

Social Class Inequalities in Scottish School Qualifications

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The qualifications that British children gain at school are strong determinants of their futures in both education and the labour market. Studies of the relationship between parental social class and children's outcomes in school qualifications report the general finding that pupils from families in less advantaged social classes on average have poorer outcomes.

This paper investigates social class inequalities in Scottish school qualifications. Scottish data provide an interesting case study because Scotland has its own set of school qualifications and has a widespread system of comprehensive secondary schools that do not select children through academic testing. This paper is innovative because it analyses new linked administrative data on individual pupils from the Scottish Qualifications Authority (SQA) with parental information from the Scottish Longitudinal Study (SLS).

Standard Grades were the main qualifications undertaken by Scottish pupils at the end of compulsory schooling. We present multivariate analysis of pupils' overall school Standard Grade scores.

We find an overall negative relationship between parental social class and children's outcomes in Scottish school qualifications. Pupils from families in less advantaged social classes, on average, have lower overall Standard Grade scores. A more nuanced finding that emerges from the analyses is that there is a cleft between the Standard Grade scores of children from families in the white and the blue collar classes. We conjecture that the complexity of parents jobs, especially in the more advantaged social classes, fosters forms of family and home life that are conducive to children having more favorable outcomes in school qualifications.

Standard Grades have been replaced by the 'National' qualifications framework. Changes in the structure and content of the curriculum and assessment could affect the pattern of parental social class inequalities. Further detailed empirical analyses of social class inequalities in outcomes in Scottish school qualifications is therefore imperative.

Introduction

The qualifications that British children gain at school are strong determinants of their futures in both education and employment (Noah and Eckstein, 1992, Joyce et al., 2003, Babb, 2005). Studies of the relationship between parental social class and children's outcomes in school qualifications report the general finding that pupils from families in less advantaged social classes on average have poorer outcomes (Drew et al., 1992, Drew, 1995, Demack et al., 2000, Gayle et al., 2003, Connolly, 2006, Gayle et al., 2009). The study of social class inequalities and school qualifications is therefore important and can provide insights into the reproduction of social inequalities and social stratification in adulthood.

The focus of this paper is social class inequalities in Scottish school qualifications. It is commonplace for British sociological studies of education and social stratification to analyse English data, and there are many fewer Scottish studies. Arguably, this is because England is the largest territory in the United Kingdom. Scottish data provide an interesting case study because Scotland has its own set of school qualifications. Scottish educational data also provide an interesting laboratory for studying social class effects because in the mid-1960s Scotland moved to having a widespread system of comprehensive secondary schools that do not select children through academic testing (Murphy, 2015). Furthermore, Scotland historically has had fewer independent (i.e. fee paying) schools than other parts of the UK (Raffe et al., 1999).

This paper is innovative because it analyses new linked administrative data on individual pupils from the Scottish Qualifications Authority (SQA) with parental information from the Scottish Longitudinal Study (SLS) (Boyle et al., 2009). An analytically attractive feature of the SLS is that the very large sample provides suitably large subsamples. The linked SLS and SQA dataset spans a time period which is not well covered by other data resources. This is because the observation window falls between the older birth cohorts and the more recent birth cohort studies (Murray and Gayle, 2012). The linked SLS and SQA data also plugs a gap left by the discontinuation of the Scottish School Leavers Survey, which collected detailed information on young people and education (see Croxford, 2009).

Parental Social Class

In the analyses that follow we initially employ the UK National Socio-Economic Classification (NS-SEC) (see Rose and Pevalin, 2002). NS-SEC is the official UK social class measure and it is widely used in social research. A great deal of theoretical groundwork and empirical testing has been directed towards developing this classification scheme and there are agreed and documented standards for using the measure in social research (Office for National Statistics, 2010). NS-SEC provides a relatively stable and parsimonious measure of parental social class (Rose and Pevalin, 2003).

NS-SEC is associated with three important aspects of individuals' economic lives; their income security, their short-term income stability, and their longer-term income prospects (Goldthorpe and McKnight, 2006, Chan and Goldthorpe, 2007, McGovern et al., 2007). Within the NS-SEC framework, occupational information and employment status are taken

together as indicators of work and employment relations, and therefore of class position. NS-SEC is in fact quite strongly associated with income level, but it is argued that the strength of NS-SEC lies in the degree to which it differentiates individuals in terms of their economic situation, which it does to a greater extent than would a focus solely on income (Goldthorpe, 2016). In the analyses below the ‘parental’ NS-SEC measure was constructed using information on both fathers and mothers, in line with the semi-dominance approach suggested by Erikson (1984).

