

OUTLINE

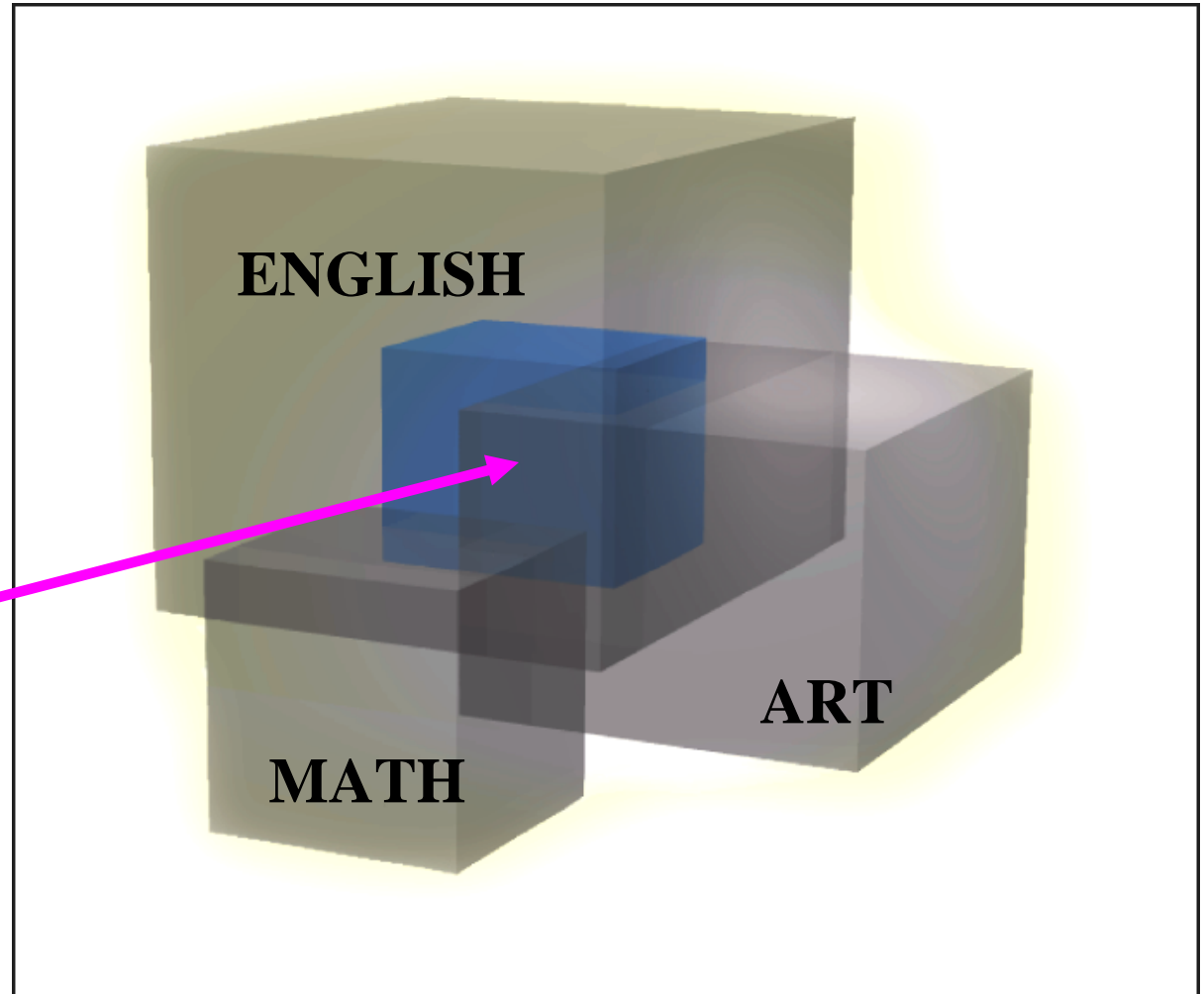
CHAPTER 9

INTELLIGENT THOUGHT & BEHAVIOR

- **REASONING**
 - Deductive logic
 - Inductive logic
- **DEFINING INTELLIGENCE**
- **MEASURING INTELLIGENCE**
- **THE NATURE OF INTELLIGENCE**

