A New Twist on Jensenism

ALAN S. KAUFMAN
Yale University School of Medicine

Jensenism is redefined, not in terms of his notions about the genetics of intelligence, but in terms of the personal qualities and beliefs that have made Jensen a researcher of note: going against convention, tackling controversial topics with empiricism, refusing to be intimidated by threats and picket lines, and being flexible enough to modify his beliefs. These aspects of Jensen are illustrated by the author's personal experiences with the man and his research.

My own, personal dictionary, not to be found in any bookstore or publishing house, has a different definition of Jensenism, one that more accurately portrays the man and his work:

> **Jen-sen-ism** (jen' se niz' em), *n.* (1) the art of going against the grain of conventional psychological wisdom; (2) the belief that no topic is too holy or taboo to reside beyond the grasp of scientific, empirical inquiry; (3) the ability to remain steadfast in one's beliefs–sometimes with a touch of arrogance–despite threats, accusations, denunciations, and attacks; (4) the flexibility to allow one's own strictly held beliefs to be overturned by new empirical discoveries; after Arthur R. Jensen (born 1923), U.S. educational psychologist, who has practiced each of these tenets during his impressive research career [1955-present].

I have long been an admirer of Arthur Jensen's approach to research. I disagree with some of his conclusions, especially those concerning genetics and race differences, but I applaud his commitment to the scientific process. And, quite simply, the man is brilliant.

I remember when I first came face-to-face with Jensen's brilliance. The *Journal of Special Education* had organized a special issue in 1984 devoted to the controversial test that I co-authored with my wife Nadeen, the Kaufman Assessment Battery for Children (K-ABC; Kaufman & Kaufman, 1983). Many luminaries in psychology were invited to write articles about some aspect of the K-ABC, and I was asked to read through all of the articles and write a rebuttal article. The package of 13 articles arrived at my home just before I was to drive to the airport for a cross-country trip. I took the package with me and spent the next five hours reading each article and feverishly taking notes for my rebuttal. Though the group of contributors included Anne Anastasi, J.P. Das, and Robert Sternberg, among others, I had a good feeling as I read through the first dozen articles. I was not wor-

Direct all correspondence to: Alan S. Kaufman, Yale University, Child Study Center, 230 South Frontage Rd., P.O. Box 207900, New Haven, CT 06520-7900.

INTELLIGENCE 26(3): 249-253
ISSN: 0160-2896

ried about rebutting the key points made by the various authors; I was feeling confident, even a bit cocky.

Then I got to Jensen's article, which was at the bottom of the pile. As I began to read his criticisms of the K-ABC, I began to sweat. One line from a movie kept weaving in and out of my consciousness: As the Sundance Kid (Robert Redford) and Butch Cassidy were being pursued by some relentless unknown enemies, Sundance asked repeatedly, "Who are these guys?" As I read page after page of Jensen's insightful critique, involving cognitive complexity, Spearman's hypothesis, and indifference indicators, I kept subvocalizing the words, "Who is this guy?" Of course, I knew quite well *who* he was; it just never occurred to me that he was so familiar with my work and that he would start his attack with smoking guns. The other authors wrote articles filled with text, opinion, and sometimes emotion. Jensen buttressed his text with original data analyses that occupied four new tables and six new figures. He used these analyses to challenge and provoke, to some extent, but mostly to inquire, to seek the truth.

He used the K-ABC subtests to assess the validity of Spearman's hypothesis (i. e., the notion that the magnitude of black-white differences in a set of tasks is positively correlated with the tasks' *g* loadings). He obtained a correlation of .58 for the 13 K-ABC subtests, virtually identical to the value of .59 for a larger group of 121 cognitive tasks (Jensen, 1984), impelling him to conclude that "the K-ABC tests cannot be regarded as at all atypical; they conform to Spearman's hypothesis at least as well as many other tests" (p. 395). That finding supported his overall perspective about the K-ABC, and he might have left it at that. But he proceeded to point out a finding that was opposite to his arguments: "The regression line for the K-ABC tests...falls significantly below the regression line...for all 121 tests....That is, the K-ABC tests show considerably smaller differences than would be predicted from their *g* loadings. This phenomenon poses what may be the major puzzle of the K-ABC" (Jensen, 1984, p. 395). And, indeed, Jensen enjoys solving puzzles. He delighted in formulating thought-provoking hypothesis after hypothesis to attempt to solve this puzzle. I disagreed with most of his ruminations, on Spearman's and other hypotheses, citing data or facts that I perceived to be contrary to his notions (Kaufman, 1984). Yet, I couldn't help but tip my hat to his objectivity and insight: "The tactics for writing the articles...vary quite a bit, ranging from the brilliant, data-based, meticulous critique of certain key aspects of the K-ABC expounded by the noted Arthur Jensen [to the emotional responses of some others]" (Kaufman, 1984, p. 410).

