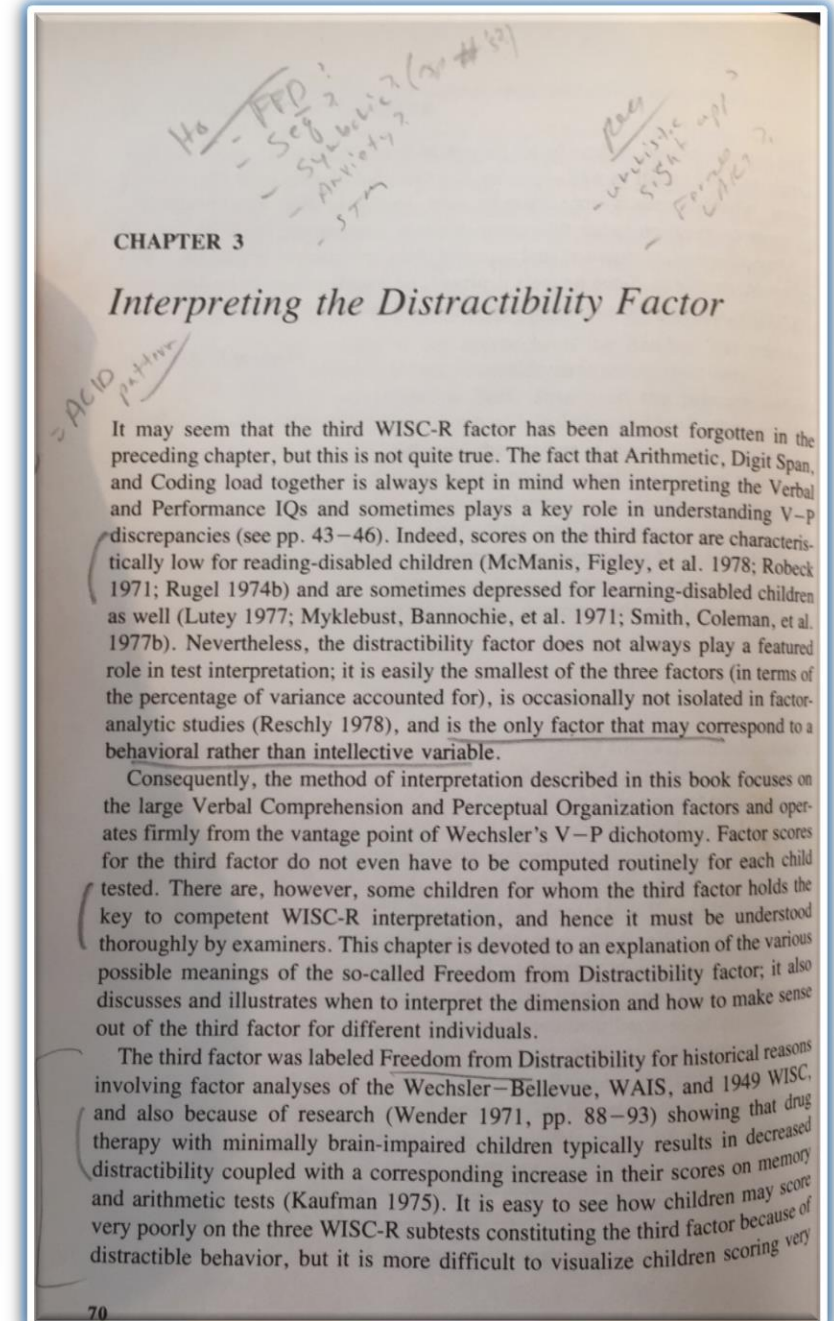
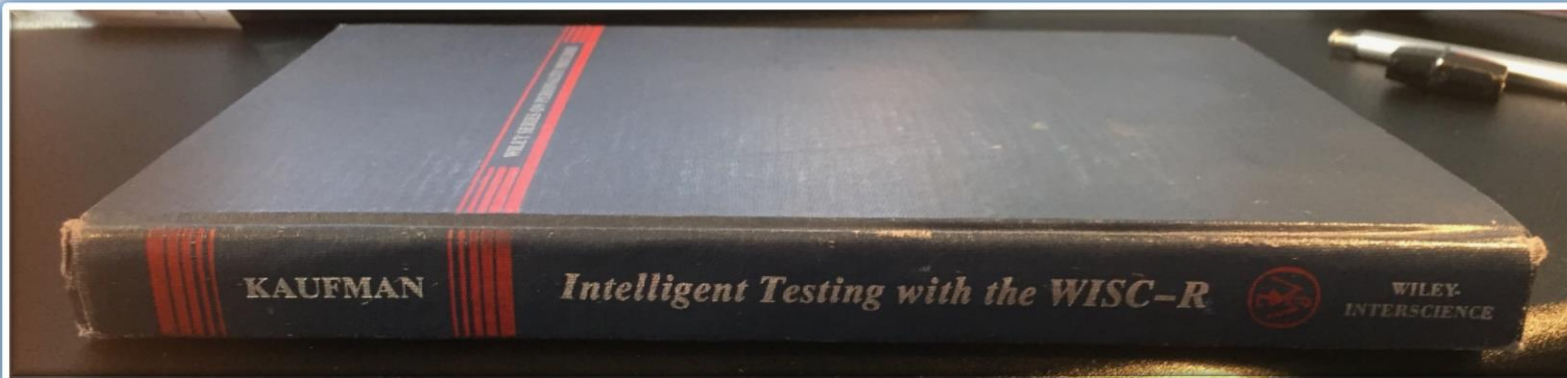