THEORIES OF INTELLIGENCE

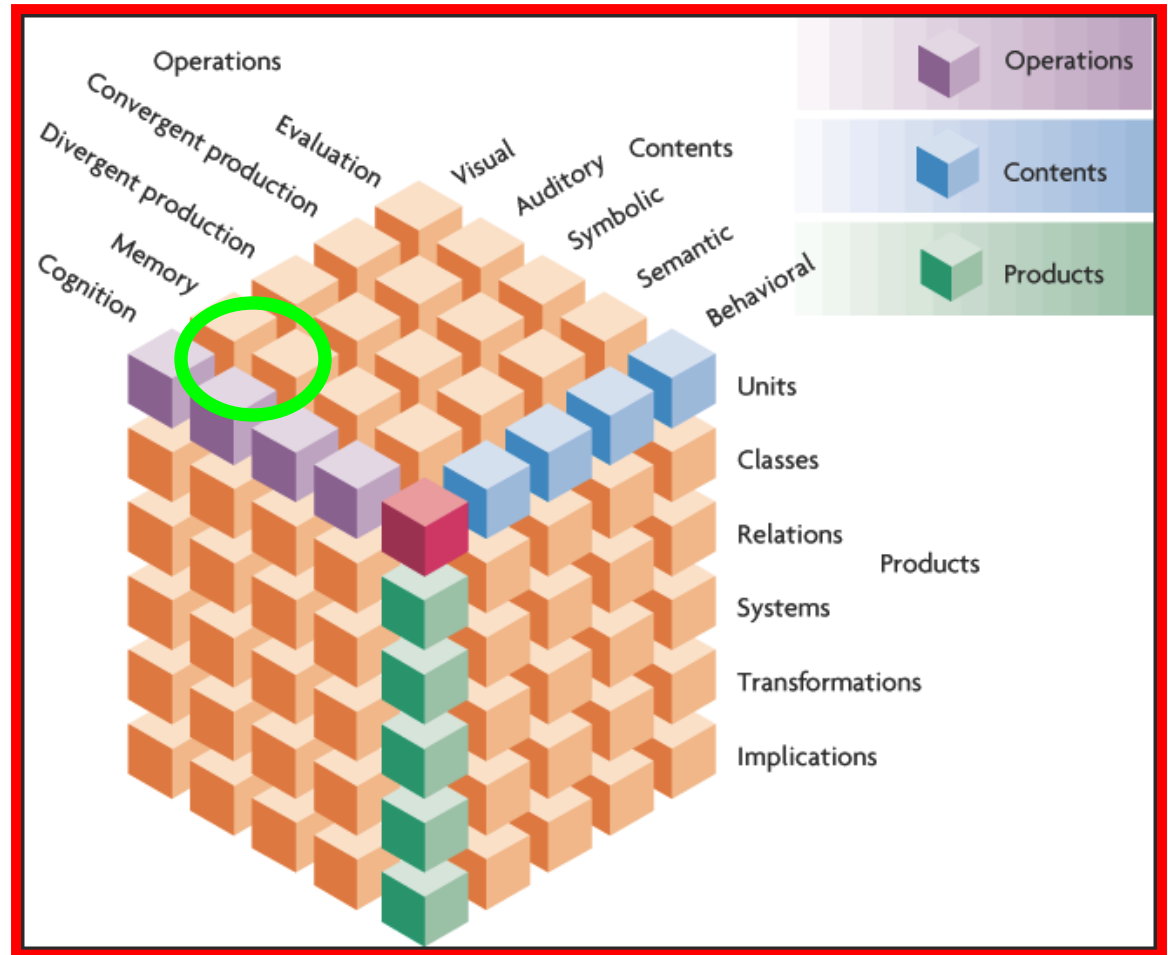
SPEARMAN:
a single
unitary
factor
(g)



