Does private schooling make you right-wing?

An investigation using the 1970 British Cohort Study

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Abstract

This paper addresses the question of whether attending a private school (both at primary and secondary stages) affects voting behaviour and political attitudes in adulthood. The analysis is based upon the British Cohort Study, a nationally representative cohort of children born in one week in April 1970 at age 42 years. A path analysis was adopted to test the impact of attending a private school on the tendency to vote Conservative in four consecutive General Elections, and on the expression of left-right attitudes in mid-life for a sample of 6917 study members. A constellation of antecedents were included in the modelling covering social origins at birth, cultural and material capital and academic achievement prior and post-secondary school entry together with an individual's early social class destination. Our findings suggest that once these aspects of the life course are included in the model that there is evidence for a direct relationship between attending private school and the expression of right wing attitudes for both men and women.

Introduction

This paper sets out to examine the influence of private (or fee-paying, Halsey, 1981) education on the voting behaviour and political attitudes of a single cohort of 'forty-something's' born in the UK during one week in April 1970 (known as the 1970 British Cohort Study (BCS70)). A unique strength of our investigation is that it is based on longitudinal evidence for the same group of individuals measured over time where we have access to information on voter choice across four consecutive General Elections from 1997 to 2010. An additional exceptional feature of the dataset is the inclusion of individual political attitudes in the teenage years at age 16, and in mid-life at age 42.Using rich life course data, we are able to incorporate information about early life origins and influences and adult destinations in our appraisal of the role of private schooling and higher education in shaping voting behaviour and political attitudes in later life.

There is a substantial literature examining the link between the level of education achieved and political attitudes, but remarkably little evidence is available regarding the influence of the type of school attended on voting behaviour and attitudes. To our knowledge, the only prior quantitative examination of this question is Evans and Tilley's (2011) work. By combining data for several years of the British Social Attitudes Survey, Evans and Tilley argue that there are differences between the views of the privately and state educated that cannot be explained by the differences in where they come from (for example parental income) and where they are now (for example current income). Their evidence appears to suggest that going to university reduces some of these differences. The gap between the views of the state and privately educated is smaller among graduates than non-graduates. We are able to build on their cross-sectional analysis using longitudinal data.

The aim of our paper is to examine the link between private schooling and right wing tendencies in terms of individual voting histories based on self-reports of voting in four

general elections (1997, 2001, 2005 and 2010) and individuals' self-reported political attitudes expressed at age 42 years. Having access to unique longitudinal records on voting allows us to examine the interplay of individual characteristics and political behaviour in a way that repeat cross-sectional or panel surveys cannot. The temporal separation between the last recorded vote in 2010 and the expression of political attitudes some 2 years later in 2012 also presented us with an opportunity to examine the extent to which our findings for voting are replicated in terms of individual political attitudes held two years later under a Conservative-Liberal coalition. We are also in the unique position of having access to political attitudes expressed at age 16 years in our analysis.

The empirical focus of the analysis is to examine the legacy of attending private school on the consistency of voting Conservative across four consecutive general elections and the subsequent expression of right-wing political attitudes, taking account of gender, family background, cultural differences in media exposure, early educational attainment, university education and occupational status aged 26 years. In addition, we are able to exploit expressions of political attitudes at two time points, pre-adult views on trade unions and strikes at age 16 and economic left-right attitudes at age 42. All of these prior influences are modelled simultaneously using a 'pictorial representation of associations' (Sewell Wright, 1934) or path analysis (Duncan, 1966, 1975). Statistically, our task is to examine to what extent private schooling maintains a direct effect on adult voting behaviour and right-wing attitudes once we take account of all of the influences mentioned above. Following a brief review of the literature we present a conceptual framework together with our research aims and variable selection. The findings are based on separate path analyses for men and women.

Background

The quote below is taken from Lambert's ethnographic account of an experience of a school prefect in a private secondary school and serves to capture a stereotyping of the role

of the private school as a cultural site and one in which Conservative partisanship is nurtured.

"Boys and Masters alike are so Conservative in outlook and politics as to be ever breathing Conservatism down the necks of those who do not conform. It seems to be almost a crime to have thought a bit about politics and not to be for ever making unqualified statements against anything not conforming to their tastes", Boy, aged seventeen, quoted in Lambert (1967, page 374).

Walford (1986) argues that this model of cultural reproduction is overly deterministic and 'quickly seen to be far from reality' (p.23) however the quotation serves to raise the question as to whether private schools simply cater for a class of families which is typically right-wing thereby consolidating the views of those students from these backgrounds or the extent to which private schooling converts the views of those students from more liberal backgrounds towards being right-wing.

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Children who attend private schools typically come from socio-economically privileged backgrounds, and have on average higher prior academic performance compared to those at state schools, so it is vital to take these factors into account (Sullivan et al., 2018a). We also need to consider that private school pupils out-perform state pupils in terms of educational attainment and progression (Parsons et al., 2017), and in terms of adult income, taking these prior factors into account (Sullivan et al., 2018b). We propose that these consequences will mediate the relationship between private schooling and the later expression of political attitudes and voting behaviour. In statistical language the central core of our investigation is to identify whether or not the type of schooling a person undergoes has any lasting or durable influence on their willingness to vote Conservative and/or adopt right-wing attitudes in adulthood.

Importantly, in developing our conceptual and empirical approach we have been able to draw on previous work using the British Birth Cohort Studies which has examined various

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aspects of political attitudes and behaviour notably, Bynner, Ukoumunne and Wiggins (1996), Wiggins, Bynner and Parsons (1997), Deary, Batty and Gale (2008), Paterson (2008), Persson (2014) and Surridge (2016). All of these studies share the principal advantage of using longitudinal evidence in order to provide rich and fine-grained measures of individual and family characteristics in childhood and adolescence as well as the subsequent expression of views, values, interests, experiences and accounts of action and behaviour in adulthood. The analysis in these studies assumes that the passage of time conveys the direction of influence between early life characteristics and behaviour upon later life outcomes. In this way temporal ordering provides an interpretation of association or influence between antecedents and outcomes which some authors (e.g. Surridge (2016)) label as an 'effect' and for convenience we also adopt the term in this paper without intending to claim causation or 'cause and effect'(Goldthorpe, 2001). In fact our conceptual framework adopts the one proposed by Surridge (2016) to examine the underlying mechanism which she links the relationship between education and 'liberal' social values over time. Her conceptual framework divides the 'education effect' into 'proxy' and 'absolute' effects. In Surridge's work 'education-as-proxy' effects are sub-divided as 'pre-adult' and 'allocation effects'. Pre-adult effects are likely to include social background and parental education levels which are familiar antecedents in the work of other authors (Bynner & Ashford, (1994) and Paterson, (2008)) as well as an individual's cognitive ability (Deary et al, 2008). Allocation effects are typically captured via occupational position and work related factors (Stubager (2008)). Surridge finds that educational attainment is positively predictive of socially liberal values, but there is no link with attitudes towards economic redistributive justice. Her model does not include the type of school a sample member attends.
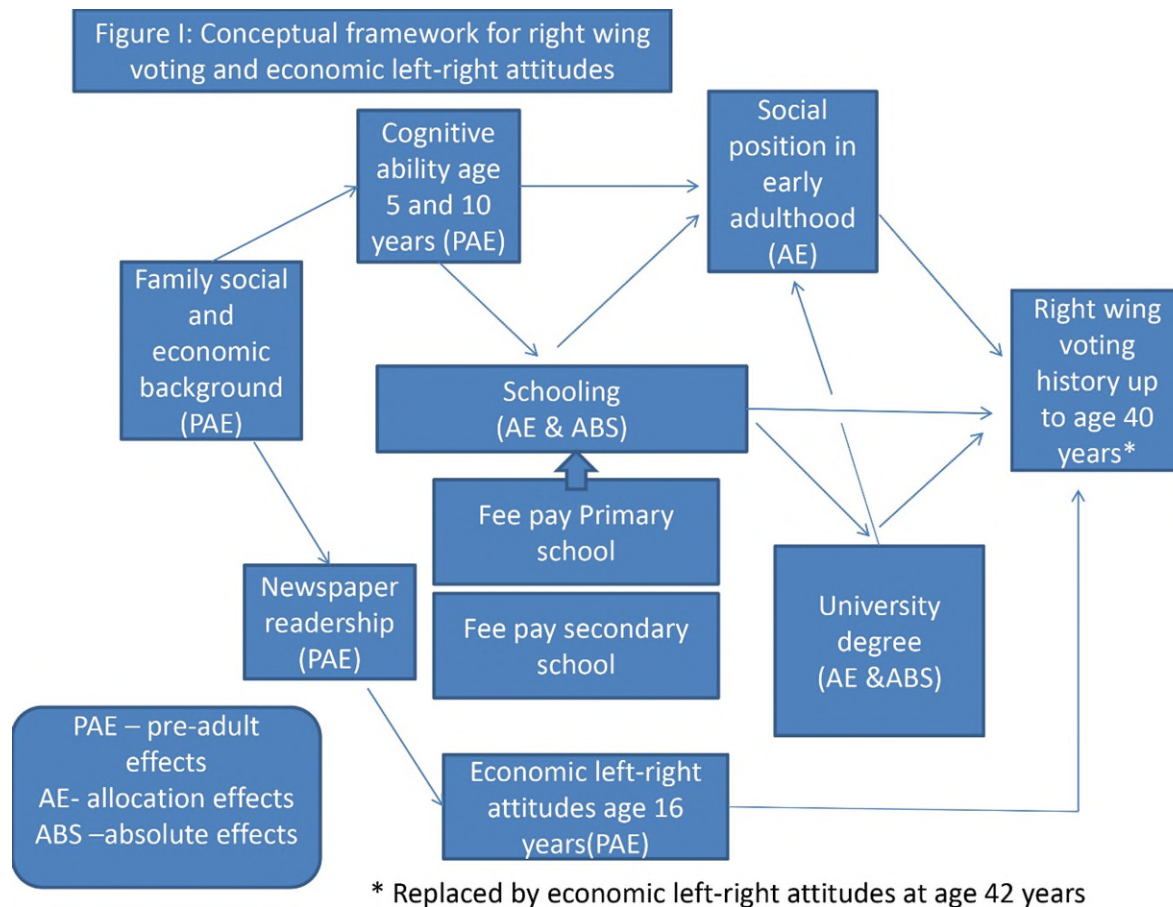
The role of social class in our formulation of the influences of type of schooling on voting and attitudes is broadly informed by Paterson (2008). He distinguishes between three dimensions of attitude: economic views on a left-right dimension, views about civil liberties, and views about racial matters and a single summary measure of participation which

