Book Reviews

The Social Determinants of Success

Inequality. A Reassessment of the Effect of Family and Schooling in America. CHRISTOPHER JENCKS and MARSHALL SMITH, HENRY ACLAND, MARY JO BANE, DAVID COHEN, HERBERT GINTIS, BARBARA HEYNS, STEPHAN MICHELSON. Basic Books, New York, 1972. xii, 400 pp., illus. $12.50.

There are two broad approaches to studying inequality, which can most easily be illustrated by considering a pair of people, i and j. The inequality of a pair on variable Y is conveniently defined as some increasing function of the absolute value of the difference, $Y_i - Y_j$, between the values of Y for the pair, sometimes standardized by dividing the difference by the mean value, or of the absolute value of the ratio (that is, the difference in the logarithms), Y_i/Y_j. We can set about explaining the value of Y for each individual in terms of his own individual conditions (his race, education, sex, age, social origins, and so on), hence explaining the difference in Y by differences in individual conditions. Or we can set about explaining the difference by a variable describing the pair (i, j) (for example, whether it is a black/white pair in the South or in the North or a pair in agriculture versus urban employment).

The second kind of analysis requires the comparison of social systems (at the very least, social systems containing the pair), since data on variables describing pairs cannot be derived from data on isolated individuals. Such system analysis usually is associated with a theory that people at the top *try* to keep people at the bottom unequal, for their own advantage; the primary variables are therefore usually ones explaining why in some social systems the rich have more power than others. The higher the power of the rich, the higher the rate of exploitation; that is, the higher the deliberately maintained distance between pairs of individuals. For example, plantation systems in agriculture in the United States (in the Black Belt in the South and in central California) have produced more inequality than small-holding systems (in the East and Midwest), especially when migrant laborers and Blacks were disenfranchised and unorganized and therefore powerless.

This book takes the first approach. That is, the authors try to explain the difference between pairs of people in, say, occupational success by differences between those same people in education, test scores, race, school attended, and so on. The policy question to which it is addressed is: How far can we reduce inequality in society at large by reducing inequalities in the schools? It does not address system questions such as why inequalities of schooling are less now than in the 1920's, or why they are less in some states or cities than in others, or why they are less in the United States than in many other countries.

One result of this individual strategy is that although the authors are clearly socialists in the broad sense that they want to decrease inequality by taking from the rich to give to the poor, their picture of American society is curiously benign. When they talk of people actively producing inequalities for their own benefit, as when employers "prefer" one kind of worker to another (pp. 182–83), their analysis of why employers' preferences reign rather than those of socialist college professors is superficial in logic and thin in evidence.

The statistical analysis of the book is of the very highest quality. It is buried in footnotes and appendices, so the reader who does not like statistical analysis can read the text with little bother. The evidence comes from putting together results from the best available studies. The authors use great ingenuity in integrating these results. Their own assessment of the adequacy of the evidence, in those cases in which I know the studies, agrees almost exactly with my own. In short, the book represents the best we know about the causes of individual success and about how far inequality in the causes accounts for inequality of success. Further, it gives a very good picture of how sure we are about these results. Nonspecialist readers can read this book with confidence that they are getting the best sociology can offer at the present time.

In particular the long analysis of the degree of inheritance of IQ, in appendix A, is the best in the literature. The authors conclude that about 45 percent of the variance of IQ scores of the U.S. population is due to variation in genes, about 35 percent is due to variation in environment, and 20 percent cannot be allocated because it is due to the correlation between the genes of a person and his environment. They also estimate that, given the state of the evidence, these allocations may easily be off as much as 20 percent, because heritabilities estimated in different ways disagree. I conclude from this that the data available are sufficiently ambiguous that they are more similar to a Rorschach inkblot than to a crucial experiment and investigators' conclusions about them are better indicators of the minds of the investigators than of the data. One has to care a lot about the answer, and to be pretty sophisticated in statistics, to read this appendix.

Before I summarize what this best we know shows, there is a major problem of substantive interpretation that must be addressed, the problem of luck. Most of the variation in test scores, educational attainment, occupational success, or income is not related to any of the causes sociologists study. A person's education, experience, and seniority may have got him a good job in a firm that goes out of business so he loses both his job and his pension rights, or in a successful firm. A person may lose a leg, and it may be his own fault, or the fault of someone poor without insurance, or the fault of someone rich. A person may lose interest in getting ahead and put his energy into his golf game. Presumably the "unexplained variance" in success is related to a large variety of such small causes.

Now consider a passage such as: "Thus there is nearly as much variation in status between brothers as in the larger population. Family background is not, then, the primary determinant of status" (p. 179). What such an argument does is to compare the causal importance of family background with the importance of luck, of the large variety of more or less unorganized small causes of people's fates. The question is whether this is the right comparison for policy analysis.