Scottish School Qualifications

The focus of this study is Scottish Standard Grades. Standard Grades were introduced in the early 1980s and were the main qualifications undertaken at the end of compulsory schooling in Scotland until they were replaced in the 2013/2014 school year (see Humes, 2013). Standard Grades were the first major branching point in the Scottish education system. Standard Grades were similar to the General Certificates of Secondary Education (GCSEs) which are the standard school qualifications in other parts of the UK. Raffe et al. (1999) asserted that Standard Grades performed similar roles to GCSEs as the main predictor of post-age 16 destinations in education, and they shared similar value in the labour market.

There were more than thirty different Standard Grade subjects available throughout Scotland. These subjects included English, mathematics, history, geography, modern studies, biology, chemistry, physics and physical education, as well as a range of foreign languages, and a number of other science, arts, humanities, and vocationally oriented subjects (Playford et al., 2016b). Pupils typically studied for around seven or eight Standard Grades over the final two years of compulsory education (Brisard and Menter, 2008).

Each of the Standard Grade subjects that the pupil studied was awarded a grade, on a seven-point scale; the highest being grade 1, and the lowest grade 7 (Raffe et al., 1999). Following Croxford et al. (2007) we construct a pupil’s overall school Standard Grade score by awarding 7 points for a grade 1 through to 1 point for a grade 7. This scoring approach is substantively sensible, and it is in line with an approach previously advocated by the Qualifications and Curriculum Authority (QCA) for GCSEs¹.

Data

A specialist dataset using administrative records was constructed for this project². The dataset comprises young people who undertook Standard Grades in Scottish schools between 2007 and 2011 who were members of the Scottish Longitudinal Study (see Boyle et al., 2009). The wider SLS data structure supplies suitable parental information. Raab (2013) provides details of the Scottish Qualifications Authority (SQA) data that have been linked to the SLS. A

¹ The Scottish Government have reported data using the Unified Points Score Scale, which is another alternative. This measure was an extended version of the Universities and Colleges Admissions Service (UCAS) Scottish Tariff points system. The scale ranged from 3 points for a grade 7 Standard Grade, up to 38 points for a grade 1 Standard Grade (see <http://www.gov.scot/Publications/2009/03/09154229/3> accessed 29/02/16).

² SLS Project Number 2014_005.

central challenge of undertaking analyses using administrative data is that they must be undertaken in safe settings (Connelly et al., 2016). Currently the restrictions placed on administrative data limit the possibilities for undertaking transparent and reproducible social research (Playford et al., 2016a).

There are no school-level or Local Authority-level indicators in the linked SQA data. Therefore, it is only possible to undertake single-level (i.e. pupil-level) analyses. A wealth of studies which have explicitly investigated the hierarchical nature of education (for a review see Connelly et al., 2014). Studies that have examined the influence that school-level and individual-level factors have on educational attainment have demonstrated that the majority of variation in attainment is at the pupil-level (OECD, 2007, Reynolds et al., 1996, Sammons, 1999). For example, Rasbash et al. (2010) estimated that up to 80% of variance in school qualification outcomes can be attributed to the pupil level. The Programme for International Student Assessment (PISA) provides valuable additional insights on this issue. Analyses of PISA data confirm that little of the variation in pupils' attainment in Scotland is associated with the ways in which schools differ, and that most of the variation is connected with how pupils differ. In essence the pupil is far more important than the school that they attended (OECD, 2007). The specialist SLS dataset could potentially be enhanced by school and Local Education Authority indicators, however we are confident that the pupil-level analyses are robust enough to offer valuable insights into the relationship between parental social class and filial educational outcomes.

Explanatory Variables (Gender, Parental Education, Household Type)

Parental social class is the main substantive focus of this paper, which we seek to understand in an appropriate multivariate context. We are at pains to point out that the SLS is an administrative data resource and it provides far fewer explanatory variables than the array that are common in youth cohort datasets (for example see Croxford et al., 2007). Our analyses include measures of gender, parental education and household type which have been identified as being substantively important in previous studies of school qualifications (Drew et al., 1992, Drew, 1995, Demack et al., 2000, Gayle et al., 2003, Connolly, 2006, Sullivan et al., 2013).

