Measuring social origins and educational attainment in the Longitudinal Study of Young People in England (LSYPE), [Waves 1–8]

Yizhang Zhao

School of Social Sciences,
Cardiff University
ZhaoY108@cardiff.ac.uk

Erzsébet Bukodi

Department of Social Policy and Intervention,
Nuffield College
University of Oxford
Erzsebet.bukodi@nuffield.ox.ac.uk

September 2020

Acknowledgements

This study has been supported by the *Oxford University Press (OUP) Fell Fund* [Grant number: 163/021] and the *British Academy* [Grant number: MD\170031].

The data used in this Data Note are available from the UK Data Archive through a secure access licence: University College London, UCL Institute of Education, Centre for Longitudinal Studies. (2018). *Next Steps: Sweeps 1-8, 2004-2016: Secure Access*. [Data collection] *4th Edition*. UK Data Service. SN: 7104, <http://doi.org/10.5255/UKDA-SN-7104-4>.

1 Introduction

This Data Note has been prepared for the research project ‘*Primary and Secondary Effects of Social Origins on Educational Attainment: A New Approach*’, conducted at the Department of Social Policy and Intervention, University of Oxford. The purpose of this project is to examine how different components of social origins affect people’s educational achievement and attainment. To achieve this aim, we use data from the Longitudinal Study of Young People in England (LSYPE) and the National Pupil Database (NPD).¹

This document describes the construction of key variables that have been used in the project. Specifically, it provides information on the focal independent variables – parental class, status, education and income – as recorded in the LSYPE survey, as well as the dependent variable(s) of educational achievement and attainment, as recorded in the National Pupil Database (NPD) and the latest available wave of the LSYPE. The purpose of the data note is to document the preparatory work undertaken, in the interests of replicability and transparency, and to provide a clear basis for comparison with the approach taken to the construction of similar variables in other datasets of similar kind.

Section 2 provides a brief introduction to the LSYPE dataset. Sections 3–6 examines each of the dimensions of social origins, and Section 7 describes the relationships between them. Section 8 details the educational achievement and attainment variables. Sections 9 then presents associations between social origins and educational attainment.

2 The Longitudinal Study of Young People in England

The LSYPE is a large-scale panel study following a sample of young adults in England who were born between 1 September 1989 and 31 August 1990. The original sample comprised over 33,000 young people in Year 9 in February 2004, aged between 13–14 years. The survey gathers information from questionnaires with both parents and children, administered annually. Eight waves of data are currently available, with the latest wave therefore providing information on the young people at 25–26 years of age. The survey provides information on a ‘variety of influences on learning and progression’ (LSYPE User Guide). With relevance to this project, the survey includes detailed information on respondents’ social backgrounds, including parental class, status, educational qualifications and other resources. It also documents socio-demographic characteristics at various stages in the life course and, through linked administrative data, it provides information about young people’s attainment of formal educational qualifications.

¹ University College London, UCL Institute of Education, Centre for Longitudinal Studies. (2018). *Next Steps: Sweeps 1-8, 2004-2016: Secure Access*. [Data collection]. 4th Edition. UK Data Service. SN: 7104, <http://doi.org/10.5255/UKDA-SN-7104-4>

2.1 Sampling

The LSYPE used a multi-stage stratified sampling design. Schools (independent, maintained and pupil referral units), drawn from the Pupil Annual School Leaving Census and the School Level Annual School Census, were used as the primary sampling units (PSUs). Children educated solely at home, pupils in schools with fewer than 10 (maintained sector) or 6 (independent sector) Year 9 pupils, boarders, and those residing in the UK only for education purposes were excluded from sampling. Maintained schools were stratified into deprived and non-deprived, with the latter over-sampled. Stage two involved sampling pupils from within each of these PSUs (on average, 33 pupils were sampled per school). Pupils from major minority ethnic groups were over-sampled and a sample boost included the 20% of schools with the most pupils in receipt of free school meals (FSM). At the school level, the LSYPE achieved a 73% response rate (with 647 of 892 sampled schools participating in the study). At the individual level, the study achieved a 74% response rate, resulting in an achieved sample of 15,770 participants. This figure reduced over subsequent waves due to attrition. See Table 1.

Table 1. LSYPE Sample Size across Waves

Wave 1	Wave2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8
15,770	13,539	12,439	11,801	10,430	9,799	8,682	7,707

The sample sizes shown in Table 1 include a further ethnic minority boost sample, which was introduced at wave 4 (this consisted of an achieved sample of 352 cases – a 59% response rate). In this data note, however, we restrict the analysis to those who presented in the initial wave. The sample size for each wave is shown in Table 2.

Table 2. LSYPE Sample Size across Waves: Excluding New Cases Introduced at Wave 4.

Wave 1	Wave2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7	Wave 8
15,770	13,539	12,439	11,449	10,195	9,556	8,494	7,569

2.2 LSYPE Data Used for Variable Construction

Information used to construct social origin variables is taken from waves 1 and 2 of the survey, when cohort members were between 13–15 years old. For parental class, status and education, information is primarily taken from wave 2, as it provides the most detailed information on these variables. In attempts to maximise the number of valid cases, variables are supplemented with information at wave 1 for those with item or unit missing data at wave 2. For parental income, information is primarily taken from wave 1 because it was at wave 1 when all main parents were asked about their income.

The LSYPE provides information on ‘main parents’ and ‘second parents’, with the former defined as the person most involved in the cohort member’s education and the latter defined as the partner or spouse of the main parent. In the majority of cases, the main parent is the natural mother of the cohort member; however this can change across waves. Tables in this document which provide information for ‘mothers’ refer to female parents and those which provide information for ‘fathers’ refer to male parents.

Variables are described in this data note using the final sample size; i.e. the sample after all cases with missing information on the outcome variable (highest qualification at age 25/transition to A-level or higher education) or any of the social origin variables have been dropped. The initial sample size was 15,770, which is reduced to a final sample size of 9,502² (60.25%) once all exclusions have been made. This figure may further reduce if measures of educational performance, such as GCSE and A-level grades, are included in future analysis. Considering that we may conduct separate analyses for different levels of educational attainment and that GCSE and A-level grades will be used in different cases, these two variables are not used for listwise deletion in this data note. See Table 3 for details.

