## Correlates of Achievement

Who Gets Ahead? The Determinants of Economic Success in America. CHRISTOPHER JENCKS and 11 others. Basic Books, New York, 1979. xvi, 398 pp. \$17.50.

Who Gets Ahead? is a descriptive account of the determinants of economic success in America. Derived from a contract report by Harvard's Center for the Study of Public Policy to the National Institute of Education and the Department of Labor, the book summarizes the efforts of Christopher Jencks and 11 colleagues to provide a thorough analysis of available data on the relationships among the family characteristics, academic ability, personality, and educational, occupational, and economic achievement of American men. The book has been promoted as a sequel to the widely discussed 1972 work by Jencks and another seven colleagues, Inequality: A Reassessment of the Effect of Family and Schooling in America, and has already received many newspaper and magazine reviews.

For reasons both good and bad, however, Who Gets Ahead? is less likely to attract the broad readership and critical acclaim that met Inequality. Who Gets Ahead? is much harder to read. This is due in part to its greater analytic sophistication, detailed summaries of results based on 11 surveys, and extensive documentation of procedural details and analytical caveats, but the book is a chore to read even for the reader schooled in the quantitative analysis of socioeconomic achievement. It develops in tandem two layers of footnotes-about 160 scattered through the 311-page text plus another 110 at the end-which seem to be part of a single effort at documentation and qualification. It has over 40 tables in the text and almost as many in the appendix even though the two groups of tables often seem equally germane to the main line of argument. Some chapters are well written, substantively important, and free of editorial gaffes, whereas others would have been better excluded. In short, Who Gets Ahead? betrays itself as a committee product, and further streamlining of the presentation could have made the book more accessible.

Who Gets Ahead? will probably be less widely read than *Inequality* for reasons of substance as well. Except for occasional rhetorical motivation, the book devotes little attention to the social policy issues that concerned Inequality and focuses instead on the statistical relationships among variables measuring achievement and its determinants. It pays only limited attention to controversial empirical topics, such as the efficacy of schools or the heritability of economic success. And it is conservative in drawing implications of empirical results for general arguments about the nature of families, schools, and labor markets. In part, this shift reflects that Who Gets Ahead? is, in the main, technically sounder than Inequality and that the authors are properly cautious in interpreting their findings. In only a few places can Jencks et al. be accused of overinterpreting their results. But one may also ask whether or not the analyses reported in Who Gets Ahead? bear much relevance to the social policy issues that ostensibly motivated the work or, for that matter, to an understanding of the workings of social stratification in America. I shall return to this point.

Who Gets Ahead? is best seen as another entry in the list of serious, descriptive, empirical monographs on social mobility and achievement in the United States, the earlier entries being Blau and Duncan's The American Occupational Structure (1967), Duncan, Featherman, and Duncan's Socioeconomic Background and Achievement (1972), Jencks and associates' Inequality, Sewell and Hauser's Education, Occupation, and Earnings (1975), Hauser and Featherman's The Process of Stratification (1977), and Featherman and Hauser's Opportunity and Change (1978). It relies largely-though not exclusively-on data gathered and already analyzed by others.

To what extent are Jencks and his associates plowing new ground? For the most part *Who Gets Ahead*? follows this earlier work in its goals, methods, and findings. The authors are concerned with the antecedents of individual success, with emphasis on the effects of the family, cognitive ability, personality, and formal schooling on socioeconomic attainment. Like all the monographs listed above, *Who Gets Ahead*? shows that there are substantial correlations between the achievements of men and the

socioeconomic levels of their parents. It shows that a major means through which higher-status parents transmit their advantages to their sons is through their sons' capacity to perform well academically and to go further in school than the sons of lower-status parents. It also documents that economic success levels are lower for blacks than for whites, for youths raised on farms than for nonfarm youths, and for youths raised in large families than for youths raised in small families. It shows that there is more of an economic advantage to an extra year of higher education than to an extra year of elementary or high school. And it shows that family background is more strongly linked to an index of sons' occupational achievement than to their earnings. These results are familiar to students of social stratification.

