6 Social Origins, Ability and Educational Attainment: Is there a Wastage of Talent?

If education is to play a major role in increasing social mobility, the association between individuals' social origins and their educational attainment – the OE association within the OED triangle – should weaken. In the previous chapter we showed that if educational attainment is conceptualised and measured in absolute terms, some, albeit slight, weakening in its association with social class origins would appear to have occurred in Britain over the last half-century or so. However, if educational attainment is treated in relative terms, this weakening no longer shows up. In this chapter we aim to investigate the OE association in greater depth. Specifically, we wish to develop our analyses in the two following ways.

On the one hand, while we retain our concern with social class as the context of mobility, we recognise that other aspects of individuals' social origins than their parents' class may be associated with their educational attainment. We will therefore report on analyses of educational inequality in which, in addition to parental class, we also include parental social status and parental education. Parents' class position can serve, on the grounds outlined in Chapter 1, as a good indicator of the economic resources that they have available in order to promote their children's educational success – as, for example, in the ways referred to at the end of the previous chapter. But, further, parents' social status can be seen as indicating their sociocultural resources, the kinds of lifestyle and social networks in which they are involved, and through which information relevant to their children's education may be obtained, useful contacts made and, perhaps, influence exerted. And parents' education can be taken as an indicator of their specifically educational resources: in particular, of their capacity to create a favourable home learning environment for their children and to provide them with informed guidance through the educational system.

In much previous research into social inequalities in educational attainment the assumption has been made, implicitly if not explicitly,

that different features of individuals' social origins, as represented by parental characteristics, can in effect serve as 'interchangeable indicators': that is, it matters little which is taken as the basis of analyses since the results obtained will be essentially the same.[1] We believe that this assumption is an invalid one, and will lead to the importance of social origins being significantly underestimated. For while variables such as parental class, status and education will be correlated, the correlations are likely to be far from perfect, and it is therefore necessary to consider how far these different parental characteristics may have *independent* and in turn *cumulative* effects on children's educational performance.

On the other hand, we wish to bring cognitive ability into our analyses, since it has been argued that if such ability is neglected, social origin effects on children's educational attainment are likely to be overestimated. In this regard, a number of contentious issues arise, and we need to make our own starting position clear. We use the term 'cognitive ability' rather than 'intelligence' to try to avoid debates about different types of intelligence and to refer to a general, underlying capacity – referred to by psychologists as the '*g* factor' – that has been shown to be involved in a range of mental processes, such as comprehension, knowledge acquisition, reasoning and problem solving. We then recognise, in the light of a large body of research, that if cognitive ability, thus understood, is measured at a relatively early stage in children's lives, it is quite strongly associated with their subsequent educational attainment, whatever their social origins.[2] For this reason, we believe – and will seek to show – that there is, *for analytical purposes*, advantage in treating cognitive ability independently of social origins in relation to educational attainment.

However, this does not imply that we regard children's cognitive ability as being *in fact* independent of their early life family environments. We would not accept the claim made by some authors that

[1] For example, in the annual reports of the Social Mobility Commission results are regularly presented on educational inequalities in relation to parental income, parental class (measured in a variety of ways), parental 'socioeconomic status', parental education, and so on, without any consideration of the differing degree of reliability of these results or of how they might be related to each other.

[2] For results from the 1946, 1958 and 1970 birth cohort studies, see Schoon (2010), and for similar results from a five-year prospective longitudinal study of 70,000 English children, see Deary et al. (2007). There is now growing evidence of a neurological basis for *g* (Burnett, 2016).

what may appear to be inequalities in educational attainment that are socially grounded should rather be understood, in the context of modern educational systems, as primarily, if not entirely, the result of the intergenerational transmission of purely genetic advantage and disadvantage. This claim depends on the supposition that the variance in cognitive ability within a population can be divided, additively, into one part due to environmental effects and another part due to genetic effects – and that the latter part predominates over the former. But this supposition would no longer appear tenable. With a phenotypical trait such as cognitive ability, it is becoming increasingly evident not only that many different genetic variants are involved, and complex gene–gene interactions, but, further, yet more complex processes of *gene–environment interaction* occurring from the womb onwards. Thus, while variation in cognitive ability does have a genetic component – and we would also regard as misguided those who would seek to deny this out of hand – the important point is that this component is not fixed in some once-and-for-all way but is, rather, open to environmental modification in its expression, and especially, it would seem, in the course of early life.[3]

From the foregoing, the key issues to be addressed in this chapter directly derive. To begin with, we examine how far parental class, status and education, *considered separately*, are associated with children's educational attainment when their early life cognitive ability is also included in the analysis, and how far any changes in this regard are apparent over time – that is, across our birth cohorts. Then, we turn to the question of how far children who in early life are at the same level of cognitive ability differ in their eventual educational attainment according to their social origins when parental class, status