combines various accounts of activities such as being a member of a political party, an environmental charity, a residents' association, or a trade union. From our perspective an important distinction is made between the effects of social class as being 'instrumental' where people's behaviour is best understood in terms of their current class position (destination class) as opposed to their class of origin into which they were first socialized (labelled as 'expressive' by Paterson) or by a process of 'acculturation' in which a person's behaviour becomes closer to that of the class to which they now belong in terms of how long they have been a member of that particular class. Paterson asks whether social attitudes and civic participation in early middle age are associated with a person's mobility trajectory, and, if so, what the implications of changes in patterns of mobility for attitudes and participation. He finds more evidence to support the influence of destination over origin. Interestingly, it would also appear that cognitive ability reinforced the influence of destination for the upwardly mobile.

Taken together the evidence provided in the various longitudinal studies referred to above represents a broad and ambitious coverage of political behaviour including voting, views, values, cynicism and political trust. Unlike these studies our approach concentrates on the type of schooling an individual receives and the extent to which that experience impacts upon voting Conservative and expressing right-wing views in adulthood. Our voting outcome is based on a count of how many occasions an individual reports a vote for the Conservative party based on four successive general elections as opposed to a single election (as in Deary et al., 2008). The expression of right-wing attitudes is based upon an operationalisation of economic views on a left-right dimension as reported two years after the creation of a Conservative-Liberal coalition government in 2010. To summarise our analysis takes account of both origin and current social class destination in the presence of the cumulative influence of childhood and family antecedents on each outcome for men and women separately.

Research aims and analytical strategy

Firstly, we focus on the act of voting Conservative or otherwise across four consecutive General Elections from 1997 to 2010 and secondly, the expression of economic left-right attitudes two years later (2012) when BCS70 cohort members (CMs) were 42 years old. The receipt of a private education is at the heart of our model in terms of whether or not there is any evidence for the consequences of a private education as having a direct effect on voting Conservative and or the expression of economic left-right views. Unlike, Surridge the attainment of a university degree is not the sole pivot of influence on right-wing tendencies but expressed as a mediator representing the possible attitudinal change that higher education may bring about both during a course of study and beyond. Figure I below adapts Surridge's model in order to emphasise the role of private education home on subsequent teenage economic left-right attitudes as well as voting and adult attitudes along this right-wing tendency. The inclusion and labelling of effects in the diagram as 'pre-adult effects' (PAE), 'allocation effects' (AE) and 'absolute effects' (ABS) is faithful to the terminology adopted by Surridge. Our intention is to present a theoretical model which adequately describes the processes which underpin our selection of variables which are described in detail below.

Figure I: Conceptual framework for right wing voting and economic left-right attitudes

Cognitive ability age 5 and 10 years (PAE)

Social position in early adulthood (AE)

Family social and economic background (PAE)

Right wing voting history up to age 40 years*

Schooling (AE & ABS)

Fee pay Primary school

Newspaper readership (PAE)

Fee pay secondary school

University degree (AE &ABS)

PAE – pre-adult effects
AE- allocation effects
ABS –absolute effects

Economic left-right attitudes age 16 years(PAE)

* Replaced by economic left-right attitudes at age 42 years

Whilst our key hypothesis concerns the role of private education, we are also interested in unpacking the intersection of socio-economic trajectories, educational and political development more generally, taking into account: socio-economic origins; the political climate of the home; adolescent political attitudes; childhood cognitive scores; primary and secondary school sector, higher education, and occupational attainment. Taking gender as an important element of socialization across the early life course we conduct all analyses separately for men and women.

Research aims:

i)   To ascertain the extent to which private schooling promotes Conservative partisanship as measured by voting behaviour and the expression of right-wing attitudes amongst a cohort of Britain's forty-something's

ii)   To what extent do early life social, material and cultural circumstances explain these differences?

iii)   In the presence of early life circumstances to explore to what extent university education mediates any difference in voting and attitudes amongst the state and privately educated? Are these differences relatively more polarised amongst those individuals who do not go on to university?

iv)   How are any of these differences moderated by gender?

All of our analyses are based upon a single birth cohort of individuals who were born in 1970 and followed through their lives until the age of 42-years. In Britain during this historical period cohort members (between the ages of 9- and 27-years) and their families experienced 18 years of uninterrupted Conservative government. The year of 1997 (the first voting record for BCS70 CMs) witnessed the election of Tony Blair and 'New Labour' who were to remain in power until 2010 (our fourth and final voting record) when a Conservative and Liberal coalition was formed under David Cameron.

Clearly, our secondary analysis will be constrained by the availability of suitably operationalised measures and the social and historical context appertaining at the time our data was collected. A number of our chosen measures will therefore act as proxies for social processes and influences. The discussion will attempt to address these limitations in a critically reflective manner following Barbones (2016).

Our analysis adopts a path analytic framework which captures the temporal ordering amongst the potential influences upon our two outcome variables: a count of whether or not a CM cast a vote for the Conservatives across each of four general elections held in 1997, 2001, 2005 and 2010 and a CM's left-right attitude score aged 42 years (in 2012) based on the summation of three Likert scaled items. Our analyses were implemented separately for men and women.

The analyses are based on samples of 6917 (3267 men and 3650 women) BCS members in 2012 resident in England & Wales who have provided genuine histories for voting and expressions of their political attitudes and condition upon type of school attended for our substantive model. Here 'genuine' simply means that the observed codes are in 'range' and not imputed. All modelling was conducted using MPlus version 7.4 (Muthén and Muthén, 2012) and employing a WLSMV estimator across twenty replications of 'filled in' data under multiple imputation (Kenward and Carpenter, (2013)) to handle any item non-response for variables other than school attended and our outcomes. In addition to the variables used in the analysis we also included a set of auxiliary variables in order to enhance the estimation of missing values. These variables are listed in the appendix and exemplify an in-house procedure for handling missing data as developed by Ploubidis and his colleagues under the Centre for Longitudinal Studies (CLS) Cross-Cohort Research Programme (Silverwood et al., 2020). In addition to the constraint on sample selection for key analytical variables the selection of auxiliary variables condition on CMs having a complete set of birth characteristics. To assess 'model fit' we adopt three conventional criteria for assessing model fit the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI) and the Tucker Lewis Index (TLI) (Brown, (2006) and Hu and Bentler (1999). Typically, a model would be regarded as 'acceptable' if RMSEA<0.08; CFI>0.90 and TLI>0.90. All path analyses were subject to a sensitivity analysis using 'counter factual' models available via MPlus (Muthén and Schultzberg, 2017).