Dr. Alan Kaufman is credited
with operationalizing
“intelligent” intelligence testing
and interpretation in 1979.

Intelligent Testing with the
WISC-R (Kaufman, 1979)

This book had a huge impact on
my professional life

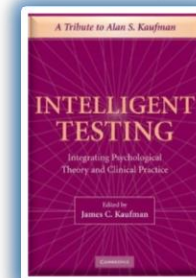
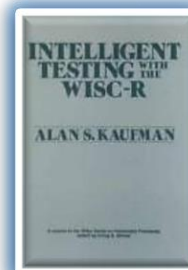




Waves Of Intelligence Test Interpretation

(Kamphaus et al., 1997)

- Wave 1 - Quantification of a General Level (g)
- Wave 2 - Clinical Profile Analysis
- Wave 3 - Psychometric Profile Analysis
- Wave 4 - Applying Theory to Intelligence Test Interpretation

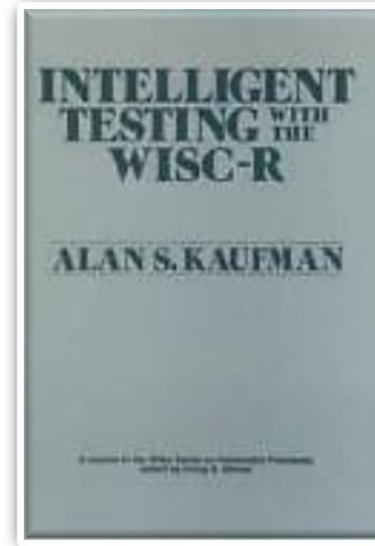




Wave 3: Psychometric Profile Analyses

Cohen, J. (1959). The factorial structure of the WISC at ages 7-6, 10-6, and 13-6, *Journal of Consulting Psychology*, 23, 285-299.

Kaufman, A. S. (1979). *Intelligent testing with the WISC-R*. New York: Wiley-Interscience.



Picture Completion

Empirical Analysis

Reliability:

Split-half .77

Test-retest .81

g loading .60 (Fair)

Subtest specificity
vs. error variance 39% vs. 23%
(Ample)

Most related to:

Block Design .52

Object Assembly .49

Least related to:

Coding .18

Digit Span .25

Proportion of Variance Attributed to:

Factor 1. Verbal Comprehension 14%

Factor 2. Perceptual Organization 28%

Factor 3. Freedom from Distractibility 1%

Factor 4. Processing Speed 1%

Abilities other than the 4 factors 33%

Error 23%

Proportion of Variance When 2 Factors Are Rotated:

Factor 1. General Verbal Ability 15%

Factor 2. General Nonverbal Ability 25%

Abilities Shared with Other Subtests (Unique abilities are asterisked)

INPUT

Visual perception of meaningful stimuli (people—things)

INTEGRATION/STORAGE

Perceptual Organization (Factor Analysis: 4-Factor and 2-Factor)

Gv—Broad Visual Intelligence (Horn)

Holistic (right-brain) processing

Cognition and Evaluation of figural stimuli (Guilford)