[3] For statements of hereditarian views, with reference to Britain, see Saunders (1996, 2010) and Marks (2014) – both authors being greatly influenced by the American work of Herrnstein and Murray (1994). The research that calls such views into question is, first, that in the rapidly developing field of epigenetics (Jablonka and Lamb, 2013; Carey, 2012), which focuses on how environmental conditions influence the expression of genes; and, second, that based on the human genome itself. It has so far proved difficult to pin down the genetic basis of any large part of variation in cognitive ability, although it is becoming evident that many different genes are involved. For a general review of relevant literature, see Heckman and Mosso (2014); and for evidence from the 1946 birth cohort of the effects of various aspects of parenting on the formation of cognitive ability, see Byford, Kuh and Richards (2012).

and education are *considered in combination*, and we again look for any changes over time. Insofar as men and women of less advantaged origins fare less well educationally than do men and women of more advantaged origins when cognitive ability is held constant, it may be supposed that there is a wastage of talent – a failure of the educational system to ensure that the academic potential of all individuals is fully realised.[4] And whether or not the extent of any such wastage is reduced across our cohorts – that is, over a period of more or less continuous educational expansion and reform – is a question of obvious relevance in evaluating the realism of the liberal scenario outlined in the previous chapter and of the capacity of educational policy alone to increase equality of opportunity in the face of persisting inequalities of condition.

One other preliminary point to be made is that, given our concern with the realisation of educational potential, we see it as more appropriate to treat education in this chapter as an absolute, consumption good – that is, as one that is of value in itself regardless of how many others share in it – rather than as a positional, investment good in relation to the labour market, and we therefore measure education in absolute rather than relative terms. We in fact focus our analyses on whether or not cohort members reached two key educational 'thresholds'. We consider, first, whether they attained at least *higher-level secondary qualifications* – Level 5 in Table 5.1 – rather than any lower level; and, second, whether they attained *degree-level qualifications* – Level 7 in Table 5.1 – rather than any lower level.

Table 6.1 derives from results we obtain from analyses in which we take together data from the 1946, 1958 and 1970 cohorts and estimate the effects of parental class, status and education, along with those of cognitive ability, on the chances of men and women reaching these two thresholds (with cohort being included as a control variable). Parental class is based on the NS-SEC classes but with Classes 6 and 7, the higher and lower strata of the working class, being collapsed since preliminary analyses showed no significant difference in their effects; parental status is measured on a scale that reflects differential association in the form of the occupational structure of close friendship (see Chapter 4, note 4). In cases where an individual's parents had different

[4] We do of course recognise that cognitive ability is only one of many different kinds of talent – but it is one of particular importance in the present context.

Table 6.1 ***Effects of cognitive ability and of parental class, status and education on the probability of attaining two educational thresholds***[(a)]

	Men		Women	
	Higher secondary	Degree	Higher secondary	Degree
Cognitive ability quintile				
first, lowest	−−	−−	−−	−
second	−	−	−	−
third	reference		reference	
fourth	+	+	+	+
fifth, highest	++	+	++	+
Parental class				
Classes 6 and 7	reference		reference	
Class 5	+	ns	ns	ns
Class 4	ns	ns	+	ns
Class 3	+	+	+	ns
Class 2	+	+	+	+
Class 1	+	+	+	+
Parental status	+	+	+	+
Parental education	++	+	+	+

Note (a) +: significant positive effect
++: significant and strong positive effect
−: significant negative effect
− −: significant and strong negative effect
ns: not significant

Source: Bukodi, Erikson and Goldthorpe (2014)

class or status positions, the more advantaged is taken. Parental education is treated on the basis of seven ordered categories that relate to both parents' qualifications in combination; and in view of the major changes in the distribution of parents' qualifications across the cohorts, a relativised measure is in this case adopted, following the same procedure as was described in regard to cohort members' own qualification in Chapter 5. Finally, cognitive ability is measured according to tests administered to cohort members at age 10–11 and is included in our analyses in the form of cohort-specific 'fifths' – or, in statistical terminology, quintiles.[5]

In the analyses underlying Table 6.1, our concern is not, we should stress, with determining the importance of cognitive ability in individuals' chances of attaining the two educational thresholds *as compared to that* of their parents' social class, status and education. Rather, we are concerned with the question of how far, once cognitive ability is included in our analyses, these parental attributes are still associated with children's educational success, *over and above any influence they may have had on the formation of children's cognitive ability*. Figure 6.1 shows statistically significant positive and negative effects and gives some indication of their relative strength.

It can be seen that, as would be expected in the light of previous research, cognitive ability has a quite consistently significant effect on the probability of cohort members reaching both of the two thresholds. Relative to being in the third – that is, the middle – quintile, taken as the reference category, being in the two lower ability quintiles is negatively associated with the chances of success, while being in the two higher quintiles is positively associated.