The authors' justification for making this kind of comparison is implicit (another possible justification, that it is traditional in the behavioral sciences, is worthless). They have *imagined* a socialist policy alternative, which would operate directly to equalize incomes, working conditions, and so on. Such a policy could presumably operate to offset the effects of luck as well as of systematic social forces such as family background. But comparing a real cause in the world with the strongest cause one can imagine, rather than with other causes actually operating, gives an artificially deflated estimate of the importance of the real cause. Thus much of the argument of the book comes down to arguing, for one systematic social cause after another, that it is unimportant compared to luck.

Aside from the fact that such a procedure is a proposal for the abolition of behavioral science, it seems to me not justified for policy analysis. The equalizing effects of the most socialist policies ever instituted in the United States, the progressive income tax and the social security system (which equalizes among ages, not among social classes), are relatively small. I doubt if they much exceed the effects of equalizing education over the past four decades. Thus it seems to me more reasonable to compare the effect of a particular systematic social cause to the total effects of all the systematic causes we can find, excluding luck. In my summary, I will therefore try to assess the size of various effects as compared with the total *explained* inequality, rather than as compared with total inequality. This means, for example for income, that I will ignore the 77 percent of the variance that is, as far as we know now, due to luck (see fig. B2, p. 339) and try to assess the importance of causes relative to the *socially patterned* inequality, the other 23 percent.

The most striking finding is that, no matter how schools are assessed, *which* school a child goes to has a negligible effect on success, however measured. Schools may be integrated or segregated, expensive or cheap, with rich students or poor students, or merely ranked by degree of success, but differences between them make very little difference to students' success. The idea that schools make a big difference is a statistical illusion. Schools whose students have high IQ or achievement scores, or that have high percentages of students going on to college, do so almost entirely because the students in them *come* to school with high scores and with family backgrounds that lead to college. A student may possibly be disadvantaged by going to school with all smart kids, because it makes him feel dumb, but the effect is trivial in size. He may on the other hand be advantaged because he learns more from his smarter peers, but that effect is also trivial in size.

What happens *within* schools has a large effect. In particular, whether a student ends up on a college preparatory curriculum is the dominant immediate determinant of whether he goes on to college. This in turn is strongly influenced by his intelligence test scores and his grades, and influenced some much smaller amount by his social background *aside* from aspects of social background that determine IQ and grades. Schools hardly discriminate at all by pure racial or social class background. Almost all the apparent discrimination is due to social influences on test scores and grades. However, most of the slippage between high school preparation and college attendance is explained by sex and social background. That is, college preparatory students who do *not* go on are largely working class, or women, and those on other curricula who *do* go on are largely from richer families, and men.

Children's intelligence is the dominant determinant of adult cognitive abilities, with years of education (nowadays much of this is a measure of the college/noncollege distinction) an important supplementary cause. Since children's intelligence scores are a dominant determinant of years of education, this means that in a practical sense years of education and adult intelligence are almost the same variable. Whatever that mixed variable is—certificates or true competence—it is by far the dominant cause of what level of job people get. Tests of adult mental competence allow us to explain a little bit more of differences in jobs above the amount explained by years of education.

The dominant determinant of income is, of course, whether or not a person holds a job, with old people, women, children, people just entering the labor market, people in seasonal, capital goods, or weapons industries, and Blacks being principally disadvantaged. Like most recent studies of inequality, this book systematically ignores the causes of being out of the labor force or being unemployed, although it does for a change include women in the analysis. Once a person has a job, the dominant cause of his income is what kind of job it is, with some smaller effect from adult measures of cognitive competence.

But income is poorly predicted by sociological or genetic IQ variables. That is, luck plays less of a role in whether or not a person becomes a physician than it does in whether he becomes a very rich or only a well-to-do physician; luck plays less of a role in determining that a person becomes a factory operative than it does in determining whether he works all year in the high-wage chemical industry or only part of the year and in the low-wage cannery industry.

Of course, by the time the originally weak effects of differences between schools on children are further attenuated by luck in getting more education, luck in getting a good job, and luck in getting a high income out of that good job, they are completely trivial. Anything we now know how to do to elementary and secondary schools, including spending money on them, integrating them or resegregating them, grouping according to ability within them or not, adding preschool and kindergartens to them, will have trivial effects on the eventual incomes of the children in the schools.

The policy implications the authors draw from this are, first, that school policies and expenditures should be evaluated by what kind of life they give children, rather than by what effect they might conceivably have on the life of 50-year-olds 40 years from now; and second, that if one wants to equalize incomes, give the poor money, not education.

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Civilian Thinkers

The Private Nuclear Strategists. ROY E. LICKLIDER. Ohio State University Press, Columbus, 1972. xiv, 214 pp. $11.

During recent years civilian students of nuclear strategy have been the targets of severe attacks from both the right and the left. Critics on the