There is a well-established association between parental education and filial (i.e. children's) educational outcomes (Dickson et al., 2013, Drew et al., 1992, Drew, 1995, Gayle et al., 2003, Korupp et al., 2002, Ermisch and Pronzato, 2010). There is also evidence of an association between household type and children's educational outcomes, but this association has been explored in fewer studies (Drew et al., 1992, Gayle et al., 2016).

There is a large portfolio of sociological research on gender and education. Hadjar et al. (2014) apercu this field and comment that in many countries male and female gender differences in educational outcomes are a longstanding feature of academic, political and public debates. Historically a key focus of these concerns was female disadvantage, but by the end of the 20th century attentions had turned to boys and their lack of educational success (see Weaver-Hightower, 2003). Gender differences in school qualifications have been

reported in a number of previous studies of school qualifications (Biggart, 2000, Gayle et al., 2003, Burgess et al., 2004, Machin and McNally, 2005, DfES, 2007).

Results

In this section we report the result of a set of multivariate analyses³. Descriptive statistics for the analytical variables are reported in Table 1. A series of ordinary least squares (OLS) regression models were estimated on pupils' overall school Standard Grade scores. Gender, household composition and parental education were all significant, and 14% of the variance was explained by these background factors. Table 2 reports a series of regression models that include measures of parental social class.

Following the prescription outlined by Lambert and Bihagen (2014), we first compare standard operationalisations of the NS-SEC scheme (Office for National Statistics, 2010). Model 1 includes a simple three category version of NS-SEC (adjusted $R^2 = 0.162$ and BIC = 65666.3). Model 2 includes a five category version of NS-SEC (adjusted $R^2 = 0.163$ and BIC = 65670.5). Model 3 includes a more comprehensive eight category version of NS-SEC (adjusted $R^2 = 0.168$ and BIC = 65643.4). On the grounds of both conventional goodness of fit and parsimony criteria, Model 3 is considered the most suitable model.

There was a correlation between parental education and parental social class (Cramér's $V = .33$ and Gamma = .59), but a small Kappa value of .04 which we interpret as 'slight' (see Landis and Koch, 1977). The interaction effect between eight category NS-SEC and parental education was not significant when added to Model 3 ($p = 0.15$), there was a very small increase in the explained variance (adjusted $R^2 = 0.169$), but the model was less parsimonious (BIC = 65860.8). The exploration for other possible interactions effects did not substantively improve upon the main effects model (Model 3).

Figure 1 depicts the effects of parental social class (NS-SEC 8 categories) estimated by Model 3. Overall there is a negative parental social class gradient, by which we mean that pupils from families in the least advantaged NS-SEC social classes, on average, have lower overall school Standard Grade scores. For illustration, the children of lawyers and doctors (NS-SEC 1.2) on average have the highest overall school Standard Grade scores. By comparison the children of cleaners (NS-SEC 7), on average, have scores that are approximately 10 points lower; the children of receptionists (NS-SEC 6) approximately 9 points lower; the children of gardeners (NS-SEC 5) approximately 8 points lower; the children of self-employed bricklayers (NS-SEC 4) approximately 6 points lower; the children of teaching assistants (NS-SEC 3) approximately 5 points lower; and the children of secondary school teachers (NS-SEC 2) approximately 4 points lower.

In order to place these results within a broader theoretical sociological context we draw on the terminology deployed by Goldthorpe (2016), and we conceptualise NS-SEC 1.1, 1.2 and 2 as the 'salariat', or 'service class', NS-SEC 3, 4 and 5 as the intermediate class, and NS-

³ The data analytical work was undertaken in a 'safe setting'. Visits are managed in accordance with strict rules protecting the data and only non-disclosive outputs from analyses are released, once they are checked for confidentiality issues (Boyle et al., 2009).

SEC 6 and 7 as the ‘wage earning working class’. The clear message is that pupils in the salariat or service class, on average, have significantly higher overall school Standard Grade scores, compared with children from families in the intermediate class and the wage earning working class.

In the intermediate class, children from families in NS-SEC 3 have significantly higher overall school Standard Grade scores, than their counterparts in NS-SEC 5 (lower supervisory and technical). Goldthorpe (2016) notes that NS-SEC 3 is largely an intermediate ‘white collar’ class, and that this is in contrast to NS-SEC 5 which is largely a ‘blue collar’ class. Children from families in NS-SEC 4 (small employers and own account workers) do not have significantly different overall school Standard Grade scores compared with their counterparts in either of the two adjacent NS-SEC categories that form the intermediate class. We theorise that this is because, as Goldthorpe (2016) asserts, NS-SEC 4 can reasonably be conceived of as a ‘petite bourgeoisie’, that undertakes a mixture of both blue and white collar work.

