

Can We Defuse the IQ Controversy?

Arthur R Jensen
Straight Talk About Mental Tests
New York Free Press, 1981. 283 pp.
\$12.95

Review by
John B. Carroll

Arthur R Jensen is research psychologist in the Institute of Human Learning and professor of educational psychology, both at the University of California, Berkeley His many publications include the books Bias in Mental Testing and Educational Differences ■ John B. Carroll is the Kenan Professor of Psychology at the University of North Carolina at Chapel Hill. The 1970 recipient of APA's Division of Educational Psychology's Edward Lee Thorndike Award for Distinguished Psychological Contribution to Education, he is author of a chapter in K. C. Diller's Individual Differences and Universals in Language Learning Aptitude

This book, Jensen tells us, is "for those of the general public who want to learn more about mental testing and its controversies" (p. ix). For anyone desiring a manageably brief, reasonably readable, and nontechnical summary of Jensen's views and supporting evidence on a variety of topics related to mental testing, this is the ticket. Indeed, the book can be recommended as a concise re-writing, omitting most of the scholarly apparatus, of the contents of several other books by this author, but particularly of his massive *Bias in Mental Testing* (reviewed in *CP*, 1980, 25, 868-871)

Above all, Jensen wishes to make clear to the public, and especially to his critics, that his positions on many issues in mental testing are actually "noncontroversial," quite orthodox and widely accepted among experts in psychometrics and genetics. He states, for example, that on the question of race differences in intelligence—admittedly a sensitive one—he believes that "it is a scientifically open question whether or not genetic as well as environmental factors are involved" and "that a genetic hypothesis (which does not exclude environmental factors) is scientifically the most plausible but is far from being rigorously proven" (p. xii). He goes on to remark that

probably the two least controversial facts in the "IQ controversy" are (1) that in human populations there is a well-recognized trait that can be called general mental ability or intelligence . . . , and (2) that the observed differences among persons in this trait are largely attributable to genetic inheritance (p. xii)

It is intriguing that Jensen regards these issues as noncontroversial, in view of the recurring discussions of them in the public press and elsewhere. A direct attack on Jensen's views, it happens, is contained in another recent book addressed to the general public, *The Mismeasure of Man* by the paleontologist, biologist, and erstwhile factor analyst Stephen Jay Gould (1981) The two issues thought least controversial by Jensen are precisely those on which Gould lays most stress. Gould complains that Jensen (along with many other mental testers) reifies "g" and places undue emphasis on genetic factors in mental abilities, especially in connection with race differences Not that Gould's arguments will completely carry the day, for they will not, despite his brilliant and scholarly exposé of some of the history of psychometric theory and research (I have not closely examined Gould's factor-analytic work on measurements of pelycosaurian reptiles, but he shows a reassuring understanding of some of the niceties of factor analysis.) And Gould is silent about most of the evidence that Jensen marshals to support his views. One can at least credit Jensen with the effort to explain and provide adequate scientific authority for his opinions

Chapter 1, "The What, How, and Why of Mental Tests," sets forth the conventional information that can be found in most texts on the subject. One could quibble about some of it, but Jensen expects quibbling; "It is part of our business," he notes (p. xi) Chapter 2, "The Structure of Mental Abilities," is chiefly

an exposition of the concept of general intelligence or "g" that underlies much of the rest of the book I am among many who would take strong exception to the statement that the existence of "g" is "patently demonstrated in the consistently positive intercorrelations among all mental tests" (p. 57). This is a technical matter on which Jensen is partly right, partly wrong. Actually it is better treated, if not to my complete satisfaction, in the book by Gould Although Jensen's book is dedicated to the memory of Thorndike, Terman, and Thurstone, Thurstone's work is nowhere mentioned, and there is hardly a hint that there might be such things as special aptitudes and abilities One other matter in this chapter deserving comment is Jensen's statement that there is "a correlation of about +.30 between IQ and brain size" (p. 71). I believe it is widely agreed that the evidence for this is extremely shaky.

Chapter 3 is the author's attempt, generally successful, to present a balanced, evenhanded account of the evidence concerning the inheritance of mental ability, along with a few remarks about "the Burt affair" (p. 124) The material gets a little technical when Jensen tries to explain polygenic theory, but careful reading will be repaid Chapter 4 asks, "Are Tests Colorblind?" and concludes, predictably, that they are, that is, generally not biased against minorities Chapter 5 looks at environmental influences on IQ, and chapter 6, at social class and race differences Most of this is standard material, but Jensen introduces a few references to new studies such as the cross-racial adoption study by Scarr and Weinberg, which, he argues, is "consistent with a genetic hypothesis" (p. 225). The last chapter has "Questions and Answers" prompted by the inquiries Jensen says he received following his appearance on a TV talk show. He takes the opportunity to express himself on a clutch of miscellaneous topics For example, he urges that achievement tests be regarded as more important than group-administered IQ tests in schools, and he warns that claims that intelligence can be raised "border on charlatanism" (p. 239)

As a rough guess, I would say that most people in the field of psychological testing might agree with about 80% of the material in this book Concern that might rise above the level of mere quibbling could be associated with the remaining 20%—for example, the generality imputed to "g," the real strength of the evidence for

the notion that black-white differences in abilities are greatest on tests highly loaded with "g" (on this point, see Horn & Goldsmith, 1981), the whole issue of the 70% (50%? 80%?) heritability of mental ability, and the claimed impossibility of improving intelligence. My judgment is that despite Jensen's good intentions and serious efforts to project an image of fairness and scientific soundness, this book will do little to neutralize the opposition or alleviate public concern. Many aspects of mental testing remain as controversial as ever. The ideal apologist for the mental testing enterprise would be some highly qualified person whose views do not have the quirks and idiosyncrasies that Jensen's do.