However, what Table 6.1 further reveals is that effects of parental class, status and education alike are *also* significant. Individuals with parents in Classes 1 and 2, the managerial and professional salariat, have consistently better chances of reaching the two thresholds, *independently of their cognitive ability*, than do those with parents in Classes 6 and 7, the broadly defined working class; and the same is true for those with parents in Class 3, that of ancillary professional and administrative employees, except in the case of women reaching the second threshold. The chances of cohort members of Class 4 and Class 5 origins are less consistently differentiated from those of Class 6 and 7 origins, although as regards the first threshold women with parents in Class 4, that of small employers and own-account workers, are

[5] For further details of the tests applied and score construction, see Schoon (2010). The use of cohort-specific quintiles serves to overcome the problem of 'Flynn effects' (Flynn, 1987): that is, the tendency for scores on cognitive ability tests to rise steadily and substantially over time – and at a far greater rate than could be accounted for by changes in gene pools, although possibly as a result of improved nutrition, better education and generally more stimulating environments. The statistical model applied – a binary logistic regression model – is fully described in Bukodi, Erikson and Goldthorpe (2014).

advantaged, and so too are men with parents in Class 5, that of lower supervisory and technical employees. The effects of parental status and education over and above those of cognitive ability are more straightforward than those of parental class. The higher parents' status and educational levels, the better their children's chances of attaining both educational thresholds.

From Table 6.1 we can then conclude that if the effects of individuals' social origins on their educational attainment are to be fully accounted for, parental class, status and education cannot be treated as interchangeable indicators. Rather, each, as we have suggested, relates to a different form of parental resources and has to be seen as having its own independent effects on children's chances of educational success.[6]

The further issue that has then to be addressed is that of whether the analyses underlying Table 6.1 reveal any changes across the cohorts. In fact, if we consider each cohort separately, the results we obtain show no changes of a consistent, directional kind. Parental class effects remain essentially constant, and while, between the 1958 and 1970 cohorts, parental status effects weaken somewhat, parental educational effects strengthen. Also between these two later cohorts there is some indication, in line with previous research findings, that the effects of cognitive ability weaken, although in our results this shows up in only a rather patchy way. For men, but not for women, being in the two lower ability quintiles becomes less damaging as regards the chances of reaching the higher-level secondary threshold but not the

[6] It would in principle be desirable to include parental income in our analyses as well as parental class, status and education. We do not do so because no data on parental income are available for members of the 1946 cohort and also because, as earlier noted, we have serious doubts about the quality of those available for the 1958 and 1970 cohorts. If, however, for these two cohorts, we do use these data, what we find (Bukodi, Erikson and Goldthorpe, 2014, Online Appendix 2) is that when parental income is considered alone, its effects on children's educational attainment appear quite sizable but that these effects are then much reduced once parental class, status and education are also brought into play. Thus, where in analysing educational inequalities, only parental income is considered, as is the usual practice among economists, origin effects are likely to be underestimated and effects attributed to income that are properly those of parental class, status or education. The use of children's eligibility for free school meals as a proxy for parental income is also very questionable, since, apart from being only a binary measure, it has been shown to have only a quite loose relation with parental income or family economic conditions more generally (Kounali et al. 2008; Hobbes and Vignoles, 2010).

degree-level threshold. Moreover, in further analyses, using data from a longitudinal study covering children born in the Avon region in 1991–2, ability effects are found to strengthen in comparison with the 1970 cohort – although without any overall weakening in social origin effects. It could be that these changes reflect, on the one hand, the move from selective to comprehensive secondary education during the 1960s and, on the other, the greater pressure on schools during the 1990s to replace mixed-ability teaching with forms of setting and streaming. But the extent of the changes is in any event not large.[7]

The general conclusion to which our findings point is therefore that over the historical period that our data cover, the independent effects of parental class, status and education on children's educational attainment persisted – *and persisted, too, in qualifying the effects of cognitive ability*. We can now move on to the second question that we raised, that of how far the eventual educational attainment of children who in early life were at the same level of cognitive ability differs according to their social origins when parental class, status and education are considered together.

To pursue this question, we allocate members of the 1946, 1958 and 1970 birth cohorts to three groups in relation to their social origins: the most advantaged, the least advantaged and an intermediate group. These groups are derived, in the way that is shown in Table 6.2, from a division of parental class, status and education each into three levels. In effect, the most advantaged group are predominantly the children of parents in the managerial and professional salariat or at least in white-collar occupations who have tertiary- or at least secondary-level qualifications, while the least advantaged group are predominantly the children of parents in wage-earning, mainly blue-collar occupations with no qualifications or at best only ones at a secondary level. Table 6.2 also shows the changing distribution of cohort members across the groups and, as would be expected in the light of the changing structure of employment and of educational expansion, the most advantaged group increases in size across the cohorts while the least advantaged decreases.

