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# SOCIAL MOBILITY IN BRITAIN: AN EMPIRICAL EVALUATION OF TWO COMPETING EXPLANATIONS

### **PETER SAUNDERS**

Abstract Existing data on social mobility in Britain demonstrate a disparity of up to 4:1 in the relative chances of children from different social class backgrounds ending up at the top or bottom of the occupational class system. In an earlier paper, it was argued that such disparities should not necessarily be seen as the result of social advantages or disadvantages associated with different class origins, for they are also consistent with a model of meritocracy in which class differentials in average levels of ability are reflected in the class destinations achieved by people from different social backgrounds. That paper has been criticised, both analytically and empirically, and this paper addresses some of these criticisms through an analysis of data from the National Child Development Study. The analysis shows that ability is an important factor influencing social mobility chances, and through a series of logistic regression and multiple regression models, it demonstrates that meritocratic factors (individual effort and ability) outweigh social advantage/ disadvantage factors in predicting the occupational class achieved by over 6,000 men and women by age 33. The paper ends by answering the analytical criticisms made against the earlier paper.

Key words: social mobility, meritocracy, social class, intelligence, social inequality, British society.

Why are children born into working-class homes less likely to achieve middleclass jobs than their contemporaries born to middle-class parents? In this paper, I shall explore and evaluate two possible explanations.

The first, and for sociologists the more familiar, emphasises patterns of *social advantage/disadvantage* associated with different class backgrounds (let us call this the 'SAD' thesis). Middle-class children are said to enjoy both material and cultural advantages which markedly (and, in the view of many, 'unfairly') enhance their chances of educational and occupational success. They receive more encouragement from their parents, they attend better schools, they learn from an early age middle-class ways of thinking, speaking and behaving, their parents can mobilise contacts and networks to place them in good jobs, and so on. The explanation for why they do better on average than working-class children therefore lies in differences in their social environments – their homes, their schools, their peer groups.

The alternative explanation – the 'meritocracy' thesis – emphasises differences in the aptitudes and characteristics of individuals achieving varying degrees of success. Compared with other systems of social stratification, class

systems are relatively open and positions are in principle filled on merit by means of competition. To the extent that a given society really is meritocratic, the more able and hard-working individuals in each generation will come to fill the higher positions in the occupational hierarchy. These bright, hardworking and successful parents will then often produce children with the same qualities who go on to emulate or surpass the achievements of their parents in the next generation. Thus, in a meritocracy, we should expect to find that middle-class children tend to do better than working-class children, not because of any social advantages bestowed upon them by their favoured environment, but simply because they are more likely to have inherited (genetically and through socialisation) the kinds of talents and personal qualities which are required in order to achieve success and which their parents themselves exhibited.

The meritocracy thesis has received little support from sociologists working on social mobility in Britain. Finding a clear statistical association between class origins and class destinations, researchers have tended to *assume* that this is the product of social advantage and disadvantage, and have ruled out the possibility that it may rather (or also) be due to differences in average levels of ability and/or motivation among individuals born into different classes. In an earlier paper (Saunders 1995), I developed a model of social mobility under conditions of 'pure' meritocracy in order to test this widespread assumption.

The model predicted the patterns of social mobility which would have occurred in Britain had class recruitment in each of two generations been based solely on individual ability, assuming that ability within each generation is normally distributed, and that ability scores regress towards the mean. The results indicated that the actual mobility rates recorded in John Goldthorpe's 1972 and 1983 surveys (Goldthorpe 1987) were broadly consistent with the pattern which we should expect to find had these individuals been recruited into social classes purely on the basis of their talents and without regard to their social origins.<sup>1</sup> The paper concluded from this that the meritocracy thesis has not been invalidated and that it remains a plausible alternative to the SAD thesis as an explanation for the tendency of middle-class children to succeed more than working-class children in the competition for middle-class jobs.

The paper did *not* argue that class recruitment in Britain really *has* been based on meritocratic principles – only that the evidence regarding outcomes is consistent with the thesis that it *could* have been. It followed that the rejection of the meritocracy thesis by sociologists like Goldthorpe was unwarranted and premature on the basis of the evidence available. In order to evaluate the relative contribution to class recruitment of social background factors, on the one hand, and of individual attributes and characteristics, on the other, we would need to know about the ability and motivation levels of individuals who move up and down the class system, but recent research on social mobility in Britain has simply failed to collect such evidence.

Since it was published, my paper has attracted some criticism (e.g. Egerton & Savage 1996, Lampard 1996, Marshall & Swift 1996). These critics take issue with the way the model was constructed and the assumptions entailed in my argument and analysis, and they suggest that available evidence renders my hypothetical argument implausible. In this paper I first consider issues of evidence by presenting some new findings which enable us empirically to evaluate the SAD and meritocracy theses, and I then conclude by addressing some of the specific criticisms which have been made regarding my earlier arguments.

### The National Child Development Study Dataset

The data on which my analysis is based derive from the British National Child Development Survey (NCDS), a longitudinal study based on an initial panel of 17,414 children born during one week in 1958. These children, and where appropriate their parents, their schools and their eventual partners, have been revisited five times since then, the last occasion being in 1991 when they were aged 33. By then, there were 11,397 individuals remaining in the panel on whom at least some information was collected by means of interviews and questionnaires. Many of these, of course, were not in full-time employment in 1991 and could not therefore be allocated to a particular social class position on the basis of their own current occupation.<sup>2</sup> Given my concern in this paper to explain the class destinations achieved by the individuals in the panel by age 33, these cases have been dropped from the analysis so as to focus only on those occupying an unambiguous class location at that time. Most of those dropped are either part-time workers (45 per cent) or home workers (37 per cent) while 10 per cent were unemployed in 1991 and the rest were students or were unable to work. Because more women than men are to be found in part-time employment or in full-time housework, a disproportionate number of women have been dropped from the analysis, and this leaves a final sample of 6,795 cases<sup>3</sup> divided into males and females in a ratio of 7:3. In later work I shall return to consider those - particularly 'housewives', part-time workers and the unemployed - excluded from the present analysis.

Panel wastage between 1958 and 1991 has inevitably skewed the representativeness of the remaining panel members as regards their class of origin, for drop-outs are drawn disproportionately from those with fathers in unskilled manual occupations. This skew is also reflected in the class of

indicates the need for caution when interpreting the results of our analysis. This applies particularly to our overall estimates of *rates* of social mobility – class IV/V inter-generational stability, for example, will almost certainly be under-estimated given the likelihood that those born into and remaining in the semi-skilled and unskilled manual working class have dropped out of the panel in disproportionately large numbers. Panel wastage should be less of a problem, however, when analysing the likely *causes* of upward or downward mobility, for there is no reason to believe that the factors associated with individual mobility among those who have dropped out of the panel will be any different from those operating among the mobile individuals remaining within it. Given that my aim in this paper lies more with explaining mobility than with estimating its overall extent, panel wastage should not therefore represent a major problem.

More of a problem, perhaps, is the fact that we are dealing with 33 yearolds, a relatively young cohort. Citing research based on the OPCS 1981-91 longitudinal survey, Noble (1995) has shown that considerable social mobility takes place after this age (e.g. 39 per cent of the men who were upwardly mobile during this period were over the age of 35, as were 77 per cent of the men who experienced downward mobility). Clearly we cannot assume that the class position achieved by the NCDS panel members at age 33 is equivalent to their eventual class of destination, for considerable movement between classes may well continue into the future. Not only does this mean that our estimates of the overall rate of movement are likely to be deflated, but it is also possible that the factors promoting movement earlier in life may be less important in influencing later career shifts. Against this, however, the advantage of analysing a young cohort like this is that we are looking at the products of relatively recent developments in post-war British history. Unlike many of the men in Goldthorpe's surveys, for example, we are focusing here on people who were born after the educational and welfare reforms of the post-Second World War period, who entered the labour market during the inauspicious economic downturn of the 1970s, and who developed their careers during the 'Thatcher years' of the 1980s. This group is thus an ideal cohort against which to assess the extent to which post-war Britain has become a meritocracy.