Who Gets Ahead? also resembles its predecessors in analytic strategy. It is mainly confined to descriptions of the joint distributions of socioeconomic attainments and factors affecting achievement. It relies on linear equations that show the net effects of each variable controlling for prior and subsequent characteristics. Such a methodology permits answers to such questions as How much of the relationship between a man's performance on an ability test and his earnings arises from the correlations of earnings and test performance with indicators of family background? or How much of the effect of test score on earnings is transmitted through length of schooling? By contrast, this analytic strategy does not lend itself to answering such questions as What would be the consequences of equalization of schooling for the distribution of labor market outcomes? or What determines the degree of earnings inequality or occupational differentiation? Who Gets Ahead? follows its predecessors in taking as given the joint distributions of socioeconomic and family characteristics and devoting itself to summarizing the distributions, rather than examining spatial and temporal variation in the distributions and attempting to explore their determinants.

Still, Who Gets Ahead? goes beyond the earlier monographs in several important respects, in no small part because of access to a relatively new source of data and because of extensive exploitation of data on the socioeconomic achievements of siblings. The data are Michael Olneck's sample of Kalamazoo, Michigan, men and their brothers. Olneck obtained information on socioeconomic achievements and family backgrounds of a sample of brothers through interviews and matched the brothers to their sixthgrade school records, which contained information on their academic ability and teacher assessments of their personalities. Although the Kalamazoo data are a small sample of limited geographic scope, they are unique in their quality, age coverage, content, and capacity to span experience from childhood to midlife.

Relying on the Kalamazoo data and personality indicators in the Project Talent data, Who Gets Ahead? reports stronger effects of personality characteristics on subsequent achievement than most earlier research leads one to expect. Analyses reported in a well-done chapter by Peter Mueser suggest that traits such as "industriousness," "leadership," "executive ability," and interest in "culture" affect various dimensions of subsequent achievement. No single personality trait appears to be most influential in all contexts, but, taken overall, personality factors appear to have significant though small effects on occupational and economic achievement even when family and cognitive factors and educational attainment are controlled. Unfortunately, these analyses are based on personality measures gathered in childhood and adolescence and thus do not have much bearing on claims by Bowles and Gintis and others about the impact of schooling on personality development. The conclusions of this chapter might have been stronger had it contained parallel analyses of available panel data that include measures of adult personality characteristics and socioeconomic achievement.

Who Gets Ahead? goes more deeply into the nature and extent of influences of family background on achievement than the earlier monographs through its analysis of sibling resemblances with respect to achievement. Because brothers have similar family backgrounds, the correlations between their earnings and occupational status provide a measure of the degree to which family background explains variation in achievement (assuming that siblings do not affect each other). Complementing analyses of the effects of measured family characteristics-for example, father's grades of schooling, size of family, and father's socioeconomic status-on son's educational, occupational, and earnings attainments with correlations between brothers' achievements makes it possible to ask more searching questions about the role of family background. In their chapter on family background effects, Mary Corcoran and Jencks present revised estimates (for the U.S. adult male population) of the proportion of variance in socioeconomic achievement attributable to family influences; for occupational status they estimate the proportion as .48; for income they estimate it as ranging between .15 and .35. These estimates contrast with ranges of .32 to .41 for occupational status and .13 to .19 for income based on measured family characteristics alone. Of greater importance, however, is Corcoran and Jencks's conclusion that, on the whole, much less of the unmeasured than of the measured part of the effects of family background on socioeconomic achievement is mediated through educational attainment. Although one can speculate about the meaning of this result, it surely indicates that students of achievement have far from fully unraveled the meaning and nature of familial influences.