In the wage earning working class, pupils from families in NS-SEC 6 (semi-routine) have significantly lower overall school Standard Grade scores compared with their counterparts in NS-SECs 1.1 through to NS-SEC 4. But it is notable that their scores are not significantly different from pupils with parents in NS-SEC 5 (lower supervisory and technical). This might partly reflect the similarity of the ‘blue collar’ occupations that are undertaken by parents in these two NS-SEC categories. Pupils from families in NS-SEC 7 (routine) have the lowest overall school Standard Grade scores, but their scores are not significantly different from other pupils from families within the wage earning working class (i.e. NS-SEC 6).

A more nuanced message that emerges from these analyses is that there is a cleft between the white collar classes (NS-SEC classes 1.1, 2 and 3) and the blue collar classes (NS-SEC classes 5, 6 and 7). This bifurcation might crudely be theorised as a ‘non-manual / manual’ divide. Whilst this straightforward distinction is initially attractive, we are concerned that it might be too simplistic and fail to appropriately describe the underlying patterns of stratification in Scottish school qualifications.

Pevalin and Rose (2002) assert that the changes in the nature and structure of both occupations and industries has rendered the ‘non-manual / manual’ distinction both outmoded and potentially misleading. They explain that conceptually neither the degree of ‘manualness’ of the work involved, nor its ‘skill level’ are considerations that determine the allocation of occupations into NS-SEC classes. Indeed, we are cautious to note that whilst NS-SEC 3 is largely a white collar class there are employees, for example specialist electricians, who engaged in what might be considered blue collar or manual work. Similarly, we also note that sales assistants and junior clerks are appropriately classified as being part of the wage-earning working class (NS-SEC 6 and 7), but the extent to which these occupations are ‘manual’ in an orthodox sense is questionable. A further notable feature of the NS-SEC scheme is that NS-SEC 6 is now largely made up of women employed in the service economy who are often engaged in work that could be considered as being ‘non-manual’.

In the next stage of the analysis, in order to further investigate the relationship between parental social class and filial educational outcomes, we have selected some additional occupation based socio-economic classification measures that could provide additional insights into the manual nature and skill level associated with parental occupations.

Following the theoretical and methodological advice proffered by Lambert and Bihagen (2014), we have operationalized three additional social class measures. The first measure is Registrar General's Social Classification⁴ (RGSC) (see Leete and Fox, 1977). RGSC categories bring together, so far as is possible, people with similar levels of occupational skill (OPCS, 1980). The second measure collapses RGSC into a binary non-manual / manual measure (see Bland, 1979). We are aware that historically there have been concerns about how well RGSC measures occupational skills (see Brewer, 1986). Therefore we have constructed a third measure that operationalises an indicator of skill proposed by Elias and McKnight (2001)⁵.

Table 3 reports the results of three further models that include these three alternative social class measures. Neither Model 4 (RGSC) (adjusted $R^2 = 0.163$ and BIC = 65671.1), Model 5 (non-manual / manual) (adjusted $R^2 = 0.154$ and BIC = 65731.7), or Model 6 (skill) (adjusted $R^2 = 0.158$ and BIC = 65712.4), improve on the explanatory power or parsimony of Model 3 (8 category NS-SEC) (adjusted $R^2 = 0.168$ and BIC = 65643.4). The three extra models do however provide additional insights into the relationship between parental social class and filial overall school Standard Grade scores.

The results of Model 4, indicate that compared with pupils from families in RGSC I (Professional), pupils in all of the other RGSC categories have significantly lower overall Standard Grade scores. We are aware that RGSC does not map neatly onto NS-SEC, but it is notable that the general shape of the negative relationship between parental social class and overall Standard Grade scores is similar in both models (cf. Model 4 and Model 5).