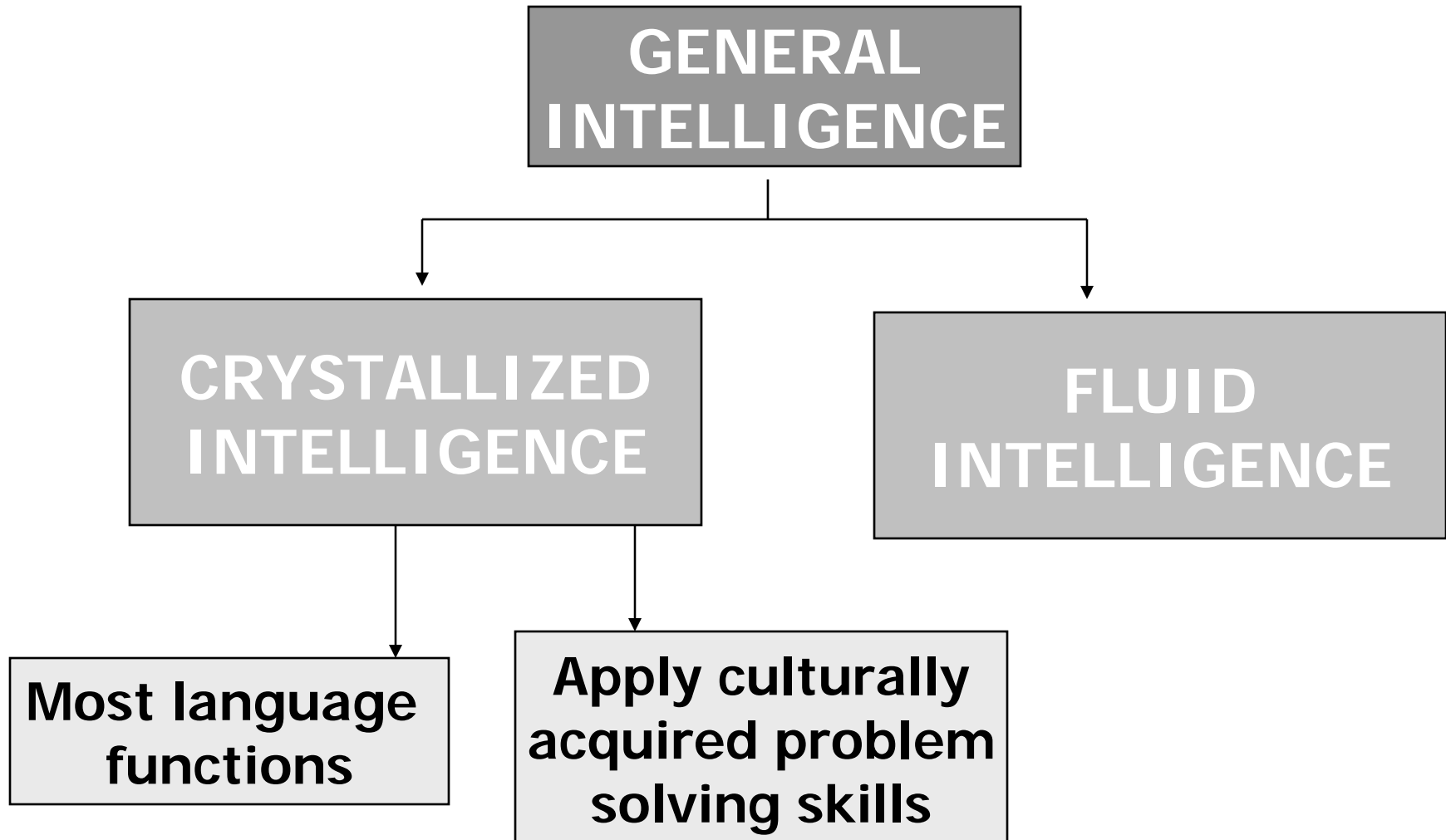
THEORIES OF INTELLIGENCE

GULIFORD

more than
100 distinct
measurable
mental
abilities.