Table 3. LSYPE Sample Size for Analysis

	Missing N	Remaining N	%
Initial LSYPE Sample]		15,770	100
Highest qualification at age 25	-2763 ¹	13,007	82.48
Transition to A-level	0	13,007	82.48
Transition to higher education	0	13,007	82.48
Parental class	-673	12,334	78.21
Parental status	0	12,334	78.21
Parental education	-116	12,218	77.48
Parental income	-2716	9,502	60.25
<i>Total</i>		9,502	60.25
<i>Key Stage 2 grade</i> ²	-799	8,703	55.19
<i>GCSE grade</i> ³	-331	8,372	53.09
<i>A-level grade</i> ⁴	-2501	5,871 ⁵	37.22

Notes:

1. After listwise deletion on educational achievement and social origin variables, the sample size is 9502. The 'Missing N' for educational achievement (N=2763) is larger than that for parental class or status mainly because it is the outcome variable and is listed first.
2. Two measures are included to indicate Key Stage 2 grades - KS2em and KS2emX2 (see Section 10 for details). Out of the 15770 individuals, 14369 have information on KS2em and 14145 have information on KS2emX2.
3. GCSE (Key Stage 4) grades are available for those present at wave 3 375 further cases are missing because of sample attrition at wave 3. If GCSE score is included, the sample size becomes 8372.
4. A-level (Key Stage 5) grades are available for those present at wave 7 2764 further cases are missing because of sample attrition at wave 7. If A-level score is included, the sample size becomes 5871.
5. After listwise deletion on all variables, the final figure is 5783.

² This figure (N=9502) is larger than the sample size of Wave 8 (N=7569) shown in Table 2. The reason is that we construct the variables of educational achievement and attainment using cumulative information across waves, and we construct the social origin variables using information from Waves 1 and 2. Therefore, on those who did not participate in the latest wave of the survey, we may still have information from previous waves.

3 Parental Social Class

Sections 3–6 will present the distributions of each of the four dimensions of social origin—parental social class, social status, education and income. Note that all frequencies (denoted N) are unweighted, while all percentages and other statistics account for the multi-stage stratified sampling design of the LSYPE as well as non-response, using Stata’s `svyset` command.

The construction of the parental social-class variable first involved allocating SOC2000 codes to mothers and fathers. At wave 2, a four-digit occupational unit code is given for both parents, though at wave 1 only major SOC code (one-digit) information is available. For each major SOC code, the modal corresponding unit code at wave 2 was derived and cases were assigned this value for wave 1. Those cases which then had missing information at wave 2 (this includes those listed as long-term unemployed and those who have never worked) were given a SOC2000 code from wave 1. Information on the gender of main and second parents was then used to determine the SOC2000 codes for mothers and fathers.

Using NS-SEC conversion tables, this information was then employed to assign each parent a class using the simplified method. Subsequently, employment status information was used to determine a class for each parent using the reduced method. Missing cases on employment status retained their simplified NS-SEC class, which was only based on SOC2000 code. See Table 4 which displays the distribution of social class for mothers and fathers using the reduced method.

Table 4. Distribution of Mothers’ and Fathers’ Social Class (Reduced Method)

	Mothers		Fathers	
	%	N	%	N
1. Higher managerial	5	469	20	1316
2. Lower managerial	30	2567	25	1713
3. Intermediate	17	1429	5	319
4. Small employers	5	425	11	809
5. Lower supervisory	8	723	17	1178
6. Semi-routine	23	1998	9	685
7. Routine	12	1131	13	1031
<i>Missing</i>		760		2451
<i>Total</i>	100	9502	100	9502

Table 5 compares mothers’ and fathers’ NS-SEC classes in a cross-tabulation. Classes 3–5 were collapsed for this table in order to yield an ordinal classification. Mothers are found to reach a higher social class than fathers in 24% of cases (n=1554), fathers reach a higher class in 44% of cases (n=2746) and in 31% of cases (n=1991) mothers and fathers belong to the same social class.

The dominance approach was then used to construct the parental social-class measure. Following Bukodi and Goldthorpe (2013), ‘the class of a parent in full-time work dominates that of a parent in part-time work, and where parents are both in full or part-time work, husband’s class is taken to dominate wife’s class unless the latter is higher in the ordering of the classes as 1, 2, 3–5, 6, 7, in which case wife’s class dominates’ (2013: 14). Figure 1 illustrates the distribution of the parental social-class variable.

Table 5. Cross-tabulation of Mothers' and Fathers' Social Class (Reduced Method)

		Fathers					
		Higher man	Lower man	Intermediate	Semi routine	Routine	<i>Total</i>
Mothers	Higher managerial	173 3%	100 2%	78 1%	11 0%	15 0%	377 6%
	Lower managerial	482 8%	679 11%	518 8%	111 2%	134 2%	1924 31%
	Intermediat	334 6%	474 8%	735 12%	145 2%	210 3%	1898 31%
	Semi	219 3%	277 4%	468 8%	177 3%	232 4%	1373 22%
	Routine	55 1%	81 1%	249 4%	107 1%	227 3%	719 10%
	<i>Total</i>	1263 21%	1611 26%	2048 33%	551 8%	818 12%	6291 100%

Figure 1. Distribution (%) of Parental Social Class (Reduced Method), N=9502

4 Parental Social Status

4.1 Chan–Goldthorpe status

Two measures of parental status have been constructed. The first is based on the Chan–Goldthorpe (CG) status order (Chan and Goldthorpe 2004). Mothers’ and fathers’ SOC2000 codes were first converted to SOC90 codes which are required for the CG scale,³ and status scores were subsequently derived using the conversion table.⁴ Figure 2 illustrates the distribution of mothers’ and fathers’ CG status scores which have been normalised so that cases take a value between 0–1.

Figure 2. Boxplot Distribution of Mothers’ and Fathers’ CG Status Scores (Normalised)

Notes: Mother variable N=8742; Father variable N=7051.

Mothers’ mean (normalised) CG status score is 0.55 compared with fathers’ mean score of 0.44. Contrary to what is shown above for social class, mothers tend to occupy a slightly higher social position than fathers. Table 6 presents the frequencies of mothers’ and fathers’ CG social status scores with the original interval-scale variable having been grouped into quartiles.

A parental social status variable was then constructed by taking the highest status score between the mother and the father. In instances where one was missing, the valid score was assigned. The

³ 33 fathers and 66 mothers had SOC2000 codes which did not have a corresponding SOC90 code (these classifications did not exist in earlier versions of the SOC). These cases were given a value based on the modal SOC90 code for that SOC2000 category.

⁴ 27 fathers and 4 mothers had SOC90 codes of 119 or 166 which do not feature in the CG conversion table. These cases were given a status score for the corresponding SOC2000 category (or NS-SEC category where this was not possible).

quartiles for this variable are also given in Table 6. When this measure is normalised with range 0–1, the mean score is 0.60 with standard deviation 0.27.