# Rates of Social Mobility Among NCDS Panel Members

The occupational data on panel members at age 33 (sweep 5) are coded in NCDS on a number of different schemata, but data on panel members' class of origin (i.e. fathers' and mothers' social classes through sweeps 1 to 3) are restricted to the OPCS classification, and this is therefore the schema used here to analyse social mobility.

For the purposes of this analysis, OPCS classes have been coded into three

strata – the middle class (classes I and II), the semi-skilled and unskilled working class (classes IV and V), and an intermediate class (classes IIIN and IIIM) – which are ranked in a hierarchy. Goldthorpe (1987) argues that the only clear class boundary in social mobility analysis is that between the middle class (or what he calls the 'service class') and the rest, but this seems unnecessarily restrictive. Whether we focus on market situation (e.g. pay and employment security), on work situation (e.g. autonomy and authority relations within the workplace), or on status situation (e.g. occupational prestige or consumption patterns such as home ownership), the average differences between classes IIIM/IIIN and IV/V are arguably no less marked than those between IIIN/IIIM and class I/II. Routine white-collar and skilled manual workers cannot clearly be ranked against each other on criteria like these, but for as long as we continue to draw boundaries between class categories, it seems legitimate to have distinguished the 'class situation' of this stratum from the distinct 'class situations' of those above and below them.<sup>5</sup>

On this three-class schema, 52 per cent of the NCDS panel had been intergenerationally mobile. This figure is the same whether we compare the social class they had achieved by age 33 with the social class of their fathers, or with the higher social class of either the mother or the father. Table 1 shows that over one-third of middle-class (I/II) children had been downwardly mobile, though few had fallen below class III. Among lower working-class (IV/V)

		Child's class age 33	
Class origin	I/II	III	IV/V
(a) percentage f	rom different class origins o	arriving at each class destina	tion (read across):
I/II	63 (59)	31 (33)	7 (8)
ш	37 (37)	49 (49)	14 (15)
IV/V	28 (27)	49 (51)	23 (22)
(b) percentage in	n each class from different	class origins (read down):	
Ì/ÍI	42 (46)	20 (25)	14 (21)
III	46 (44)	60 (57)	56 (55)
IV/V	12 (10)	20 (17)	30 (24)

Table 1				
Intergenerational Social Mobility Rates Based on I	Father's Class*			

\*Parental class is shown in parentheses. Social class of fathers in 1974 (sweep 3), when the children were aged 16, is a baseline which enables comparison with the Goldthorpe survey. In analysis later in the paper, however, class of origin is measured by the higher social class of either the mother or the father in 1974 (or by the class of father in 1969 – sweep 2 – in those cases where neither the mother nor father was employed in 1974), a measure I call 'parental class'. This table includes data based on both of these measures. The figures are, in fact, broadly similar irrespective of which basepoint we adopt.

children, a quarter had been upwardly mobile into the middle class while half had moved into class III. Less than half of those achieving middle-class entry had come from middle-class origins, and less than a third of those entering class IV/V had started out there (although, as noted earlier, this may in part be a function of higher panel wastage rates among inter-generationally stable class IV/V respondents).

These overall patterns are broadly consistent with those reported for the two Goldthorpe surveys and by Payne (1987) in his Scottish study. In all cases, around half of the population is found to have undergone social mobility (measured on a three-class scale), and upward mobility into the middle class is common, even among those starting out at the bottom, while downward movement across the whole range is much less in evidence.

The NCDS data are not, however, entirely consistent with Goldthorpe's results, as we can see by comparing *relative* measures of social mobility. The OPCS and Goldthorpe class categories correspond fairly closely as regards classification of professionals at one end of the class system and semi-skilled and unskilled occupations at the other (see Marshall *et al.* 1988:27), so it is meaningful to compare disparity ratios in mobility chances of those in OPCS classes I/II and IV/V in the NCDS panel with the ratios reported by Goldthorpe for movement between the service class and the manual working class in his survey.

Table 2 shows that children born to middle-class fathers are just over twice as likely to have achieved middle-class positions by the age of 33 as compared with children born to fathers in semi-skilled or unskilled occupations, and they are about three and a half times less likely to end up in semi-skilled or unskilled jobs than those with fathers in classes IV and V. It is difficult to square the first of these figures – a disparity ratio of just over 2:1 - with Goldthorpe's figures of around 4:1 (in the 1972 survey) and 3:1 (in the 1983 survey) unless we conclude that the relative chances of working-class success have been improving over this period. It is true that uneven rates of panel wastage mean we must exercise caution in interpreting these results, for any under-representation of class IV/V non-movers will tend to exaggerate the

Social Mobility Disparity Ratios			
<u></u>	Relative chances of being in:		
	Class I/II	Class IV/V	
Father class I/II	2.21	set at 1	
Father class III	1.29	2.18	
Father class IV/V	set at 1	3.47	

Table 2

Source: NCDS data.

extent of upward mobility from this class. Against this, however, we are using a much tighter definition of the 'working class' than that on which Goldthorpe's disparity ratios have been calculated, for class IIIM employees are here classified as 'intermediate' rather than 'working' class, and this would be expected to produce *higher* disparity ratios in the NCDS panel than those reported by Goldthorpe. It seems, therefore, that the trend towards a reduction in disparity ratios for middle-class entry (which was documented by Goldthorpe himself between 1972 and 1983) is continuing, although this conclusion remains tentative.<sup>6</sup>

# Does Ability Explain Anything?

At ages 7, 11 and 16, the children in the NCDS survey were tested for both maths and reading ability. In addition, at the age of 11 they all sat a (non-standardised) general ability test consisting of eighty verbal and non-verbal items. The scores attained on this general ability test are strongly predictive of their performance on the various maths and reading tests.<sup>7</sup> The general ability test results therefore provide us with a good indicator of a range of talents and aptitudes, including literacy and numeracy, which were likely to prove crucial both to academic success and to later career development.

Unsurprisingly, children's scores on the ability test correlated with the social class of their parents (r=0.24), and there was a clear and consistent gradient in mean test scores between those with fathers or mothers in class I/II and those whose parents were in classes IV and V. This could be explained by the 'environmental' advantages enjoyed by middle-class children relative to working-class children in their formative years, or it could be explained by differing levels of 'natural' intelligence being passed from parents to children in the different social classes. In all probability, both factors are relevant (for a useful review of the current state of knowledge on the relation between IQ scores, environmental influence and genetic hereditability, see Neisser *et al.*, 1996).<sup>8</sup> For our purposes, it does not matter whether this correlation is due more to nature or to nurture, for our concern is not to explain why children from different class backgrounds have different average levels of ability, but is rather to analyse whether measured ability has an effect on class destinations independently of class origin.

The second part of Table 3 is critical for analysing this question. This demonstrates that test scores correlate much more strongly (r=0.37) with the social class achieved by the children twenty-two years after taking the test, than they do with the class of their parents around the time that they sat the test. Again, there is a clear gradient in scores ranging from those entering class I/II to those entering class IV/V, but the higher correlation is due mainly to a much more marked association between ability and class at the lower end of the class system.

 Table 3

 Mean Ability Scores by Class of Origin (Higher Parental Class) and Class of Destination

Class of origin	Mean test score*	SD	Class of destination	Mean test score*	SD
I/II	50.6	14.3	I/II	51.6	13.7
Ш	44.0	15.0	III	42.2	14.7
IV/V	40.2	15.3	IV/V	36.3	14.8
r=0.24 ( <i>l</i>	V=5,565, missii	ng=1,230)	r=0.37 (N=5	,826, missing=96	59)

\*Mean test score for total sample = 45.4 on 80 items, standard deviation (SD) = 14.3.

