## Psychology's Role in Economic Development

Is there an identifiable personality trait that promotes or retards economic progress in societies?

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It is a remarkable project for a scholar to attempt "to isolate certain psychological factors and to demonstrate rigorously by quantitative methods that these factors are generally important in economic development." This attempt David C. McClelland began 15 years or so ago. In **The Achieving Society** (Van Nostrand, Princeton, N.J., 1961. 527 pp. \$7.95) McClelland weaves the many threads of his prodigious labors into a tapestry intended to portray his thesis comprehensively and persuasively.

Some persons, he indicates, are characterized in greater degree than others by the "achievement motive," and some are characterized in greater degree than others by what David Riesman has termed "other-directedness." The frequency with which these two characteristics are present in personality varies among societies. The rate of economic progress of a society tends to depend on their presence and depends very little on factors which other students of economic development have thought important. Moreover, we know what type of childhood environment causes the achievement motive to appear in an individual, and perhaps we also know what circumstances inculcate otherdirectedness; and we can exercise some limited influence on both. So the argument of the book runs. I am not convinced that McClelland's evidence supports all of his conclusions and recommendations, but I am thoroughly convinced of the importance of the analysis presented.

Apart from equating the achievement motive to "an inner concern with achievement," McClelland nowhere in the book defines it. Perhaps with scientific caution he would define it simply as that which is measured by the tests he administers. The person who is characterized by achievement motivation is more drawn to problems than another person, and he feels more satisfaction in the process of solving them (but not necessarily in the reward he may obtain by solving them). Social psychologists are in fair agreement that there is such an identifiable characteristic, that it operates largely in the individual's unconscious processes (so that the individual is apt to err in estimating the degree to which he possesses it), and that it can be measured with a certain degree of accuracy. Under laboratory conditions McClelland measures it convincingly by certain "projective tests" and demonstrates a high correlation with certain traits of behavior, but for the data used to compare the degree of achievement motivation present in different societies, he relies mainly on obtaining identical types of writing from them (for example, among the writings used are poetry, public funeral speeches, and third grade readers), from which he determines how often, per 100 words, achievement-related ideas, as rather rigorously defined, appear in each.

## Scope and Method

He takes the world from the time of ancient Greece to the present as his laboratory. A brief discussion of two of his major studies will illustrate his method. Collecting second to fourth grade readers in use in 23 nontropical countries about 1925 and those in use in a larger number of such countries in

1950, he proceeded to evaluate the achievement motivation reflected in the stories prepared for school use in each country. As one measure of economic growth in each of the same countries from 1925 to 1950, he took gain in national income per capita (Colin Clark's estimates, expressed in "international units"). By the statistical method of simple correlation, he then computed the gain in per capita income that each country might have been expected to attain in view of its initial level of income. He regarded the amount by which the country exceeded or fell short of the expected increase as measuring its over- or under-achievement, and he found that the scores of the 23 countries for achievement motivation, based on the readers, correlated highly with their degree of over- or underachievement. Similarly, the scores for achievement motivation in 1925 correlated highly with the degree of overor under-achievement in increasing the production of electricity from 1929 to 1950, and achievement motivation in 1950 correlated highly with the degree of over- or under-achievement in the production of electricity from 1952 to 1958.

In studying the ancient world, Mc-Clelland used a broader time scale. He measured the achievement motivation expressed in the literature of Greece during three time periods: 900 to 475 B.C., 475 to 362 B.C., and 362 to 100 B.C. It declined steadily. Then, measuring Greece's economic prowess by the size of her trade area in the sixth, fifth, and fourth centuries, respectively, he found economic expansion from the sixth to the fifth centuries and contraction from the fifth to the fourth. The expansion, he concludes, was due to the high degree of achievement motivation found in the earliest period and the contraction to the subsequent decline in achievement motivation.

By similar methods, he finds similar relationships between achievement motivation and economic prowess in Spain in the late Middle Ages, in England from 1500 to 1833 (economic change lagged 50 years behind change in the need to achieve), in the United States between 1800 and 1950, and in Peru from 800 B.C. to A.D. 700. He adduces much other evidence as well, but these are some of the main pieces.

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## **Economics of Personality**

In the materials he analyzed, McClelland also finds evidence concerning the relationship between other personality characteristics and economic prowess. His evidence casts doubt on various hypotheses occasionally suggested in the literature, but it convinces him that one type of social change is highly favorable to development. Economic development will progress if "the force which holds society together has shifted from tradition, particularly impersonal institutional tradition, to public opinion which helps define changing and functionally specific interpersonal relationships." In other words, change in a society from "tradition-directedness" to "other-directedness" is not merely a feature of advanced urban culture as Riesman suggests; it is an early change which portends economic development. Having uncovered this relationship, as he thinks, McClelland asks why it should be so; he finds reasons satisfying to him, which, for reasons of space, I shall not summarize.