Before continuing with a description of our operational variables it is worth considering the concept of statistical mediation and how it plays a role in the construction of our path models. Clearly, the main focus of our analysis will be to examine the extent to which the cumulative effect of attending private school (during preparatory (primary) and secondary stages) has on voting behaviour and adult political attitudes. However the literature suggests that rather than simply modelling the effect of schooling directly upon attitudes and voting we should allow the private schooling effect to be mediated via degree status (simply whether or

not a CM gained a university degree) upon voting behaviour and/or the expression of left-right political attitudes. In graphical terms this is represented by a 'classic mediation' triangle as illustrated in figure I where   a direct path connects 'schooling' (essentially fee-pay schooling or not) with the outcome labeled 'right wing voting history up to age 40 years' and an indirect path connecting 'schooling' via university degree status to the right-wing voting history outcome). Similar 'mediation' triangles can be identified involving education and social position in early adulthood as mediators. Conventionally, the paths have arrowheads that point to the implied dependent variable so a variable can be both dependent and independent in this context. In the analysis that follows each path has an associated path coefficient. In terms of measurement a mediation triangle can be described by a 'total effect' of a variable upon the dependent variable which in turn is the sum of the 'direct' and 'indirect' effect'. For more complex mediation, involving more than one mediator the indirect effect can be decomposed into specific indirect effects. The estimation process assumes that our outcome variables are counts and handled by a probit analysis (Aldrich and Nelson, 1984). Estimated path coefficients are therefore interpreted as 'standard deviation' units and the interpretation of the strength of any effect follows Cohen (1982)[i]. For further reading on statistical mediation see Jose (2013) and Kiernan & Huerta (2008) for an excellent application which broadly mirrors our analytical approach. We now continue with a description of our variable selection.

Selection of variables

Table I below lists all of the variables entered into the path analysis together with their respective labels which are used in the path diagrams.

The key variables listed represent our two outcome variables: voting behavior as measured across four consecutive General Elections in Britain and a measure of left-right attitudes at age 42 years. The number of occasions a CM voted Conservative was constructed as a

simple count ranging from 0 (no votes cast for the Conservatives at all) to 4 (most loyal

Conservative voters). The left-right score represents a position on a scale based on

economic issues rather than liberalism. In particular, the economic left-right score consists of

the summation of three Likert scaled items namely, 'big business benefits the owners at the

expense of the workers', 'Government should redistribute income' and 'there's one law for

the rich and one for the poor' which were originally selected from a validated left-right scale

of seven items (Evans et al., 1996) and confirmed by Wiggins et al (1997) using factor

analysis. Each item was originally rated on a 5-point scale where 1= strongly agree to 5

=strongly disagree and reverse coded so a high score indicates a strong right wing attitude.

The type of school a CM attended was described in terms of whether or not s/he attended a

fee-paying preparatory school and/or a fee-paying secondary school. An individual's

achievement beyond compulsory schooling was captured in terms of whether they obtained

a university degree or not. To mark a CM's early life's social, material and cultural

circumstances we used four indicators: social class at birth, the highest parental

qualification, family income and whether or not a 'right (conservative) leaning' newspaper

was read in the home during a CM's childhood and adolescence (Duffy & Rowden, 2005).

Family income was reported when CMs were aged 10 years and newspaper readership was

reported when CMs were aged 16 years. In addition a CM's educational attainment was

included as principal component scores for cognitive ability aged 5- and 10-years

respectively (Parsons, 2015). Economic left-right attitudes reported at age 16 years (around

the time of a teachers' strike in the UK) consists of a summative score following Persson

(2014) based on two items taken from a battery of 21 items of value statements. These

items are Likert scaled items worded as, 'trade unions are needed to represent workers' and

'(disagree) that strikes should be illegal'. We will begin our analysis with some basic sample

descriptives for key outcomes and predictors followed by our path analysis.

Table I: Variable description and labels used in the path analysis to interpret the influence the expression of left-right attitudes and voting behaviour for 'forty-something's' in 2012

Variable	Description	Label used
Key variables		
Left-right score in 2012	Summated index from 1 (left) to 5 (right)	LR_42
No. of times voted Conservative	Score 0-4 is a count of number times voted Conservative in the 1997, 2001, 2005 & 2010 elections	Tory
University Degree or not	0 for no degree or 1 for degree	Degree
Private school at Secondary level	0 for state school, 1 for private (fee paying) school	Private
Private preparatory school	0 for state primary, 1 for private school prior to secondary (preparatory)	Prep
Early life social & cultural background		
Social class at birth	Coded 1 (low, SC V or IV) to 4 (high, SCII or I)	Soc_Par
Highest parental qualification	Coded 0 (none) to 5 (degree) using NVQ categories	Qual_Par
Family income when CM aged 10 years	Coded 1 (lowest, less £35 per week) to 7 (highest, more than £250 per week) in 1980	Income
Right leaning newspaper accessible at home	Guardian, Independent and Mirror coded 0 versus the Daily Telegraph, Times, Daily Mail, Daily Express, Star and the Sun all coded 1	Paper
Childhood educational attainments		
Cognitive score at age 5 years	A principal component score (high represents high achievement) based on five tests	Cog_5
Cognitive score at age 10 years	A principal component score (high represents high achievement) based on eight tests	Cog_10
Adolescent 'right wing' political attitudes	A sum of ratings for 'trade unions are needed to represent workers' and '(disagree) that strikes should be illegal'. 5-point scales which were reverse coded and summed	LR_16
Early social class destination aged 26 years	A binary variable for professional or managerial occupation (code 1) or not at age 26 years (code 0)	Soc_26

The descriptive analysis that follows begins to reveal some important differences between state and fee-paying CMs and underscores the richness in our data source.

Descriptive analysis

Table II provides a number of interesting contrasts amongst our selected variables for male and female CMs who attended either a state secondary school or a fee-paying (private) secondary school. To put these contrasts into context for the total sample, only 3.0% (3.3% men and 2.8% women) attended a private primary school before commencing their secondary schooling. At secondary school 6.2% (6.8% men and 5.7% women) attended a private school. Unsurprisingly perhaps, only 1% of those CMs attending a state secondary school had been to a private primary school whereas over a third (36.6%) of those attending a private secondary school had done so [these percentages are not shown in table II]. All comparisons condition on having a genuine recorded value for our outcome variables, type of schooling and degree status otherwise item missingness has been addressed by applying multiple imputation as outlined above.

Table II: Comparisons between state and private secondary schooling by gender for key variables

	Men		Women	
	State	**Private**	**State**	**Private**
Mean x [0-4] voted Tory (1997-2010)	1.9 (.02)	2.6* (.10)	1.8 (.02)	2.5* (.11)
Tory voter in 2010	31.4 (0.01)	55.9* (0.03)	26.8 (0.01)	48.8 *(0.02)
Mean Left-Right attitude score *(2012)* Range: 1-5	2.7 (.01)	3.1* (.06)	2.8 (.01)	3.2* (.06)
<u>**Family background characteristics**</u> ***Social Class*** *(1970)* % II or I	22.1 (.01)	64.4* (.03)	21.4 (.01)	60.8* (.03)
Highest Parental Qualification *(1975)* % Degree/nvq4+	15.5 (.01)	68.5* (.10)	15.3 (.01)	67.3* (.10)
Family Income *– banded – (1980)* % £200+ per week	11.2 (.01)	68.6* (.04)	11.9 (.01)	63.2* (.10)
Right Wing newspaper in home *(1986)* % Yes	63.7 (.02)	73.6 (.05)	64.9 (.01)	71.8* (.05)
<u>**Individual characteristics**</u> ***Standardised cognitive scores*** *Age 5 (1975)* % Highest quintile	19.2 (.01)	40.8 (.04)	19.4 (.01)	41.6* (.04)
Age 10 (1980) % Highest quintile	20.5 (.01)	58.1* (.04)	17.7 (.01)	53.1* (.04)
Independent primary school (1980)	0.8 (.00)	37.4* (.04)	0.8 (.00)	35.8* (.04)
% Yes ***'Right-wing' political attitude*** (1986) Mean score: range 2-6	3.4 (.04)	3.6 (.10)	3.4 (.02)	3.5 (.10)
Highest qualification *(2012)* % degree or higher	19.3 (.01)	59.5* (.03)	20.3 (.01)	66.5* (.03)
Early social class destination % professional and managerial	27.7 (.01)	55.1* (.04)	26.7 (.01)	52.5* (.04)
N (100%)	3045	222	3441	209

Imputed means/percentages, standard errors in parentheses, *=p<0.05

Firstly, cohort members who had been to private secondary schools were more likely to consistently vote Conservative across four consecutive general elections (1997-2010). In

fact the percentage of individuals casting four consecutive votes for the Conservatives is relatively low for both sectors (less than 1 in 5 amongst fee-payers and less than 1 in 10 amongst state school attendees) with little difference between men and women (see table III below). Nevertheless, at the most recent general election in our database those CMs attending private secondary school were almost twice as likely to vote Conservative compared to their state school contemporaries.

