DOCUMENT RESUME

ED 098 715 EA 006 553

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TITLE An Educational Attainment Model for Great Britain.

SPONS AGENCY National Science Foundation, Washington, D.C.

PUB DATE Aug 74

NOTE 32p.: Paper presented at the Annual Meeting of the

American Sociological Association (Montreal, Quebec,

August 1974)

EDRS PRICE MF-\$0.75 HC-\$1.85 PLUS POSTAGE

DESCRIPTORS *Academic Ability; *Academic Achievement; Academic

Standards: Admission Criteria: *Secondary Education;

Social Background; *Social Mobility

IDENTIFIERS *Great Britain

ABSTRACT

Data from a longitudinal study of a national sample of boys born in 1946 is used to test Turner's model of "sponsored" social mobility in Britain. Turner suggested that, through selection for one of several forms of secondary education, individuals are sorted into different strata that largely determine their level of attainment in later life. Analysis of the data showed that school selection did have an important effect on later attainment, although the effect became less significant as the subjects grew older. Ability was the second most important determinant of attainment and was the most important factor in secondary school selection. Social background also had a definite effect on school selection. Opportunities for further education after secondary school and the awarding of formal qualifications according to universal standards were seen as factors that tempered the effect of sponsorship in later life. (Author/JG)

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AN EDUCATIONAL ATTAINMENT MODEL FOR GREAT BRITAIN*

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*A paper presented at the annual meeting of the American Sociological Association, Montreal, August 1974. The arrangements for the use of these data were made while the author was in London on a Senior Postdoctoral Fellowship from the National Science Foundation, and the analysis was conducted under Grant No. GS-28627, also from N.S.F. I am grateful to J. W. B. Douglas for granting me access to these data. Elizabeth Atkins and Sharon Poss were very helpful at various stages of the data processing. I am also indebted to Elizabeth Atkins, Richard T. Campbell, J. W. B. Douglas and an anonymous reviewer for their careful reading and pointed criticisms of an earlier draft of this paper. They made several important suggestions for improvement. Weaknesses which remain are wholly my own responsibility.



AN EDUCATIONAL ATTAINMENT MODEL FOR GREAT BRITAIN

AESTRACT

Using data from a longitudinal data set from a national sample of boys born in 1946, educational attainment at age twenty-one is explained in terms of social origin, ability, and type of secondary school attended. When examined from the perspective of Turner's characterization of Britain as having a system of "sponsored mobility," sponsorship (through selection for the more elite forms of secondary education) appears to be more effective in the short-run than it is in the period after the boys leave school. Formal qualifications, awarded according to universalistic standards, and opportunities for further education after leaving school are seen as important means by which the effects of sponsorship are tempered, although they remain strong throughout.

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One focus of attention in the examination of factors influencing educational attainment has been on the characteristics of the schools individuals attend. The basic logic of such research is that students from different backgrounds generally attend schools having different characteristics, and such different schools should have varied effects on how students perform in the early grades, what goals they set, and, eventually, what levels of education they attain. The effects of school differences, net of the effects of social origins, have not been shown to be very great in this country (Hauser, 1969). In the British system, however, a much more explicit differentiation between kinds of schools is made, and one might expect a greater effect there than here.

One characteristic that presumably makes the British system different from the American is the latter's commitment to an open competition among those in a school for access to opportunities for higher education and the rewards associated with it. An insightful discussion of this quality of the American system, as it



differs from the British, has been offered by Turner (1960). He refers to the American system as one in which "contest mobility" is the dominant theme. In contrast, he describes the British system as approximating one in which "sponsored mobility" is the norm.

Under <u>sponsored</u> mobility elite recruits are chosen by the established elite or their agents, and elite status is <u>given</u> on the basis of some criterion of supposed merit and cannot be <u>taken</u> by any amount of effort or strategy. (p. 856)

. . . the goal of sponsored mobility is to make the best use of the talents in society by sorting persons into their proper niches. (p. 857) Accordingly, the ideal credentials are special skills that require the trained discrimination of the elite for their recognition. In this case, intellectual, literary, or artistic excellencies, which can be appraised only by those trained to appreciate them, are fully suitable credentials. (p. 858)

These statements make reference to "elite recruits," but Turner intends for the discussion to apply to all levels of the stratification system. Sponsorship is a quality of the total system of mobility. Although there have been criticisms of this contrast between the two systems (Halsey, 1961), Turner's formulation has continued to be used in much of the literature dealing with the two countries. The present paper grows out of a consideration of that formulation through an analysis of data from Great Britain. It cannot deal with all of the important elements of the Turner formulation and the demurrers to it; it is designed simply to examine the importance for educational attainment of some of the major features of the British educational system. In the process, it will be possible to consider aspects of the system which seem to be less consistent with the idea or sponsorship. A brief description of the British educational system will be presented before turning to the data analysis.