THEORIES OF INTELLIGENCE



Measuring Intelligence

Wechlser (WAIS-R, WISC)

VERBAL SCALES -

SUBTEST

INDICATOR OF

↑ Vocabulary	(language mastery)
↑ Similarities	(Relational patterns)
↑ Arithmetic	(symbols/abstract reasoning)
↑ Digit Span	(Short term/working memory)
↑ information	(Past learning)
↑ Comprehension	(practical/applied knowledge)

Measuring Intelligence

Wechlser (WAIS-R, WISC)

PERFORMANCE SCALES - Perceptual processing & perceptual organization

SUBTEST

INDICATOR OF

↑ Picture Completion

(visual processing)

↑ Block Design

(whole/part)

↑ Matrix Reasoning

(patterns/relationships)

↑ Symbol Search

(processing speed)

↑ Object Assembly

(all of above)

↑ Digit-Symbol Coding

(abstract symbols)

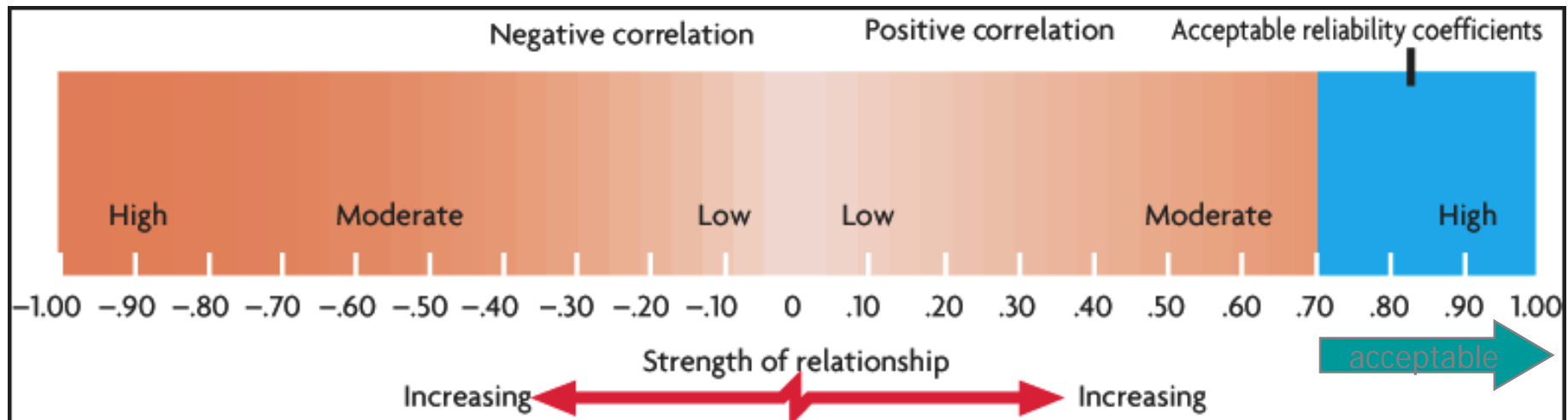
MEASUREMENT ISSUES

A good test must be reliable and valid

RELIABILITY refers to consistency of measurement

Test-retest: same group takes the test twice

Split-half: divide the test into halves and then compare consistency of scores on the halves



Reliability:

A Basic Requirement of Psychological Tests

A. Split-Half Reliability

Scores on
odd-numbered
items



Scores on
even-numbered
items

Correlation
is high



Conclusion:
Split-half
reliability
is high

Scores on
odd-numbered
items



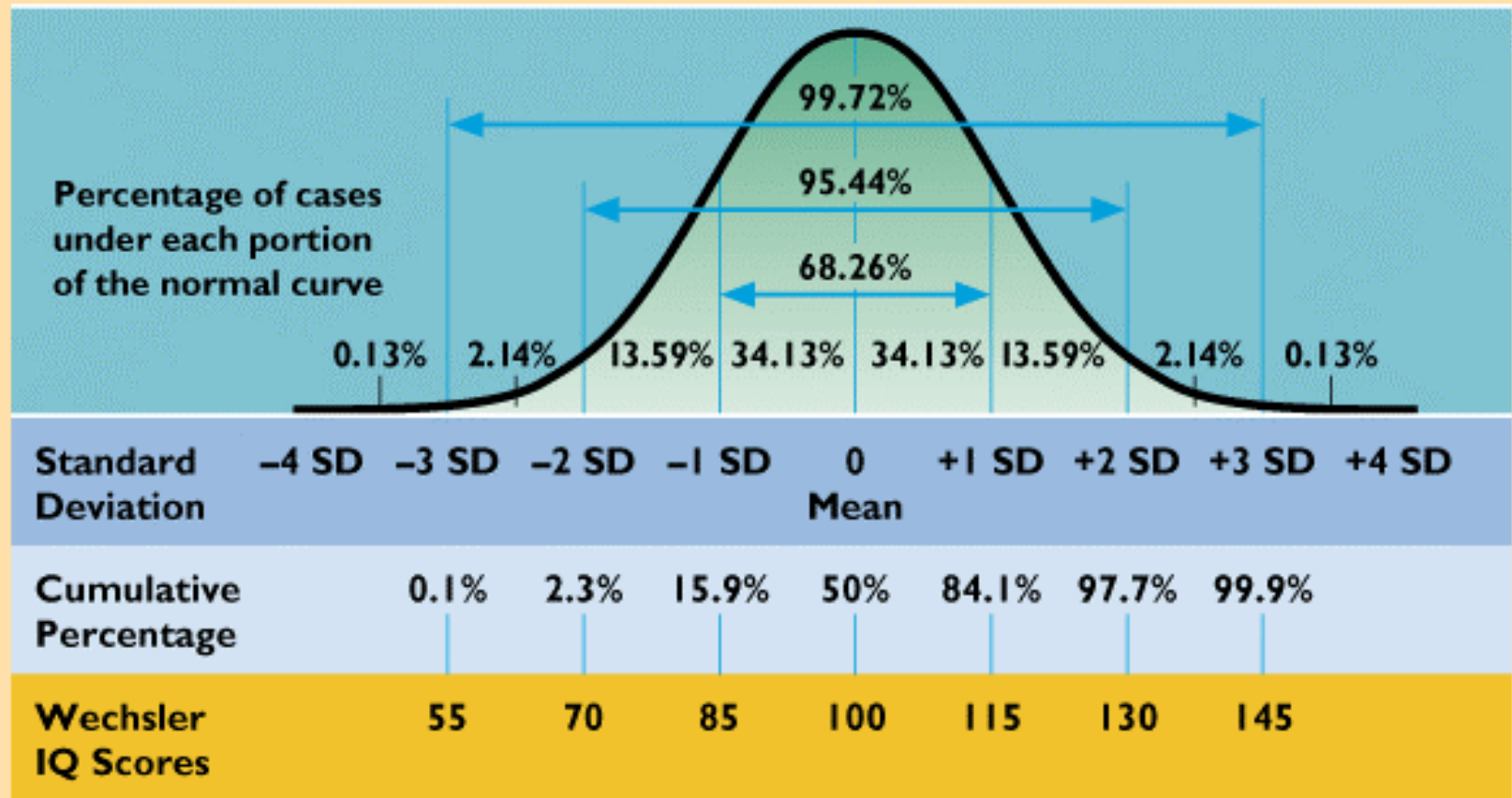
Scores on
even-numbered
items