Table III: Percentage distribution of the number of times CM voted Conservative during 1997-2010 by gender and secondary school sector

Men			Women	
% votes	State	Private	State	Private
0	60.1	36.0	64.2	43.5
1	13.3	12.6	13.3	9.1
2	13.0	21.2	10.6	21.1
3	6.1	14.0	5.7	8.6
4	7.4	16.2	6.2	17.7
Total%	100	100	100	100
N	3045	222	3441	209

Note: total sample size 6917 based on the actual values reported for these key items.

Private school attendees also score higher on the mean left-right scale (meaning they are more right-wing). The mean scores are remarkably similar amongst both men and women and the distributions shown in figure II are quite symmetrical demonstrating a fairly even spread of opinion within each sector.

Figure II: Percentage distribution of left-right score by gender, school and degree status

average left right score: high score = right wing.
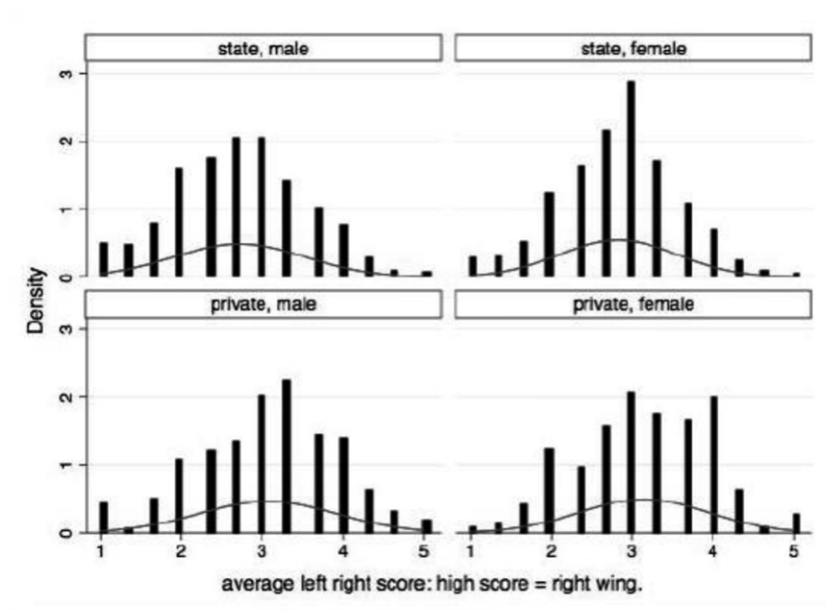
Secondly, amongst the pre-adult 'early life social and cultural' background variables in table II we witness strong differences between state and private secondary school attendees according to social class, parental education and family income where the percentage of parents possessing these advantaged attributes with children in the private sector typically exceed those with children in the state sector by a factor of three for both males and females. Another pre-adult effect relates to the influence of taking a right-leaning newspaper in the family home (reported by the CM at age 16 years and taken to be a proxy for cultural and political values in the home during a CMs childhood). This classification suggests that amongst families whose children attend a private secondary school those taking a right leaning paper exceeds that for state school attendees between 7 and 10 per cent for females and males respectively. Overall, around 64% of all families take a 'right leaning' newspaper [not shown in table II].

Thirdly, state and privately educated children varied in terms of their individual characteristics. In particular, state educated CMs were less likely to be in the highest quintile for cognitive scores at age 5 years compared to those in private secondary schools with

consistent two fold differences for both males and females at this age. This gap opens up to at least a three-fold difference at age 10 years and translates into a similar magnitude of difference when the highest educational qualification at age 42 years is considered. Private secondary school attendees are no more likely to hold right wing views at age 16 years than their state school contemporaries. However, the correlation between the right wing attitude scores at 16 years and those at age 42 years was very weak for the sample as a whole (0.04; 0.04 for men and 0.03 for women). Nevertheless, this association was stronger amongst those CMs who had attended private secondary school (0.10) and even stronger for women from this sector (0.13 compared to 0.07 for men). For those CMs from the state sector, the corresponding correlations were (0.07 and 0.4), (not shown here).

We will now turn to our path analysis beginning with the path analysis of the Conservative vote count followed by the expression of right-wing political attitudes for men and women respectively.

Path Analysis

Figures III through VI contain a set of final path models for each of our outcomes; the count of Conservative votes (Tory) and the score for the expression of economic left-right views (LR_42) as continuous variables and conducted separately for men and women. The direction and magnitude of effects were confirmed under counterfactual analyses (not shown here). We will begin with the interpretation of the pre-adult effects namely; family circumstances, preparatory school attendance or not, childhood cognition scores and teenage political attitudes, followed by allocation and absolute effects namely: private secondary schooling, degree attainment and early destination social class on voting and economic political attitudes in the final models. In order to reduce the complexity of showing all possible temporal paths between variables, any path with a statistically non-significant path coefficient has been suppressed (p>.05). Estimated path coefficients can be interpreted

as associations (positive or negative) showing the amount of movement along a standardized scale. As a result of employing the same set of antecedents for each model, the pre-adult effects convey the same inter-relationships prior to their impact on schooling, degree attainment and early social class destination and their interpretation will therefore not be repeated in what follows. Our interpretation foregrounds voting behaviour (on the basis that actions speak louder than words). For each outcome, we commence with the findings for men and then draw out any key differences between men and women.

Voting Conservative during 1997 to 2010

Table IV below contains the goodness of fit criteria for the final models for men and women which are 'most acceptable' under the conventional criteria described under our analytical strategy above. The values of the fit criteria are also reproduced in the diagrams for convenience. We will now continue to consider the results for men and women separately.

Table IV: Model fit statistics for final models for men and women's number of times voting Conservative in general elections 1997, 2000, 2005 and 2010.

Criteria	Men	Women
RMSEA	0.05	0.05
CFI	0.99	0.99
TLI	0.92	0.93

Figure III: Final model on voting Conservative for men

Tory Voting (1997-2010)
Men

Fit Statisitics
RMSEA: .05
CFI: .99
TFI: .92
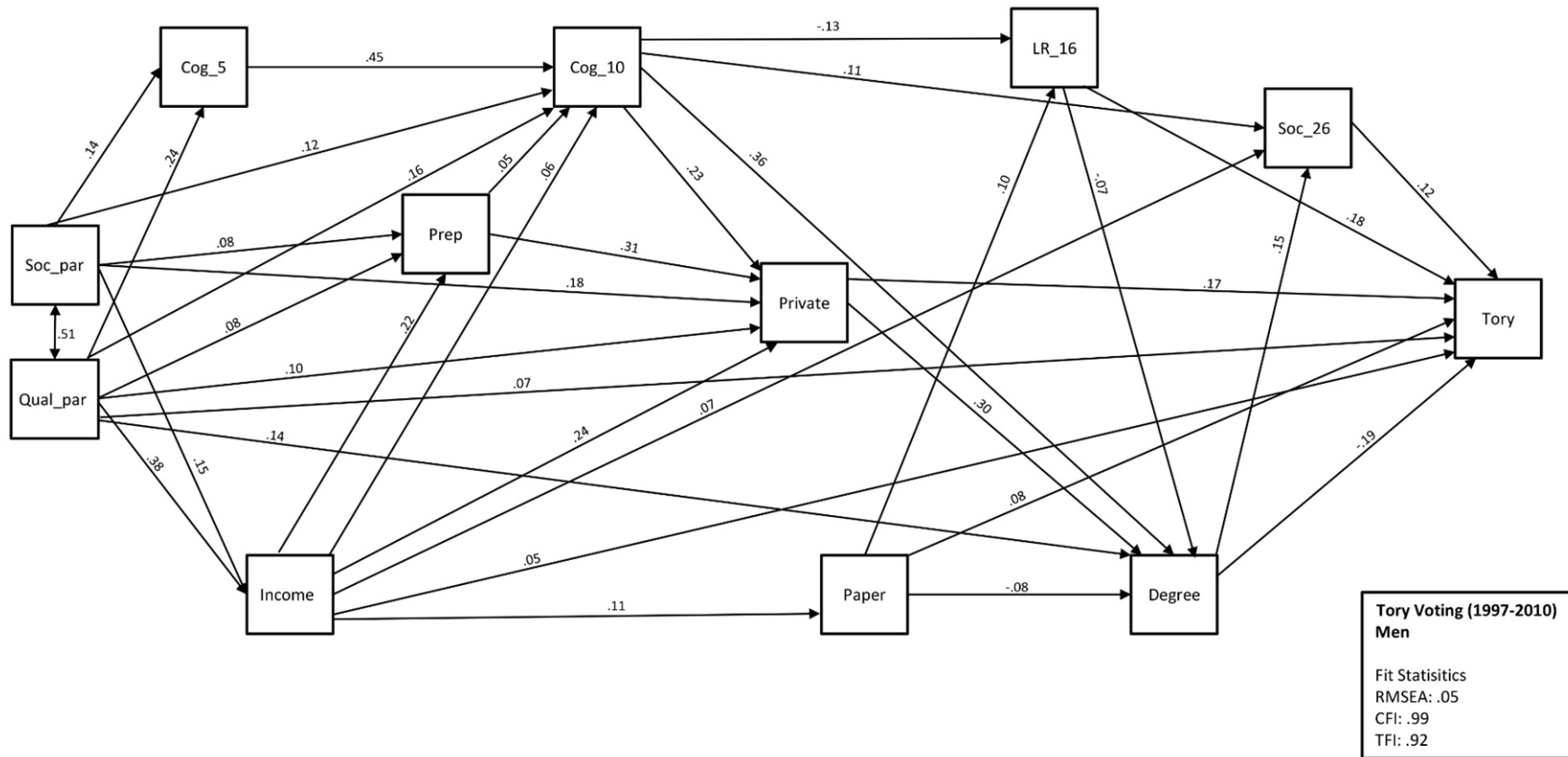
Pre-adult effects