Sponsored and Contest Mobility in the British Educational System

It must be noted at the outset that the British educational system has been undergoing major changes over the past decade or two. The general pattern of this change has been in the direction of bringing it closer to the American system,



although even today it is considerably different. Since the data used in the analysis presented here come from a cohort of boys born in 1946, however, it is reasonable in the present discussion to ignore the most recent changes. Instead, we must look at the British system as it was at the time these boys were in school-roughly from 1951 through 1962 for most of them, those receiving higher education continuing into the middle 1960s.

During the relevant period, the vast majority of children began their formal schooling in an Infants' School at about five years of age, moving at about eight to the Junior School. During the last year of the Junior School, when they were approximately eleven years old, an overall assessment of the child's progress and promise was maje, generally referred to as "the eleven plus." This varied from area to area, but included written examinations, teachers' ratings and, to some extent, parents' wishes. This was the basis of assignment of children to secondary schools. (This assignment occurred at age twelve in Scottish schools.) Within the state-supported system, secondary schools were generally of three types: Grammar Schools which were oriented toward preparing students for higher levels of education of an academic type; Technical Schools which were nearly as demanding as Grammar Schools but oriented toward more applied fields such as engineering, nursing and so on; and Secondary Modern Schools. The latter tended to be a residual category; those who were not selected for Grammar or Technical Schools were automatically assigned to the Secondary Modern Schools. There were, of course, schools in the private sector through which parents could seek what they might view as a more appropriate education for their children than that available in the assigned state-supported school, although the proportion of students attending such schools was very small. 3 (There are few private schools in Scotland; students generally attend either a five-year "Senior Secondary" or a three-year "Junior Secondary" School.) The contrast between Grammar, Technical and private schools on the one hand and the Secondary Modern Schools on the other was one of the characteristics

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of the British system that led Turner to view it as one in which sponsored mobility is a dominant theme. Once a student has been chosen to go to one of the selective schools, he has the opportunity to develop in ways not easily available to the Secondary Modern School pupil.

There are other features of the British system, however, that need to be taken into account if we are to assess the importance of sponsorship. At the time the boys studied here went through school, mandatory attendance was enforced only until the age of fifteen, and the majority of students, especially those in non-selective schools, actually left full-time education before they reached the age of sixteen. Thus, in general, British youngsters received much less formal schooling than American youngsters did during the same period. Compensating for this to some extent, however, was an elaborate set of programs of "further education" through which an individual, after leaving secondary school, could obtain credentials which increased his occupational opportunities. In some cases, students who left secondary school relatively early transferred immediately to a full-time lower level program in a college of further education, and they thus did not actually "leave school." Even more common were various forms of part-time education ranging from programs of "day release" in which employers allowed (or required) employees to attend school during working hours, to "sandwich courses" in which short-term fulltime courses were taken between periods of full-time work, to programs of night study similar to those available in the United States. These programs tended to be heavily influenced by industry and were largely focussed on increasing workrelated skills, but they varied widely in both their academic challenge and the occupational level to which they were relevant.

The significance of opportunities for further education in the British system goes beyond the mere possibility of obtaining additional years of education. One of the features of the British system which tends to fit Turner's idea of sponsore: mobility is an elaborate set of "qualifications" recognized both in the educational



system and by industry. Within the formal school system, it is possible for a youngster to take a number of examinations in different subjects. If he passes them, he has academic qualifications which are significant for later employment or for admission to institutions of higher education. These qualifications are basically at three levels: lower level (Royal Society of Arts and College of Preceptors), ordinary ("O-level") and added ("A-level") qualifications. Although advanced qualifications require extended study and therefore those who obtain them in school will have remained relatively long, there is no guarantee that remaining in school will lead to qualifications. After a youngster leaves secondary school, various equivalent forms of certification are available through the institutions of further education. It is thus possible for a student to obtain even high level recognized qualifications after leaving school as well as while he is in school. On the basis of such qualifications, he may gain admission to institutions of higher learning and even enter professional occupations.

The significance of qualifications in the British system seems to fit Turner's idea that in a system of sponsored mobility "the ideal credentials are special skills that require trained discrimination of the elite for their recognition."

On the other hand, the possibility of obtaining such qualifications outside the bifurcated secondary school system in which early selection for an elite education is a dominant feature casts doubt on the degree to which sponsorship is actually effective in the long run. It we are to examine the process of educational attainment in Britain, therefore, we must consider the role not only of early selection but also of qualifications and the system of further education.

Viewed as a channel of social mobility, the British educational system thus appears to have two very important features: (1) The early selection of students for assignment to different kinds of secondary school presumably pre-determines to a considerable extent their potential for mobility, and the fact that selection is largely based on universalistic criteria means that selection should be primarily



a function of academic-intellectual qualities. (2) Since the majority of young people leave full-time education at an early age, and since there are elaborate opportunities for further education open to them, further education programs have the potential for differentiating among students with similar formal schooling and for compensating for any disadvantages they might have had due to the early selection. The first of these features is the basis for referring to the British system as "sponsoring" mobility, but the second suggests that the system has compensating mechanisms which may provide for a more open "contest."