This result is consistent with the meritocracy thesis, but not with the SAD thesis. The SAD thesis would predict correlations of equal strength between class origin and ability and class destination and ability, for, in this view, ability differences are simply a function of initial class advantages and disadvantages and they should play little or no independent role in selecting individuals for class membership. The meritocracy thesis, by contrast, suggests that able children will be selected for higher positions regardless of their social background, and it therefore predicts that any association between class of origin and ability should be weaker than that between ability and class of destination. This is indeed what we find in Table 3. The particularly strong association between low ability and low class destinations indicates that bright children from all class origins are tending to avoid class IV/V entry and are to some extent being selected for higher positions.

Table 3 therefore demonstrates that ability does play some part in influencing class destinations independently of its association with class origins. But could this explain a disparity ratio of 2.2:1?

By age 33, 43 per cent of the NCDS sample were in class I/II occupations. The score achieved on the ability test by the top 43 per cent of children was 49 or above. If class positions were filled purely on the basis of measured ability, then a score of 49 would represent the minimum threshold for entry to the middle class.

In fact, only 62 per cent of those entering class I/II scored this highly. Put crudely, 38 per cent of those arriving in class I/II were not bright enough to be there! Focusing on the less able entrants to class I/II (i.e. those scoring less than 49), we find that twice as many (32 per cent) came from class I/II backgrounds as from class IV/V backgrounds (17 per cent). Looking at the data in a different way, and focusing on the lowest quartile of ability across the whole sample, we find that 41 per cent of low ability children from class I/II origins still managed to gain entry to class I/II as compared with 21 per cent of low ability children from class IV/V origins. Low ability middle-class

children are therefore twice as likely to succeed as low ability children from semi-skilled and unskilled manual worker homes, although even among the latter, around one-fifth still arrive in the middle class despite low ability scores at age 11. It is clear from this that low ability is not necessarily a barrier to later occupational success. Conversely, high ability does appear to offer a reasonable guarantee against failure, for only 5 per cent of children in the top ability quartile ended up in class IV/V while 65 per cent of them made it to class I/II.

Ability, then, is part of the explanation for why middle-class children are more successful than working-class children, but it is not the full story. If we calculate a modified set of disparity ratios dividing the sample into those with an ability score high enough to warrant entry to class I/II and those scoring below this threshold point, then we find that, compared with middle-class children, class IV/V children improve their chances of entering class I/II from approximately 2.2:1 to 1.7:1 once we control for ability. The relative chances of lower working-class and middle-class children ending up in class IV/V are, however, virtually unaffected when we add a control for ability, remaining at around 3.5:1. It seems from this that the barriers against bright working-class children succeeding are quite low, but that the safeguards against failure enjoyed by dull middle-class children are still quite strong. Meritocracy is much more in evidence when we look at able children moving up than when we look at less able children moving down.

### Evaluating the Meritocracy and SAD Theses

Ability is only one part of the meritocracy thesis. The other key element is 'effort' (Young 1958:94), which involves both the desire to succeed and a commitment to behaviour (e.g. hard work) that is thought likely to bring success. In a meritocratic society, bright individuals will only succeed if they are motivated to do so, and people of lesser ability may still achieve relatively high positions if they are committed, motivated and hard-working. A rigorous test of the meritocracy thesis thus requires adequate measures of effort as well as ability.

From among the various potential indicators available in the NCDS survey, three (confirmed by factor analysis) provide the strongest measures of 'effort': (a) a motivation scale based on attitude questions answered by the children at age 16 (MOTIVATION); (b) an 'absenteeism' factor based on school truancy records and reports of trivial absences (ABSENTEEISM); and (c) a 'job commitment' factor based on answers to three attitude questions at age 33, all of them measuring the extent to which respondents thought that people should stick at their jobs even if they found them unsatisfactory (WORK ATTITUDES).<sup>9</sup> Taken together with the ability scores at age 11 (ABILITY), these represent the major indicators for testing the meritocracy thesis.

What, then, are the comparable indicators for evaluating the SAD thesis? One, clearly, is PARENTAL CLASS which is measured according to the social class of father or mother when the child was aged 16, whichever is the higher. Linked to this is the educational level of the parents, for not only will this affect the 'cultural capital' available in the home, but it may also influence the values which parents have and the decisions they make regarding the importance of a good education for their children. For fathers (FATHERS EDUCN) and mothers (MOTHERS EDUCN), educational level is a dichotomous variable based on whether or not they completed their schooling at the minimum leaving age. Other variables and factors measuring possible class advantages/disadvantages associated with social background include the higher class of either grandfather (GRANDPARENTS), a measure of OVER-CROWDING in the home based on persons per room through sweeps 1, 2 and 3, and a measure of lack of basic amenities in the home through sweeps, 1, 2 and 3 (HOME AMENITIES).

Also related to the SAD thesis are a number of variables and factors associated with the education of the child and the support it received from the parents. PRE-SCHOOL EDUCATION indicates whether or not children attended any pre-school or nursery education facility before the age of 5, and TYPE OF SCHOOL distinguishes those receiving a private education at 16 from those attending state schools. FATHER READ and MOTHER READ indicate the degree to which father and mother respectively read to the child at age 7, and PARENTAL INTEREST is a measure, taken at age 11, based upon the school's assessment of the interest demonstrated by the father and mother plus evidence on whether they had made contact with the school during the previous twelve months. There is also a factor, PARENTAL ASPIRATIONS, which is based on the parents' wish (expressed when the child was 11) that the child should remain at school beyond the minimum leaving age, together with their hope that it should go on to some form of further education. Finally, the sex of the child is measured by GENDER.<sup>10</sup>

Taken together, these thirteen measures cover a large number of the material and cultural advantages/disadvantages which sociologists down the years have identified in an attempt to explain why class origins should be expected to influence educational and occupational success later in life. Not everything, of course, has been included, but these measures do offer a fair basis for testing most of the fundamental claims on which the SAD thesis rests.

# Working-Class Success and Middle-Class Failure

We can began an empirical evaluation of the meritocracy and SAD theses by considering why some working-class children succeed when others do not, and why some middle-class children fail when others maintain or enhance the position achieved by their parents.

Table 4
A Logistic Regression Model Predicting Class IV/V Children Entering Class
I/II Against Those Remaining in Class IV/V

Step	Variable	% Correct	Final R	Final exp (B)
0		58.5		
1	ABILITY	69.6	+0.26	1.06
2	MOTIVATION	73.0	-0.16	0.90
3	WORK ATTITUDES	74.1	+0.15	1.59
4	GENDER	75.7	+0.10	2.05
5	GRANDPARENTS	76.0	-0.09	0.63

Notes: Variables not included in the equation are: MOTHER READ, FATHER READ, MOTHERS EDUCATION, FATHERS EDUCATION, PRE-SCHOOL EDUCATION, TYPE OF SCHOOL, HOME AMENITIES, OVERCROWDING, PARENTAL ASPIRATIONS, PARENTAL INTEREST, ABSENTEEISM. In both Tables 4 and 5, missing data have been replaced by group means based on gender. Variables are entered in the model through Forward Stepwise selection (criterion for entry is p < 0.05) and are assessed for removal using the Likelihood Ratio (LR) Test based on p > 0.10. ABILITY is measured by raw scores on an 80 items ability test (high scores=high ability). MOTIVATION is an NCDS derived factor measuring scores on an attitude scale where higher scores indicate lower motivation. WORK ATTITUDES is measured by attitude scores on three items with low scores indicating a concern to stay in employment irrespective of the quality of the job. GENDER is a dichotomous variable with males coded 0 and females coded 1. GRAND-PARENTS is coded to the higher class of either grandfather: 1=I/II, 2=III, 3=IV/V. In Table 5, both MOTHERS EDUCN and FATHERS EDUCN are dichotomous coded 0 if the parent finished school at the minimum leaving age and 1 if they stayed on; ABSENTEEISM is a measure of absenteeism at 16 where high scores indicate high levels of truancy or trivial absences; and TYPE OF SCHOOL indicates whether children attended state schools (coded 0) or private schools (coded 1) at age 16. N=441.