[7] The previous research indicating a weakening in the effects of cognitive ability between the 1958 and 1970 cohorts is Galindo-Rueda and Vignoles (2005). This research does, however, rely on less direct and more limited measures of social origins than does our own. For details of the analyses of the Avon Longitudinal Study data, see Bukodi, Bourne and Betthäuser (2018).

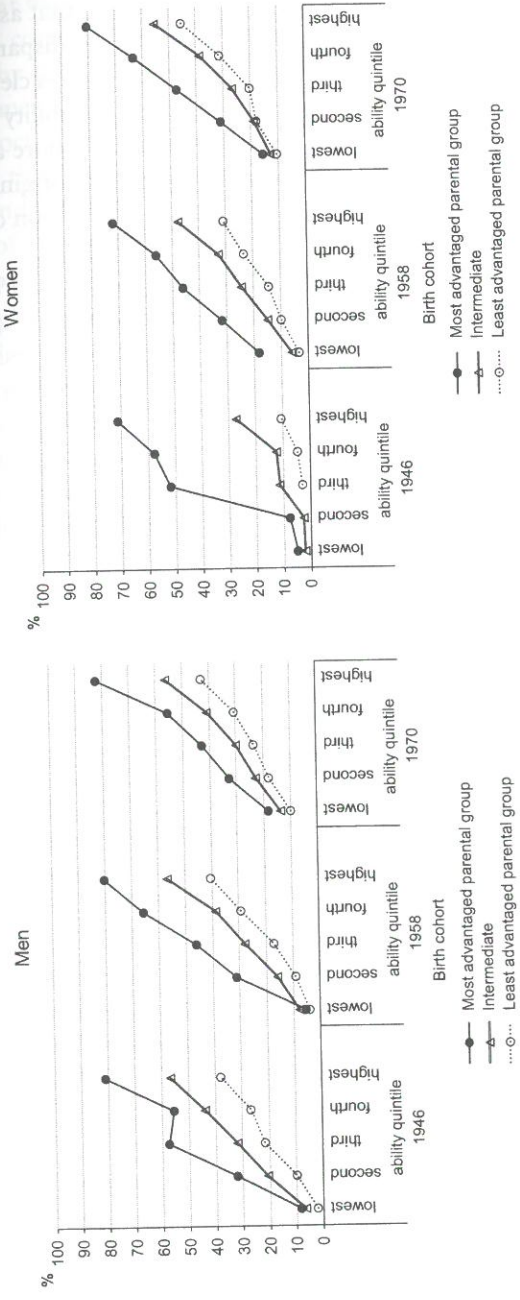
Table 6.2 *Composition of parental groups and distribution across cohorts*

Parental group	Level of parental characteristics			% by cohort		
	class	status	education	1946	1958	1970
Most advantaged	1	1	1	8	14	22
	1	2	1			
	1	1	2			
	2	1	1			
Intermediate	Other combinations of the three levels			40	55	51
Least advantaged	2	3	3	52	31	27
	3	2	3			
	3	3	2			
	3	3	3			
				100	100	100

Level 1: Classes 1 and 2; top third of status scale; degree-level qualification
Level 2: Classes 3, 4 and 5; middle third of status scale; qualification below degree-level qualifications
Level 3: Classes 6 and 7; bottom third of status scale; no qualifications

We can then examine the chances of men and women in the three groups attaining the two educational thresholds that we distinguish when we hold constant early life cognitive ability. In Figure 6.1 we show the results we achieve for the higher secondary threshold by graphing the probabilities of this threshold being reached by men and women in each group within each cognitive ability quintile and within each cohort.

It is evident, first of all, that, in line with the results we have already presented, the probability of reaching the threshold rises quite steeply, in each cohort and for both men and women alike, as one moves from the lowest ability quintile to the highest – although together with some tendency, especially among women, for success in this regard to increase across the cohorts for those at all ability levels alike. Second, though, it can also be seen that within each ability quintile the probability of reaching the threshold is higher in the group with the most advantaged social origins than it is in the intermediate group, and is



Source: Bukodi, Erikson and Goldthorpe (2014)

Figure 6.1 Estimated probabilities (%) of attaining upper secondary or higher level of qualification by parental group, cognitive ability quintile and cohort

higher in the intermediate group than it is in the group with the least advantaged social origins. And, third, it can be seen that as one moves from the lower- to the higher-ability quintiles, the disparities in the probabilities of success across the three parental groups clearly *widen*. There is, in other words, an 'interaction' between ability and social origins. Ability, one could say, counts for more, the more advantaged an individual's social origins or, alternatively, social origins count for more, the higher an individual's ability – a nice illustration of what has been called 'the Matthew effect'.[8]