Why should a high degree of achievement motivation lead to economic growth? Because, McClelland suggests, his studies of individuals that have high achievement motivation show that these individuals like to take moderate risks in which their abilities can influence the outcome, to carry on energetic and novel instrumental activity, to assume responsibility, to undertake actions in which success or failure can be measured, and to anticipate future possibilities. These are precisely the desires that can be satisfied in entrepreneurial business positions, and persons having high achievement motivation are therefore drawn to such positions.

How is achievement motivation inculcated in an individual? It depends, McClelland suggests, basing his suggestions on a considerable amount of empirical research by social psychologists, on childhood training. To summarize overly simply a chapter's discussion, achievement motivation will emerge in a son if his father is not dominating (if the father is, the son will learn not to exercise initiative), if his mother is highly "nurturant," and above all if she insists that, beginning at an early age, but not too early, the son accomplish things for himself and rewards him with love when he does so. Since the "Protestant ethic" stresses individual responsibility and should, McClelland

thinks, lead parents to insist on early achievement by their children, he concludes that the association which Weber noted between the Protestant ethic and economic advance is a true causal one.

How then may economic growth be accelerated? By an ideological campaign and the emancipation of women, to overcome resistances to modernization; by building factories rather than cottage industry, in order to break up traditional patterns; by introducing widespread use of motors, to interest men in new things; and by improving transportation and communication, creating a free press, and introducing group play in schools and elsewhere, to create other-directedness. He has fewer suggestions for the inculcation of achievement motivation. Change in the educational system is of doubtful help. One study suggests that talking to a man about his fantasies, and thus increasing his achievement motivation, improves his subsequent performance. Lastly, McClelland recommends that United States government subcontract to American business enterprises the job of providing technical aid to lowincome countries. The business enterprises, he suggests, will send men with high achievement motivation, and these men may set manpower standards for the companies being aided, which would bring indigenous men who have the highest achievement motivation into effective roles.

## Evaluation

The work is open to criticisms of several types. First, some of the statistical methods and deductions leave something to be desired. As noted above, McClelland calculates a simple regression between two variables, then a second between achievement motivation and deviations from the regression line, a procedure which gives spurious results if the achievement motivation and the variable first used are correlated, as they almost certainly are in this case. In his introductory chapter, he uses simple correlations to test the association of various factors with economic growth, whereas multiple correlations are surely called for. He makes a variety of conversions of data to forms he finds more convenient, without, it seems to me, adequately justifying the procedure. Lastly, not all of his histori-

cal data fit his theory, unless he assumes no lag in the 20th century between the presence of the achievement motive and its effect on economic growth; in his study of England, a lag of 50 years; and in his study of ancient Greece, a lag of some 300 years. He offers no explanation of the differences. (Conceivably they are justified.) No one who knows McClelland's work would have other than the highest respect for his scrupulous professional honesty, but there are unconscious biases, and one wonders how much weaker the evidence would look if an equally honest man, unconvinced of McClelland's thesis, took the various sets of raw data and analyzed the same relationships. A workable model of life is probably more complex than McClelland's, but there is evidence in addition to that which he presents in this book to suggest that he has hold of an important aspect of the truth.

Secondly, the theoretical structure for the analysis of personality is somewhat inchoate. The evidence concerning the relationship between childhood environment and need for achievement is convincing, within its limited scope, but in much other discussion of personality characteristics one finds only the most casual attention to whether the characteristics being analyzed could coexist in an individual. His discussion of how to influence personality suffers from the same neglect of the modern theory of personality and its formation. Great controversies remain in this field, but it is no longer a field in which recommendations are justified without reference to basic theory.

Lastly, the book lacks style. A book in which there are occasional sentences like the following needs editing: "Apparently we have here stumbled across, in quite a roundabout way, a fundamental value attitude. . . ."

Yet this is a book of ideas and evidence that cannot be ignored. Too many economists have believed that low-income countries fail to develop simply because they are too poor to finance development or have markets too small to induce investment; too many scientists or engineers have thought that, by the injection of a little scientific method or a little system analysis, the problem could readily be solved; and so on. No such person with an open mind who reads this book, or who reads selected chapters that interest him, will be quite as naive thereafter.