Parental social class and highest educational qualifications are strongly correlated (.51) and have separate and combined effects upon a CMs cognitive achievement at age 5 years and at age 10 years. There is a strong direct path connecting the cognitive achievement scores at age 5 and10 years (.45). Parental social class and highest educational qualification also have fairly strong separate and combined effects upon family income as reported at age 10 years. These three variables all combine to have a direct path to preparatory school (primary) although family income is more influential than social class and education alone (.22 cp.08 and .08 respectively). Family income is also positively related to cognitive achievement at age 10 years (.06), attendance at private secondary school (.24) and the take-up of a right leaning newspaper in the home (.11) which in turn has a direct relationship with the expression of right-wing attitudes at age 16 years. The legacy of newspaper readership in the home can also be seen in terms of its negative relationship with degree attainment (-.08) and voting Conservative in early mid-life (.08). However, there is not a direct path connecting the expression if right-wing attitudes at age 16 years and private schooling. Interestingly, cognitive ability at age 10 years is negatively related to the expression of right-wing views at age 16 years (-.13) but has a strong direct connection with degree attainment (.36) and social position at age 26 years but not with voting Conservative. Unsurprisingly, preparatory and private secondary schooling are directly related (.31).

For women the pre-adult effects are quite similar to their male counterparts but we do see additional direct connections for the role of parental social class on the expression of right-wing attitudes at age 16 years (.06) in addition to that of taking a right-leaning newspaper in the home, also for early social class destination (.05) and an enduring legacy of social advantage upon voting Conservative (.08). Again, the expression of right-wing attitudes at 16 years is independent of private schooling but like the men there is a positive relationship between the expression of right-wing attitudes at 16 years and voting Conservative in mid-life.

Allocation and absolute effects

For men, the receipt of a private secondary school education has positive direct effects on voting Conservative (.17) and degree attainment (.30) whilst degree attainment itself is negatively related to voting Conservative (-.19). In this way possession of a university degree mediates the direct effect of private secondary schooling on the tendency to vote Tory (the total effect is 0.11). Furthermore, degree attainment is also positively related to early social class destination (.15) which in turn is positively related to voting Conservative (.12).

The story for women is very similar to that for men in terms of the direction of effects as illustrated in Figure IV below, but there are some noteworthy differences. The effect of private secondary schooling is relatively stronger than for men in its association with voting Conservative (.30 cp .17) and again holds a positive relationship with degree attainment (.36) which in turn occupies a stronger mediating role on voting behaviour (-.30 cp -.19) than for the men. Again, early social class destination is influenced by degree attainment, which in turn is positively related to voting Conservative.

Figure IV: Final model on voting Conservative for women
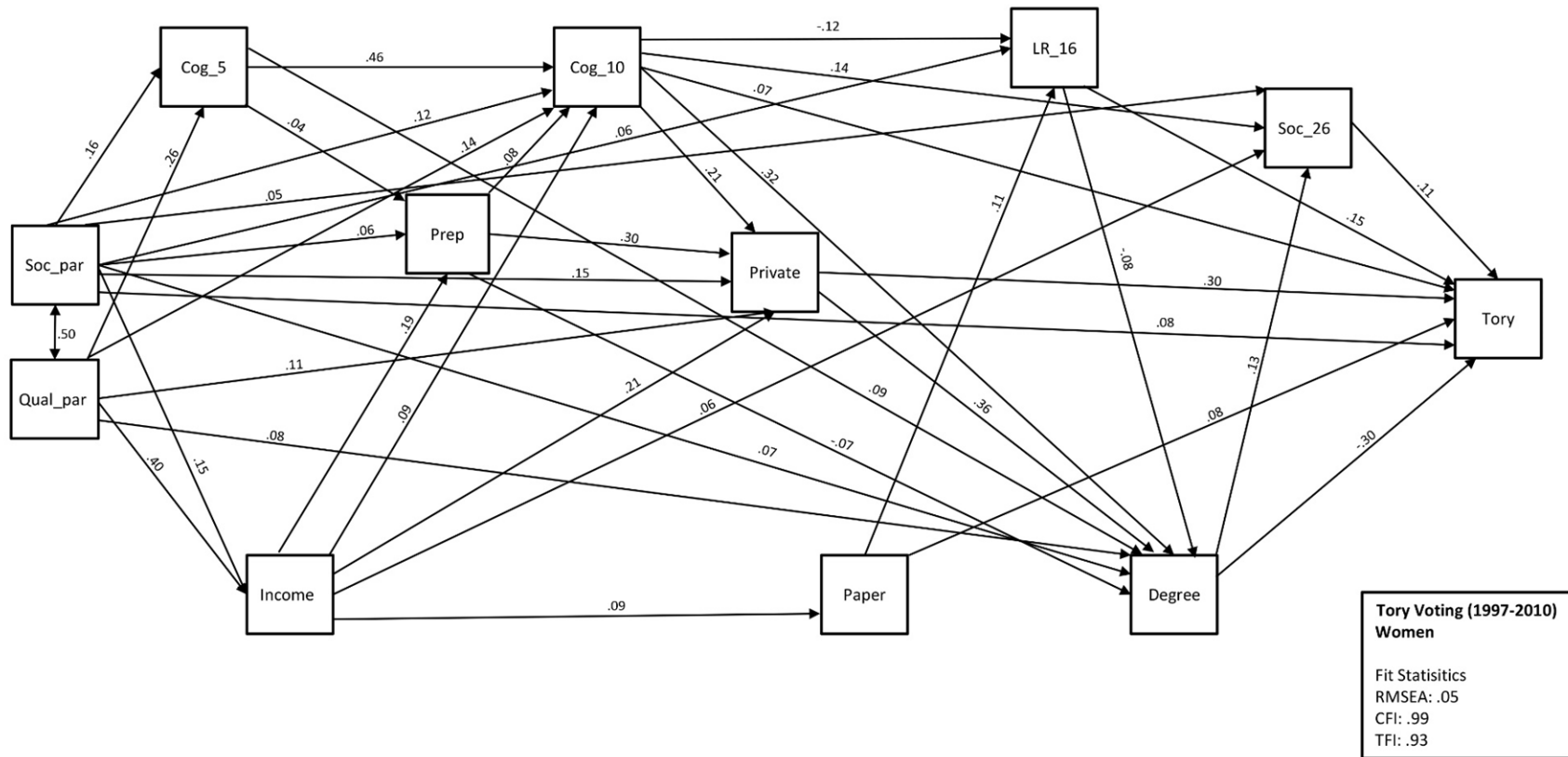
For men and women the interplay of private education, degree status, early social class destination and voting is relatively complex and cannot be disengaged from pre-adult effects. In particular, if having higher educated parents makes someone more likely to go to private school , but also more likely to obtain a degree and an advantaged occupation in early adulthood how do these attributes play out in terms of voting Conservative at age 40 years? We can also pose the same question in terms of the influence of parental social class at birth and to do so we show the estimates of the total effect of parental qualifications and social class upon voting Conservative for both men and women in table V below.