Table 6. Distribution of Mothers', Fathers' and Parents' CG Social Status Scores (Quartiles)

	Mothers' Status		Fathers' Status		Parents' Status	
	%	N	%	N	%	N
1 st Quartile	28	2551	32	2289	25	2597
2 nd Quartile	26	2222	17	1305	23	2166
3 rd Quartile	25	2181	27	1874	28	2599
4 th Quartile	21	1788	24	1583	24	2140
<i>Missing</i>		760		2451		0
<i>Total</i>	100	9502	100	9502	100	9502

4.2 CAMSIS status

The second parental status variable is based on the CAMSIS scale.⁵ This provides two separate scales for men and women, assuming that social hierarchies vary according to gender. Figure 3 illustrates the distribution of mothers' and fathers' CAMSIS scores which have again been normalised so that the range is 0–1 for both variables. Mothers' mean (normalised) CAMSIS score is 0.43 compared with fathers' mean score of 0.47. Using this alternative measure, therefore, fathers are found to tend to occupy higher social positions than mothers.

Figure 3. Boxplot Distribution of Mothers' and Fathers' CAMSIS Status Scores (Normalised)

Notes: Mother variable N=8742; Father variable N=7051.

⁵ Although CAMSIS can be created using the SOC2000 codes directly, SOC90 scores were used instead of SOC2000 scores for consistency with the approach taken to generating CG scores.

Table 7 presents quartiles and frequencies taken from the original interval-scale variables, and also gives parental CAMSIS status which has been derived using the dominance approach. When this parental variable is normalised with range 0–1, the mean score is 0.52 with standard deviation 0.17.

Table 8 presents Pearsons' correlations between the various measures of the CG and CAMSIS scale variables described above. These correlations are based on the original interval-scale variables.

Table 7. Distribution of Mothers', Fathers' and Parents' CAMSIS Social Status Scores (Quartiles)

	Mothers' Status		Fathers' Status		Parents' Status	
	%	N	%	N	%	N
1 st Quartile	24	2207	25	1805	25	2601
2 nd Quartile	28	2466	24	1735	23	2213
3 rd Quartile	25	2157	25	1762	25	2328
4 th Quartile	23	1912	26	1749	27	2360
<i>Missing</i>		760		2451		0
<i>Total</i>	100	9502	100	9502	100	9502

Table 8. Pearsons' Correlations: Mothers', Fathers' and Parental Status Scores (CG and CAMSIS)

	Mother (CG)	Mother (CAM)		Father (CG)	Father (CAM)
Mother (CG)	1.00		Father (CG)	1.00	
Mother (CAM)	0.88**	1.00	Father (CAM)	0.88**	1.00
	Mother (CG)	Father (CG)		Mother (CAM)	Father (CAM)
Mother (CG)	1.00		Mother (CAM)	1.00	
Father (CG)	0.36**	1.00	Father (CAM)	0.40**	1.00
	Parents (CG)	Parents (CAM)			
Parents (CG)	1.00				
Parents (CAM)	0.88**	1.00			

5 Parental Education

Parental education was recoded into 8 ordered categories given in Bukodi and Goldthorpe (2013). Table 9 shows details on how the qualifications given in the original variable were reallocated to the 8-category version of educational attainment.

As shown in the table, ‘1 A-level pass’ was differentiated from ‘2+ A-level passes’, and ‘5+ O-level passes’ was differentiated from ‘1–4 O-level passes’ in Bukodi and Goldthorpe’s classification. However, parental education is derived from survey data (LSYPE waves 1 and 2), in which only a crude classification of education was available. Under such circumstances, the recoding cannot be very accurate. For instance, ‘A-levels’ was recoded into ‘2+ A-level passes’. The inaccurate recoding was not a worrying issue in generating parental education, but it brings about a problematic mismatch in this project when individuals’ highest educational attainment at 25 is generated. For more details, see Section 8.

Table 9. Details on Recoding of Original Parental Education Variables to Bukodi and Goldthorpe (2013) Scale (the 8-Category Version)

Categories of original variable	Recoded to Bukodi and Goldthorpe (2013) scale
-99. Parent not interviewed	Missing
-91. Not applicable – YP in care	
1. Higher degree	8. Higher degree, NVQ 6 [higher tertiary]
2. First degree	7. Degree, NVQ 5 [higher tertiary]
3. HE diploma	6. tertiary sub-degree qualification, NVQ 4 [lower tertiary]
4. HNC/HND/NVQ 4	
5. Teaching qualification, non-degree	
6. Nursing qualification, non-degree	
7. A-levels	5. 2+ A-level passes [higher secondary]
8. OND/ONC	4. 5+ O-level passes or 1 A-level pass, NVQ 3 [secondary –high performance]
9. City and Guilds part III, NVQ3	
10. CSYS	5. 2+ A-level passes [higher secondary]
11. Scottish higher grade	4. 5+ O-level passes or 1 A-level pass, NVQ 3 [secondary –high performance]
12. AS level	
13. Trade apprenticeship	3. 1–4 O-level passes, NVQ 2 [secondary – low performance]
14. City and Guilds part II, NVQ2	
15. GCSE grades A–C and equivalent	
16. GCSE grades D–E and equivalent	2. Below O-level, NVQ 1 [sub-secondary]
17. City and Guilds part I, NVQ1	
18. Youth training, skill seekers	
19. Qualification, level unspecified	
20. No qualification mentioned	1. No qualifications

The distribution of the parental education measure, constructed using the dominance approach, is given in Table 10.

Table 10. Distribution of Parental Education (Dominance Approach)

	%	N
1. No qualifications	8	1104
2. Below O-level, NVQ 1 [sub-secondary]	8	780
3. 1–4 O-level passes, NVQ 2 [secondary – low performance]	27	2425
4. 5+ O-level passes or 1 A-level pass, NVQ 3 [secondary – higher]	13	1179
5. 2+ A-level passes [higher secondary]	6	575
6. Tertiary sub-degree qualification, NVQ 4 [lower tertiary]	18	1624
7. Degree, NVQ 5 [higher tertiary]	13	1194
8. Higher degree, NVQ6 [higher tertiary]	7	621
<i>Missing</i>		0
<i>Total</i>	100	9502

An alternative is to create a combined parental education variable, reflecting the approach taken by Bukodi and Goldthorpe (2013). Information from both parents is incorporated into this measure and given in the following categories:

1. Neither parent has any qualification
2. One parent has secondary or lower qualification; other parent has no qualification
3. Both parents have secondary or lower qualification
4. One parent has higher secondary or lower tertiary qualification; other parent has lower qualification
5. Both parents have higher secondary or lower tertiary qualification
6. One parent has degree-level qualification; other parent has lower qualification
7. Both parents have degree-level qualifications

To use this method, a plausible assumption needs to be made regarding missing values if educational information is only available for one parent. Two strategies are considered: (1) assuming the value of the missing parent is ‘no qualification’; and (2) assuming the value of the missing parent is equal to the modal value for partners corresponding to the valid category. The distributions of the variables constructed using these two assumptions are given in Figure 4.