These features of the British system lead to a concentration in this paper on three specific questions: To what extent does the selection mechanism used in the assignment to secondary school make it possible for a high ability child to be sponsored by the system irrespective of his level of origin? To what extent does the division of children into different kinds of secondary schools have a long-term effect on their educational attainment? To what extent does the availability of chanuels of further education act to alter the pattern set by the early selection process?

Method

The data used in the analysis to be presented come from the ambitious longitudinal study conducted by J. W. 3. Douglas. Numerous publications have appeared using various portions of the data, the most directly relevant to our concerns being All Our Future (Douglas, Ross and Simpson, 1968). The study has followed a national cohort of British youngstons born in the first week in March 1946 from before their bigth to the present. Although there have been losses in the original sample due to death and emigration, reducing the original sample of 5,362 to 4,720 living in Britain by 1961, Douglas and his associates have been remarkably successful in maintaining contact with them and in obtaining the desired periodic information. The amount of missing information varies for different measures. For



instance, the date on which a child left full-time lower education is known for 98% of those still in Britain, but full test information for all of the testing periods covered by the study is available for only 77%. Anyone who has conducted longitudinal research will recognize, however, that even the latter is a remarkable accomplishment. The original sample consisted of a'l the children of non-manual and agricultural fathers and one-fourth of those of manual fathers born in Britain in that week of 1946. Weighting is used to bring the sample back to a representation of the total cohort.

The data used here, which include all males in the sample, were kindly provided by Dr. Douglas, along with other data not reported on here. The data were provided in the form of cross-tabulations of pairs of variables, the frequencies arrived at through the weighting process just noted. These cross tabulations were transformed into correlations to permit the multi-variate analysis called for in some of the analysis. All correlations are based on all cases for whom the two measures are available.

The model (see Figure 1) is derived from the status attainment models used in the United States, but it incorporates the significant features of the British school system. The four exogenous variables (father's occupation, father's education, family size, and measured ability) are viewed as having an effect on the

Figure 1 about here

type of secondary school the child attends. All five of these variables are seen as influencing the child's level of educational attainment. Attainment can be measured in three ways: by the age the boy left full-time lower level schooling, by the qualifications he obtained while in full-time school, by his ultimate educational level at age twenty-one.

Father's Occupation. The original classification used by Douglas had ten categories taken from the British Family Census of 1946. Some of these categories



were collapsed for the present analysis in order to have codes that were similar to those used in the analysis of American data and to have a clear-cut order to the categories. Those used here are: 1. Semiskilled or unskilled manual worker, agricultural worker, or worker of unknown skill; 2. Foreman or skilled manual worker; 3. Non-manual wage earner; 4. Self-employed, farmer or salaried employee; 5. Professional or employer of 10 or more workers. The numerical codes noted here (and in other cases, below) were used in the correlation and regression analysis. This classification referred to the father's job when the boys were eleven years old and was based on information collected from the mothers in 1957.

Father's Education. In using this variable, it was necessary to decide on the significance to assign to formal educational experience in relation to the final educational qualifications obtained by the father. Through various kinds of further education, fathers who had had only a primary school education could obtain qualifications higher than some other fathers who had gone to secondary school. The measure decided on employs qualifications, when a father had them, rather than the time spent in formal educational channels. The categories used are: 1. Attended primary school only, no qualifications; 2. Took courses after leaving primary school, no qualifications; 3. Attended secondary school, no qualification. 4. Took courses after leaving secondary school, obtained technical or commercial qualifications; 6. Took courses after leaving primary or secondary school, obtained technical or commercial qualifications; 6. Took courses after leaving primary or secondary school, obtained professional qualifications or a higher degree. This information was collected in an interview with the boys' mothers when the boys were six years old.

Family Size. This is the number of children in the family (including the sample child) when the boys were fifteen. The highest category coded was seven or more.

Ability. This is a standardized score (using a mean of 50 and a standard deviation of 10) for the Alice Heim AH4 tests of verbal and non-verbal ability.



(See Pidgeon, 1968). Five categories of standard scores were used: 1-41, 42-47; 48-52; 53-58; and 59 and above. Numerical scores of 1 through 5 were used in the correlation and regression analysis. The tests were administered in 1961 when the boys were fifteen.

Type of Secondary School. A simple dichotomy of school types is used, differentiating (1) non-selective (Secondary Modern, Comprehensive, Bilateral) from (2) selective (Grammar, Technical, Direct Grant, and Independent). For the Scottish students the division was between Junior Secondary and Senior Secondary. The very great majority (four-fifths) of the boys went to either Grammar, Technical or Secondary Modern Schools. They were classified according to the type of school they were in in 1961, when they were fifteen years old, but little change had occurred between 1957 and 1961.

School Leaving Age. This is the age at which the boy left full-time lower level education in either a secondary school or a college of further education. It thus left out any reference to higher or part-time education. The Lategories used are: Before or at 15½, after 15½ but by 16½, after 16½ but by 17½, after 17½ but by 18½, after 18½. Numerical codes of 1 through 5 were used in the correlation and regression analysis.