Notably there is a cleavage between the overall Standard Grade scores of pupils in the non-manual classes and their counterparts in the largely manual RGSC classes (IIIM, IV and V). Pupils from families in these manual social classes, on average, have overall Standard Grade scores that are eight points lower than pupils from the families in the Professional RGSC social class. This chimes with the results of Model 5, that estimates that pupils from families in the manual social class category on average score approximately four points lower on overall Standard Grade scores, than their counterparts from families in the non-manual social class category. We note that within the official NS-SEC documentation it is asserted that users of earlier classification schemes wanted something similar to a non-manual / manual measure, and therefore the three-class NS-SEC measure was created as a 'faute de mieux' approximation⁶. The results of Model 5 and Model 1, convince us that the degree of 'manualness' in parental social class is an important dimension of filial overall Standard Grade scores.

The effects of parental occupational skill levels are investigated in Model 6. The results indicate that compared with pupils from families in the High Skill category, pupils from

⁴ To operationalise the Registrar General's Social Class measure we matched occupational information (measured by SOC2000) and a measure of employment status. See <http://www.camsis.stir.ac.uk/occunits/distribution.html#UK> and <http://www.camsis.stir.ac.uk/downloads/gb91soc2000.zip> accessed 03.10.19.

⁵ To operationalised the skills measure we adopted the methodology that we describe here <https://osf.io/yrb3k/> accessed 28.03.20 .

⁶ See <https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticssocioeconomicclassificationnssecrebasedonsoc2010> accessed 03.10.19.

families in each of the lower skilled categories have significantly lower (and monotonically decreasing) overall Standard Grade scores.

Discussion

The overall negative relationship between parental social class and children's outcomes in Scottish school qualifications is unequivocal (*id est*, pupils from families in less advantaged social classes on average have lower overall Standard Grade scores). There is a strong negative relationship when parental social class is measured using NS-SEC, the official UK social class measure. The statistical modelling results have indicated that there is a cleft between overall Standard Grade scores for pupils with parents in broadly white collar social classes, and those with parents in broadly blue collar social classes.

Further investigation using alternative parental social class measures, leads us to conclude that occupational skills and the manual nature of work are also an important dimensions of the relationship between parental social class and children's outcomes in qualifications in the Scottish school system. Like Parcel and Menaghan (1994) we conjecture that the complexity of parents jobs, especially in the more advantaged social classes, fosters forms of family and home life that are conducive to children having more favorable outcomes in school qualifications.

We speculate that social class differences in parenting styles, family activities and cultural values in the home may also play a role in producing inequalities in outcomes in school qualifications (Bourdieu, 1977, Ermisch, 2008, Kiernan and Mensah, 2011, Lareau, 2011, Washbrook, 2011, Vincent and Ball, 2007). Administrative educational data however does not contain measures that are suitable for investigating these areas. The SLS provides vital additional information that is not available in SQA administrative data, but provides far fewer explanatory variable than the array that are common in youth cohort datasets (for example see Croxford et al., 2007).

Conclusion

There have been a raft of political initiatives and policies aimed at improving Scottish education (see Riddell, 2009). Despite these policies, and after many decades of comprehensive secondary schooling in Scotland, the presence of parental social class inequalities in school Standard Grade outcomes is especially disappointing.

Pupils from families in the wage earning working class have the least favourable outcomes. There was a cleft between pupils with parents in broadly white collar social classes, and those with parents in broadly blue collar social classes. Occupational skills and the manual nature of work are also important dimensions of the social class inequalities. We conjecture that the complexity of parents jobs influences their children's outcomes in school qualifications.

The overall relationship between parental social class and Scottish Standard Grades is comparable to the effect that has been observed in GCSEs in other parts of the UK (see Gayle et al., 2016). The qualifications that British children gain at school are strong determinants of

their futures in both education and employment. Therefore, the importance of parental social class inequalities in Scottish school outcomes must not be downplayed.

In 2002 the Scottish Executive Education Department launched a national debate on schools for the 21st century, with the aim of driving forward an agenda for greater flexibility and choice in the school curriculum (Munn et al., 2004). The implementation of The Curriculum for Excellence and Getting it Right for Every Child (GIRFEC) are two recent initiatives aimed at tackling social inequalities within Scottish education (Priestley and Humes, 2010, Kidner, 2013, Coles et al., 2016). In the school year 2013/2014 Standard Grades were replaced by the 'National' qualifications framework (SCQF, 2015).

Developments in the curriculum in Scottish schools have driven changes in assessment, and these changes are reflected in the structure and content of the National qualifications. The diet of qualifications that pupils are examined for remains flexible, and it is a mixture of pupil choices, parental choices, teachers' decisions and institutional constraints and opportunities (e.g. the organisation of the school's timetable). Therefore, it is not difficult to imagine that the implementation of the National qualifications could affect the pattern of parental social class inequalities. Further detailed study of social class inequalities in outcomes in Scottish school qualifications is therefore imperative.