The lasting influence of parental education is significantly stronger for men compared to women, whereas the total effect of social class is relatively stronger for women compared to men, though not significantly so. Parental qualification has a strong direct effect on degree attainment which in turn mediates the direct effect of private secondary education for both sexes (see figures III & IV). For women social class has a lasting direct effect upon the tendency to vote Conservative whereas the opposite is the case for men where social class largely plays an indirect or permeating role on the tendency to vote Conservative.

Table V : Total effects (direct and indirect) of highest parental qualification and social class on voting Conservative (1997-2010) +

	Highest Parental Qualifications		Parental Social Class	
Origin	**Men**	**Women**	**Men**	**Women**
Direct	.067 (2.313)*	-.030 (-1.115)ns	.031 (1.277) ns	.086 (3.657)***
Indirect	.025 (1.460) ns	.041 (2.408)*	.073 (4.554) ***	.048 (3.199)**
Total	.092 (3.855)***	.011 (0.523) ns	.104 (4.741)***	.134 (6.395)***

+Standardized estimates followed by Standardized Estimate/ Standard Error in parentheses.
* p<0.05; ** p<0.01; *** p<0.001; ns+ p<0.10; ns p> 0.10

Tables A.II and A.III in the appendix provide further information on selected specific indirect effects using the 'VIA' command available in MPlus for parental qualifications and parental social class contrasting men and women. Specific indirect effects define the statistical effects

of all possible paths which originate from each background variable via the named variable to the voting outcome.

We will now consider the results for predicting economic left-right attitudes aged 42 years two years following the general election in 2010.

Economic left-right attitudes

The selection of antecedent variables for the analysis of the economic left-right attitude scores corresponds exactly with those included in the voting model. As shown in table VI below both models meet our goodness of fit criteria very well. The path diagrams for the final models are illustrated in figures V and VI.

Table VI: Model fit statistics for final models for men and women's economic left-right attitude scores aged 42-years

Criteria	Men	Women
RMSEA	0.05	0.04
CFI	0.99	0.99
TLI	0.92	0.94

Pre-adult effects

The structural diagrams for figures III and V overlap (similarly for figures IV and VI) prior to each outcome. For men the only pre-adult effect to have a slightly weaker positive relationship with the expression of right-wing political attitudes at age 42 years compared to the voting outcome is the expression of right-wing attitudes at age 16 years. The latter being a narrowly focused score based on attitudes to trade unions and striking rather than the redistribution of wealth, big business and inequality. There is little variation in results for

women when we compare the pre-adult effects of schooling, early social class position, degree attainment on political attitudes as shown in figure 6 compared with figure 4. Where we can detect a difference for women relates to the role of cognitive achievement at age 10 years which in addition to having well-defined paths to private schooling (.21) and degree attainment (.32) and a negative relationship to the expression of right-wing attitudes at age 16 years, there is a direct (albeit modest) relationship with the expression of political attitudes at age 42 years (.07). Given the absence of any mediating effect for degree attainment this could well represent that being a 'bright girl' at age 10 years does not hold a lasting aversion towards the expression of right-wing attitudes some thirty years on.

Figure V: Final model on economic left-right attitudes for men
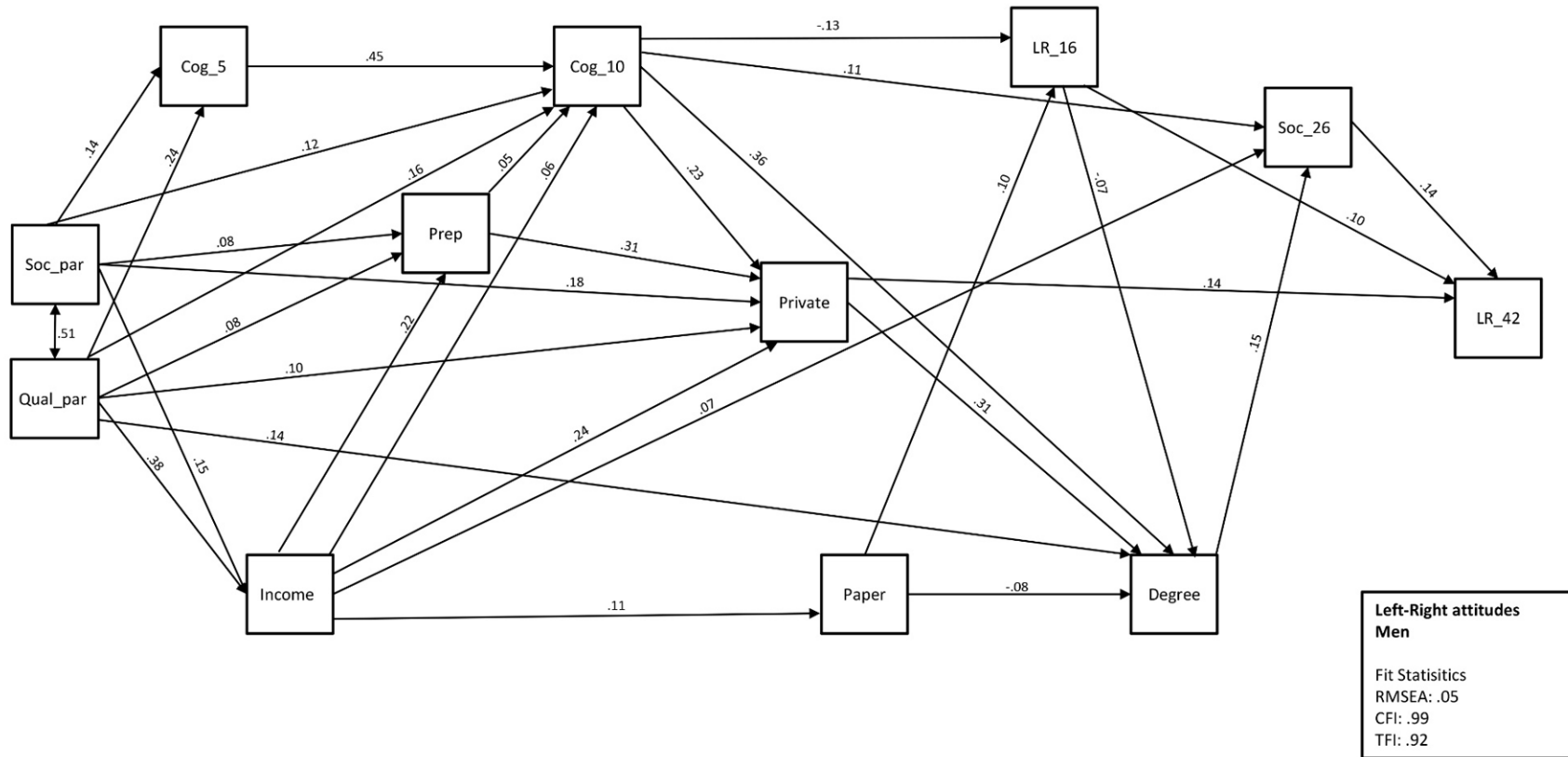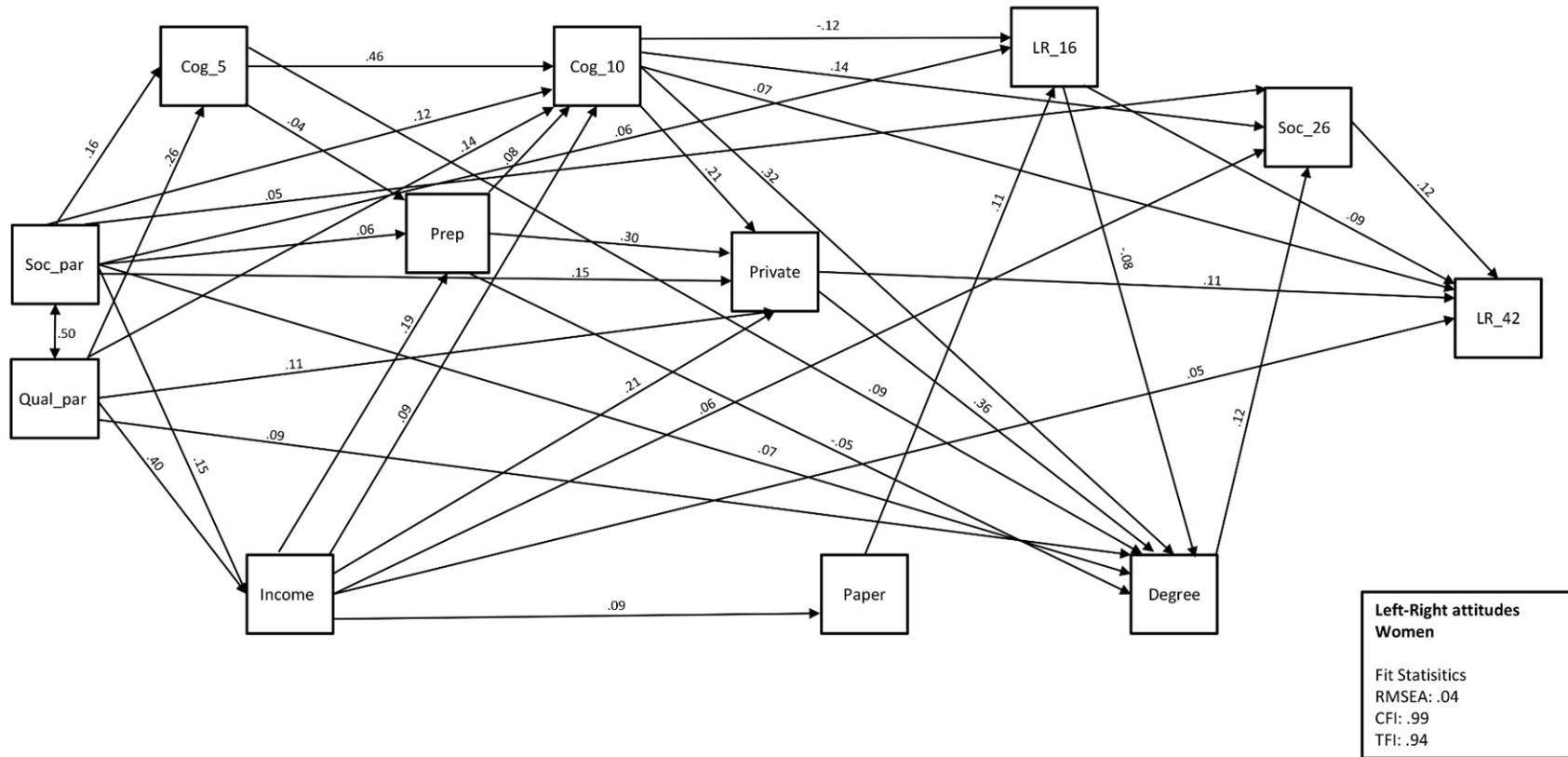