Qualifications. The boys were categorized according to the qualifications they gained in their full-time lower level education. The categories used are:

1. No qualifications; 2. Royal Society of Arts and other lower level qualifications; 3. One or more "O-level" passes; 4. At least four "O-level" passes in at least three of the fields of English, Science, Mathematics or a foreign language;

5. One "A-level" pass; 6. Two or more "A-level" passes.

Educational Level. This is a compound index summarizing the educational attainment of the boys as of 1967 when they were twenty-one years old. It is based on verified information from the educational institutions attended. It encompasses the boys' attainments both during their full-time lower level education and after



they left full-time school. The measure is based on an assessment of the comparability of the very large number of different methods of obtaining occupationally relevant educational qualifications (Burnham, 1971). The categories used are:

1. Left school at or before 16, did less than two years' further education, and gained no qualifications; 2. Left school after 16 or did two or more years' further education, but gained no qualifications; 3. Gained Royal Society of Arts or "O-level" qualifications or equivalent technical/commercial/professional qualifications; 4. Gained "A-level" qualifications or equivalent technical/commercial/professional qualifications; 5. Entered full-time higher education or gained advanced technical/commercial/professional qualifications.

In presenting the findings, I have chosen to examine each step in the model in order. The first issue to be dealt with is whether selection for the two types of secondary school reflects only the ability measure, as the logic of the selection system would seem to call for, or whether socio-economic variables also appear to influence selection. Second, the effects of school selection and the four exogenous variables on the three measures of educational attainment are examined in order to assess the effect of the type of school the boy attends on his educational attainment. Finally, a more detailed analysis is presented to highlight the long-term effects of the selection process on the educational attainment of boys of different ability levels. Table 1 reports the intercorrelations of all variables, and Table 2 presents the path coefficients for the model.

Tables 1 and 2 about here

Secondary School Selection

An important theme in many of the critiques of the British school system in recent years has been the claim that the presumed objectivity of the secondary school selection methods is not found in reality. To the extent that selection is biased in favor of higher status youngsters, and to the extent that the selective



schools increase opportunities for higher status in adulthood, such bias would make it difficult for lower status youngsters to be upwardly mobile. Much of the impetus for the introduction and expansion of comprehensive schools has come from those who believe that "sponsorship" tends to promote intergenerational continuity, and the comprehensive school is seen as a mechanism of "contest mobility." Since ability, however measured, is generally found to be associated with social origin, it is necessary to examine the selection pattern with reference to both origin and ability in order to determine if social origin has an effect on selection in addition to any effect of ability.

The first row of Table 2 presents the path coefficients for the first step in the model, secondary school selection, along with the R^2 resulting from the effects of all four exogenous variables. There is no doubt that the most important single source of explanation of the type of school attended is ability. The coefficient for that path is three times as large as any of the other three. Yet, social origin clearly has an effect. All three path coefficients for the social origin measures are statistically significant. Also, of the total variance explained by the four variables ($R^2 = .293$), .064 is attributable to the unique effect of the social origin measures, since ability alone explains only .229 (the square of the ability-school type correlation). In contrast, the unique effect of ability is .141 (the R^2 of social origin with selection being .152). Thus, although ability is by far the more important source of explanation of secondary school selection, social origin appears to have a definite effect.

The Short-Term and Long-Term Effects of School Selection

Since one might expect that ability and social origin would influence a boy's educational attainment, even after he enters secondary school, it is important to separate the effects of the two types of school from the effects of ability and social origin. The basic question becomes: What is the effect of type of school



on educational attainment, net of the effects of ability and social origin?

The second and third rows of Table 2 report the findings relevant to that question so far as in-school attainment is concerned, using school leaving age and qualifications as the measures of in-school educational attainment. It is apparent that, for both measures, type of school is the single most important source of explanation of attainment. Also, in both cases ability is second most important. The individual social origin measures are weaker than either ability or school type, although their combined effects are sizable, especially on school leaving age.

In the fourth row of Table 2, the same analysis is reported using educational level at age twenty-one as the measure of educational attainment. Three things are noteworthy. First, considerably less of the variance of educational level is explained by the model than is the case with school leaving age and qualifications gained in school. Second, the effect of school type on educational level is much weaker than its effects on the other two attainment measures. The effects of the social origins measures are also somewhat weaker, but the contrast is not as sharp as with school type. Third, the effect of ability is even stronger here than it was in the case of the other two measures. Thus, although school type is still an important source of explanation of educational attainment at age twenty-one, its effect is considerably weaker than at the time the boys left full-time lower level education.

The importance of school type in an explanation of educational attainment seems, therefore, to diminish as the boys get older. Since the overall power of the model to explain attainment is weaker using educational level as the measure of attainment, however, we will need to look more closely at this outcome. Table 3 is the first step in such an analysis. It reports the total effects of the

Table 3 about here



three sources of explanation (social origins, ability, and school type) along with their combined and unique effects. The total effects are simply the squares of the individual correlations (or the R² for the social origins measures), the combined effects are the R²s, and the unique effects are the changes in R² when a variable is deleted from the equation involving all of the variables. These results make it clear that ability is at least as important in explaining educational level as it is in explaining either of the other measures of attainment, while school type is much weaker. School type adds much less to the R² for educational level than it does to the other two measures, once social origin and ability have been considered. While social origin and ability, together, add about equally to the explanation of all three attainment measures, once school type is considered, ability is most important in explaining educational level, and social origin is most important in explaining leaving age.