Spatial (Bannatyne)

Simultaneous processing

Distinguishing essential from nonessential details

Visual organization without essential motor activity

*Visual recognition and identification (long-term memory)

OUTPUT

Simple motor (pointing) or vocal

Subject to Influence of:

Ability to respond when uncertain

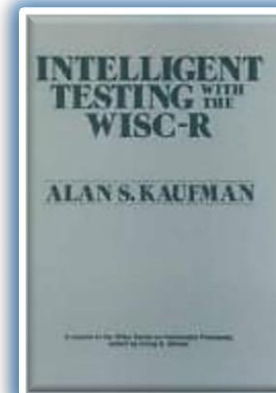
Alertness to the environment

Cognitive style (field dependence—field independence)

Concentration

Negativism (“Nothing’s missing”)

Working under time pressure

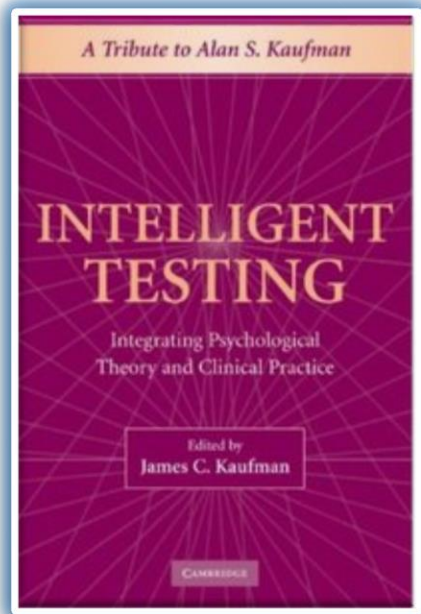


2. Kaufman and Sattler had the right idea (and still do)—if you must retrofit old tests with new interpretations, all flights of fancy must take off and land on the runway of psychometric constraints. For example, if two tests are allegedly measuring the same thing based on your task analysis, they should probably correlate with each other more highly than they do with other tests.

3. The human mind has trouble grasping nature's preference for continua over dichotomies. As a shorthand for communication, it is common to label a test as belonging to a certain category ("the WISC-IV matrix reasoning subtest measures Gf and the WJ III Visual Closure test measures Gv."). In reality, tests reflect one or more factors, each to varying degrees (e.g., matrix reasoning has a secondary loading on Gv that is slightly larger than visual closure's primary loading.) The important question is not so much "*Does* this test measure factor X?" but "*How well* does this test measure factor X? For whom? Under what conditions?"

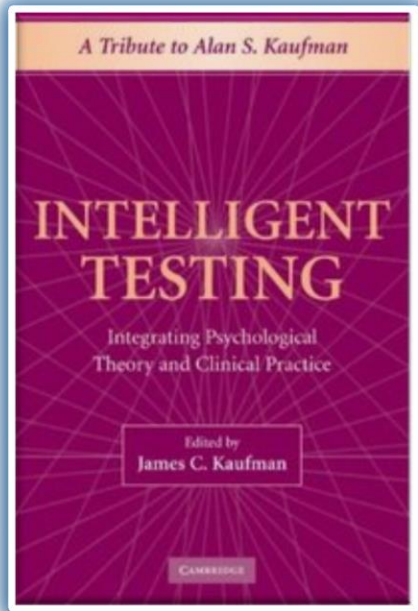
obviated fully by scientific findings. The underappreciated genius, William Stern (1900, as cited in Lamiell 2003), said it best:

[E]very individual is a singularity, a one-time existing being, nowhere else and never before present. To be sure, certain law-like regularities apply to him, certain types are embodied in him, but the individual is not exhausted by these laws and types; there remains ever something more, through which the individual is distinct from others who conform to the same laws and types. And this last kernel of being, which reveals the individual to be thus and so, distinct from all others, is not expressible in the language of scientific concepts, it is unclassifiable, incommensurable. In this sense, the individual is a limiting concept, toward which theoretical investigation strives but can never reach; it is, one could say, the asymptote of science. (pp. 15–16)



The intent of the intelligent testing model was and remains to “bring together empirical data, psychometrics, clinical acumen, psychological theory, and careful reasoning to build an assessment of an individual leading to the derivation of an intervention to improve the life circumstances of the subject” (Reynolds, 2007, p. 1133) – in Fletcher-Janzen (2009)