Left-Right attitudes
Men

Fit Statisitics
RMSEA: .05
CFI: .99
TFI: .92

Figure VI: Final model on economic left-right attitudes for women

Left-Right attitudes Women

Fit Statisitics
RMSEA: .04
CFI: .99
TFI: .94

Absolute and allocative effects

Private secondary schooling appears to have a direct effect on the expression of right-wing political attitudes for both men and women (0.14/0.11). In contrast to our finding for the voting model, there is no evidence for the possession of a university degree as being a statistical mediator between attending private secondary school and holding right-wing political attitudes. However, as found for the voting model, degree attainment influences early social class destination which in turn influences the expression of right-wing political attitudes. It would appear that having a university degree holds less import for the expression of right-wing attitudes than it does for voting behaviour. What matters more is attending a private secondary school and having a relatively privileged occupation in early life. As for the voting model the expression of right-wing attitudes at age 16 years has an independent effect on political attitudes in early mid-life. Similarly, for women there is no evidence for the possession of university degree as having a mediating role on the expression of right-wing attitudes at age 42 –years.

The lasting influence of parental education and social class for both men and women is very similar and largely acts indirectly on the expression of economic political attitudes. The magnitude of the respective total effects is similar yet transmitted via their indirect effects than any direct effect (Table VII below).

Table VII : Total effects (direct and indirect) of highest parental qualification and social class on economic left-right attitudes at age 42 years (2012) +

Origin	Parental Qualification		Parental Social Class	
	Men	**Women**	**Men**	**Women**
Direct	-.003 ns	-.002 ns	.042 ns	.027 ns+
Indirect	.058 (4.198)***	.071 (5.374)***	.064 (4.855)	.059 (5.795)***
Total	.055 (2.495)***	.069 (3.714)***	.106 (5.203)***	.086 (4.470)***

+Standardized estimates followed by Standardized Estimate/ Standard Error in parentheses.
 * $p<0.05$; ** $p<0.01$; *** $p<0.001$; ns+ $p<0.10$; ns $p> 0.10$

From Appendix: Tables A. IV & A.V we see that the combined influences of family income, private secondary schooling and early occupational status still matter when it comes to having right leaning attitudes but now we also see the emergence of preparatory schooling and cognitive performance as having a role. Private education at a young age and high cognitive performance scores appear to have formative influences of political attitudes some thirty years on. This is especially so for women.

Concluding Remarks

The way Britain votes has captured the attention of major sociologists and political scientists since World War II (Goldthorpe and Lockwood, 1968, Heath et al., 1985 and Evans and Tilley, 2017). In this paper we have focused upon the specific influence of the receipt of a private (fee-paying) education upon voting for the Conservative Party over four consecutive General Elections during the establishment of 'New Labour' (1997-2005) and the move to a Tory/Liberal coalition in 2010, as well as the expression of economic left-right attitudes in 2012. We have used a unique longitudinal survey spanning eight waves of data collection for individual members of a single cohort born in 1970 (BCS70) and followed up to and including data collection when the cohort members were aged 42 years.

The strengths of our analysis include the use of rich, nationally representative birth cohort data, which has allowed us to control for a wide range of antecedents of private schooling, including socioeconomic and cognitive characteristics as well as a proxy for the political affiliation of the household in the form of the type of newspaper taken in the home. Whereas most previous work on voting and economic left-right political attitudes is based on cross-sectional data or at best a series of continuing or repeat surveys (e.g. the British Election Survey) our investigation focuses on the same individuals assessed from birth to mid-life. We have argued that by adopting a score of voting affiliation across four General Elections, we have a stronger measure of attachment to right-wing values rather than one based on a single election as adopted in other longitudinal studies of political participation. In order to

isolate the effect of private schooling on right-wing voting and adult political attitudes we have taken account of early life influences covering family circumstances, newspaper readership in the family home, cognitive achievement, early destination social class and the expression of left-right attitudes in adolescence. Most recently work by Anders et al. (2020) using a much later born British Cohort Study namely, the Millennium Cohort Study (MCS), has revealed an important association between traditional parental values and their offspring's probability of attending private school over and above family income which suggests an exciting opportunity for future research whereby the views of parents can be incorporated in terms of their influence upon their children's attendance at private school or not as well as their influence on the subsequent voting behaviour of their children as adults.

In providing any interpretation of the strength of attachment amongst the privately educated to the Conservative Party across four General Elections from 1997 to 2010 and the expression of their political attitudes two years beyond the 2010 election, it is important that we take account of the political context that best describes this period. A period of time which Evans and Tilley (2017) describe as one of 'middle class consensus' when 'parties have converged and, more specifically, 'the Labour Party has become less left-wing and more like the Conservatives' (p.117). This description stands in contrast to the previous period of 'working class consensus' (1945-1970) and followed by the 'breakdown of consensus' (1974-1992). These convenient historical descriptions of political climates neatly mark the year of our CMs birth and separate their parents' experience from their own exposure to the decline of working class politics in Britain. It is against this background of social and political change that we set out to examine the extent to which the experience of private education is more or less likely to influence a CMs decision to vote consistently for the Conservative party. If as Evans and Tilley, (2017, page 136) argue that the 1990s can be regarded as a 'critical period' of change when the two main parties grew more alike in terms of "...policy, class appeal, and in their patterns of recruitment by education and social class"

then we might expect a weak or neutral effect of private schooling on voting Conservative during a period described as one of 'middle class consensus'.