These findings suggest that ability is less important and school type is more important in explaining attainment in school than in explaining gains in educational attainment after the boys leave school. Yet, this is not clearly the case since educational level at age twenty-one includes attainment both during and after they left school, and the measures of attainment at the two points in time are different. A different kind of analysis is necessary if we are to examine the pattern of later attainment alone.

Educational Attainment after Leaving School

Since school leaving age is an unalterable in-school outcome, only qualifications provide a basis for comparing in-school and post-school attainments. Although the measure of qualifications gained in school is somewhat different from that used in the educational level measure, with some collapsing of categories, comparable measures can be produced. It is possible to identify at both points in time those who have no qualifications, those with lower level qualifications



(Royal Society of Arts or "O-level"), and those with higher level qualifications ("A-level" or professional qualifications).

The previous analysis leads to two kinds of expectations: Tirst, since school type is more strongly associated with in-school qualifications than with associated educational level, though significantly/with both, it would be expected that selective school boys would gain qualifications much more often in school than would non-selective school boys, that such a difference would still exist at age twenty-one, but that the difference would be smaller at the later time. Second, since ability contributes more and school type contributes less to explaining educational level than to explaining qualifications gained in school, ability should help explain the gains in qualifications in the post-school period. Data relevant to these expectations are presented in Tables 4 and 5.

Table 4 about here

Table 4 reports the proportions of cases from the two kinds of schools who obtained no qualifications, lower qualifications, and higher qualifications both during their full-time schooling and afterwards. In the two panels of Table 4, the column totals represent the proportions in each category at the time they left full-time lower level schooling, and the row totals represent the proportions at age twenty-one. The cell entries on the upper left to lower right diagonal are the proportions who did not increase their level of qualifications after leaving school, and those above the diagonal are the proportions who did.

As expected, a far greater proportion of the selective school students obtained qualifications in school, and their superiority in this regard is still very great at age twenty-one. Almost exactly the same proportion (one-sixth) from both kinds of schools obtained further qualifications after leaving school. A larger proportion of selective school boys went from lower to higher level qualifications (.131 versus .064), but there were more non-selective school boys who obtained



their only qualifications after leaving school (.110 versus .042), and they were more likely than their selective school counterparts to obtain higher level qualifications (.079 versus .032). Overall, the selective school boys may have lost some of their advantage so far as having some qualifications is concerned, but they increased their advantage so far as higher level qualifications are concerned. Thus, it is not really possible to say that the difference between the two types of schools diminished, although it did not seem to increase appreciably either.

The issues involved are more complex than Table 4 suggests, however. We have seen that obtaining qualifications, either in school or afterwards, is a function of factors other than school type, especially ability, and the two types of schools have different proportions of high ability students. Because there is an overlap in the ability distributions in the two types of schools, it is possible to determine if those with similar ability levels at the two kinds of schools obtain the same qualifications, either in school or afterwards. Table 5 deals with that issue.

Table 5 about hore

In each type of school a differentiation was made among three ability levels: low (test acores up to 47), average (48-52), and high (53 and above). Except for the low ability category in the selective schools, which contains only 95 boys, all categories contain at least 200 cases. For each of these categories, two questions were raised: What proportion gained any qualifications and gained high level qualifications in school? Of those who failed to gain any qualifications or who failed to gain high level qualifications in school, what proportion did so after leaving school? This second question leads to a different treatment of the data than found in Table 4 since it uses as the base for the proportions only "the population at risk" -- those who had not already gained qualifications or high level qualifications at school. Since 89% of high ability selective school boys obtained some qualifications at school, for instance, compared with 36% of



non-selective school boys, it is not particularly meaningful to report that "only"

3% of the former but 13% of the latter gained qualifications after leaving school.

The three panels of Table 5 report the proportions in each ability category in each school type who gained qualifications in school, after school, and overall. (The first and last panel proportions are based on the total number of cases in each category; the second panel proportions are based on the number of cases who did not gain the particular level of qualifications in school.) Also in each panel is reported the ratio between the proportions for the selective and non-selective school boys. To take a single example, consider the low ability cases and whether they gained any qualifications at all. Almost two-thirds (.663) of the selective school boys of low ability obtained some qualifications in school, compared with only one-ninth (.107) of the low ability boys in non-selective schools, a six-toone advantage. Of those who did not obtain qualifications in school, almost onefifth (.188) of the selective school boys did so after leaving school, compared with nearly one-tenth (.093) of those from non-selective schools, a two-to-one advantage. Overall, low ability boys from selective schools were almost four (3.82) times as likely to obtain some qualifications (.726 versus .190) either in school or afterwards.