Table 4 gives the results of a logistic regression model in which four meritocracy variables and twelve SAD variables are used to predict whether individuals born to class IV/V parents will remain where they are or move all the way up to class I/II. It demonstrates clearly that it is meritocratic variables – ability, motivation and attitudes to employment – which are the key factors distinguishing successful lower working-class children from those they leave behind them.

The best initial prediction of class destination, achieving 59 per cent accuracy, is that they all succeed. When ability scores are entered into the model, the accuracy of prediction rises sharply to 70 per cent, and addition of their motivation scores at age 16 improves predictive accuracy by a further 3 per cent. One of the two remaining meritocracy indicators (work attitudes in adult life)<sup>11</sup>, plus just two of the SAD indicators (gender – women perform rather better than men; and grandfathers' class – those with grandfathers above class IV/V perform better)<sup>12</sup> also achieve levels of significance enabling them to enter and remain in the model, but together they only raise the level

of predictive accuracy by a further 3 percentage points. The final partial correlation coefficients (R) indicate the relative effect of each variable in the model, and from these it is clear that ability (R=0.26) is by far the strongest influence on lower working-class success, with motivation (R=0.16) and attitudes to work (R=0.15) as contributory factors. The impact of ability cannot be due to any 'class bias' in the testing instrument, of course, for class background is automatically controlled here by focusing only on those from class IV/V homes.

Perhaps the most striking feature of Table 4 concerns the list of variables which fail to enter the model. Some, like private schooling, are hardly surprising, for very few of these children attended fee-paying schools. Others, however, are surprising from the perspective of the SAD hypothesis. Material deprivation in the home (measured by overcrowding and by lack of basic amenities) has no significant effect. Nor do parental levels of education, exposure to books at an early age, pre-school play group or nursery attendance, parental interest in the child's schooling, or parental aspirations for the child's future. To the extent that we can predict success for children from classes IV and V, the key factors have to do with their ability and their attitudes to work (at school and in later employment) and have very little or nothing to do with material conditions or 'cultural capital' in the home.

Table 5 outlines a similar logistic regression model, this time predicting failure (i.e. downward mobility out of class I/II) of middle-class children. The overall strength of this model is much weaker, for none of these variables helps very much in predicting downward mobility. Nevertheless, to the extent that we can predict it, ability is again the key factor with an R (0.19) twice as

Step	Variable	% Correct	Final R	Final exp (B)
0		60.0		
1	ABILITY	66.1	+0.19	1.04
2	MOTIVATION	66.6	-0.10	0.94
3	TYPE OF SCHOOL	67.5	+0.07	1.92
4	MOTHERS EDUCN	67.7	+0.05	1.36
5	ABSENTEEISM	68.1	-0.04	0.79
6	FATHERS EDUCN	68.1	+0.04	1.34
7	WORK ATTITUDES	68.9	+0.04	1.15
8	GENDER	68.7	-0.04	0.76

 Table 5

 A Logistic Regression Model Predicting Class I/II children Entering Class I/II

 Against Those Who Are Downwardly Mobile

Notes: Variables not included in the equation are: MOTHER READ, FATHER READ, PRE-SCHOOL EDUCATION, GRANDPARENTS, HOME AMENITIES, OVERCROWDING, PARENTAL ASPIRATIONS, PARENTAL INTEREST. N=1,830. strong as that of any other variable in the model, and motivation is entered second. Private schooling appears as the most important of the SAD indicators, suggesting that the private schools may offer middle-class parents some means of insuring their less able offspring against downward mobility. Parental education levels, absenteeism at school, attitudes to work and gender (where this time males prove rather more successful than females) all achieve statistical significance but make only tiny contributions to the final model.

# Factors Predicting Class of Destination

We have established (a) that class of destination at age 33 partly reflects individual ability, and (b) that the best predictors of working-class success and of middle-class failure are ability and motivation. The meritocratic thesis proves much stronger than the SAD thesis in explaining why some individuals succeed while others do not.

The meritocracy thesis has, however, to be subjected to a much stronger test. Supporters of the SAD thesis may well be willing to accept that individual qualities can make *some* difference to where people end up in life – that dull and lazy middle-class children are more likely to fail than bright and hard-working ones, or that intelligent and motivated working-class children are more likely to succeed than their less intelligent and less committed peers. The key question, however, is whether such individual qualities outweigh the initial advantages or disadvantages experienced by children growing up in *different* social environments. For example, are dull middle-class children still likely to do better than bright children from class IV/V backgrounds?

The short answer to this is that they are not. Class I/II children who retained their middle-class position had achieved an average score of 54.2 on the general ability test as compared with 46.2 for those falling to class III and 41.5 for those falling to class IV/V. Class IV/V children who achieved entry to class I/II had an average score of 47.2 as compared with 39.0 for those entering class III and just 33.0 for those who stayed in class IV/V. Differences in average scores between these six groups are significant at a probability level less than 0.0001 (F=131.0 with 5 df). Not only do ability scores within each class of origin sharply distinguish those who later succeed from those who do not, but class IV/V children entering the middle class have higher average ability scores than class I/II children leaving it.<sup>13</sup>

In order to evaluate the relative importance of ability and effort on the one hand, and social advantages and disadvantages on the other, we can develop a multiple regression model including all the meritocracy and SAD variables and factors. To do this, we take as the dependent variable the positions achieved by panel members at age 33 on the Hope–Goldthorpe occupational prestige scale<sup>14</sup> (the same model has also been run using the Cambridge scale

 Table 6

 A Multiple Regression Model with Hope-Goldthorpe Rank Scores as

 Dependent Variable

Step	Variable	Change in $R^2$	Final beta
1	ABILITY	0.14	+0.25
2	MOTIVATION	0.16	-0.13
3	PARENTAL CLASS	0.18	-0.08
4	ABSENTEEISM	0.19	-0.07
5	MOTHERS EDUCN	0.20	+0.06
6	WORK ATTITUDES	0.20	+0.07
7	GENDER	0.21	-0.07
8	FATHERS EDUCN	0.21	+0.05
9	PARENTAL INTEREST	0.22	-0.05
10	TYPE OF SCHOOL	0.22	+0.05
11	OVERCROWDING	0.22	-0.03

Notes: Variables entered/deleted stepwise with p<0.05 as criterion for entry and p>0.10 as criterion for deletion. Missing data replaced by group means based on gender. No variables correlate at higher than 0.5. Lowest tolerance (0.68) and highest Variance Inflation Factor (1.46) on ABILITY. Variance proportions on eigenvalues show some dependency between MOTHERS EDUCATION (59%) and FATHERS EDUCATION (63%), and between ABILITY (60%) and MOTIVATION (35%). Variables not in the equation: FATHER READ, MOTHER READ, PRE-SCHOOL EDUCATION, GRANDPARENTS, HOME AMENITIES.

with broadly similar results).<sup>15</sup> Independent variables are the same as in Tables 4 and 5, and the results are summarised in Table 6.