Thus if, for purposes of illustration, we take men in the 1970 cohort, Figure 6.1 shows that for those in the bottom ability quintile the chances of attaining the higher secondary education threshold are in general quite low and that differences according to social origins range only from a 10 per cent probability for those in the least advantaged group to a 20 per cent probability for those in the most advantaged group. But for men in the top ability quintile, at the same time as the chances of success overall become much higher, the absolute differences between the groups in these chances considerably increase, ranging now from a little over a 40 per cent probability for those in the least advantaged group to as high as a 80 per cent probability for those in the most advantaged.[9]

Finally, Figure 6.1 also allows us to see the extent of changes across the cohorts. In the case of men, what is in fact most notable is the absence of any change of a significant kind: the graphs for the three cohorts are remarkably similar. In the case of women, the situation is somewhat different. Among women in the 1946 cohort, the disparities in the chances of attaining the higher secondary threshold, in relation to social origins, widen across the ability quintiles to a still greater extent than among men. For women in the top ability quintile, the probability of success is only 10 per cent for those in the least advantaged parental group, while being 70 per cent for those in the most advantaged. With the 1958 cohort, the disparities are a good deal reduced, as the chances of success of women in both the intermediate and the least advantaged parental groups markedly improve; and some

[8] After Matthew 25:29, the Parable of the Talents, 'For unto everyone that hath, shall be given.'

[9] In the binary logistic regression model underlying Figure 6.1 a term for the interaction between cognitive ability and the social origins variable was included and proved to be highly significant.

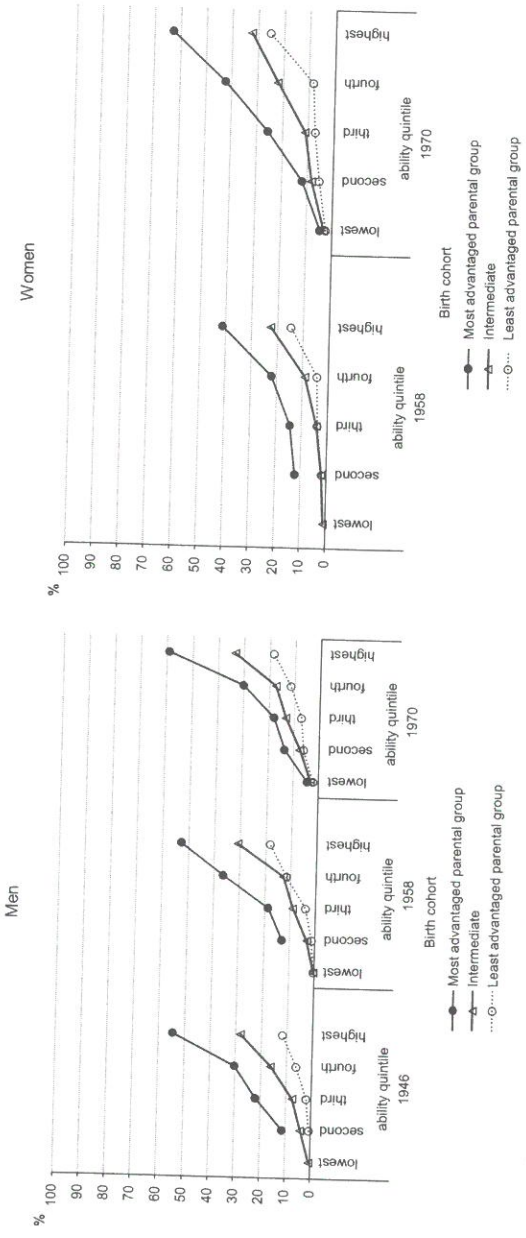
further reduction is apparent between the 1958 and 1970 cohorts. The result is that with the 1970 cohort the graphs for women come into a very close correspondence with those for men. What is therefore suggested by this pattern of change is that, although over the period covered some equalisation in educational attainment among women of differing social origins did indeed occur, this had less to do with changes in the educational system itself than with women's changing attitudes and ambitions in regard to education, with the result that in the latest of our cohorts women take up, to a similar extent as men, such opportunities as the system affords.

