- At various points throughout recent history, researchers have proposed some different definitions of intelligence.
- While these definitions can vary considerably from one theorist to the next, current conceptualizations tend to suggest that intelligence is the ability to:

- Intelligence involves some different mental abilities including logic, reasoning, problem-solving, and planning.

- While the subject of intelligence is one of the largest and most heavily researched, it is also one of the topics that generate the greatest controversy.

- **Nature vs. Nurture:** The debate over whether intelligence is primarily influenced by genetics (nature) or environmental factors (nurture).

Types of intelligence
1) FLUID INTELLIGENCE

- Fluid intelligence It reflects our ability to reason effectively, identify patterns, and recognize relationships between concepts.
- fluid Intelligence that reflects the ability to reason abstractly
- Fluid intelligence encompasses the ability to reason conceptually and abstractly
- Eg. If we were asked to solve an analogy, group a series of letters according to some criterion or remember a set of numbers, we would be using fluid intelligence. We use fluid intelligence when we're trying to rapidly solve a puzzle
- (mobile lock pattern)

2) CRYSTALLIZED INTELLIGENCE

- Crystallized intelligence is the accumulation of information, knowledge, and skills that people have learned through experience and education & that they can apply in problem-solving situations.

- It reflects our ability to call up information from long-term memory. We would be likely to rely on crystallized intelligence .

- For instance, if we were asked to participate in a discussion about solution to causes of poverty, a task that allows us to draw on our own past experiences & knowledge of world.

- In contrast to fluid intelligence, which reflects a more general kind of intelligence, crystallized intelligence is more a reflection of culture in which a person is raised.

- The differences between fluid intelligence & crystallized intelligence become especially evident in late adulthood, when people show declines in fluid, but not crystallized, intelligence

THEORIES /APPROACHES OF INTELLIGENCE

Different researchers have proposed a variety of theories to explain the nature of intelligence. Here are some of the major theories of intelligence that have emerged during the last 100 years.

- Is intelligence a single, general ability, or is it multifaceted and related to specific abilities?

General Intelligence

British psychologist Charles Spearman (1863–1945) described a concept he referred to as general intelligence or the g factor. **g or g -factor** The single, general factor for mental ability assumed to underlie intelligence in some early theories of intelligence

GENERAL INTELLIGENCE

- Early psychologists interested in intelligence assumed that there was a single, general factor for mental ability, which they called g, or the g-factor.

- This assumption was based on the fact that different types of measures of intelligence, whether they focused on, say, mathematical expertise, verbal competency, or spatial visualization skills, all ranked test-takers in roughly the same order.

- People who were good on one test generally were good on others; those who did poorly on one test tended to do poorly on others.

Theory of Multiple Intelligences

One of the more recent ideas to emerge is [Howard Gardner](#)'s theory of multiple intelligences.

- He has taken an approach very different from traditional thinking about intelligence.

- Gardner argues that we have a minimum eight different forms of intelligence, each relatively independent of the others:

- **Bodily-kinesthetic intelligence**: The ability to control your body movements and to handle objects skillfully (dancer , dram artists, athletics, surgeons)

- **Interpersonal intelligence**: The capacity to detect and respond appropriately to the moods, motivations, and desires of others (

- **Intrapersonal intelligence**: The capacity to be self-aware and in tune with inner feelings, values, beliefs, and thinking processes

- **Logical-mathematical intelligence**: The ability to think conceptually and abstractly, and the capacity to discern logically or numerical patterns

- **Musical intelligence**: The ability to produce and appreciate rhythm, pitch, and timbre
- **Naturalistic intelligence**: The ability to recognize and categorize animals, plants, and other objects in nature
- **Verbal-linguistic intelligence**: Well-developed verbal skills and sensitivity to the sounds, meanings, and rhythms of words
- **Visual-spatial intelligence**: The capacity to think in images and pictures, to visualize accurately and abstractly
- furthermore, he suggests that there may be even more types of intelligence, such as existential intelligence, which involves identifying and thinking about the fundamental questions of human existence

Study Alert

Remember, Gardner's theory suggests that each individual has every kind of intelligence but in different degrees.

TRIARCHIC THEORY OF INTELLIGENCE BY ROBERT STERNBERG

Intelligence is a "mental activity directed toward purposive adaptation to, selection, and shaping of real-world environments relevant to one's life."

ADAPTATION – Occurs when one makes a change within oneself in order to better adjust to one's surroundings.

- **SHAPING** – Occurring when one's changes their environment to better suit one's needs.

- **SELECTION** – Replace the previous, unsatisfying undertaken when a completely new alternate environment is found to meet individual's goals.
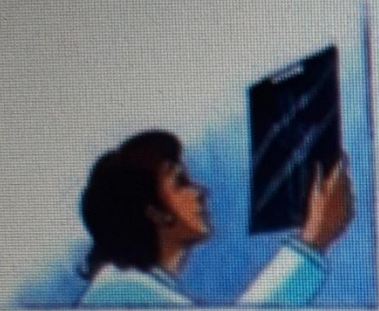
SUCCESSFUL INTELLIGENCE

- While he agreed with Gardner that intelligence is much broader than a single, general ability. Sternberg proposed what he referred to as "successful intelligence," which involves three different factors:

- **Analytical intelligence** (focuses on planning, monitoring, reflection and transfer. Being able to see the solutions) Analytical intelligence: Your ability to evaluate information and solve problems.

- **Creative intelligence** Creative intelligence: Your ability to come up with new ideas.

- **Practical intelligence** Practical intelligence: Your ability to adapt to a changing environment