All four of the meritocracy variables enter the model, but as before, ability is entered first and has by far the strongest effect (beta=0.25) of any of the variables and factors in the model, while motivation at school enters second (beta=0.13) and absenteeism at school and work attitudes enter fourth and sixth respectively, each with betas=0.07. The strongest SAD variable in the model is parental class (beta=0.08). Parental education levels, gender,<sup>16</sup> parental interest in the child's schooling, private schooling and overcrowding in the home all achieve statistically significant effects, but they make only a tiny contribution to the overall model fit. Grandparents' social class, preschool education, early exposure to books and the level of basic amenities in the home all fail to achieve statistical significance. Basically, the model improves hardly at all after step 4 – occupational status at age 33 is explained (to the extent that it is explained by any of these factors) mainly by ability, motivation, parental class and absenteeism, and of these four, ability appears roughly twice as important as motivation and three times more important than parental class and absenteeism.<sup>17</sup>

It has also to be recognised, however, that the final model's  $R^2$  of 0.22 is fairly weak. The meritocracy thesis appears much stronger than the SAD

 

 Table 7

 A Multiple Regression Model Including Qualifications and Status of First job as Independent Variables

Step	Variable	Change in $R^2$	Final beta
1	EXAMS	0.23	+0.19
2	QUALIFICATIONS	0.28	+0.22
3	FIRST JOB	0.30	+0.13
4	ABILITY	0.31	+0.13
5	PARENTAL CLASS	0.31	-0.06
6	ABSENTEEISM	0.32	-0.04
7	GENDER	0.32	-0.05
8	MOTIVATION	0.32	-0.05
9	WORK ATTITUDES	0.32	+0.04
10	OVERCROWDING	0.32	-0.03

*Note:* Variables not in the equation: MOTHERS EDUCATION, FATHERS EDUCATION, FATHER READ, MOTHER READ, PRE-SCHOOL EDUCATION, TYPE OF SCHOOL, GRAND-PARENTS, HOME AMENITIES, PARENTAL INTEREST

thesis, but even when the two are combined, over three-quarters of the variance in occupational prestige scores remains unexplained. In part, this is because we have failed to include in the model direct measures of achievement which are obvious stepping stones to later occupational success. These include examination success at school (EXAMS), the achievement of further qualifications after leaving school (QUALIFICATIONS), and the occupational status of the first job taken after completing full-time education (FIRST JOB)<sup>18</sup> Both the SAD and meritocracy theses accept the importance of these factors in influencing occupational success – the issue is not whether qualifications than others – so adding them to the analysis does little to help us choose between these two competing explanations. It does, however, substantially strengthen our overall predictive model (Table 7).

What is perhaps most interesting about Table 7 is that ability still enters the model before any of the other variables we have been considering, and it still has a beta weight over twice as large as that of any of these other variables. Adding school examination passes and post-school qualifications to the model does not exhaust the predictive power of the ability test results. This suggests that bright people tend to end up in higher status jobs, partly because they accumulate more qualifications, but also because their ability comes to be recognised and rewarded independently of their paper qualifications. This finding is particularly relevant given one of the claims made by Marshall and Swift (1996) in their critique of my earlier paper, and it is to this and other related criticisms of that paper that I now turn.

# Ability, Opportunity and Relative Measures of Mobility

Some of the criticisms made of my earlier paper can swiftly be dismissed. Marshall and Swift, for example, claim that my argument was intended to apply beyond Britain, and they take me to task for ignoring evidence from studies of mobility in Sweden and Ireland. As the title of my paper (*Might Britain be a Meritocracy?*) should have made clear, however, the analysis was based on British data, and the argument was specifically grounded in the British case, which makes it somewhat unfair to accuse me of overlooking other countries!

The same authors then go on to make the serious accusation that I deliberately misrepresent their work. The basis of this accusation concerns my claim that recent research in Britain has failed to take account of ability differentials when interpreting the relative mobility chances of individuals from different social class origins. Marshall and Swift claim that their 1993 paper 'specifically address[ed] the possibility, raised by Saunders, that those who are upwardly mobile are more able than those left behind' (1996:378), and they suggest that I wilfully ignored this in order to sustain my argument. There are two points to make about this.

First, my argument was part of a critique of the way Goldthorpe and others have interpreted data on relative mobility rates. Disparity ratios or odds ratios greater than 1:1 are routinely taken to indicate the persistence of unequal opportunities when the same data could equally be explained by different average levels of ability or motivation among people from different class origins. Those who insist on using such relative measures as indicators of structural class disadvantage should first take account of factors, such as ability and motivation, which are almost certainly contributing to the ratios which they compute, but this has rarely been attempted. As we saw in the example of the NCDS data, disparity ratios may well be reduced when we control for ability (in this case, the disparity ratio fell nearly a third, from 2.2:1 to 1.7:1), and results and analysis are misleading when such controls are not applied.

Secondly, it is true that, in their 1993 paper, Marshall and Swift considered whether social mobility is related to *educational qualifications*. They argue that this refutes my claim that researchers in the Nuffield tradition have failed to take account of *ability differentials*. For them, the best indicator of ability is not IQ or some similar measure, but is educational performance, and they show that class origins still influence class destinations even when controlling for different levels of educational attainment. Educational attainment is, however, a hopeless indicator of ability (or of 'ability plus effort'), and it is irrelevant that Daniel Bell (or any other defender of the meritocracy thesis) might have argued otherwise. As I demonstrate in Table 7, ability is an important influence on occupational placement *over and above* any effect it might have through formal qualifications. Not only do bright people tend to perform better in exams, but they also tend to continue performing better once they enter the labour market. Controlling for educational qualifications does not, therefore, 'mop up' all the possible effects of differential ability, and the fact that Marshall and Swift find that class origins still influence class destinations after controlling for education in no way meets the requirements that researchers take the effects of ability into account in their models.

There seem to be two reasons why Marshall and Swift want us to focus on qualifications rather than on more direct measures of ability such as IQ. One is (as I said in my original paper) that neither they nor Goldthorpe have ever bothered collecting the data necessary to measure ability directly (Goldthorpe's collaborator, A. H. Halsey, did try to take account of IQ when analysing the educational backgrounds of the men in the 1972 Nuffield survey, but he did it by *estimating* the likely average IQ scores of children from different class backgrounds, drawing on previous work from the 1950s and early 1960s, rather than by measuring their actual scores – Halsey, Heath and Ridge, 1980). The problem, of course, is that it is almost impossible to discover individual IQs in one-off surveys of an adult population such as those conducted by Goldthorpe (1987) and Marshall *et al.* (1988), whereas it is easy to ask respondents to list their formal qualifications. Marshall and Swift's insistence on using educational credentials rather than IQ thus appears to be making a theoretical virtue out of a pragmatic necessity.

The second reason why they do not want to use IQ scores is that, like many sociologists, they are ideologically opposed to doing so. Those who oppose the use of IQ do so, either because they believe there is no such thing as 'intelligence', or because they think it cannot be measured by IQ tests. Marshall and Swift appear to fall into the second category, and they advise that, in my earlier paper, I should have 'avoided mention of IQ (or measured intelligence) altogether' (1996:383).

I have no doubt that IQ scores are (like virtually every indicator we use in empirical research) an imperfect measure (my own evidence from NCDS suggests that working-class children may be underperforming on these tests relative to their 'actual' intelligence – see note 13). IQ scores are, however, the best indicator we have of intelligence (certainly better than examination results), and the issue (addressed in psychology) of how far they measure innate as against learned ability is largely irrelevant for sociological purposes where our concern is not with the question of why a child is bright, but is with the question of whether bright children are enabled to succeed in the society in which they live. The question of the adequacy of IQ scores for sociological research on social mobility thus turns on whether or not they provide us with a reasonable measure of the kinds of mental skills and aptitudes which most 'higher class' jobs in modern, complex, knowledge-based technological societies demand and require.

Recent research reviews in the United States (by the Board of Scientific Affairs of the American Psychological Association – Neisser et al. 1996) and

in Britain (Mackintosh 1995) make clear that intelligence does have a genetic component, and (more important) that IQ tests do provide a reasonable indicator of many dimensions of mental ability, both innate and learned. Undoubtedly intelligence is multi-faceted, but IQ scores correlate positively and strongly with different dimensions of ability (verbal, spatial, numeracy, memory, etc. - though not necessarily with 'practical intelligence'), they correlate strongly with other independent measures of mental agility such as mental reaction times, forward and backward digit span tests, the evoked potentials of brainwaves and positron emission topography (see Eysenck 1995 and Herrnstein and Murray 1994:282-6), they are relatively stable over time (see note 8) and even correlate with measures of 'infant intelligence' such as attentiveness and memory, and they correlate strongly and positively with academic performance and with various measures of job performance in adult life. If sociologists are genuinely interested in understanding the dynamics of social mobility, then they cannot afford to ignore so robust and powerful a measure as IO.