Several outcomes are worth highlighting: (1) At all ability levels, both in school and afterwards, those who attended selective schools obtained more qualifications, and more high level qualifications, than those who attended non-selective schools. (2) At all ability levels, the selective school boys obtained the bulk of their qualifications while in full-time school while the non-selective school boys obtained theirs mainly after leaving full-time school. (3) Although the advantage of the selective school boys is less marked with respect to qualifications gained after leaving school, it is still present. The non-selective school boys "catch up" after leaving school only in the sense that they fall behind at a slower rate. (4) The advantage of the selective school boys is clearest at the low



ability level, both during school and afterwards. Sponsorship thus seems to be most effective in furthering the careers of these low ability boys. (5) As a corollary of (4), ability is more clearly associated with gaining qualifications among non-selective than selective school boys.

Tables 4 and 5 indicate how the advantage of the sclective school boys is reduced between school leaving and age twenty-one so far as the ratios of proportions are concerned while at the same time the absolute differences between the two groups of boys have actually increased. At the time they leave full-time lower level school, sponsorship has indeed been extremely successful, especially so far as higher level qualifications are concerned. Practically none of the non-selective school boys, but two fifths of the selective school boys, have obtained higher level qualifications by that time. By the time they are twenty-one, a significant proportion of non-selective school boys have obtained higher level qualifications, but they have fallen even farther behind than they were before.

The advantage of the selective school boys cannot be explained in terms of their higher ability levels, either while they are in school or afterwards. They obtain more and higher level qualifications than their non-selective school counterparts at all ability levels. In fact, their greatest advantage is at the low ability level. Low ability selective school boys obtain almost as many and as high level qualifications at their average ability schoolmates, and the similarity is greatest at the time they leave school. Among selective school boys, there seems to be a "floor effect;" the great majority get some qualifications, and nearly half at all ability levels get higher level qualifications. Among non-selective school boys, there seems to be a "ceiling effect;" the majority obtain no qualifications, and only high ability boys have even a one-in-four chance of obtaining higher level qualifications. Although after leaving full-time lower level school the non-selective school boys come much closer to equalling the selective school boys, thus suggesting a reduced effectiveness of sponsorship, they



still continue to fall farther behind. The difference by school type is smallest at the high ability level, but it exists even there.

Discussion

A boy's social origin has a significant influence on the type of secondary school he attends, although the single most important determiner of school type is ability. Both social origin and ability continue to have independent effects on the boy's accomplishments in secondary school, although type of school is by far the single most important source of explanation of school leaving age and qualifications gained in school. Finally, later educational attainment, after leaving school, is also influenced by the kind of school he attended, although the effect is not as strong as it is during full-time lower level schooling.

How do these findings fit with Turner's view of the British system as one which "sponsors" mobility? If one takes his characterization as meaning that the British system is close to the ideal type form of sponsorship, Turner may have overstated the case. ¹¹ There is certainly not a full separation of cutcomes for boys attending the two types of school, the system of further education serving to increase the overlap of outcomes for the two groups. If selection for Gra aar and Technical School education is a form of sponsorship, it is not wholly successful, although its effects are apparent.

The significance of qualifications in the British system fits Turner's description of sponsorship very well. As he says, "the ideal credentials [under a system of sponsorship] are special skills that require the trained discrimination of the elite for their recognition." (p. 858) The system of qualifications deviates from a fully effective form of sponsorship, however, in that qualifications are awarded according to universalistic criteria. Although students in selective schools have far greater opportunities to obtain the background experience necessary to pass the examinations, they are evaluated according to the same



standards as those from non-selective schools. Thus, outstanding students from non-selective schools can successfully compete for higher level qualifications.

Assignment to a type of secondary school is very important but not a wholly determinative decision.

It may be argued, though, that the full effects of school type are not reflected in this analysis. Even though boys who have gone to Secondary Modern schools may obtain qualifications, at least after they leave secondary school, the very fact that they have attended such a school may affect their later opportunities, especially employment opportunities. Even though the procedures used here to classify qualifications gained through further education are based on occupationally relevant criteria, and even though this is the most carefully developed classification system available, the categories are so broad that there is plenty of room for occupational differentiation within any single category. (And to carry out the analysis in Tables 4 and 5 it was necessary to make them even broader.) One might expect that type of school attended would help explain that within-category variation. When employers have a choice, they might be expected to prefer the Grammar or Technical School boy. Such a preference may be based on more refined differentiations among qualifications than are used here. They may also be based on more subtle "credentials" than any classification system can include -- such as accent, poise, artistic interests, and so oa.

Any wholly satisfactory assessment of this analysis as an indication of the degree of sponsorship in the dritish system, however, must also contend with the fact that the model used leaves considerable room for the operation of other factors in determining educational attainment. Compared with comparable analyses of attainment using United States data, a sizable proportion of the variance in educational attainment has been explained. Yet important questions remain unanswered. What else determines school selection besides ability and social origin? Are there other personal qualities, besides ability, which help explain both in-school



attainment and later qualifications? Are there variations within types of schools that would help strengthen the model? Clearly, further work needs to be done.

