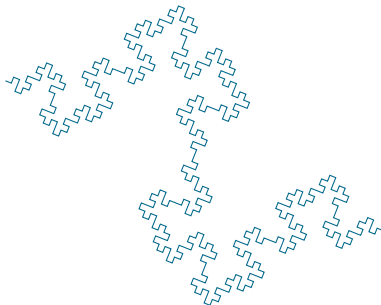


Personality and Intelligence

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INTRODUCTION

Introduction

Definitions

Theories

Measurement Assumption

Integration with Personality Theory

Application

Differential Epidemiology

DEFINITIONS OF INTELLIGENCE I

- ▶ Consensus Definition (Gottfredson, 1997)

“Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. **It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather it reflects a broader and deeper capability for comprehending our surroundings – ‘catching on,’ ‘making sense’ of things, or ‘figuring out’ what to do.**”

DEFINITIONS OF INTELLIGENCE II

- ▶ Boring's Definition (Boring, 1923)

“[I]ntelligence as a measurable capacity must at the start be defined as the capacity to do well in an intelligence test. Intelligence is what the tests test.”

- ▶ Boring's Definition Misquoted (e.g., Legg & Hutter, 2007)

“Intelligence is what is measured by intelligence tests.”

STRUCTURE I

- ▶ Fluid – Crystallized Distinction (Cattell, 1941; Horn, 1965)
 - ▶ Fluid Intelligence
is the ability to think systematically and solve problems in novel situations.
 - ▶ Crystallized Intelligence
is the capacity to use reason, information, and experience. I like to think of it as “knowledge,” and that is the product of our accumulated experiences interacting with fluid intelligence.

STRUCTURE II

- ▶ Carroll Three-Stratum Theory (1993)
 - ▶ Hierarchical Structure
 1. narrow (70),
 2. broad (10), and
 3. general cognitive ability (1)

STRUCTURE III

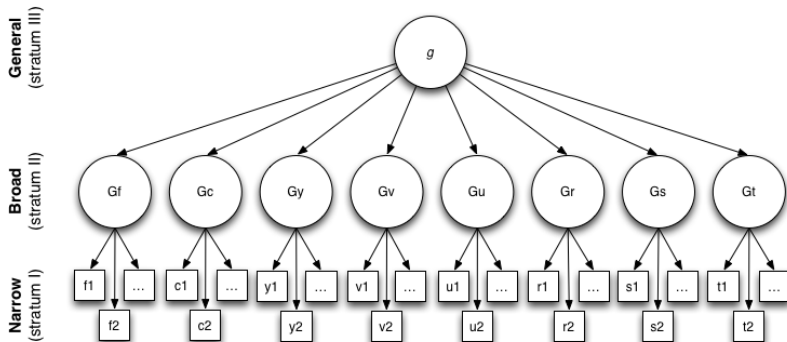


Image Source: Wikipedia.org

STRUCTURE IV

- ▶ Cattell-Horn-Carroll Theory
is the integration of Cattell and Horn's theory within Carroll's structural model. The broad abilities are:
 1. Crystallized Intelligence (Gc)
 2. Fluid Intelligence (Gf)
 3. Quantitative Reasoning (Gq)
 4. Reading Writing Ability (Grw)
 5. Short-Term Memory (Gsm)
 6. Long-Term Storage and Retrieval (Glr)
 7. Visual Processing (Gv)

STRUCTURE V

- 8. Auditory Processing (Ga)
- 9. Processing Speed (Gs)
- 10. Decision/Reaction Time/Speed (Gt)

STRUCTURE VI

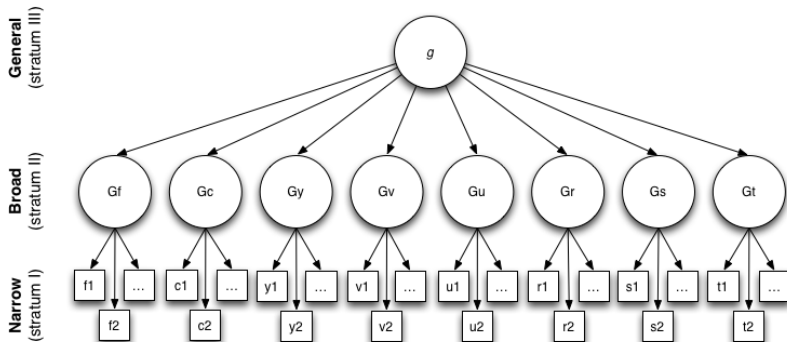


Image Source: Wikipedia.org

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