Having said all this, the model of mobility under conditions of 'perfect meritocracy' which I developed in my earlier paper did not make use of actual IQ scores. This was deliberate, for I did not want the model to depend upon data which many sociologists still distrust. Rather than working from the actual distribution of IO scores in the different social classes, I worked from the proportionate size of the classes themselves and calculated what the IQ scores of the fathers and sons in Goldthorpe's 1972 survey 'should' have been had individuals in each of these two generations been selected for their occupational positions solely on the basis of their ability. Assuming that IQ in each generation is normally distributed, with a mean of 100 and a standard deviation of 15, and that there is a correlation of 0.5 between IQ scores of fathers and sons (a figure derived from Eysenck), the model predicted the mobility flows which would have occurred between the working class and the service class based on a calculation of the regression to the mean of IQ scores between the two generations. The results were remarkably consistent with the actual mobility rates recorded by Goldthorpe for this sample of fathers and sons.

In his critique of this paper, Lampard says that my initial assumption – that all the fathers in Goldthorpe's study had secured class positions commensurate with their IQ levels – is 'implausible': 'Is it conceivable that the IQs of all the service class fathers were higher than the IQs of all the intermediate class fathers, whose IQs were in turn all higher than those of all the workingclass fathers?' (1996:387). But this comment misses the whole point of the model and reveals a lack of understanding of the methodology of ideal types. I do not claim that all the fathers in Goldthorpe's survey really *were* recruited to classes on the basis of their ability. Rather, I use Goldthorpe's data on class sizes in each of the two generations to construct a pure model of what the pattern of social mobility would have looked like *if* the last two generations had been so recruited, and in this way, I was able to compare the 'reality' against the pure yardstick of an imagined 'perfect meritocracy'.

Lampard goes on to suggest that, 'Empirical data showing a weaker relationship between occupational class and IQ than that assumed by Saunders would refute his crucial assumption' (1996:388), and he duly provides such data showing that service-class fathers almost certainly had lower average IQ scores (and that working-class fathers had higher average IQ scores) than those imputed in the model. He then recalculates the predicted mobility flows based on these figures, and not surprisingly finds that they exceed the actual mobility flows recorded by Goldthorpe. He concludes that, 'The conclusions of Saunders' paper only stand if he can demonstrate that service-class fathers do have the implausibly high kind of mean IQ implicit in his model' (1996:391)

Not so! I never claimed that Goldthorpe's fathers *really had* been recruited to their social class positions solely on the basis of their IQ scores. The whole point of the paper was to demonstrate that Goldthorpe's data were consistent with the pattern which would have been found had both fathers and sons been allocated to social classes on the basis of ability alone, and that Goldthorpe's rejection of the meritocracy thesis on the basis of his data was therefore invalid. To judge whether Britain is a meritocracy, we first have to know what the pattern of social mobility would look like under purely meritocratic conditions, and that was what the paper established. The model was an attempt to demonstrate the falsity of the assumption (found in Goldthorpe's and Marshall's work) that disparity and odds ratios greater than 1:1 are necessarily evidence against the existence of meritocracy, and it successfully showed that even disparity ratios as high as 3:1 *could be* consistent with the operation of meritocratic principles. By confusing an ideal type model with an empirical model, Lampard has simply muddied the waters.

Seen in this way, my earlier paper has to be understood primarily as a critique of the way relative mobility measures (disparity ratios and odds ratios) have been used and interpreted in British research. Here too, though, my critics say I have got it wrong! For Marshall and Swift, odds ratios are valid measures of the *distribution of opportunities* in society, and 'Saunders has simply failed to grasp this point' (1996:376). This is perhaps the central issue which separates us, so let me again try to clarify why the use of these measures in the Nuffield tradition of mobility research is so problematic.

One reason is (as Payne 1987 has argued) that an emphasis on relative measures encourages researchers to conclude that nothing has 'really' changed when the opportunities available to working-class children have actually expanded dramatically in the post-war years. As Goldthorpe's own respondents made clear through their life-history notes, what matters most to people is not whether their children have gained opportunities disproportionately to others (relative chances), but is rather the extent of the opportunities which their children enjoy (absolute chances). To suggest that,

'There have been no changes in social "fluidity", while adding that, 'Of course, this does not mean that the British class structure is *entirely* closed' (Marshall *et al.* 1988:137, emphasis added) is to invite the conclusion that nothing of any significance has really changed and that the system is still *largely* closed. Not surprisingly, other sociologists have picked up on this message and used it to recycle the old myths about social closure which Goldthorpe's original work did so much to dismantle (for one example, see Scase's recent text which paints a grossly misleading picture of the degree of mobility and openness of contemporary British society – Scase 1992:53–5).

The real problem, however, goes deeper than this, and it concerns the very concept of 'fluidity' as measured by odds ratios. The point is best made by Trevor Noble who has for nearly twenty years been arguing, against the Nuffield tradition, that, 'Fluidity or "pure mobility" cannot be partialled out as separate from structural mobility' (1995:74). For odd ratios to show any increase in 'fluidity', it would be necessary, as a minimum, that the chances of working-class children achieving middle-class rather than working-class jobs should increase faster than the chances of middle-class children achieving middle-class rather than working-class jobs (i.e. working-class chances of achieving upward mobility must increase faster than middle-class chances of avoiding downward mobility). In a situation where the number of middle-class jobs is rising, and the number of working-class jobs is falling, this is an almost impossible requirement - Noble shows that it could only happen if middleclass self-recruitment had become saturated, or if (as in a post-revolutionary situation) middle-class children were formally barred from entering middleclass occupations. With an expanding middle class and a declining working class, there must (as Goldthorpe and Marshall recognise) be an increase in rates of upward mobility, but (as they seem to fail to recognise) there must also be a fall in rates of downward mobility. The change in the occupational structure over time means that social mobility is not a 'zero-sum' game - the middle class need not lose for the working class to win. Odds ratios, however, analyse mobility as if it were a zero-sum game. Improvements in working-class upward mobility chances are cancelled out by improvements in the chances of middle-class children avoiding downward mobility, yet both patterns necessarily follow from the 'structural' expansion of the size of the middle class and contraction in the size of the working class. As Noble concludes, 'The odds ratio ... is a statistic that, other than in exceptional historical circumstances ... can only vary in one direction' (1995:74).

This is a major flaw in the basic measure used by Goldthorpe, Marshall and others in this tradition of work. In a growing, dynamic society in which everybody is benefiting from improved opportunities, social 'fluidity' as measured by odds ratios will at best remain static, for odds ratios cannot register any 'improvement'! Far from it being 'very difficult to avoid the logic of odds ratios when one comes to consider social processes of mobility' (Egerton and Savage 1996:9), it is clear that odds ratios entail a perverse 'logic' which *should* be avoided, and which easily can be avoided by focusing instead on disparity ratios as the measure of 'relative class opportunities' – which is what I have done in this paper.

# Conclusions

My earlier paper set itself the limited objective of demonstrating that the meritocracy thesis should not be written off as a possible explanation for working-class children faring less well in the occupational class system than middle-class children do. Having established in that paper the case for investigating the importance of class differences in ability and motivation, this paper has taken the next logical step by investigating whether these two core components of individual 'merit' actually do influence the class positions in which individuals end up by age 33. We have seen that both factors are indeed important influences, ability more so than motivation, and that they clearly outweigh the effects of any initial social advantages or disadvantages associated with class of origin.