There is reason to believe, within the limits of this analysis, that the formal sponsorship built into the British system is a powerful determiner of the ultimate educational attainment of young people, but there are some countervailing forces also. Although the formal structure does have those features of sponsorship Turner has described, and although the outcome is clearly influenced by that sponsorship, the effect of the system of further education has many of the qualities Turner refers to as a system of "contest mobility." Selective school boys have a head start in the contest (through qualifications gained in school), and they compete more successfully even after leaving school, but some non-selective school boys do succeed. Further work may show either that the assumed comparability of types of qualifications is inappropriate or that more subtle qualities gained in a selective school have powerful effects on later occupational, status or income distributions. It may also be that the very elitist value orientation in Britain (Lipset, 1963) directs the sponsorship efforts of the system toward controlling only access to elite positions; thus access to other strata is permitted to follow the contest mobility pattern. 12 But until the value of such revisions of the present analysis have been demonstrated, we must conclude that sponsorship in the British system is counterbalanced to some extent by avenues of competition. The "contest" may not be a wholly fair or open one, but it does take place.



FOOTNOTES

- Actually, Turner's discussion referred to the English system. I use the term British throughout because the data used come from England, Scotland and Wales. The Welsh school system is like the English, but the Scottish system differs in several respects. Almost nine-tenths of the cases considered here come from England and Wales, however, and it is assumed that the Scottish-English differences are now significant for this analysis.
- 2. Actually, the British differentiate among kinds of schools in more detail than this suggests. The only other kind of school serving a significant proportion of students, however, is the Comprehensive School which combines some of the features of the other three major types. The Comprehensive School is a relatively new form which has been established to meet criticisms by those who object to the elitist implications of early selection and the sharp differentiation between the selective and non-selective schools. Its very existence suggests that there are pressures in Britain to move away from a system of sponsored mobility.
- 3. Of the total sample dealt with here, sixty-one per cent attended Secondary

 Modern schools, nineteen per cent attended Grammar schools, four per cent

 attended Technical schools and four per cent attended schools in the private

 sector. The rest were at a variety of other kinds of schools, a total of ten

 per cent attending Comprehensive schools.
- 4. In the present sample, forty-seven per cent left school at fifteen, and only twenty-six per cent were still in school after sixteen years and three months.
- 5. It is impossible in a brief article to convey the diversity of types of further education. The interested reader is referred to Cantor and Roberts (1969) for a detailed discussion.



- 6. See Douglas et al. (1968) for further details of the study design and sample losses.
- 7. Because of the true longitudinal nature of the data, there is one question that needs to be dealt with if we are to order the variables as shown in Figure 1. Two of the four exogenous variables (father's occupation and education) were measured at or before the time the boys were assigned to a kind of secondary school. The family size and ability measures, however, were taken after that assignment, though for this analysis we would ideally have had measures taken at or before the time of assignment. It is unlikely that an earlier measure of family size would have a very different outcome in the analysis, but more serious questions might be raised about the ability measure. One might expect that the more academic orientation of the selective schools would lead to a further advantage on such a measure for boys in selective schools. To the extent the results of ability measures at ages eleven and fifteen might differ, though, the difference should generally be of the sort that would lead to a stronger effect of ability on school type, as shown in Figure 1. Since it will be shown below that this effect is not even as strong as would be ancicipated from knowledge of the formal selection process, it seems unlikely that the use of the fifteen-year measure is a source of any significant distortion.
- 8. This involves collapsing categories 2, 3 and 4 and categories 5 and 6 of the qualifications measure to form the lower and higher categories of in-school attainments; it also involves collapsing categories 1 and 2 and categories 5 and 6 of the educational level measure to form the no qualifications and higher qualifications categories of post-school attainments.
- 9. More than one-third of the boys in the highest ability category (59+) and



three-fifths of those in the next highest category (53-58) were in non-selective schools.

- 10. The comparable proportions here and in Table 4 are not identical because ability measures were not available on all of the boys.
- 11. In fairness, it must be noted that Turner did not say the British system was a perfect example of sponsored mobility but only that the folk norms were such as to define sponsorship as the way the system should work.
- 12. Turner's article states (p. 856, footnote) that the sponsorship conceptualization applies to all levels, but it would be consistent with an elitist value orientation to view all statuses below the upper stratum as equally insignificant.



REFERENCES

Burnham Further Education Committee.

1971 Grading of Courses. London: Her Majesty's Stationery Office.

Cantor, L., and I. F. Roberts.

1969 Further Education in England and Wales. London: Routledge and Kegan Paul.

Douglas, J. W. B., J. M. Ross, and H. R. Simpson.

1968 All Our Future. London: Peter Davies.

Halsey, A. H.

1961 "Sponsored and contest mobility: A criticism of Turner's hypothesis."

American Sociological Review 26 (June): 454-455.

Hauser, Pobert M.

1969 "Schools and the stratification process." American Journal of Sociology 74 (May): 587-611.

Lipset, S. M.

1963 "The value patterns of democracy: A case study in comparative analysis."

American Sociological Review 28 (August): 515-531.