It is conceivable that administrative educational data on pupil's outcomes in the National qualifications could be linked to the SLS. On reflection we consider that more comprehensive analyses of parental social class effects, require measures relating to home and family life (e.g. parenting styles, family activities and cultural values). Detailed home and family measures are beyond the scope of administrative sources, and will only feasibly become available through social surveys. We envisage that the most fruitful research data will combine detailed measures collected via social surveys with administrative education data.

	Mean	Standard Error	Percentage (col)	Frequency
<i>Sex</i>				
Male	32.4	0.2	52	4,346
Female	33.6	0.2	48	4,079
<i>Lives with</i>				
Both parents	34.1	0.2	79	6,636
Mother only	28.8	0.3	20	1,699
Father only	28.4	1.5	1	90
<i>Parental Highest Qualification</i>				
First degree/higher degree etc.	38.8	0.2	28	2,337
HNC/HND etc.	35.0	0.4	11	907
Higher grade/CSYS/A level etc.	34.2	0.3	18	1,543
O Grade/Standard grade/GCSE etc.	29.7	0.2	31	2,629
No Qualifications	24.4	0.4	12	1,009
<i>Parental NS-SEC 8 Class</i>				
1.1 Large employers and higher managerial and administrative	38.4	0.5	7	*
1.2 Higher professional	41.4	0.5	7	*
2 Lower managerial, administrative and professional	36.3	0.2	28	*
3 Intermediate	33.4	0.3	15	*
4 Small employers and own-account	31.4	0.5	8	*
5 Lower supervisory and technical	29.7	0.4	10	*
6 Semi-routine	27.4	0.3	16	*
7 Routine	25.3	0.4	9	*
<i>Parental NS-SEC 5 Class</i>				
1 Higher managerial, administrative and professional	37.5	0.2	43	3,617
2 Intermediate	33.4	0.3	15	1,287
3 Small employers and own account	31.4	0.5	8	648
4 Lower supervisory and technical	29.7	0.4	10	800
5 Semi-routine and routine	26.6	0.3	25	2,073
<i>Parental NS-SEC 3 Class</i>				
1 Higher managerial, administrative and professional	37.5	0.2	43	3,617
2 Intermediate	32.7	0.3	23	1,935
3 Routine and manual	27.5	0.2	34	2,873
<i>Parental RGSC 6 Class</i>				
I Professional	41.6	0.5	7	596
II Managerial and Technical	36.4	0.2	38	3,179
IIIN Skilled Non-manual	31.7	0.3	27	2,304
IIIM Skilled Manual	28.2	0.4	15	1,276
IV Partly Skilled	27.1	0.4	10	831
V Unskilled	24.8	0.8	3	239
<i>Parental RGSC 2 Class</i>				
Non-manual	35.1	0.2	72	6,079
Manual	27.5	0.3	28	2,346
<i>Skill Level of Parental Occupation (SOC2000)</i>				
High	39.2	0.3	24	1,983
Upper Middle	33.3	0.2	34	2,871
Lower Middle	30.2	0.2	35	2,974
Low	25.3	0.5	7	624
	33.0	0.1	100	8,425