Intelligent Testing: Bridging the Gap between Classical and Romantic Science in Assessment (Elaine Fletch-Janzen, 2009)



- The **gold standard** for clinical-psychometric test interpretation
- Incorporates both quantitative and qualitative analysis
- The first system of test interpretation that **followed scientific principles** and at the same time overtly sought to reduce inappropriate use of obtained test scores
- Demands a very **high standard of clinical expertise**
- The central point of intelligent testing is that the **clinician's judgement** regarding the patient is the central point



“ Tests do not think for themselves, nor do they directly communicate with patients. Like a stethoscope, a blood pressure gauge, or an MRI scan, a psychological test is a dumb tool, and the worth of the tool cannot be separated from the sophistication of the clinician who draws inferences from it and then communicates with patients and professionals”

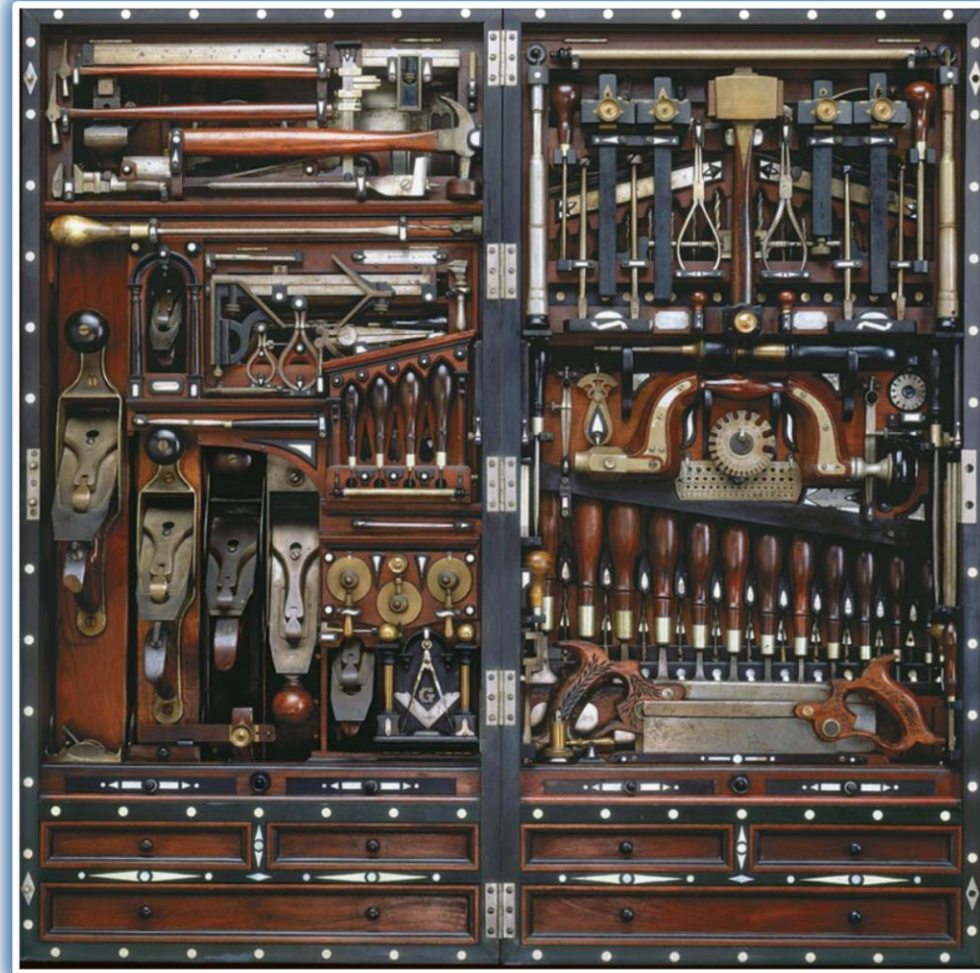
Meyer et al. (2001). Psychological testing and psychological assessment. American Psychologist

If you give a monkey a Stradivarius violin and you get bad music.....



You don't blame the violin !!!!

**We (psychologists) are the
instrument !!!!**



“Intelligent” intelligence testing and interpretation
requires ... **knowing thy instruments**

An “intelligent” clinician understands and “**romances the stones (tests)**” which have different and multiple facets