Figure 4. Distribution (%) of Parental Education (Combined Approaches 1 and 2)

The Spearman rank correlations between the different approaches to combining the main and second parents' educational information are shown in Table 11.

Table 11. Spearman Rank Correlations between the Different Approaches to Creating Parental Education Measure

	Dominance	Combined 1	Combined 2
Dominance approach	1.00		
Combined approach 1	0.94**	1.00	
Combined approach 2	0.93**	0.97**	1.00

Notes: No weights have been applied.

For the remainder of this data note, the combined approach which replaces information on missing parents with the modal corresponding value (combined approach 2) is used to represent parental education. Finally, to treat education in relative terms and to therefore facilitate cross-cohort comparisons, scores can be assigned to each category according to the percentage of parents falling below that level in the cumulative distribution (Bukodi and Goldthorpe 2013). Table 12 presents the distribution of this relative scale. The mean educational level is calculated by normalising the relative scale variable so that values are within the range 0–1.

Table 12. Parental Education (Combined Approach 2): Relative Scale

	% falling below educational level
1. Neither parent has any qualification	0.00
2	8.08
3	18.19
4	56.40
5	75.97
6	80.50
7. Both have degree-level qualifications	91.78
Mean level (0–1)	0.424
Standard deviation (0–1)	0.332

6 Parental Income

The parental income variable described in this section measures the total income from work, benefits and anything else from the main parent and partner. Information is used from wave 1 of the survey, though cases with missing information are given a value from wave 2 where this is applicable. Two variables are employed: the first asks respondents to report their annual income from a list of 32 bands and the second asks those who selected the highest band (32) to report, from a further list of 60 high-income categories, which band their annual income falls into. These measures were combined, resulting in 91 categories. The upper and lower bounds of each category were then transformed into weekly amounts (divided by 52), and cases were reassigned an income figure based on the mid-value of their band. The variable is treated as continuous. Figure 5 illustrates the distribution after log transforming the values.

Figure 5. Histogram of Log Weekly Gross Parental Income

Note: No weights have been applied.

This variable has minimum and maximum values of 4.5⁶ and 7693⁷ (both before log transformation). Mean gross parental income is £599.46 per week, with standard deviation 632.42. Median gross parental income is £424.50⁸, which is equivalent to an annual combined income of £22,074. These amounts have been checked against gross weekly household incomes from the

⁶ The underlying count for this figure is 82.

⁷ The underlying count for this figure is 12.

⁸ The underlying count for this figure is 491.

2004/05 year of the Expenditure and Food Survey, which are very similar.⁹ Table 13 gives the distribution of parental income when the original variable is grouped into quartiles.

Table 13. Distribution of Parental Income (Quartiles)

	%	N
1st Quartile	24	2519
2nd Quartile	26	2651
3rd Quartile	25	2222
4th Quartile	25	2110
<i>Missing</i>		0
<i>Total</i>	100	9502

⁹ Using the 2004/05 Expenditure and Food Survey, the mean gross current income of households is £555.52 with standard deviation 608.99, and median income is £425.60.

7 Associations between Social Origin Measures

7.1 Parental social class and social status

This section presents the results from a series of bivariate analyses between the social origin measures. First, the bivariate relationship between social class and social status is examined. Table 14 and Figure 6 present the distribution of parental CG status score (original scale) across parental social class. Table 15 and Figure 7 present the distribution of parental CAMSIS status score (original scale) across parental social class.

Table 14. Mean CG Status Scores (original scale) by Parental Class

	Mean	SD	N
Higher managerial	0.40	0.18	1502
Lower managerial	0.26	0.22	2802
Intermediate	0.14	0.20	755
Small employers	-0.01	0.28	773
Lower supervisory	-0.13	0.26	1246
Semi routine	-0.13	0.22	1291
Routine	-0.24	0.23	1133

Table 15. Mean CAMSIS Status Scores (original scale) by Parental Class

	Mean	SD	N
Higher managerial	70.93	9.23	1502
Lower managerial	62.15	9.10	2802
Intermediate	55.60	7.79	755
Small employers	52.71	10.17	773
Lower supervisory	46.22	10.08	1246
Semi routine	44.61	9.63	1291
Routine	38.94	10.25	1133

Figure 6. Boxplot Distribution of Parental CG Status Scores (original scale) by Parental Class

Note: Outliers have been removed to preserve anonymity.

Figure 7. Boxplot Distribution of Parental CAMSIS Status Scores (original scale) by Parental Class

Note: Outliers have been removed to preserve anonymity.

Table 16 presents the results of a one-way analysis of variance, showing that differences between groups are statistically significant. Parental class explains 51% and 55% of the total variance in parental CG and CAMSIS status, respectively.

Table 16. One-way ANOVA: Parental CG and CAMSIS Statuses by Parental Class

	Between groups	Within groups	F	p	%
CG status	482.05	471.25	1618.74	0.00	50.56
CAMSIS status	1051908.08	847683.392	1899591.47	0.00	55.38

7.2 Parental social class and education

Table 17 uses the 7-level relative scale parental education variable (normalised with range 0–1) to present the mean level of parental education for each social-class group. Figure 8 plots this information graphically.

Table 17. Mean Parental Education (7-level Relative Scale, Normalised) by Parental Class

	Mean	SD	N
Higher managerial	0.69	0.30	1502
Lower managerial	0.55	0.32	2802
Intermediate	0.36	0.28	755
Small employers	0.34	0.29	773
Lower supervisory	0.27	0.24	1246
Semi routine	0.22	0.22	1291
Routine	0.17	0.19	1133

Figure 8. Boxplot Distribution of Parental Education (7-level Relative Scale, Normalised) by Parental Class

Note: Outliers have been removed to preserve anonymity.

Table 18 gives the results of a one-way analysis of variance. Differences in the mean educational level between social classes are statistically significant and 35% of the total variance in parental education is explained by parental class.