Correlation
is low

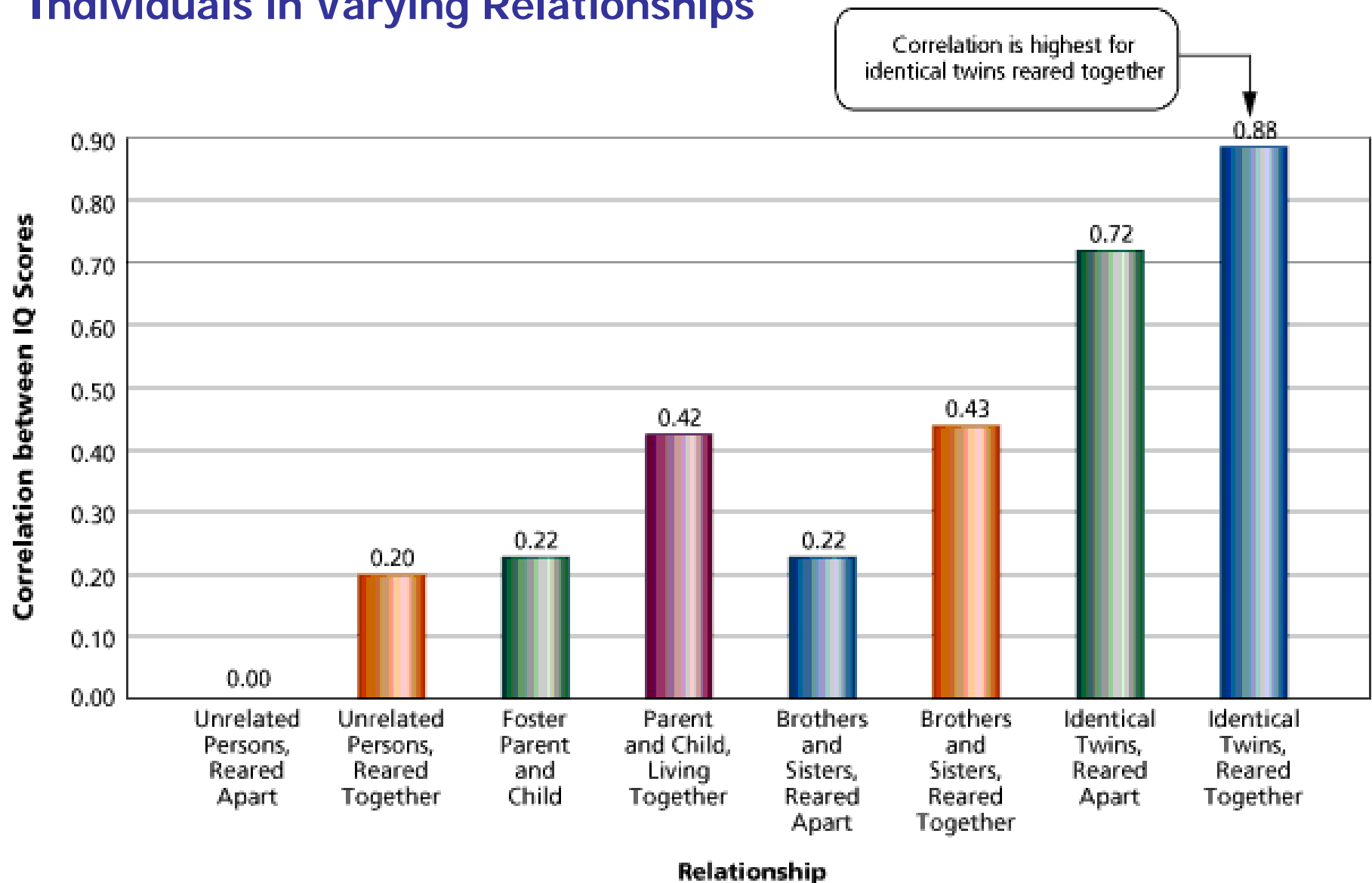


Conclusion:
Split-half
reliability
is low

Test Norms: The Normal Curve



Correlations Between IQ Scores of Individuals in Varying Relationships



Source: Based on data from Bouchard & McGue, 1981; and Erlenmeyer-Kimling & Jarvis, 1963.