The results presented in Figure 6.1 do then indicate quite clearly that a wastage of talent occurs. Children with high levels of cognitive ability, as measured in early life, but who are disadvantaged in their social origins do not translate their ability into educational attainment to anything like the same extent as do their more advantaged counterparts. It is true that the overall amount of this wastage will be tending to decline insofar as fewer children are coming from social backgrounds of the kind that we have characterised as least advantaged. Nonetheless, we can – remarkably enough – still echo the conclusion reached by our sociological forebears researching inequalities in secondary educational attainment as far back as the 1930s: that a 'striking discrepancy exists' between 'the amount of good material in the community and the extent to which the existing machinery of social selection utilises it'.[10]

How far, then, do we find any different situation when we turn to the educational threshold set at degree level? Figure 6.2 has the same kind of derivation and format as Figure 6.1, with two exceptions. No graph is shown for women in the 1946 cohort since insufficient numbers attained degree level to permit any reliable analysis; and, again because of small numbers in the earlier cohorts, it is only with the 1970 cohort that we can make any estimate of the chances of cohort members in the bottom ability quintile reaching this threshold.

In the case of men, we see in fact much the same pattern of results as with the higher secondary threshold, although the disparities in chances of success between those in the least advantaged and most advantaged parental groups across the ability quintiles are somewhat

[10] The quotation comes from Gray and Moshinsky (1935: 115). Their outstanding work in quantitative sociology was carried out within the Department of Social Biology at LSE under the direction of Lancelot Hogben – a pioneer, incidentally, of research into gene–environment interaction.



Source: Bukodi, Erikson and Goldthorpe (2014)

Figure 6.2 Estimated probabilities (%) of attaining degree-level qualification by parental group, cognitive ability quintile and cohort

smaller. There is also some indication of a slight narrowing of the disparities between the 1946 and 1958 cohorts but this tendency then disappears between the 1958 and 1970 cohorts.

In the case of women, however, the results do differ somewhat from those found with the higher secondary threshold. With the 1958 cohort, the disparities in women's chances of success across the parental groups are, at all ability levels, relatively small – generally smaller than those found for men; but with the 1970 cohort, the disparities quite clearly *increase* so as to become the same as or, if anything, wider than those for men. As can be seen, this comes about because, while women in the 1970 cohort of all social origins alike have a higher probability of attaining the degree-level threshold than women in the 1958 cohort, this greater rate of success is especially marked among more able women from the most advantaged parental group. Among these women in the highest ability quintile, over 60 per cent – a higher proportion than with their male counterparts – attained degree-level qualifications as compared with only around 25 per cent of those in this same ability quintile but coming from the least advantaged group.

Overall, then, a wastage of talent is just as evident at the second educational threshold that we have considered as it is at the first. Again, it is clear enough that educational potential is not being realised, and on a quite substantial scale.

Results of the kind we have presented do therefore go clearly against the position of those who, as we earlier noted, would claim 'the decline of the social' in regard to differences in educational attainment: that is, on the grounds that the educational systems of modern societies are already sufficiently developed to ensure that such differences as do now exist predominantly reflect variation in cognitive ability that is itself for the most part genetically determined. What our findings show is that even if one discounts the influence of early life family environment on the formation of cognitive ability – a very large discounting, it might be thought – children of similar ability *still* have very different chances of educational success depending on their parents' resources as these are represented by their class, status and education. There is no evidence at all of an emergent 'cognitive meritocracy'. Even if cognitive ability is taken as in itself meritorious, which may be thought a rather dubious supposition, its expression in educational attainment proves to be highly imperfect. And such a situation may be regarded not only as being, from a normative standpoint, unfair to those who lose out in not

being able to fully realise their educational potential but also as damaging to society at large through the failure that is involved to make the best use of available human resources.[11]

Wasted talent? – 1

Dave

Dave grew up in a working-class family. His parents had only minimal education. At school he enjoyed sport but little else: 'I wasn't academic but I got by and got what I needed to get a job.' He left school at 16 – no one in his family or in his school suggested that he might stay on. He trained as a refrigeration technician and has spent almost all his life in this kind of work, making in the end 'good money' through overtime and shift working, although at some cost to his personal life. He has divorced twice.

However, apart from maintaining his sporting interests at a high level, winning trophies in football, table tennis, snooker and golf – 'I always have to win' – Dave has become an expert scuba diver and is taking courses on the theory – the physics and physiology – of diving. In addition, he has developed a strong interest in genealogy and is using internet sources to research his family history, which he has succeeded in tracing as far back as the early seventeenth century – 'rolls and rolls of paper'. He reads a lot, not fiction but mainly history; he wants to know 'what happened'.

[11] The phrase 'the decline of the social' is the subtitle of the book on educational inequalities by Marks (2014) already cited in note 3 above, and similar views are to be found in the work of Saunders, also there cited. The idea of a 'cognitive meritocracy' is problematic in that the possession of a high level of cognitive ability – whatever weight in its formation may be given to genetics or to early life environment – is essentially a matter of chance, outside of the individual's control. So merit, at least if understood with any connotation of moral worth, is scarcely involved. We would recognise that, in part, educational inequalities do arise from choice – children of less advantaged social origins tend to make less ambitious educational choices than do those from more advantaged backgrounds with the same level of previous performance (Jackson, Erikson and Goldthorpe, 2007). But, as is generally the case in social life, these are choices made under constraints.