Table 18. One-way ANOVA: Parental Class by Parental Education

	Between groups	Within groups	F	p	%
Education	309.06	739.29	661.55	0.00	35.09

Table 19¹⁰. Distribution of Cases: (i) Neither Parent has any Qualification, and (ii) Both Parents have Degree-level Qualifications, by Parental Class (Reduced Method)

	Neither has qualification		Both have degree	
	%	N	%	N
1. Higher managerial	1	28	22	332
2. Lower managerial	2	85	12	349
3. Intermediate	5	47	4	31
4. Small employers	8	97	3	25
5. Lower supervisory	9	156	OM	OM
6. Semi-routine	17	291	1	16
7. Routine	27	400	1	10

Note: OM= Omitted low values to preserve anonymity.

Table 19 below shows a crude summary of the relationship by comparing the proportions of cases for which: (i) neither parent has any qualification, and (ii) both parents have degree-level qualifications, by each social-class group. Among those from the higher managerial class, 22% of

¹⁰ The bar chart has been removed to preserve anonymity.

cases have two parents with degree-level qualifications, compared with just 1% or less among those from lower supervisory, semi-routine or routine classes. Conversely, only 1% of those from higher managerial backgrounds have parents with no qualifications, compared with 27% of those from the routine class.

7.3 Parental social status and education

Figures 9 and 10 show how the parental status variables (CG and CAMSIS) are distributed within each of the seven groups of the categorical parental education variable.

Figure 9. Boxplot Distribution of Parental CG Status Scores (Original Scale) by Parental Education (Combined Approach 2)

Note: Outliers have been removed to preserve anonymity.

Figure 10. Boxplot Distribution of Parental CAMSIS Status Scores (Original Scale) by Parental Education (Combined Approach 2)

Note: Outliers have been removed to preserve anonymity.

7.4 Parental income and others

Table 20 gives the mean, median and standard deviations of parental income by each category of parental class, status (CG and CAMSIS) and education.

Table 20. Parental Income by Parental Class, CG Status Quartiles, CAMSIS Status Quartiles and Education (Combined Approach 2)

		Parental Income			
		Median	Mean	SD	N
Parental class	Higher managerial	779.0 (N=33)	981.5	837.2	1502
	Lower managerial	574.5 (N=172)	706.5	671.5	2802
	Intermediate	369.5 (N=27)	450.4	376.0	755
	Small employers	424.5 (N=48)	534.1	653.9	773
	Lower supervisory	424.5 (N=100)	468.4	460.7	1246
	Semi routine	269.5 (N=63)	333.2	309.6	1291
	Routine	269.5 (N=47)	304.4	208.4	1133
Parental CG status	1st Quartile	309.5 (N=98)	363.7	320.8	2597
	2nd Quartile	369.5 (N=79)	476.5	509.1	2166
	3rd Quartile	524.5 (N=153)	625.4	557.5	2599
	4th Quartile	705.5 (N=57)	930.3	874.4	2140
Parental CAMSIS status	1st Quartile	269.5 (N=125)	331.8	307.6	2601
	2nd Quartile	424.5 (N=144)	490.6	453.1	2213
	3rd Quartile	524.5 (N=118)	635.6	575.8	2328
	4th Quartile	705.5 (N=70)	911.3	863.6	2360
Parental education	1. No qualification	229.5 (N=71)	296.1	405.6	1104
	2.	389.5 (N=48)	434.9	369.2	1022
	3.	389.5 (N=114)	473.4	428.3	3362
	4.	524.5 (N=96)	637.9	611.0	1805
	5.	674.5 (N=21)	862.5	751.7	394
	6.	705.5 (N=31)	895.7	751.7	1043
	7. Both have degrees	>710.0	1043.1	1074.8	772

Note: Maximum and minimum values are not shown to preserve anonymity. Unweighted Ns for each of the median values are shown as requested by the Secure Lab. Accurate median values are replaced by a range if the unweighted N is below 10.

7.5 Bivariate correlations

Finally, correlations between the social origin variables are presented below. Table 21 gives Spearman rank correlations between categorical measures and Table 22 gives Pearson correlations between alternative social origin measures, all of which have been normalised to take values in the range 0–1. The strength of associations is largely similar across the two tables. All correlations are statistically significant ($p < 0.01$). Parental class and status are strongly correlated, correlations between parental education and class or status are moderate, and correlations between parental income and any other social origin measure are weak.

Table 21. Spearman Rank Correlations: Parental Class, CG Status Quartiles, CAMSIS Status Quartiles, Education (Combined Approach 2) and Income Quartiles

	Class	CG status	CAMSIS	Education	Income
Class	1.00				
CG status	-0.71**	1.00			
CAMSIS status	-0.73**	0.83**	1.00		
Education	-0.55**	0.57**	0.60**	1.00	
Income	-0.44**	0.40**	0.43**	0.39**	1.00

Notes: No weights have been applied.

Table 22. Pearson Correlations: Parental Class, CG Status (Original Scale: Normalised), CAMSIS Status (Original Scale: Normalised), Education (Combined Approach 2: Relative Scale) and Income (Original Scale: Normalised)

	Class	CG status	CAMSIS	Education	Income
Class	1.00				
CG status	-0.70**	1.00			
CAMSIS status	-0.73**	0.88**	1.00		
Education	-0.53**	0.57**	0.61**	1.00	
Income	-0.33**	0.32**	0.36**	0.33**	1.00

Notes: No weights have been applied.

8 Educational Attainment

8.1 Highest educational qualification at age 25–26

This section provides an overview of the measures of respondents' educational attainment that will be used in the analysis for the research project. The latest information on educational attainment is available in the eighth wave of LSYPE survey, which was conducted in year 2015/16 when respondents were aged 25–26 years old. Participants in this wave were asked whether they have had any new qualifications since last interview. If yes, the highest educational attainment would be documented.

In order to generate respondents' highest educational attainment at age 25–26, we need to combine information from NPD and the latest LSYPE survey. While NPD provides accurate GCSE and A-level grades, LSYPE survey only includes a crude list of educational attainment.¹¹ If the original Bukodi and Goldthorpe (2013) scale was used, the allocation of LSYPE categories would not be very accurate. This was not a worrying issue in generating parental education, for which only LSYPE surveys were used. However, this approach would be problematic to generating respondents' highest educational attainment at 25 because information from NPD and LSYPE surveys is combined and there is a mismatch between the two sources of information. For instance, if an individual reported his/her highest qualification as 'A-levels' in Wave 8, we do not know whether he/she had 2+ A-level passes (Category 5 in Bukodi and Goldthorpe's scale) or whether he/she had 1 A-level pass (Category 4 in Bukodi and Goldthorpe's scale). Similarly, if an individual reported his/her highest qualification as 'GCSE level' in Wave 8, we do not know whether he/she had 5+ GCSE passes or 1-4 GCSE passes.