About a year after being so thoroughly impressed by Jensen's empiricism, wisdom, and sense of fairness, I had the chance to see him in action, and get to know him personally, at the 1984 American Psychological Association meeting in Anaheim. Jensen was giving a paper on several topics that included Spearman's hypothesis, his K-ABC research, and black-white differences in IQ and achievement. The media, naturally, was not far behind, and a circus atmosphere developed, with reporters, picketers, video cameras, and security guards everywhere. Jensen was escorted into the large, packed room by the guards and he showed not the slightest trace of intimidation. He began his address with blunt remarks about the large achievement discrepancies between blacks and whites, differences that were not explainable by simple environmental variables. I was taken aback by the directness of his statements and his interpretations on a topic that invariably invites hemming, hawing, apologetic statements, and back-stepping. I guess I shouldn't have been so surprised in view of his writings on the topic, but I had never heard him speak before and was

expecting a small dose of political correctness; instead, I witnessed something more akin to sublime self-confidence blended with in-your-face arrogance.

That evening, Nadeen and I joined Jensen, Cecil Reynolds, and one or two other psychologists for dinner. Our son, James, then 10 years old and now a Ph. D. student of Robert Sternberg's at Yale, had been watching TV that afternoon and saw the demonstrations against Jensen the psychologist and threats against Jensen the man. James, out of fear, pleaded for us not to join Jensen for dinner, but settled for a solemn promise that we wouldn't sit too close to him. Dinner was thoroughly enjoyable as Jensen, though a bit uncomfortable with the spotlight, entertained everyone with tales of harassment and intrigue stemming from his notoriety. I recall him telling of a TV talk show host's duplicity; the host (I believe it was Mike Wallace) made Jensen look foolish when he changed the questions that actually aired from the actual questions that were asked during the taped interview.

I have always enjoyed Jensen's ability to revisit the old in psychology and come away with something new. His research on reaction time is excellent and thought provoking. A simple twist on Galton's initial tasks for measuring intelligence, long relegated to historical status within the field of psychology and long believed to be an "off target" attempt to measure cognitive ability, and Jensen was able to produce an apparently valid measure of IQ. A sophisticated empirical treatment of the *g* factor, likewise dismissed by mainstream psychology as a concept that is primarily of historical importance, and Jensen re-established *g* as an invariant construct of potential value. One might disagree with the meaningfulness of *g* and dispute the theoretical basis or practical utility of the *g* factor, but the quality of Jensen's research on the general factor demands that his findings and conclusions not be taken lightly or dismissed cavalierly.

The net result of his research and writing on these formerly historical topics is to reinterpret history. Galton's original intelligence test focused on sensori-motor abilities and, though powerfully influential in the emergence of the IQ concept in the United States and Europe, Galton's test was ultimately declared invalid and was replaced by Binet's IQ test. Binet had the insight to allow errors of measurement to invade the science of intelligence and relied conceptually on Spearman's *g* factor in providing a rationale for his choice of cognitive tasks for his battery. Subsequently, the *g* approach was replaced by Wechsler's multi-score instruments, and theories from Thurstone to Guilford to Horn that greatly downplay *g*; even the latest revision of the Stanford-Binet yields subtest and area scores and relies on a blend of Thurstone and Horn-Cattell as a theoretical foundation. But the careful research by Jensen on reaction time and the *g* factor forces historians and those involved in the clinical assessment of intelligence to rethink the contributions of Galton, Spearman, and Binet, and to realize that the early instruments may have been more on-target than initially believed. Galton, in particular, may have missed by a few inches instead of a few miles. Intriguingly, Jensen's research on reaction time and *g* is not only tied to the past; it also may provide a link to the future as assessment enters the computer-based stage of examining EEGs and CT scans for, potentially, increasingly objective measurement of intelligence (Eysenck & Barrett, 1985; Jensen, 1985).

As a trainer of school and clinical psychologists in intellectual assessment for a quarter-century, I have found some of Jensen's research and theorizing quite valuable. The research that impressed me for its simplicity, yet far-reaching implications, was his work on Wechsler's Digit Span (Jensen & Figueroa, 1975). So much had been written on the

potential impact on intelligence test scores of environmental variables such as motivation and perseverance and of cultural variables such as the relevance of the stimuli used in test questions. Evaluating the importance of these variables is difficult because of their multifaceted complexity. Yet, Jensen's Digit Span research was ingenious because it effectively held these variables constant. Why would an examinee be more or less motivated or persevering when responding to Digits Forward versus Digits Backward, tasks that utilize the identical, culturally neutral stimuli? The research results that revealed quite different individual variation on the repetition of digits in the forward versus backward sequence were provocative and could not be easily dismissed by proponents of the key role of motivation or culture loading in accounting for group differences.