Wasted talent? – 2

Harry

Harry's father was a self-employed carpenter. Harry's schooling was not successful, mainly, he believes, because he was made to write right-handed when he was really a 'lefty'. From that point 'I just disassociated from education.' He was told that he had an IQ of 147 but left school with only one O level: 'My sister was the prize pupil in the school and I was the prize prat.' In any case, his father thought that school work was less important than 'having a trade'. On his father's advice, Harry took up an apprenticeship in joinery.

After completing his apprenticeship, Harry was employed for twenty-five years in the same joinery shop but then suffered a serious industrial accident which meant he could no longer continue in manual work. While unemployed, he took a course in computing which he found 'quite easy'. Through a chance acquaintance, he was invited to go for an interview for a salesman's job in a firm manufacturing specialised industrial machinery. He got the job and has since remained with this firm, more recently being given some managerial responsibilities.

Harry played football and cricket at a high amateur level – 'I'm very competitive' – and has become a community coach. He is also a very active school governor, being first a parent and then a community representative. In this connection he has completed several training courses and is now passionately interested in education.

However, the further question that arises is that of the implications of our findings for the current political discussion of social mobility and related policy issues. Up to a point, what we have shown might be regarded as supportive of the importance that is attached to education as a driver of mobility. If it is the case that the educational system is failing children of less advantaged social origins in that many of them do not have the same educational success as do children from more advantaged origins of the same level of ability, then the need for further policy initiatives designed to ensure a greater equality in educational outcomes, and thus in opportunities in the labour market, would appear to be underlined. That is to say, there is no basis for supposing that existing disparities in educational attainment are predominantly

the result of intergenerational genetic transmission – with the implication that further educational reform is likely to be subject to diminishing returns.[12]

Nonetheless, we would in fact wish to revert to the argument we have already advanced: that what can be achieved through educational policy alone in increasing equality of opportunity – and thus reducing the wastage of talent – in the face of inequality of condition has to be recognised as quite limited; and we would see the findings reported in the present chapter as providing further support for this argument. Too much is in this regard being asked of education, not on account of the resistance that comes from genetic determinism, but on account of that which comes from differences in a range of parental resources that can be deployed in furthering children's educational success.

Our previous finding that, at least with education being treated in absolute rather than relative terms, inequalities linked specifically to class origins have somewhat decreased now in fact requires significant qualification. When, while controlling for early life cognitive ability, we bring parental status and parental education into the analysis, in addition to parental class, we see that these also have independent effects on children's educational attainment, and, further, that when social origins are understood in this more comprehensive way, then over the period that our research covers, there is little indication that the influence they exert on children's absolute levels of educational attainment has been reduced – despite the almost continuous educational expansion and reform that has taken place. The liberal expectation that the exigencies of postindustrial society – its very 'logic' – would serve to bring into being an educational system in which inequality of opportunity was progressively reduced has not been borne out.

The disconnect between the findings of sociological research and the consideration of issues of educational inequality in political and policy

[12] Such an idea did apparently receive some attention during Michael Gove's time as Secretary of State for Education (2010–14), when one of his policy advisors, Dominic Cummings, produced a report in which it was claimed, on the basis of the work of the behavioural geneticist, Robert Plomin, that up to 70 per cent of population variance in cognitive ability was genetically determined; and, on this basis, the cost-effectiveness of preschool programmes for disadvantaged children was questioned. But although Gove apparently met Plomin to discuss the issues raised, the report appears to have been otherwise of no great consequence.

contexts could in fact be regarded as most apparent *in the inadequate attention that in the latter case is given to the importance of differences in parental resources*. In pursuit of policies capable of minimising 'social gaps' in educational attainment, especially at the primary and secondary levels, the importance of such differences has been largely disregarded, and the main concerns of policy have been directed elsewhere.

Perhaps the most obvious illustration of this is the emphasis that, since the years of New Labour, has been placed on 'school effectiveness': that is, on the part that it is believed can be played in reducing socially linked inequalities in educational attainment, as well as in raising general standards, by focusing on a number of so-called 'key factors' that include not only school organisation and resources and teaching styles but also 'leadership' and 'culture'. Research aimed at more precisely specifying these factors and at measuring their causal power has in the event proved highly controversial, and charges of both implicit ideological bias and methodological inadequacy have been raised. But what might more relevantly be noted is the body of available evidence that would indicate that insofar as 'school effects' can be established – and whatever the processes through which they operate – they still account for only a quite minor part of the total variance in pupils' educational performance as compared with that accounted for by pupils' own characteristics, and not least by those relating to their social origins. If ways of improving school effectiveness can be reliably identified, there would be obvious advantage in putting them into general practice. But what it might be possible thus to achieve in reducing inequalities in educational attainment would appear to have been seriously exaggerated in policy circles, and with, in turn, an inappropriate degree of responsibility being placed on schools in dealing with problems, the basic sources of which lie outside their walls.[13]