Table 23. Comparison between Bukodi and Goldthorpe (2013) Scale and the Revised Scale

Bukodi and Goldthorpe (2013) scale	Revised scale
8. Higher degree, NVQ 6 [higher tertiary]	7. Higher degree, NVQ 6 [higher tertiary]
7. Degree, NVQ 5 [higher tertiary]	6. Degree, NVQ 5 [higher tertiary]
6. tertiary sub-degree qualification, NVQ 4 [lower tertiary]	5. tertiary sub-degree qualification, NVQ 4 [lower tertiary]
5. 2+ A-level passes [higher secondary]	4. A-level [higher secondary]
4. 5+ O-level passes or 1 A-level pass, NVQ 3 [secondary –high performance]	3. AS-level , NVQ 3 [higher secondary–low performance]
3. 1–4 O-level passes, NVQ 2 [secondary – low performance]	2. GCSE and below (e.g. NVQ 2 and NVQ 1) [lower/sub secondary]
2. Below O-level, NVQ 1 [sub-secondary]	
1. No qualifications	1. No qualifications

Given the situation, slight changes are made to the original scale. As shown in Table 23, the revised scale has 7 categories, and categories 2–4 are labeled as 'GCSE and below', 'AS-level' and 'A-level'. Information from NPD, which includes students' performance at Key Stages 4 and 5, is recoded into these three categories, and then information from LSYPE wave 8 is incorporated if higher

¹¹ Compared with the list of educational attainment used in waves 1 and 2, which has 20 categories in total, wave 8 has separate lists for academic and vocational education.

qualifications have been acquired at the age 25–26. Table 24 shows details on how academic and vocational qualifications given in LSYPE wave 8 are reallocated to the 7-category version of educational attainment.

Table 24. Details on Recoding of Original Parental Education Variables in LSYPE wave 8 to the Revised Educational Scale (the 7-Category Version)

LSYPE Wave 8 (academic)	LSYPE Wave 8 (vocational)	Revised scale
1. Higher degree		7. Higher degree, NVQ 6 [higher tertiary]
2. First degree		6. Degree, NVQ 5 [higher tertiary]
3. Diploma in higher education	1. HNC/HND	5. Tertiary sub-degree qualification, NVQ 4 [lower tertiary]
4. Teaching qualification		
5. Nursing qualification		
6. A-levels		4. A-level [higher secondary]
7. Welsh Baccalaureate		
8. International Baccalaureate		
9. AS level	2. ONC/OND	3. AS-level , NVQ 3 [higher secondary–low performance]
10. Scottish higher grade	3. BTEC/BEC/TEC	
11. Certificate of sixth year studies	4. SCOTVEC/SCOTEC	
	5. NVQ Level 3–5	
12. GCSE	6. NVQ Level 1–2	2. GCSE and below (e.g. NVQ 2 and NVQ 1)
13. Scottish lower grade	7. GNVQ/GSVQ	[lower/sub secondary]
14. Other school certificate	8. City and Guilds Certificate	
	9. RSA/OCR	
	10. Trade apprenticeship	
	11. Entry level qualifications (Wales)	
	12. Basic skills	
	13. Key skills	
	14. Youth training certificate	
	15. Other vocational training	
		1. No qualifications

Notes:

1. Vocational qualifications are coded in a conservative manner if broad labels are used. For example, BTEC qualification has three different levels, which can be converted into NVQ equivalent levels of 2, 3 and 4. According to the Labour Force Survey, the majority of people with a BTEC qualification has a NVQ 3 or NVQ 4 equivalent, and in this project, BTEC is coded into NVQ 3 rather than NVQ 4.
2. The coding of NVQ qualifications in the revised scale is consistent with Bukodi and Goldthorpe (2013) Scale, i.e. NVQ 4 is regarded as equivalent to sub-degree rather than degree level; NVQ 3 is grouped together with AS-level rather than A-level. However, as NVQ4 is the highest vocational qualification in the data, there is no degree-level vocational qualification reported in our results.
3. In previous projects, HNC/HND was coded as a sub-degree qualification for parental education, but was coded as a degree level qualification for young people. In waves 6 and 7, those who were studying for ‘HNC/HND/OCR Higher Diploma/NVQ 4 or 5’ were coded as studying for a vocational degree-level qualification.

Table 25 describes how respondents are distributed across the defined levels of educational attainment. 1972 (=1082+890) respondents have a degree or higher degree level qualification, which account for 20.01% in the sample, while only 2.54% had no formal qualifications at all.

Of particular note is that the figure 20.01% is significantly lower than the percentage of those who have made the transition to higher education. As shown in Section 8.3, 3744 out of 9502 (37.15%) respondents have made the transition to higher education. Among the 3744 respondents, 1772 (=3744-1972) did not have a degree-level qualification at age 25–26. Further exploration showed that, among the 1772 individuals, 929 did not participate in the latest wave of LSYPE survey and therefore did not have a chance to update their information. For the remaining 843 individuals, although they turned out in the latest survey, they reported no ‘new qualification’ since last wave, which could be due to inaccurate memory about previous surveys or due to their academic failure.

It is also worth noting that the variable ‘highest educational attainment’ is based on cumulative information from eight waves of the survey, and those who are included in the current sample may not have participated in the latest wave when they were 25-26 years of age. As a respondent’s highest education would only be updated if they continued participating in the survey, the way in which the variable is constructed may lead to an underestimation of people’s educational attainment at age 25-26 if they dropped out before the latest wave. If we restrict the sample to those who presented at Wave 8 (N=7569), the percentage of people who had a degree or above level qualification would be 34.31%. See Table 25 for details.

Table 25. Highest Educational Qualification at age 25–26

	Current Sample		Wave 8	
	%	N	%	N
1. No qualifications	2.54	227	1.32	89
2. GCSE and below, NVQ1 and NVQ2	41.90	3900	26.65	1863
3. AS-level, NVQ 3	11.81	1116	13.14	930
4. A-level	19.01	1851	16.65	1232
5. Tertiary sub-degree qualification, NVQ 4	4.73	436	7.93	570
6. Degree, NVQ 5	11.31	1082	19.02	1415
7. Higher degree, NVQ 6	8.70	890	15.29	1215
<i>Missing</i>		0		255
<i>Total</i>	100.00	9502	100.00	7569

Finally, the use of this new scale of educational attainment does not change the results of educational performance, which only draws on information from NPD. In addition, it does not change the results of educational transitions to Key Stage 5 and higher education. The measures for educational transition are based on information of enrolment from NPD and five waves of LSYPE surveys (waves 4–8), which is not relevant to qualifications one has acquired, and therefore the distributions of transition measures are not affected by the educational scale being used for highest educational qualification.