Source: SLS

Table 1 Descriptive Statistics School Standard Grade Points Score⁷

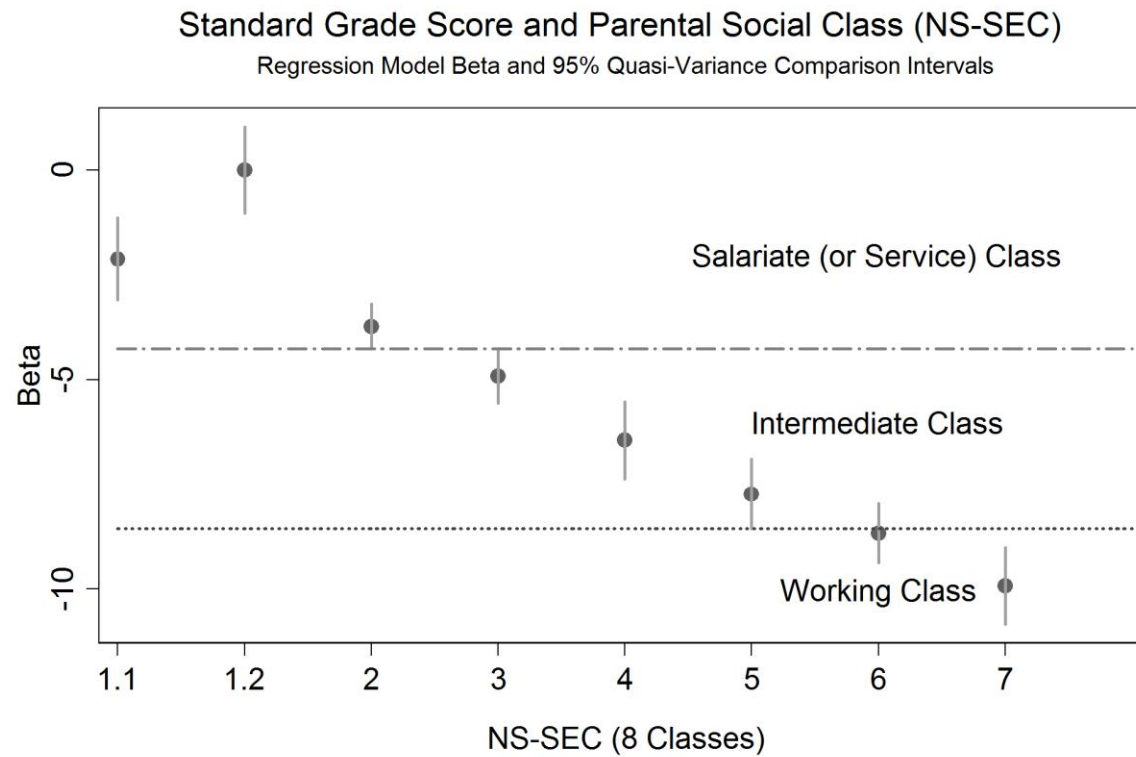
⁷. Some frequencies are omitted due to Statistical Disclosure Control (SDC).

	Model 1				Model 2				Model 3			
	B	SE	Quasi SE	VIF	B	SE	Quasi SE	VIF	B	SE	Quasi SE	VIF
Male	-1.32***	(0.26)	-	1.00	-1.33***	(0.26)	-	1.00	-1.33***	(0.26)	-	1.00
Female	0.00	(0.00)	-	-	0.00	(0.00)	-	-	0.00	(0.00)	-	-
Lives with both parents	0.00	(0.00)	0.19	-	0.00	(0.00)	0.18	-	0.00	(0.00)	0.19	-
Lives with mother only	-1.27***	(0.34)	0.29	1.14	-1.19***	(0.35)	0.30	1.20	-1.04**	(0.35)	0.30	1.21
Lives with father only	-1.87	(1.27)	1.25	1.01	-1.82	(1.27)	1.25	1.01	-1.68	(1.26)	1.25	1.02
First Degree/Higher Degree	0.00	(0.00)	0.30	-	0.00	(0.00)	0.30	-	0.00	(0.00)	0.30	-
HNC/HND	-2.71***	(0.47)	0.39	1.28	-2.80***	(0.47)	0.40	1.29	-2.50***	(0.47)	0.39	1.30
Highers/CSYS/A-levels	-2.80***	(0.41)	0.30	1.53	-2.87***	(0.41)	0.30	1.54	-2.41***	(0.42)	0.30	1.58
O Grade/Standard Grade	-6.02***	(0.39)	0.25	2.00	-5.97***	(0.39)	0.25	2.00	-5.51***	(0.40)	0.25	2.07
No Qualifications	-9.92***	(0.53)	0.41	1.75	-9.69***	(0.53)	0.41	1.77	-9.15***	(0.53)	0.42	1.81
1.1 Large employers and higher managerial									-2.12**	(0.68)	0.50	1.88
1.2 Higher Professionals									0.00	(0.00)	0.52	-
2 Lower managerial and professional									-3.73***	(0.55)	0.27	3.67
3 Intermediate									-4.92***	(0.63)	0.33	3.08
4 Small employers and own account									-6.45***	(0.70)	0.47	2.13
5 Lower supervisory and technical									-7.73***	(0.68)	0.42	2.43
6 Semi-routine									-8.67***	(0.66)	0.36	3.46
7 Routine									-9.92***	(0.73)	0.47	2.63
1 Higher managerial, admin and prof					0.00	(0.00)	0.26	-				
2 Intermediate					-1.88***	(0.41)	0.33	1.33				
3 Small employers and own account					-3.43***	(0.53)	0.47	1.18				
4 Lower supervisory and technical					-4.67***	(0.49)	0.42	1.26				
5 Semi-routine and routine					-5.98***	(0.41)	0.31	1.89				
1 Higher managerial, admin and prof	0.00	(0.00)	0.26	-								
2 Intermediate	-2.38***	(0.36)	0.26	1.41								
3 Routine and manual	-5.51***	(0.37)	0.26	1.84								
Constant	40.25***	(0.29)	-	-	40.25***	(0.29)	-	-	42.87***	(0.51)	-	-
<i>n</i>	8425				8425				8425			
<i>R</i> ²	0.162				0.164				0.169			
adj. <i>R</i> ²	0.162				0.163				0.168			
df	10				12				15			
Deviance	65575.9				65562.1				65507.8			
BIC	65666.3				65670.5				65643.4			

