

# Consumer Behavior

## 4. Intelligence



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## **4.1. Intelligence, abilities and aptitudes**

## **4.2. Cognitive styles**

## **4.3. Creativity**

## 4.1. Intelligence, abilities and aptitudes

### Defining intelligence

Intelligence is **what is tested with intelligence tests**.

**Edwin G. Boring** (1923). "Intelligence as the Tests Test It." *New Republic* 36, 35-37

**Pure intelligence**, is something to do with the **ability to see relations** and the **capacity** of using them **to solve problems**.

The **main difficulty** is to study a concept which results from a **mixture of pure intelligence and acquired knowledge** (wisdom).

## Measuring intelligence

Intelligence is measured using **ad-hoc tests**.

**Mental age** is the chronological **age at which all subjects score similarly**. The mean score at a given age.

**Intelligence Quotient (IQ)** is calculated by dividing **the subject's mental age by their chronological age** and multiplying by 100.

$$IQ = \frac{\textit{Mental age}}{\textit{Chronological age}} \times 100$$

**Terman, L. M.** (1916). *The measurement of Intelligence*. Houghton Mifflin Co. Cambridge, MA.

### Difficulties with IQ measurements

Assumes intelligence is normally distributed.

May be culturally biased.

May not adequately distinguish between pure intelligence and acquired knowledge.

Abilities and aptitudes vary across subjects with the same levels of intelligence.

## Two factor theory of intelligence

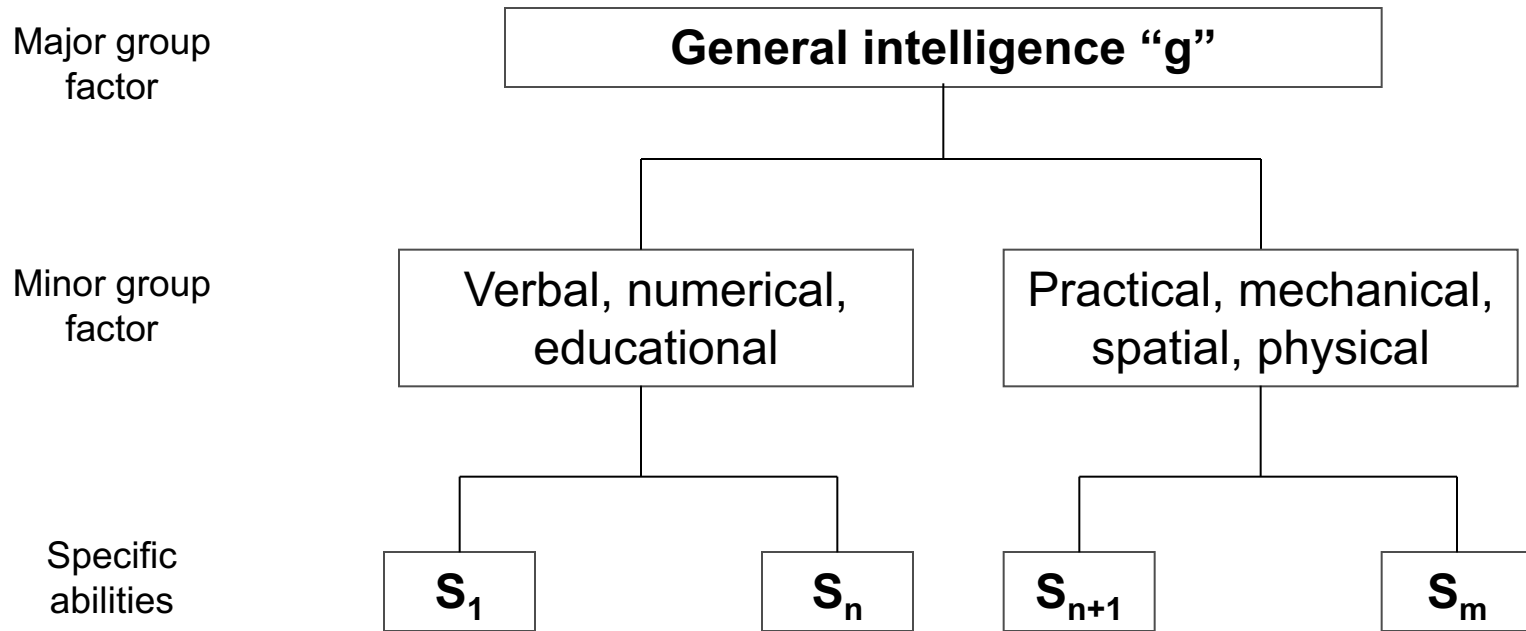
Intelligence is decomposed into a series of factors which are specific to given abilities.

An underlying factor of general intelligence “g” helps performance in all areas of human ability.

The “g” factor is innate and accounts for success in all activities. It is constant across individuals.

No person is absolutely uniform in his mental performance. They differ in the specific factors.

Performance in any situation is predicted by the amount of share of general and specific factors in different intellectual activities.



**Vernon, P. E.** (1969). *Intelligence and cultural environment*. Methuen. London

## 4.2. Cognitive Styles

**Strategies** adopted when people are faced with **learning new materials** or **solving complex problems**. Individuals face problems in different ways.

Holists approach the problem in a **broad** manner. Examine several aspects more or less simultaneously. Serialists adopt a **step-by-step** approach.

**Pask, G.** (1976) "Styles and Strategies of Learning", *British Journal of Educational Psychology*, Vol 46, II, 128-148, 1976.

Field independent individuals face the problem in an **analytical and structured** approach. Field dependent are less analytical and tend to perceive things in a **more global** way.

**Witkin, H.A.**, et al (1977). "Field-dependent and field-independent cognitive styles and their educational implications". *Review of Educational Research* 47(1), 1-64.



### Reflective vs. impulsive decision making.

The way a problem is faced by individuals is related to the time taken in the response.

Impulsive individuals follow the first possible solution to the problem. And they fail more often. They value a quick response and are not worried about making mistakes.

Reflective individuals delay their response. They attempt to consider the validity of the different solutions. And they get right answers more often.

**Kagan, J.** et al (1964). "Information processing in the child: Significance of analytic and reflective attitudes". *Psychological Monographs*, 78 (578), 1–37

## 4.3. Creativity

Creativity is the ability to generate **new ideas**. In general, people are good at analyzing and processing information, but they frequently fail when the problem requires new and previously unknown solutions.

Lateral thinking. **Convergent thinking** individuals tend to converge upon a **single acceptable solution** to a problem. Divergent **thinking** people have the ability to generate a **range of** possible **solutions** to a problem for which there is no unique answer.

**Divergent thinking, knowledge and reasoning** are used in combination during the creative process.

**De Bono, E.** (1967) *The Use of Lateral Thinking*. Jonathan Cape, London

### Stages in creative thinking

**Preparation.** Recognition that a given problem is worthy of study.

**Incubation.** A subconscious activity that goes on in the mind to evaluate potential solutions.

**Inspiration.** Ideas and possible solutions come abruptly into the conscious mind.

**Verification.** When the solution or idea is tried out in practice. It is the point at which the validity of the solution is tested.