In sum, introducing the revised scale of educational attainment only changes the distribution of one variable—highest educational qualification at age 25–26, and it improves the measurement accuracy of this variable.

8.2 Educational transitions to Key Stage 5

We also seek to analyse educational attainment according to whether respondents made various educational transitions at two crucial branching points. The first is at the end of compulsory education (after pupils sit GCSE exams), when respondents must decide whether to continue with further education (Key Stage 5); and then, conditional upon completion of study at Key Stage 5, the second transition we consider is whether respondents continue to higher education.

The measures of whether respondents made the transition to Key Stage 5 are based on both information in the NPD on exams taken (both successfully and unsuccessfully) at each level and on the information contained in the LSYPE questionnaires. See Table 26, which presents the distribution of two measures: whether respondents continued to Key Stage 5 study at all, and whether respondents continued to Key Stage 5 specifically to undertake further academic study (typically in the form of A-levels).

Table 26. Transition to Key Stage 5

	Academic only		Academic and vocational	
	%	N	%	N
No	39.87	3604	28.17	2566
Yes	60.13	5898	71.83	6936
<i>Missing</i>		0		0
<i>Total</i>	100.00	9502	100.00	9502

8.3 Educational transitions to tertiary education

The descriptive statistics on whether respondents made the transition to higher education are based on both tertiary-level attainment and variables contained in the LSYPE surveys indicating whether the respondent was in higher education at the time of the survey. Tables 27, 28, 29 and 30 present the distribution of transition to tertiary education (including sub-degree and NVQ4), transition to HE, transition to Russell-Group HE, and transition to postgraduate level education, respectively.

Table 27. Transition to tertiary education (including sub-degree and NVQ4)

	%	N
No	55.37	5075
Yes	44.63	4427
<i>Missing</i>		0
<i>Total</i>	100.00	9502

Table 28. Transition to university

	%	N
No	62.85	5758
Yes	37.15	3744
<i>Missing</i>		0
<i>Total</i>	100.00	9502

Note: the highest vocational education in the data is NVQ4, and therefore HE only includes the academic route.

Table 29. Transition to Russell-Group university

	%	N
No HE	62.85	5758
Non Russell-Group HE	28.07	2884
Russell-Group HE	9.08	860
<i>Missing</i>		0
<i>Total</i>	100.00	9502

Table 30. Transition to postgraduate level

	%	N
No	90.35	8519
Yes	9.65	983
<i>Missing</i>		0
<i>Total</i>	100.00	9502

Tables 31 and 32 cross-tabulate respondents' A-level and their transitions to university and to Russell-Group university. Of those who made the transition to further academic study at the end of compulsory education, 61.78% also made the transition to university, and 15.11% were admitted into Russell-Group university.

Table 31. Transition to A-level by Transition to university: N and Row Percentages

	Transition to university		
	No	Yes	<i>Total</i>
A-Level: No	3604	0	3604
	100.00%	0.00%	100.00%
A-Level: Yes	2154	3744	5898
	38.22%	61.78%	100.00%
<i>Total</i>	5758	3744	9502
	62.85%	37.15%	100.00%

Table 32. Transition to A-level by Transition to Russell-Group university: N and Row Percentages

	Transition to Russell-Group university		
	No	Yes	<i>Total</i>
A-Level: No	3604	0	3604
	100.00%	0.00%	100.00%
A-Level: Yes	5038	860	5898
	84.89%	15.11%	100.00%
<i>Total</i>	8642	860	9502
	90.92%	9.08%	100.00%

9 Educational performance

9.1 Performance at Key Stage 2 (KS2)

This section constructs respondents' academic performance at Key Stage 2, which pupils sit at age 11. The section describes the construction of two measures. Using data from NPD, fine-graded test scores are available for the English, maths and science components of the Key Stage 2 exams separately.

The first measure constructed uses English and maths scores in a principal components analysis (PCA), saving scores from the first factor extracted (generating the measure "KS2em"). The second measure uses an alternative approach for respondents who have zero scores (i.e. those who failed the tests). As Figure 11 shows, there are a notable proportion of these cases, leading to a 'spike' in the left tail of the histogram. The second measure therefore uses non-failed scores in place of failed scores for other Key Stage tests where possible. First, failed scores for maths are replaced with non-failed scores for English and vice versa. Then, of those who failed both, failed scores are replaced with non-failed science scores. Finally, those who failed all maths, English and science tests are set to missing. Scores on both measures are then included in a PCA (generating the measure "KS2emX2"). See Table 33 for details. Figures 11 and 12 illustrate the distributions of the two measures.

Table 33. Previous Performance Measures: Derived from PCA

	PCA				New Variables			
	Eigenvalue	Loading		% of variance	Min	Max	Mean (SD)	Valid N
		English	Maths					
KS2em	1.75	0.71	0.71	0.88	-3.44	2.67	0.00 (1.32)	14369
KS2emX2	1.73	0.71	0.71	0.86	-3.29	2.90	0.00 (1.32)	14145

Figure 11. Distribution of KS2 Academic Performance (KS2em)

Note: A small number of cases with extremely high scores have been omitted from these graphs to preserve anonymity.

Figure 12. Distribution of KS2 Academic Performance (KS2emX2)

Note: A small number of cases with extremely high scores have been omitted from these graphs to preserve anonymity.

9.2 Performance at Key Stages 4 and 5

In this section, measures of performance at Key Stages 4 and 5 are presented. Key Stage 4 (GCSE) grades are available for those present at LSYPE wave 3. The sample size reduces to 9127 with 375 missing cases. Key Stage 5 (A/AS-level) grades are available for those present at LSYPE wave 7. The sample size reduces to 6363 with 3139 missing cases. Table 34 and Figure 13 present the distribution of number of GCSEs graded A*–C (or equivalent).