References

- Gould, S. J. *The mismeasure of man*. New York: Norton, 1981.
- Horn, J. L., & Goldsmith, H. Reader be cautious (Review of *Bias in Mental Testing* by A. R. Jensen). *American Journal of Education*, 1981, 89, 305-329.

Creativity and Madness

Robert A. Prentky
Creativity and Psychopathology: A Neurocognitive Perspective
New York: Praeger, 1980. 276 pp.
\$27.95

Review by
Ralph Barocas

Robert A. Prentky is research associate in the Department of Psychology at Brandeis University, director of research at the Massachusetts Treatment Center (Bridgewater), and research assistant professor of psychology at Boston University. He is editor of *Biological Aspects of Normal Personality*. ■ Ralph Barocas is professor of psychology and director of clinical training at George Mason University (Fairfax, Virginia). He is coauthor with A. J. Sameroff of a chapter in P. Karoly and J. J. Steffan's *Advances in Child Behavior Analysis and Therapy* (in press).

This book is concerned with the proposition that mental illness and creativity originate from a single neuropsychological continuum of cognitive functioning and, furthermore, that a unitary process describes all creative endeavors, setting

aside distinctions between artistic and scientific contributions. The book is an adventure in imagination in which Prentky puts forward speculative argument to support his contentions. But in the end he too finds that "after more than 2,500 years . . . we can conclude very little that is definite" (p. 212). Still, the author attempts to understand madness and genius by using primary and secondary sources, memories, autobiographical accounts, samplings from psychometrics, psychopathology, and cortical functioning literatures. He also evaluates the continuity of genius across disciplines.

These are not new concerns for Prentky. This volume both extends and elaborates on an earlier contribution on creativity and psychopathology (Prentky, 1979) in which he argued that a neurocognitive perspective was critical to understanding the relation of genius to madness. Although this material appears again in the present volume, the additional space has permitted more intense consideration of his proposals. New and enriched materials include enlarged discussions of the cognitive aspects of creativity, the genetics of psychopathology, and his abstract-concrete dimension of thought processes. Also, there is a brief but completely new section on neuroanatomical and neurochemical control and greater attention to lateralization. The major share of new material, accounting for approximately one third of the book, is in a single chapter on the creativity of the artist and scientist.

Overall, the book challenges the reader. It does so because of the qualitative spectrum of data we are asked to consider. For example, some data in the discussion of the relation between the "creative and insane" is gathered from lists in which outstanding persons have been characterized as suffering one mental disorder or another. Strindberg, Kant, and Copernicus are schizophrenic, Kafka, Schopenhauer, and Balzac are depressed, and Freud, Einstein, and the Brownings are neurotic or suffer from an insufficiency of character. This is not the kind of data most empirical scientists are accustomed to, or accept as conclusive evidence. And neither is Prentky convinced by these data. Instead, he invites us to temporarily suspend our skepticism and accept these observations as facts so as to examine their implications. This tack is taken throughout the book. Repeatedly we are asked to enter into an agreement in

which aspects of our critical judgment are reined to allow for the presentation of tentative ideas. Prentky asks us to do this in the discussion of attributes of creative persons in his description of Bloom's talented Air Force captains. No one believes that successful middle management in the military approximates the genius of Mozart, Newton, or Shakespeare. Yet, the suggestion is that there may be something of value for the understanding of genius to be obtained from the study of relatively commonplace competence. Similarly, his discussions of laterality, neuroautonomic, and neurochemical control are also conjecture because none of that work was undertaken with the goal of clarifying the issues under discussion. Moreover, as Prentky indicates, much of those literatures are "incomplete and contradictory" (p. 110).

So, the data for support of his thesis derives from many sources and requires us to make transitions from literary statements to psychometric descriptions to reports of central nervous system functioning. Points are made in his argument through illustrations taken from autobiographical remarks or the observations of contemporaries. It is the narrative account and not the accumulation of instance that shows the way. Other times, when the empirical psychological literature is used, soft generalizations are made from deficient knowledge sets. Never are the hypotheses in question directly tested, and that may be because of the difficulties in definitions of creativity and the rarity of genius. In the end the reader has two choices—to reject these notions as groundless, ill-formed, and premature or to see the varied array of data, no piece alone unassailable, as convergent indications of a point of departure for understanding the relation between creativity and psychopathology. The latter choice is Prentky's invitation and my suggestion as well.

Reference

- Prentky, R. A. *Creativity and psychopathology: A neurocognitive perspective*. In B. Maher (Ed.), *Progress in experimental personality research* (Vol. 9). New York: Academic Press, 1979.