Who Gets Ahead? also differs from the earlier monographs in its attempt to present results from a large number of surveys simultaneously, including two chapters devoted explicitly to sources of noncomparability among data sources. In principle, this is valuable because it provides a range of parameter estimates rather than a single estimate and reveals which procedural differences among surveys really matter and which empirical results are not robust under alternative sample definitions. The book is not by any means, however, an exhaustive treatment of available data, and multiple data sources could have been used to better effect in several places. As noted, the analysis of personality effects might have been strengthened with data on adult personality and achievement. A more serious problem is found in Joseph Schwartz and Jill Williams's analysis of effects of race on earnings. In one of the volume's weakest chapters, they attempt to evaluate recent trends in race differences in returns on schooling by comparing the 1962 Occupational Changes in a Generation survey to the 1971 Panel Study of Income Dynamics, two surveys that are shown elsewhere in the book to have serious noncomparabilities. Microdata from the Current Population survey, the Public Use samples from the 1960 and 1970 censuses, or the two Occupational Changes in a Generation surveys would have afforded a better basis for longitudinal comparisons and indeed have been analyzed by other researchers for just this purpose.

In the final chapter of Who Gets Ahead? Jencks compares the empirical results of *Inequality* and Who Gets Ahead? and finds relatively small differences between the two sets of analyses. I have sketched those features of Who Gets Ahead? that advance beyond or differ from other monographs of comparable scope. These comparisons suggest that Who Gets Ahead? makes a marginal contribution to the study of socioeconomic achievement in America, one that will be important primarily to specialists in the quantitative analysis of achievement.

This restriction is not a major criticism, since research on socioeconomic achievement remains a lively and cumulative subdiscipline. It contains many unresolved yet reasonably well-defined empirical topics, many of which are touched upon in Who Gets Ahead? and remain the focus of high-quality research. These include the analysis of measurement error in achievement models, comparisons between the achievement processes for men and women, sources of intercohort change, the impact of career interruptions, the transition from school to work, and the measurement of additional variables that may be relevant to achievement, such as family wealth, the quality of schools, industrial structure, and social networks.

On the other hand, it is not clear that the research tradition of which Who Gets Ahead? is a part is up to addressing the questions of social policy and social science that ostensibly motivate many of its practitioners. In the most theoretically informed and careful chapter in the volume, on the effects of education on success, Michael Olneck motivates his analysis by reference to the "public policy" concern of improving economic welfare through educational expansion. The chapter reports a craftsmanlike effort to estimate the effects of schooling on occupational and earnings attainment and cautious attempts to interpret the relationships. How the positive effect of education on economic success is to be interpreted is an issue with clear relevance to improving the living standards of the least advantaged. If the effect means that schooling genuinely enhances the economic productivity of the individual, then increased schooling is to the good of persons who would otherwise drop out and has a social payoff as well. But if the effect means that schools retain those young persons who already have characteristics making them the most employable persons-and that schools themselves do not do anything for students in this regard-then increased schooling may not help the poor. Or, if the effect means that employers simply use school credentials to select and promote workers, improving the educational credentials of the poor will be beneficial only so long as there is not a further round of educational inflation that preserves the relative standing of persons from advantaged backgrounds. Although Olneck's results on the nonlinear effects of schooling on achievement are suggestive, he correctly concludes that his analyses do not permit him to rule out any of these possible interpretations. Analyses of the kind he presents cannot speak directly to the question of how the observed effect of education on success comes about.

Olneck's chapter is not weaker in this regard than the others in the volume: on the contrary, this issue is raised more starkly here than elsewhere because Olneck embroiders his statistical analysis with theoretical possibilities. Time and again the authors of Who Gets Ahead? are forced to admit that their data do not enable them to adjudicate among alternative interpretations of the workings of schools, families, labor markets, and firms. Instead, the best that can be said is that the elaborate analyses of the joint distributions of achievement and background characteristics "bear upon" questions of social policy in some general way. Unfortunately, it is not clear that. any understanding of ways to ameliorate the conditions of the disadvantaged either in practice or in principle has been gained by the refinements and elaborations of the study of the socioeconomic achievement process over the past 15 vears.