Jensen's hierarchical Level I–Level II theory of intelligence, simplistic as it is, provides clinicians with a valuable method for interpreting profile fluctuations when more conventional explanations (such as verbal–nonverbal) do not suffice. When interpreting intelligence test profiles, I have always considered it to be a mark of "intelligent testing" to be able to apply diverse theories as explanations for a child's or adult's subtest fluctuations (e. g., Kaufman, 1990, 1994). For the purpose of profile interpretation, complex theories are usually less practical or effective than simple theories for grouping subtests into alternative, relevant patterns that may reveal a person's cognitive strengths and weaknesses. Jensen's memory–reasoning dichotomy has proved to offer a useful alternative interpretive strategy for understanding a person's profile when the fluctuations in that profile suggest that the test's global scales cannot be meaningfully interpreted. For example, memory–reasoning sometimes fits the data better than Wechsler's Verbal–Performance split, the K-ABC's Sequential–Simultaneous division, or the Stanford-Binet IV's fluid–crystallized dichotomy. In view of the fact that of the alternative theories mentioned, only Jensen's is hierarchical, the application of Level I–Level II theory to profile interpretation adds an additional dimension to the mix, a dimension that sometimes has implications for educational applications.

My own research disputes some aspects of Jensen's most controversial statements regarding the intellectual abilities of blacks versus whites. On the K-ABC, for example, one of the Achievement subtests is Faces & Places, a test of general information that uses a visual-vocal instead of an auditory-vocal format; thus, instead of responding orally to a question such as "Who is Martin Luther King, Jr.," the child must respond orally to a picture of Dr. King. This K-ABC subtest assesses range of general knowledge, as does Wechsler's Information subtest. Yet, unpredictably, the apparently culture-loaded Faces & Places subtest produces trivial black-white differences whereas Wechsler's information subtest yields among the largest racial differences observed on conventional intelligence tests (Kaufman, 1994; Kaufman & Kaufman, 1983). My interpretation is that the legacy of large racial differences has maintained when the tests have been the same old tests used since the time of Binet and World War I. When a new task is tried, even when it is an apparent shift of a kaleidoscope such as Faces & Places relative to Information, then the racial differences may disappear. In fact, the black-white difference was also small (as was the Hispanic-white difference) for adolescents and young adults on an adult analog of the general information task called Famous Faces (Kaufman, McLean, & Kaufman, 1995). Furthermore, a new fluid reasoning task called Four-Letter Words, clearly a Level II task from Jensen's system, also produced much smaller than predicted race differences for a large sample of adolescents and adults (Kaufman, Chen, & Kaufman, 1995). These findings

reinforce the notion that the so-called "constant difference" of about one standard deviation between test scores of whites and blacks may be largely a function of the limited selection of traditional tasks that defined virtually all tests of intelligence from the past. Race differences on the new breed of intelligence tests that has proliferated in the past two decades, many of them theory-based, may not conform so closely to the findings of tasks from the Binet-Wechsler tradition.

Yet, despite my disagreements with some aspects of Jensen's research and writing, I remain steadfast in my admiration for his stubborn insistence that no topic is too holy to be scrutinized by empirical analysis; that no interpretation of data is too politically incorrect to permit a straightforward expression of one's scientific opinion; that threats and intimidation are not effective methods for thwarting creativity and expression; that some of the best inspirations for research can be found in the historical annals of psychology among discarded and disavowed ideas; and that one should be ready and willing to abandon strictly held beliefs if new, compelling data should come along to suggest that the old ideas may be wrong. To me, Jensen is the quintessential scientist.

REFERENCES

Eysenck, H.J., & Barrett, P. (1985). Psychophysiology and the measurement of intelligence. In C.R. Reynolds & V.L. Willson (Eds.), *Methodological and statistical advances in the study of individual differences* (pp. 1–49). New York: Plenum.

Jensen, A.R. (1984). The black–white difference on the K–ABC: Implications for future tests. *Journal of Special Education, 18*, 377–408.

Jensen, A.R. (1985). Methodological and statistical techniques for the chronometric study of mental abilities. In C.R. Reynolds & V.L. Willson (Eds.), *Methodological and statistical advances in the study of individual differences* (pp. 51–116). New York: Plenum.

Jensen, A.R., & Figueroa, R.A. (1975). Forward and backward digit span interaction with race and IQ: Predictions from Jensen's theory. *Journal of Educational Psychology, 67*, 882–893.

Kaufman, A.S. (1984). K–ABC and controversy. *Journal of Special Education, 18*, 409–444.

Kaufman, A.S. (1990). *Assessing adolescent and adult intelligence*. Boston: Allyn & Bacon.

Kaufman, A.S. (1994). *Intelligent testing with the WISC–III*. New York: Wiley.

Kaufman, A.S., & Kaufman, N.L. (1983). *K–ABC interpretive manual*. Circle Pines, MN: American Guidance Service.

Kaufman, A.S., McLean, J.E., & Kaufman, J.C. (1995). The fluid and crystallized abilities of white, black, and Hispanic adolescents and adults, both with and without an education covariate. *Journal of Clinical Psychology, 51*, 637–647.

Kaufman, J.C., Chen, T., & Kaufman, A.S. (1995). Race, education, and gender differences on six Horn abilities for adolescents and adults. *Journal of Psychoeducational Assessment, 13*, 49–65.