The g factor Arthur Jensen

What a scholar! Profound thesis, fascinating trivia

Jensen's definitions and descriptions of his science are fascinating. g stands for General Ability. It is neither IQ nor intelligence itself. Intelligence, per Jensen, is the capacity of all animals to perceive and act upon the natural world. The Intelligence Quotient is a statistical artifice that maps individuals' problem solving abilities into a linear scale according to a Gaussian bell-curve distribution. By definition the average IQ is 100 and the standard deviation (SD) 15. By the properties of the bell curve approximately 2/3 of the population falls within one SD of the median, that is, between 85 and 115.

However, as Jensen points out repeatedly, general ability is not a linear function. The discriminators are whether or not an individual can solve specific problems. There is no way to define a lineal relationship between two individuals if once can figure out (for instance) the lowest primo number greater than 90 and another cannot, or one can figure that context requires the word above to be "prime" not "primo" and another cannot. There is no metric for "g" itself. Rather, all tests of mental ability have a degree of "g loading." Psychometrics is the science of assessing and manipulating information about a quality that cannot be measured directly.

Jensen devotes much energy to defending the validity of "g", this thing that defies direct measurement. It is real because:

a) It is statistically "there." It is highly correlated among myriad tests.

b) It works in the real world. There is no single discriminator that approaches the value of "g", usually proxied by an IQ test score, as a predictor of educational or job performance.

c) It has equal predictive power for both sexes, all ages and all populations of mankind. It is independent (as he takes endless pages to prove) of race, language and socio-economic status (SES).

d) Many seemingly unrelated kinds of tests all turn out to measure the same thing. Tests may be verbal or pictorial, or may simply measure the time it takes to react to and act upon a visual or auditory stimulus.

e) By adulthood it no longer has much to do with advantages such as hearing Mozart in the womb or a Montessori kindergarten, or disadvantages such as Jim Crow and slavery.

The other reviews of this book are quite good. Some of Jensen's many fascinating observations:

o Incest is a bad idea. The offspring have a significant intelligence deficit.

o Smart parents, alas, can't count on having equally smart kids. On average their intelligence regresses halfway back to the mean (100 for white Americans). On the bright side, the average people manage by dumb luck to produce enough smarties for each succeeding generation.

o Breast feeding makes a huge difference, about 7 IQ points. Blacks do not breast feed as often or as long as whites. Big, easy change to make in society.

o The factors generally agreed to comprise "g" differ among races and sexes. Blacks exceed whites in short term memory. Men exceed women in spatial intelligence. When the many individual factors are aggregated they reveal different means for different races, with whites in the middle with an average of 100.

o Individuals with IQs below 70 are generally considered to be retarded. White retarded kids frequently look and act somehow different, while retarded kids of other races are more normal in terms of socialization, motor skills and energy. This is related to the two types of retardation, familial and organic. In simple words, there is something "wrong with" an organically retarded child. A bad forceps delivery, spina difida or one of a number of identifiable anomalies. Familial retardation, on the other hand, simply represents a bad spin of the chromosomal wheel of fortune that is sexual reproduction. The odds are higher in populations whose median IQs are lower.

o Cause for concern: If Vanhansen and Lynn are right in "IQ and the Wealth of Nations" there are perhaps a dozen countries in which the average citizen would be considered retarded and hence marginally educable by U.S. standards.

o Illiteracy is not always a matter of reading. Below the threshold of retardation people often have the same inability to understand a sentence whether it is written or spoken. The issue is having enough "g" to make sense out of the words.

o People with lower IQs are markedly more fertile than those with higher IQs. This dysgenic (opposite of eugenic) trend stands to lower "g" within the U.S. population. Average intelligence will of course remain at 100 because by definition it is the population mean.

Jensen comes across through this book as first and foremost an inquisitive mind, a scientist. He often states with unashamed candor that he (nor anybody else) knows the answer to some knotty problems of psychometrics, like the Flynn effect that shows overall intelligence rising 3 points per generation. Contrast his thoroughness and openness with the tone of advocacy found in Stephen Jay Gould (Mismeasure of Man) and sites such as fairtest dot org. Steven Pinker describes in "The Blank Slate, the Modern Denial of Human Nature" the extreme and prolonged abuse Jensen has taken from the academic community. I'm happy to report he hasn't lost his sense of balance. Or sense of humor.