Table 34. Performance at Key Stage 4 – Number of GCSE/GNVQ Qualifications at Grades A*–C

	%	N
0	15.95	1419
0.5	0.46	45
1	9.12	807
1.5	0.58	53
2	3.53	319
2.5	0.57	57
3	3.10	288
3.5	0.78	75
4	4.44	417
4.5	1.04	97
5	3.74	346
5.5	1.12	103
6	3.80	370
6.5	1.27	121
7	4.05	374
7.5	1.61	157
8	4.73	435
8.5	2.44	220
9	6.07	554
9.5	4.67	422
10	8.97	822
10.5	4.74	403
11	5.49	498
11.5	2.18	195
12	2.04	202
12.5	0.85	79
13	1.08	100
13.5	0.46	45
14	0.43	40
14.5	0.23	22
15	0.25	21
15.5	OM	OM
16	OM	OM
16.5	OM	OM
17	OM	OM
19	OM	OM
<i>Total</i>	100.00	9127

Note: OM= Omitted low values to preserve anonymity.

Figure 13. Performance at Key Stage 4 – Number of GCSE/GNVQ Qualifications at Grades A*–C

Table 35 and Figure 14 show the distribution of number of A-level passes among the full sample and among those who transitioned to Key Stage 5 (Academic).

Table 35. Performance at Key Stage 5 – Number of A-Level passes

	Transitioned to A-level		Full Sample	
	%	N	%	N
0	29.19	1380	49.85	3088
1	3.49	160	2.47	160
2	7.67	386	5.43	386
3	33.80	1622	23.94	1622
4	16.73	688	11.85	688
5	3.00	134	2.13	134
6	2.76	119	1.95	119
7	0.64	30	0.45	30
8	1.25	63	0.89	63
9	0.74	39	0.52	39
10	0.38	17	0.27	17
11	OM	OM	OM	OM
12	OM	OM	OM	OM
13	OM	OM	OM	OM
15	OM	OM	OM	OM
16	OM	OM	OM	OM
<i>Total</i>	100.00	4655	100.00	6363

Notes: OM= Omitted low values to preserve anonymity

Figure 14. Performance at Key Stage 5 – Number of A-level Passes (for Respondents who Made Transitione to A-level)

10 Social Origins and Educational Attainment

This section examines the relationship between each of the social origin measures and our educational attainment outcome variables.

10.1 Parental class and young people's education

Table 36 shows the distribution of respondents' highest educational attainment at 25–26 across different social-class backgrounds. 31% of those from higher managerial and professional backgrounds, according to our scale, achieve qualifications of degree-level and above, compared with just 10% from routine backgrounds.

Table 36. Distribution of Young Person's Highest Educational Attainment at 25–26 across social-class backgrounds

	1. No Qual. (%)	2. (%)	3. (%)	4. (%)	5. (%)	6. HE (%)	7. (%)	Total (N)
1. Higher managerial	0.96	26.15	8.27	28.21	5.07	17.78	13.56	1502
2. Lower managerial	1.37	33.80	11.93	23.52	5.02	13.38	10.98	2802
3. Intermediate	2.10	39.23	12.99	17.64	5.09	12.93	10.03	755
4. Small employers	2.29	45.17	12.88	18.93	3.75	9.87	7.10	773
5. Lower supervisory	2.82	54.34	13.39	12.27	5.01	7.86	4.31	1246
6. Semi routine	4.19	56.89	12.83	11.84	3.51	5.84	4.90	1291
7. Routine	6.76	56.83	12.37	9.14	4.89	5.50	4.51	1133
Total	2.54	41.90	11.81	19.01	4.73	11.31	8.70	9502

Table 37 considers academic transition measures. Those from higher social-class backgrounds are shown to continue on in post-compulsory education at rates substantially higher than their peers in lower social-class categories. 56% of those from higher managerial and professional backgrounds made the transition to higher education, compared with just 19% from routine backgrounds.

Table 37. Transition to KS5 (Academic) and university by Parental Social Class

	KS5 (Academic)		University	
	% Transitioned	N	% Transitioned	N
Higher managerial	79.51	1216	56.45	869
Lower managerial	70.20	1981	45.85	1317
Intermediate	60.42	475	39.76	317
Small employers	58.64	477	31.21	277
Lower supervisory	45.60	608	23.96	341
Semi-routine	43.33	624	21.27	337
Routine	38.77	517	18.70	286

As noted in Section 8.1, due to various reasons, the percentage of acquiring a degree-level qualification is significantly lower than the percentage of making the transition to higher education in our data. Considering the limitations of the former variable, relationships between other social origin measures and educational attainment will be based on transition measures only.

10.2 Parental social status and young people's education

Tables 38 and 39 show the distribution of respondents' educational transitions across parents' social status quartiles. For both CG and CAMSIS social status scales, around 56% of those from higher managerial and professional backgrounds made the transition to higher education, compared with less than 20% from routine backgrounds.

Table 38. Transition to KS5 (Academic) and university by Parental CG status

	KS5 (Academic)		University	
	% Transitioned	N	% Transitioned	N
1st Quartile (lowest)	39.82	1008	18.85	552
2nd Quartile	50.32	1329	26.98	758
3rd Quartile	65.07	1453	39.71	912
4th Quartile (highest)	78.69	2108	56.52	1522

Table 39. Transition to KS5 (Academic) and university by Parental CAMSIS status

	KS5 (Academic)		University	
	% Transitioned	N	% Transitioned	N
1st Quartile (lowest)	36.71	953	17.00	510
2nd Quartile	51.31	1273	27.30	725
3rd Quartile	64.90	1486	39.40	933
4th Quartile (highest)	78.87	2186	56.49	1576

10.3 Parental education and young people's education

Table 40 considers respondents' educational transition by parents' education. A steep gradient has been found for the educational transition to higher education. The percentage of making the transition is almost four times among those whose parents both have degrees than among those whose parents have no qualifications.

Table 40. Transition to KS5 (Academic) and university by Parental Education

	KS5 (Academic)		University	
	% Transitioned	N	% Transitioned	N
1. No qualifications	37.56	528	18.99	303
2	42.43	507	20.92	293
3	49.89	1740	25.82	933
4	67.68	1234	41.04	782
5	83.25	329	60.77	241
6	83.93	884	62.19	653
7. Both have degrees	88.33	676	70.96	539

10.4 Parental income and young people's education

The association between parental income and young people's educational transition is examined. As shown in Table 41, a clear social gradient is found, both in relation to the likelihood of transitioning to A-level and to higher academic education, however the relationship is not quite as strong as it is for other measures of social origin.

Table 41. Transition to KS5 (Academic) and university by Parental income

	KS5 (Academic)		University	
	% Transitioned	N	% Transitioned	N
1st Quartile (lowest)	49.87	1359	27.31	786
2nd Quartile	51.07	1448	29.26	870
3rd Quartile	60.57	1408	36.21	882
4th Quartile (highest)	79.01	1683	55.78	1206