Our key finding is that private schooling was directly linked to a greater tendency towards right-wing attitudes and Conservative voting in mid-life for both men and women. Quite how this connection is shaped must be a matter of conjecture or further research. In the British context we must return to the work of Walford and others (1986) and begin with the role of 'masters' and school as an environment that may reinforce right-wing opinion amongst pupils during the formative historical period for our cohort (1975-1988). There is surprisingly little quantitative evidence about the influence of teachers, school environment, ethos and peers and our enquiry is no exception. What we do have are markers of attendance at fee paying school and/or university and to that extent our findings reveal evidence for a complex interplay of both effects on right-leaning attitudes and voting behaviour. Interestingly research on US undergraduate political attitudes suggests that peer influences and the faculty environment (teachers, campus history and ethos) appear to be equally important (Dey, 1996 and 1997). To what extent similar influences hold for those who experience a private school education remains untested from a quantitative perspective. We can conclude that whilst private schooling has an aggregate effect in demonstrating a difference in means towards being right-wing, there are variations in the tendency to vote Conservative and to express right-wing attitudes in mid-life at the individual level which may not simply be as a result of schooling. Interestingly, we can confirm that private schooling was not associated with right wing attitudes in adolescence. This may well be the result of using a narrow measure which upon two items which were solely focussed on the role of trade unions during the time of a teacher's strike in the UK (1986) which would have resulted in less sympathy for trade unions amongst pupils in the state sector at that time. In retrospect it is perhaps ambitious to expect these items to correlate well with the economic views of left-right redistributive justice evaluated 26 years later. Interestingly, children with high cognitive scores at age 10 years were less right wing at 16. However, in the case of women, there

was a direct pathway from high test scores at age ten to being right-wing in mid-life and voting Conservative. But before we are tempted by the conclusion that "*If a woman is not a socialist by the time she is 20, she has no heart. If she is not a conservative by the time she is 40, she has no brain*"[iii], we must take on board the fact that the relationship with cognition is complex, with multiple indirect pathways. High cognitive scores make respondents more likely to get a university degree, which in turn is linked to a lower likelihood of voting conservative for both sexes, but is not directly linked to left-right attitudes. Gaining a degree is in turn related to social class attainment at age 26, which predicts both right wing attitudes and voting for the Conservative Party. We could interpret this as suggesting that the indirect effect of educational attainment via occupational attainment implies that the self-interested individual will side with the better off in society, while the direct influence of a university education in itself makes Conservative voting less likely, potentially due to an increased acceptance of social diversity (Evans, 2002) and a dislike of historically illiberal Conservative policies, rather than due to economic left-right views, which are not directly affected by education.

Finally, our analysis provides confirmatory evidence that private schooling has a direct effect on voting Conservative and the expression of right-wing attitudes amongst the UK's forty-something's. The effect of private schooling on voting Conservative or the expression of right-wing attitudes is neither overwhelming nor indicative of a form of social apartheid (Seldon, (2008)). Nevertheless, over a period of time when both Conservative and New Labour moved closer together in terms of their political agendas to remain loyal to the Conservatives might suggest a deep ideological attachment to right-wing values amongst a relatively small minority. Given this convergence of left and right it could be argued that this finding is quite persuasive. What the analysis clearly demonstrates is that for this cohort born in 1970 that the exposure to private schooling in the presence of other key (measured) influences is likely to generate more votes for the Conservatives in the four general elections compared to those who were educated in the state sector.

7241 words

Appendix

Table A I: List of Auxiliary variables used in the multiple imputation procedure

- Age of mother 1st birth (age 0)
- Age mother left full-time education (age 0) (range: 7-31, includes 0=never at school, 99=education not yet completed) (or binary: 0=minimum, 1=extended)
- Age father (if present) left full-time education (age 0) (range: 6-38, includes 0=never at school, 99=education not yet completed) (or binary: 0=minimum, 1=extended)
- Birthweight: weight of CM when born (grams) (age 0): 0=2515 + grams, 1=less than 2515 (low birthweight)
- Overcrowding: number of people in CM home / number of rooms in the home (excluding kitchens and bathrooms) = person per room ratio (age 5) (range .07-6)
- Home ownership: 0=rented/other, 1=mortgage/owned outright (age 5)

- Whether CM has a Grade A-C English O'level/GCSE or Grade 1 CSE (age 16, 30, 34): 0=no, 1=yes
- Whether CM has a Grade A-C Math O'level/GCSE or Grade 1 CSE (age 16, 30, 34): 0=no, 1=yes
- Derived score from all grades achieved in public examinations at age 16 (Grade A = 7, Grade 5 CSE = 1) (age 16): (range: 0-99)
- Highest grade of A'levels obtained (age 30, 34)" 0=none, 1=DE grade only, 2=1-2 A-C grades, 3=3+ A-C grades)
- Cognition at 16: A standardised score from a Principal Components Analysis (PCA) of five assessment scores completed by study members at age 16. The scree plot confirmed the presence of a single component where the first unrotated principal component accounted for 64% of the total variance. The factor loading of each of the tests on this component was 0.75 for Vocabulary and Reading, 0.73 for Arithmetic, 0.53 for Spelling and 0.45 for Matrices. Cronbach's alpha for these five age 16 tests was strong, α = 0.86 (standardised scores), indicating there was very good internal consistency between the tests. (Parsons, 2014).

Table A II: Total effect of a parent's highest educational qualification on voting Conservative for men and women for selected indirect effects using the 'via' command in MPlus.

	Men		Women	
	Std. Est	St Est./S.E.	Std. Est.	St Est./S.E.
Highest parental qualification				
Total	.092	3.855***	.011	.523 ns
Total direct	.067	2.313*	-.030	-.1.115 ns
Total indirect	.025	1.460 ns	.041	2.408*
Via family income	.047	5.514***	.039	4.796***
Via private secondary schooling	.060	3.517***	.014	4.582***
Via left-right attitudes age 16 years	-.010	-1.776 ns+	-.009	-1.767 ns+
Via degree status	-.066	-4.317***	-.078	-5.614***
Via job status age 26 years	.017	4.181***	.016	3.968***

Note: The estimates of specific indirect effects are not necessarily mutually exclusive and do not simply add up to the global estimate of indirect effects of parental qualifications on voting Conservative (see Table II Kiernan & Huerta, 2008). The tables only show selected indirect effects which are statistically significant at or below the 10 per cent level. Formally,

* p<0.05; **p<0.010; ***p<0.001; ns+ p<0.10; ns p> 0.10.

Table A III: Total effect of a parental social class on voting Conservative for men and women for selected indirect effects using the 'via' command in MPlus.

	Men		Women	
	Std. Est	St Est./S.E.	Std. Est.	St Est./S.E.
Parental social class				
Total	.104	4.741***	.134	6.395***
Total direct	.031	1.277 ns	.086	3.657***
Total indirect	.073	4.554***	.048	3.199**
Via family income	.019	4.560***	.015	4.182***
Via private secondary schooling	.058	3.367**	.045	3.371**
Via left-right attitudes age 16 years	.014	2.105*	.009	1.926ns+
Via degree status	-.027	-3.532***	-.059	-5.116***
Via job status age 26 years	.011	2.928*	.014	3.832***

* p<0.05; **p<0.010; ***p<0.001; ns+ p<0.010; ns p> 0.010

Table A IV: The total effect of a **parent's highest educational qualification** on economic left-right wing attitudes for men and women for selected indirect effects using the 'via' command in MPlus.

	Men		Women	
	Std. Est	St Est./S.E.	Std. Est.	St Est./S.E.
Highest parental qualification				
Total	.055	2.495***	.069	3.714***
Total direct	-.003	ns	-.002	ns
Total indirect	.058	4.198 ***	.071	5.374***
Via family income	.035	4.351***	.039	4.530***
Via Cognition age 5 years	.012	2.351*	.013	2.656**
Via preparatory schooling	.007	2.164*	.025	3.441**
Via private schooling	.047	2.518*	.004	1.840 ns+
Via left-right attitudes age 16 years	-.006	-1.652 ns+	.044	2.759**
Via degree status	ns	ns	ns	ns
Via job status age 26 years	.021	5.004***	.017	4.398***

* p<0.05; **p <0.010; *** p<0.001; ns+ < 0.10 ns p>0.10.

Table A. V The total effect of a **parental social class on economic left-right wing attitudes** for men and women for selected indirect effects using the 'via' command in MPlus.

	Men		Women	
	Std. Est	St Est./S.E.	Std. Est.	St Est./S.E.
Parental social class				
Total	.106	5.203***	.086	4.470***
Total direct	.042	ns	.027	ns
Total indirect	.064	4.855***	.059	5.795***
Via family income	.014	3.845***	.039	4.530***
Via Cognition age 5 years	.007	2.231*	.013	2.656**
Via Cognition age 10 years	ns	ns	.025	3.441**
Via Preparatory schooling	.005	2.010*	.004	1.840 ns+
Via private schooling	.045	2.609**	.044	2.759**
Via left-right attitudes age 16 years	.007	1.915 ns+	-.005	-1.699 ns+
Via degree status	ns	ns	ns	ns
Via job status age 26 years	.014	3.444**	.017	4.398***

* p<0.05; **p <0.010; *** p<0.001; ns+ < 0.10; ns p>0.10.

Notes

[i] Cohen (1992) describes effect sizes as 'small' at around 0.10, 'medium' (at around 0.30) and 'large' if > 0.50.

[ii] Alleged quote by Churchill also attributed to Disraeli, Shaw and Bertrand Russell. According to Carruthers earliest known version attributed to Guizot (19th century historian) see https://katecarruthers.com/2005/02/alleged-quote-by-churchill-on-being-a-socialist-or-conservative/. Feminised here to emphasise our findings (accessed 24/8/17 at 16.51)

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