.410** (0.138)
Real estate, professional/administrative	—	-0.429*** (0.122)
Public admin/education/health and social work	—	-0.542*** (0.131)
Others	—	-0.331* (0.136)
N	6,251	6,251

Note: Employed at wave 9 only. OLS coefficients (SE). * p<.05, ** p<.01, *** p<.001.