[13] On entering office in 1997, the New Labour government established a Standards and Effectiveness Unit within the Department for Education and Employment. For a review of the controversies arising over research promoted by this body and related studies of school effectiveness, see Goldstein and Woodhouse (2000). New Labour also initiated the academies policy, on which see Chapter 5, n. 12. In some policy quarters, much has been made of the supposed success of the London Challenge, a secondary school improvement programme, in raising levels of educational attainment and especially among pupils from disadvantaged local areas. However, subsequent research (Burgess, 2014)

Moreover, to the extent that any wider view has been taken, what is notable is that the concern has then been far less with differences in parental resources than with differences in parental *behaviour*: that is, with how far parents show an interest in their children's education, encourage them in their school work, engage with teachers, provide help with homework and study space, arrange educationally relevant out-of-school activities and so on. There can be no doubt that parental behaviour in these respects *is* a highly important factor in children's educational performance. But what appears to be seriously neglected in this regard – and with consequent policy failures – is the degree to which, and ways in which, differences in parental behaviour reflect the differing opportunities that are created and the differing constraints that are imposed by parents' resources, as these are conditioned by their class and status positions and their own educational level.[14]

What has been aptly called the 'concerted cultivation' model of parenting is far more easily engaged in by parents in salaried employment, with relatively secure, stable and potentially rising incomes, with social networks involving others in similarly advantaged positions, and with high levels of education than it is by parents in wage-work, with relatively insecure and fluctuating incomes, often dependent on overtime and shift working, with social networks of limited range, and whose own levels of education are low.[15] In the case of parents in situations approximating to the latter, simply pointing to shortcomings in the support they give to their children in their education and urging that they become more 'accountable' for their behaviour, without a full recognition of the disadvantaged conditions under which their

indicates that a very large part of the change that occurred can be attributed to the shifting ethnic composition of the London student body, with growing numbers of pupils coming from ethnic minority groups, often concentrated in disadvantaged areas but in which educational aspirations and levels of motivation are distinctively high. For research findings and more general discussion of the relative importance of school effects on children's educational performance, behaviour in school and psychological well-being, see Sellström and Bremberg (2008).

[14] The Department of Education's Parenting Early Intervention Programme (2008–11) and CANparent Programme (2012–14) were of very limited effectiveness and were discontinued. Subsequently, no comparable programmes have been centrally funded. See Social Mobility Commission (2017a: 26–7) and also the discussion of 'parenting policies' in Stewart and Waldfogel (2017).

[15] The concept of the 'concerted cultivation' of children is due to the American sociologist, Annette Lareau (2003).

parenting has to be undertaken, is a very questionable approach. Not only is it likely to have little success but comes dangerously close to 'blaming the victims'. The most detailed research carried out in the recent past into parental behaviour in ways relevant to children's education has found little evidence of any overall narrowing over time in differences in relation to parental class, status and education – and this could scarcely be regarded as surprising, given the general persistence, if not the widening, of social inequalities of condition. Yet adequate recognition of the problems that arise is still evidently lacking in official pronouncements and policy proposals.[16]

If education is to play a key role in promoting social mobility, the association between individuals' social origins and their educational attainment – as represented by the OE side of the OED triangle – should weaken. On the basis of more detailed analyses, we have now confirmed doubts we previously raised about whether in Britain any such weakening is in train – or could indeed be thought likely to occur in the present state of British society. In the next chapter, we move on to consider, also in greater detail than before, the further requirement of education being a key driver of mobility: that is, that the association between individuals' educational attainment and their eventual social destinations, as represented by the ED side of the OED triangle, should strengthen.

[16] The research referred to is that of Richards, Garratt and Heath (2016), a study of 'the childhood origins of social mobility' carried out for the Social Mobility Commission. Unfortunately, other studies in this area sponsored by the Commission are of lower quality, especially as regards the treatment of parental resources. For example, a study concerned in part with parenting in relation to the secondary school progress of 'low income pupils' (Shaw, Baars and Menzies, 2017) has in fact no data on parental income but uses the inadequate proxy of children's receipt of free school meals (see note 6 above), and gives no consideration at all to the effects of parental class, status or education. The proposals of Theresa May's administration for 'improving social mobility through education' that emanated from the Department of Education (2017), under Justine Greening, start out from an explicit recognition of the current wastage of talent but, yet again, the main policy emphases are on improving school effectiveness and parental behaviour. The proposals met with strong criticism from within the Conservative Party, and in the ministerial reshuffle shortly afterwards Justine Greening left the government.