Pidgeon, D. A.

1968 "Details of the fifteen year tests." Pp. 194-197 in J. W. B. Douglas,
J. M. Ross, and H. R. Simpson, All Our Future. London: Peter Davies.
Turner, Ralph H.

1960 "Sponsored and contest mobility and the school system." American Sociological Review 25 (December): 855-867.



Figure 1

Model of Educational Attainment

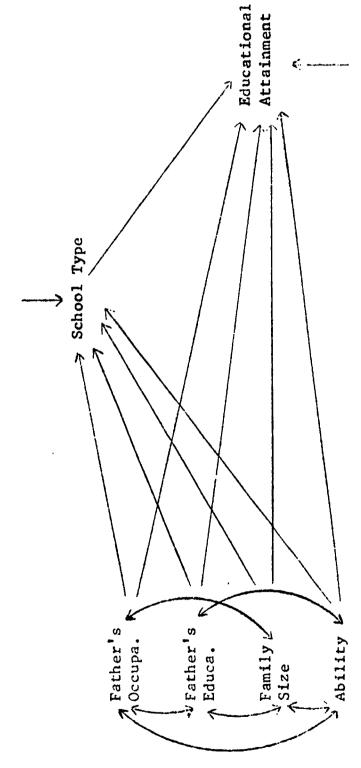




Table 1
Correlations Among Attainment Model Variables

	Father's Education	Family Size	Ability	School Type	Leave Age	Qualifi- cations	Education Level
Father's Occupation	•532	~• 1 90	• 265	• 325	•432	• 393	20
Father's Education		148	. 223	• 309	.404	. 389	• 322
Family Size			193	210	260	•• 259	271
Ability				• 479	•467	• 504	• 473
School Type					• 650	• 665	• 512
Leave Age						. 874	• 692
Qualifi- cations							. 748

Table 2
Path Coefficients, Educational Attainment Model

Independent Variables

Dependent Variable	Father's Occupation	Father's Education	Family Size	Ability	School Type	R ²
School Type	.130	.138	 C38	.396	*	.293
Leaving Age	.152	.131	083	.158	.467	.518
Qualifi- cations	.098	.131	081	.204	.478	.532
Educational Level	.067	.116	128	.260	.303	.371



Table 3

Total, Combined and Unique Effects of Social Origin,

Ability, and School Type on Educational Attainment

Dependent Variables Leaving Age Qualifications Educational Level Total Effects of: (1) Social Origin .258 .230 .176 (2) Ability .219 .254 .224 (3) School Type .423 .443 .262 Combined Effects of: (1) and (2).364 .370 .306 (1) and (3).500 .50L .321 (2) and (3).455 .487 .329 .371 (1), (2) and (3).518 .532 Unique Effects of: .044 (1) Social Origin .064 .042 (2) Ability .019 .031 .051 .065 (3) School Type .162 .154

Table 4

In-School and Post-School Qualifications by School Type

School In-School		In-School	In-School Plus Post-School Qualification				
Type	Quals.	None	Lower	Higher	Total		
	None	.139	.010	.032	.181		
1ve	Lower	.000	.280	.131	.411		
Selective	Higher	.000	.000	.408	.408		
Š.	Total	.139	.290	.572	1.000		
			·····				
							
e c	None	.678	.031	.079	.788		
Non-Selective	Lower	.000	.120	.064	.184		
	Higher	•000	.000	.028	.028		
Non.	Total	.678	.151	.171	1.000		



Table 5

In-School and Post-School Qualifications by School

Type and Ability Level

	In-Schoo Proportion Gaining Some			l Qualifications Proportion Gaining High Level		
Ability Level	Sel.	Non-Sel.	Ratio	Sel.	Non-Sel.	Ratio
Low	.663	. 107	6.20	.211	.011	19.18
Average	.687	.256	2.68	,254	.039	6.51
High	.893	.364	2.45	.462	.053	8.72
Total	.845	.215	3.93	.412	.030	13.73

	Post-School Qualifications							
	Proportion Gaining Some			Proportion	Proportion Gaining High Leve			
Ability Level	Sel.	Non-Sel.	Ratio	Sel.	Non-Sel.	Ratio		
Low	.188	.093	2.02	.267	.089	3.00		
Average	.349	.206	1.69	.333	.201	1.45		
High	.294	.200	1.47	.298	.221	1.35		
Total	.294	.143	2.06	.302	.152	1.99		

	Total Qualifications						
	Propo	rtion Gaini	ng Some	Proporti	on Gaining	High Level	
Ability Level	Sel.	Non-Sel.	Ratio	Sel.	Non-Sel.	Ratio	
Low	.726	.190	3.82	.421	.099	4.25	
Average	.796	.409	1.95	.502	.232	2.16	
High	.925	.491	1.88	.622	.262	2.37	
Total	.891	.327	2.72	•590	.177	3.33	

Note: Proportions in the top and bottom panels are based on the total number of cases in each school-ability category. Proportions in the middle panel are based on the number in each school-ability category who had not gained qualifications, or high level qualifications, while in school.