The evidence has been presented in three parts. First, we have seen that ability correlates more strongly with class of destination than with class of origin, and this must mean that the occupational class system is to some extent selecting by ability irrespective of social class origins. Secondly, we have also seen that ability and motivation are the key predictors of lower working-class success and of middle-class failure. Low ability does not necessarily prevent entry into the middle class (not even for children from lower-class backgrounds), but high ability does tend to safeguard individuals against failure, irrespective of their social origins. Thirdly, this paper has shown that class destinations, measured indirectly by means of the Hope-Goldthorpe occupational ranking scale, reflect individual merit (ability and motivation) much more than class background. Many of the factors which have attracted so much academic attention from sociologists down the years - private schooling, parental contact with schools, material conditions in the home, the 'cultural capital' passed on by middle-class parents to their children, and even gender bias in the school or the workplace - turn out, even when statistically significant, to exert only relatively minor effects on people's class destinies. By contrast, the factors which sociologists have so often ignored, or even dismissed as self-evidently 'ideological' or unimportant - factors having to do with the intellectual capacities of individuals and the tenacity they display in working towards a given objective - turn out to be much more important. As Ron Dore (1994) suggests, British sociologists have imposed a taboo on discussions of intelligence over the last thirty years, and this has severely hampered our understanding of crucial social processes such as social mobility.

This paper has not demonstrated or claimed that occupational class recruitment in Britain is entirely based on meritocratic principles. The high degree of variance left unexplained by the various models indicates that there are other factors at work which have little to do with either social advantage/ disadvantage or meritocracy, and the models also suggest that both of the theses considered in this paper have something to offer to an overall explanation of class destinations. Nevertheless, the paper has conclusively demonstrated that the occupational class system in Britain is more meritocratic than has commonly been assumed, and that initial patterns of social advantage or disadvantage are much less significant than has generally been claimed.

Should this be cause for celebration? There are signs in the literature that left-inclined sociologists are now shifting the goal posts in the face of mounting evidence that societies like Britain are more open than they had believed. Their complaint has long been that this society falls far short of the principle of equality of opportunity, but gradually, their argument is shifting to suggest that, even if the system is becoming more meritocratic, this is itself a justifiable cause for grievance! Marshall and Swift's 1996 paper is a case in point, for following Rawls (1972), they argue that neither ability nor effort *should* justify reward since both talent and 'the ability to work hard' are chance attributes of a 'natural lottery' rather than virtues achieved through individuals' own efforts.<sup>19</sup>

I have discussed the moral case for meritocracy elsewhere (Saunders 1996, chapter 9), so let me limit myself to just two observations. First, a meritocracy does not reward individuals simply for being born bright. As in the parable of the three talents, ability is only rewarded when it is put to good social use. Employers of my labour, or customers for my services, do not give me money and status as a reward for my ability; they do it because I use my ability to provide them with something which they value and are prepared to pay for. My entitlement does not therefore accrue to my ('undeserved') luck in being born intelligent, but to the service which I provide to others by using my ability. Occupational positions are earned. They are not allocated like sweets as rewards for doing well in IQ tests.

Secondly, the Rawlsian logic is not simply anti-meritocratic, it is antihumanist. The 'original position' from which Rawls insists we must decide on issues of fairness strips us of the essential features of our personalities which make us distinctive as human beings, and it ends up treating all aspects of our individuality – our ability, our honesty, our good humour, our willingness to work – as common property to be used for the benefit of the least well-off. In the end, as Nozick (1974) has shown, the application of Rawlsian principles results in gross 'unfairness', for it deliberately disregards the prior action and characteristics of individuals which help bring about their condition. A Rawlsian logic, for example, would award every candidate in an examination the same mark irrespective of whether they had spent the preceding week revising or drinking in the bar. Such an outcome will be welcomed not by those concerned for 'social justice', but by those motivated by envy or avarice. SOCIAL MOBILITY IN BRITAIN

There will always be competing moral principles regarding 'just rewards', and it seems that many of us subscribe simultaneously to several which may be incompatible, but the meritocratic principle is the necessary guiding principle of any competitive market society, and in Britain, it is the one which attracts widespread popular endorsement.<sup>20</sup> The principle of meritocracy is widely understood as a 'fair' and 'just' principle, and for most people (even if not most sociologists), evidence that ability and effort are increasingly being recognised and rewarded in this country will be positively welcomed.

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### Notes

- 1. This probably does not apply to *elite* positions (especially those based upon ownership of land or other substantial assets), but only to movement within the occupational class system see Saunders 1995, fn. 4.
- 2. There has, of course, been an extensive debate over whether individuals should be allocated to social class positions solely on the basis of their own current occupation, or whether it is appropriate to take account of the social class of their partner (see, for a review, Macrae 1990) and/or the social class of their last fulltime occupation (see Marshall, Roberts and Burgoyne 1996). Given that my concern in this paper is to identify the factors in individuals' own biographies which influence the position they achieve in the occupational class system by age 33, it is clearly inappropriate to classify their social class position with reference to any criteria other than those associated with their own current full-time employment.
- 3. The sample size from which the multivariate analyses later in the paper have been developed has been further reduced to 6,156 by deleting cases where there is a large amount of missing data.
- 4. The social class achieved by male panel members by age 33 can be compared with the social class distribution of men at the 1991 census (although we should not expect the occupations of a cohort of 33 year-olds to match those of the whole male population between 16 and 65):

R-G class	Panel males (1991)	Census males (1991)	% over/ under-represented
I/II	39.7	34.9	+13.8
III	44.0	44.0	0
IV/V	16.3	21.1	-22.7

5. In later tables in this paper, the three values of social class are treated as ordered and with equal intervals, the rationale being that on income, job security, autonomy, authority and occupational prestige, the average 'gap' between professional/managerial employees (who score 'high' on all measures) and routine while-collar/skilled manual employees (who score 'medium') may be taken as roughly comparable with that between white-collar/skilled manual employees and semi-skilled and unskilled manual workers (who score 'low'). Of course, the larger question still remains of whether it makes theoretical sense to break the population into class categories at all, for the criteria on which class schema are constructed (*e.g.* income level, degree of autonomy, occupational prestige ranking) invariably turn out to be ordinal measures which have no clear 'breaks' (see Prandy and Bottero 1995).

- 6. Other researchers also using NCDS data have looked at rates of mobility between income bands. Dividing the sample into five income bands, Johnson and Reed (1996) find that 34% of those in the top quintile had fathers who were also in the top income quintile, while just 10% of them had fathers in the bottom income quintile. Those born to the richest 20% of fathers are therefore 'overrepresented' by a factor of 1.7 in the top income group, while those born to the poorest 20% of fathers are 'under-represented' by a factor of 2. The authors claim that these figures indicate substantial income 'immobility', but with two-thirds of the highest income stratum originating from lower income backgrounds (and nearly one-third of them having fathers in the bottom half of the distribution), they might also be interpreted as indicating a remarkable degree of movement between the generations. The authors also show a strong association between income mobility and ability as measured at the age of 7 (a finding which is consistent with my data showing that occupational mobility is linked to ability).
- A latent 'academic ability' factor can be constructed which loads quite strongly on reading (R) and maths (M) scores at each age (factor loadings: R7=0.63, M7=0.53, R11=0.84, M11=0.91, R16=0.68, M16=0.68). This factor is in turn strongly predicted by the scores achieved on the verbal and non-verbal ability test taken at age 11. Ability score loads on the latent ability factor at 0.86 with a residual of 0.50 (average standardised residual=0.018).
- 8. There is no warrant for assuming, as Egerton and Savage (1996:11) do, that the association between parental class and ability test scores in NCDS cannot be due to genetic endowment. The fact that test scores vary somewhat between the ages of 7, 11 and 16 does not demonstrate that ability is simply a function of class-based environmental factors, for even if test scores were *wholly* determined by genetics, we should still find some variation over time due simply to measurement error. In fact, there is a remarkable degree of *stability* in these test scores. In a forthcoming paper with Rod Bond, I shall report a stability coefficient of 0.84 between each test period which means that 70% of the variance in performance can be predicted from the previous performance. Even the performance on very simple tests taken at age 7 accounts for 50% of the variance in performance at age 16.
- 9. There are various measures of absenteeism including school attendance record and truancy reported by parents as well as records of trivial absences and truancy reported by the school, but in generating a general factor, the loadings on the first two variables were much weaker than on the other two (0.37 and 0.42 as compared with 0.83 and 0.84) and model fit was improved substantially when they were removed. Ten work attitude questions were originally included, five from each sweep, but only eight were successfully factored (into three different factors) in exploratory analysis, and later confirmatory analysis could only achieve satisfactory model fit (average standardised residual=0.006; normalised fit index=0.995) using one factor loading on three statements: that any job is

better than being unemployed, that one would pack in a job if one did not like it, and that one should hold on to a job even if one does not like it.