This is doubly unfortunate because, after all, the major questions of social policy closely coincide with some of the most basic questions of the way society works. What are firms doing when they reward persons with more schooling more highly? What is really learned in school? What would happen to the intergenerational transmission of inequality if children spent less time in nuclear families and more time in other child-raising situations? What would happen if formal educational qualifications were equalized or if employers were prohibited from discriminating on the basis of educational status? What would it take to alter the association between the socioeconomic levels of parents and those of their offspring? These are questions of equal concern to those who would alter the opportunity structure and attainment process and those who have a scientific interest in the structure and functioning of social institutions.

There is no shortage of speculations about these issues. Indeed Jencks himself in the final five pages of *Who Gets Ahead*? offers some good insights into the possible consequences of equalizing the credentials and resources that persons bring to the workplace. To investigate the issues, however, requires different analyses and data from those contained in *Who Gets Ahead?*—historical and comparative analyses, both within and between societies, coupled with detailed study of the behaviors of families, schools, and firms. Nonetheless, the kind of technical acumen displayed by the Harvard group and others in the analysis of achievement is required as well. Questions of basic scientific and policy interest will remain matters of speculation and ideology until the generation of researchers who have learned so well how to estimate achievement models turns to direct empirical evaluation of ideas about how stratification really works.

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## Handedness and Mental Function

Neuropsychology of Left-Handedness. JEAN-NINE HERRON, Ed. Academic Press, New York, 1979. xiv, 358 pp., illus. \$24.50. Perspectives in Neurolinguistics and Psycholinguistics.

Any right-hander who has sat next to a left-hander at the dinner table or has faced one across a tennis net can testify to the practical significance of hand preference. But why should anyone besides baseball coaches and manufacturers of school desks care about the prevalence of left-handedness, much less its causes? The answer lies in research findings on the localization of mental functions within the brain. The right and left sides of the human brain (or more accurately the right and left cerebral hemispheres) are specialized for different cognitive operations. Language skills are organized primarily within the left hemisphere, visuospatial skills within the right. This generalization is true, however, only for a certain segment of the population-righthanders. Soon after it was first proposed that the left hemisphere had a special role in language, it became obvious that non-right-handers (that is left-handed and ambidextrous persons) had to be considered separately. Not only do they often differ from right-handers, they differ substantially among themselves. A great deal of work (much of which is reviewed in this book) has gone into determining how a person's hand preference is related to the localization of mental processes within his or her brain. Even though the exact nature of this relationship is far from clear, enough has been discovered for some investigators to use handedness as a marker for various patterns of hemispheric specialization. This allows them to deal with experimental questions not easily approached in any other way. If, for example, we accept the hypothesis that in right-handers language

processes are present only in the left hemisphere, while in ambidextrous persons they are likely to be present in *both* hemispheres, it becomes possible to investigate whether lateralization of language skills to one hemisphere has some advantage over a more bilateral organization. We have only to compare the performance of ambidextrous and righthanded persons on various cognitive tasks. Similarly, if hand preference is a reliable marker, we can more easily study such issues as the role of inheritance and pathology in the origin of hemispheric specialization. Handedness has thus become an extremely important topic in neuropsychology.

The present book consists of 16 papers covering everything from the prevalence of left-handedness in artists to anatomical asymmetry of the two sides of the brain in right- and left-handers. If you are seeking a simplistic or self-consistent description of handedness research, look elsewhere. The papers in this book are directed at issues that are the center of active research and just as active controversy. Though many of the chapters are literature reviews, they are definitely theory-oriented. Often adjacent chapters review some of the same literature and arrive at quite different theoretical interpretations. Since the quality of the reviews and of the theoretical arguments is generally quite good, such conflicts serve to sharpen the issues, allowing readers both to increase their understanding and to better formulate their own views. Many of the chapters are fairly technical (dealing, for example, with the methodology for making neuroanatomical measurements or for separating environmental from genetic influences in twin studies). The writing is clear enough, however, that readers with some background in psychology should be able to follow the arguments.