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ Source: SLS

Table 2 Regression Models (OLS) School Standard Grades Points Score – Parental Social Class Measures



Source: SLS, n=8,425, model includes gender, household type and parental education

Figure 1 School Standard Grade Scores – Parental Social Class Effects (NS-SEC) Model 3

	Model 4				Model 5				Model 6			
	B	SE	Quasi SE	VIF	B	SE	Quasi SE	VIF	B	SE	Quasi SE	VIF
Male	-1.33***	(0.26)	-	1.00	-1.31***	(0.26)	-	1.00	-1.35***	(0.26)	-	1.00
Female	0.00	(0.00)	-	-	0.00	(0.00)	-	-	0.00	(0.00)	-	-
Lives with both parents	0.00	(0.00)	0.18	-	0.00	(0.00)	0.18	-	0.00	(0.00)	0.19	-
Lives with mother only	-1.55***	(0.35)	0.30	1.18	-1.93***	(0.34)	0.29	1.10	-1.17**	(0.36)	0.31	1.23
Lives with father only	-1.61	(1.27)	1.25	1.02	-1.64	(1.27)	1.26	1.02	-2.19	(1.27)	1.25	1.01
First Degree/Higher Degree	0.00	(0.00)	0.30	-	0.00	(0.00)	0.26	-	0.00	(0.00)	0.29	-
HNC/HND	-2.31***	(0.48)	0.39	1.31	-3.33***	(0.47)	0.40	1.25	-2.61***	(0.47)	0.39	1.29
Highers/CSYS/A-levels	-2.45***	(0.42)	0.30	1.58	-3.87***	(0.39)	0.30	1.38	-2.82***	(0.41)	0.30	1.51
O Grade/Standard Grade	-5.94***	(0.39)	0.24	1.99	-7.50***	(0.36)	0.24	1.64	-6.63***	(0.38)	0.24	1.87
No Qualifications	-9.94***	(0.52)	0.41	1.73	-11.48***	(0.50)	0.41	1.55	-10.91***	(0.51)	0.40	1.64
I Professional	0.00	(0.00)	0.53	-								
II Managerial and Technical	-3.48***	(0.54)	0.25	4.15								
IIIN Skilled Non-manual	-5.72***	(0.60)	0.25	4.32								
IIIM Skilled Manual	-8.47***	(0.64)	0.34	3.21								
IV Partly Skilled	-8.14***	(0.71)	0.43	2.70								
V Unskilled	-8.99***	(0.99)	0.80	1.61								
Non-manual					0.00	(0.00)	-	-				
Manual					-3.87***	(0.32)	-	1.22				
High Skill									0.00	(0.00)	0.31	1.76
Upper Middle Skill									-3.87***	(0.36)	0.21	2.21
Lower Middle Skill									-4.67***	(0.40)	0.25	1.62
Low Skill									-7.14***	(0.63)	0.52	-
Constant	42.96***	(0.51)	-	-	39.94***	(0.29)	-	-	41.60***	(0.33)	-	-
<i>n</i>	8425				8425				8425			
<i>R</i> ²	0.165				0.155				0.159			
adj. <i>R</i> ²	0.163				0.154				0.158			
df	13				9				11			
Deviance	65553.6				65650.3				65612.9			
BIC	65671.1				65731.7				65712.4			

Standard errors in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3 Regression Models (OLS) School Standard Grades Points Score - Alternative Parental Social Class Measures

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