- 10. The various factors constructed to test the SAD thesis were derived as follows: OVERCROWDING is based on measures of persons per room at 7, 11 and 16 and loads on these three variables with coefficients of 0.72, 0.86 and 0.65 respectively; HOME AMENITIES is similarly based on the number of 'basic household amenities' shared or lacking at these three periods (factor loadings=0.59, 0.77 and 0.42); PARENTAL INTEREST is measured by teacher assessments of father's (loading=0.79) and mother's (loading=0.87) interest expressed on a four-point scale, plus whether or not one or both parents have made contact with the school (loading=0.49); PARENTAL ASPIRATIONS expresses the parents' desire (when the child was aged 11) that it should stay on at school past 16 (loading=0.80) and that it should go on to further education (loading=0.58).
- 11. In this, as in later models reported in this paper, the effect of the work attitudes factor appears counter-intuitive, for as the score on WORK ATTITUDES rises, so do the chances of occupational success, yet on the three attitude items comprising this factor, it is low scores which indicate job commitment. Further reflection on these three items suggests that they may be seen as indicating, not a 'work ethic' in the sense of commitment to hard work and building a career, but rather a 'cautious ethic' emphasising the need to hold on to one's job and eschew all risks. All three statements to which respondents were asked to respond emphasised the choice between holding on to one's job at all costs, and changing it if it is not what one wants. It seems that, as in the parable of the three talents, it is those who are not willing to sit back with what they already have who end up prospering.
- 12. This may provide some support for the claim, first developed by Jackson and Marsden (1962) in their study of 88 successful working-class boys in Huddersfield, that a disproportionate number of upwardly mobile working-class people come from 'sunken middle-class' backgrounds where their parents (usually the mother) occupy a lower class position than the grandparents.
- 13. The fact that ability scores of class I/II children entering class I/II are substantially higher than those of class IV/V children entering class I/II may indicate some degree of 'class-bias' in the test results i.e. that the test results underestimated the 'true ability' of class IV/V children. Alternatively, it may be that class IV/V children are entering different kinds of middle class jobs than class I/II children, jobs which place less emphasis on high academic ability as against other competences and skills (e.g. 'practical intelligence' which is not well measured by IQ tests). This is an issue I shall consider in detail in later work.
- 14. See Goldthorpe and Hope (1974). This scale is used because it provides a dependent variable measured at interval level. This enables multivariate analysis based on least squares regression and in future work on this data set it will enable the development of path diagrams derived from structural equation models. Goldthorpe himself abandoned this scale (in favour of a categorical class schema) when he applied log-linear modelling techniques to the analysis of social mobility tables, but regression-based models remain more appropriate if the concern is to understand how different individuals end up in different positions, as opposed to Goldthorpe's major concern with analysing the effects of relative mobility rates on class structuration. For a discussion of these issues, see the papers by Kelley and Marshall, together with Goldthorpe's reply, in Clark, Modgil and Modgil (1990).
- 15. See Stewart et al. (1980). The Cambridge scale is based, not on the prestige of occupational titles, but on patterns of interaction and shared life styles, and the

scale differs between men and women. Using the Cambridge scale as the dependent variable produces somewhat different results from those outlined in Table 6, and the final  $R^2$  is higher (0.31 for men, 0.26 for women), but for both men and women, ability and motivation still feature as the key explanatory variables (for men, ABILITY beta=0.26; MOTIVATION beta=-0.16; PARENTAL CLASS beta=0.10; for women, ABILITY beta=0.26; MOTIVATION beta=-0.14; MOTHERS EDUCATION BETA 0.12). Interestingly, PARENTAL CLASS does not enter the model as a significant predictor for women.

16. It should be remembered that only those women who are in full-time employment are included. A break-down of social class by gender shows, predictably, that women are heavily over-represented in class IIIN and under-represented in class IIIM. They also tend to be over-represented in class II and under-represented in class I:

	Percentage of employed men/women in classes:					
	Ι	Ĭ	ÎIIN	IIIM	IV	V
Men	9	31	10	35	12	2
Women	6	43	32	7	12	1

In terms of our three-class model (I/II versus III versus IV/V), gender variations occur within rather than between the classes, and gender therefore fails to correlate with class of destination or with Hope–Goldthorpe (H–G) occupational status at age 33 (r=0.0026, p=0.415). Gender therefore appears insignificant as a factor influencing occupational status among those in full-time employment. The reason why gender nevertheless achieves statistical significance in the multiple regression model has to do with its association with other independent variables in the model. Girls, for example, scored better on the ability test than boys (mean scores=48.3 and 44.2 respectively), and on this basis, women should have achieved higher H–G scores than men at 33.

- 17. Some caution is required at this point given that multiple regression models will often disguise indirect effects of those variables entered at later steps. We know from Table 3, for example, that ability to some extent reflects class of origin, but once ability is entered into the model, the indirect effect of class of origin on H-G score via ability is eclipsed. Furthermore, the reliability of some of the SAD variables may be lower than that of the ability test score, and there is therefore a clear need to take account of error variances. In a forthcoming paper with Rod Bond we shall present a path analysis based on a linear structural equations model which will enable us to take account of indirect as well as direct effects and to control for different error variances. Anticipating this, preliminary results from this path model nevertheless indicate that the standardised total effects of ability and motivation still far exceed those of parental class see Saunders (1996), chap. 8.
- 18. EXAMS is a 9-point scale based on the number and grades of CSE, O-level and Alevel passes (and their Scottish equivalents). QUALIFICATIONS is a 5-point scale based on NVQs. Exam success and further qualifications tend, of course, to covary (r=0.54), as do ability and exam success (r=0.54), and this creates a potential problem of collinearity in the model. However, inspection of tolerance and variance inflation factors suggests that this is not a serious problem (VIF for exams=2.08, for further qualifications=1.49, and for ability=1.46), and inspection of variance proportions for eigenvalues reinforces this conclusion (highest shared variance proportions for EXAMS and QUALIFICATIONS = 0.24 and

0.69 respectively; highest shared variance proportions for EXAMS and ABILITY = 0.19 and 0.60 respectively).

- 19. Goldthorpe (1996) has also recently criticised the concept of meritocracy, arguing that different employers will hire, promote and fire according to many different criteria of 'merit' with the result that outcomes appear more the result of chance than of the application of consistent meritocratic principles. Perhaps but it would be surprising if employers recruiting into positions of responsibility and high autonomy were uninterested in candidates' ability and record of hard work. Ability and effort may not be sufficient conditions of perceived merit, but they are almost certainly necessary ones.
- 20. Elsewhere (Saunders and Harris 1995) I report evidence showing that about half of the population supports an egalitarian statement calling for increased taxation of higher earned incomes, half support a free-market statement to the effect that people's rewards should be determined by the demand for their services, but about 90% support a meritocratic statement in which rewards should be determined by ability and hard work.

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Biographical note: PETER SAUNDERS is Professor of Sociology in the School of Social Sciences at the University of Sussex. His recent books include A Nation of Home Owners (1990), Social Class and Stratification (1990), Privatization and Popular Capitalism (1995), Capitalism: A Social Audit (1995) and Unequal But Fair? A Study of Class Barriers in Britain (1996).

Address: School of Social Sciences, University of Sussex, Falmer, Brighton, East Sussex, BN1 9QN.