

Sternberg's Triarchic

Theory of Intelligence

Presented By: Laila Mohsen, Lobna Mohamed, Rawan Bassem, Youssef El Sedawy, Ashraf Sobhy, Mostafa Kasab, Ahmed Hamdy, Youssef El Sherif, Ehab Sabry & Omar Khaled

Who is Sternberg?



Robert Jeffrey Sternberg is an American psychologist known for his theories on love, intelligence and creativity. He was born in New Jersey on December 9, 1949.

The Story behind Sternberg's Theory

Sternberg developed his very first intelligence test, which he named the Sternberg Test of Mental Ability (STOMA).

After suffering from test anxiety and doing poorly on an exam, he realized that the test was not an accurate measure of his actual knowledge and abilities.

When he retook the same test in a different room with a group of younger students, he found that he felt more confident and was scored much higher as a result.

Sternberg defined intelligence as mental activity central to one's life in real-world environments; individuals “succeed” in life when they use mental skills to adapt to, select, and shape external environments.

The Story behind Sternberg's Theory

Sternberg's Triarchic Theory of Intelligence was developed about the same time as Gardner's Theory of Multiple Intelligences. In the late 1990s, Sternberg changed the name of the theory to the Theory of Successful Intelligence.

The theory comprises three types of intelligence: analytical (also referred to as componential); practical (also referred to as contextual) and creative (also referred to as experiential).

Sternberg's work on the Theory of Successful Intelligence unfolded in three phases. The first phase was the validation of the fundamental importance of different abilities and the collection of supporting evidence from different cultures and societies.

The second phase included studies designed to develop valid and reliable methods to assess analytical, practical, and creative abilities.

The third phase was designed to apply the Theory of Successful Intelligence to the educational environment.

Triarchic Theory of Intelligence

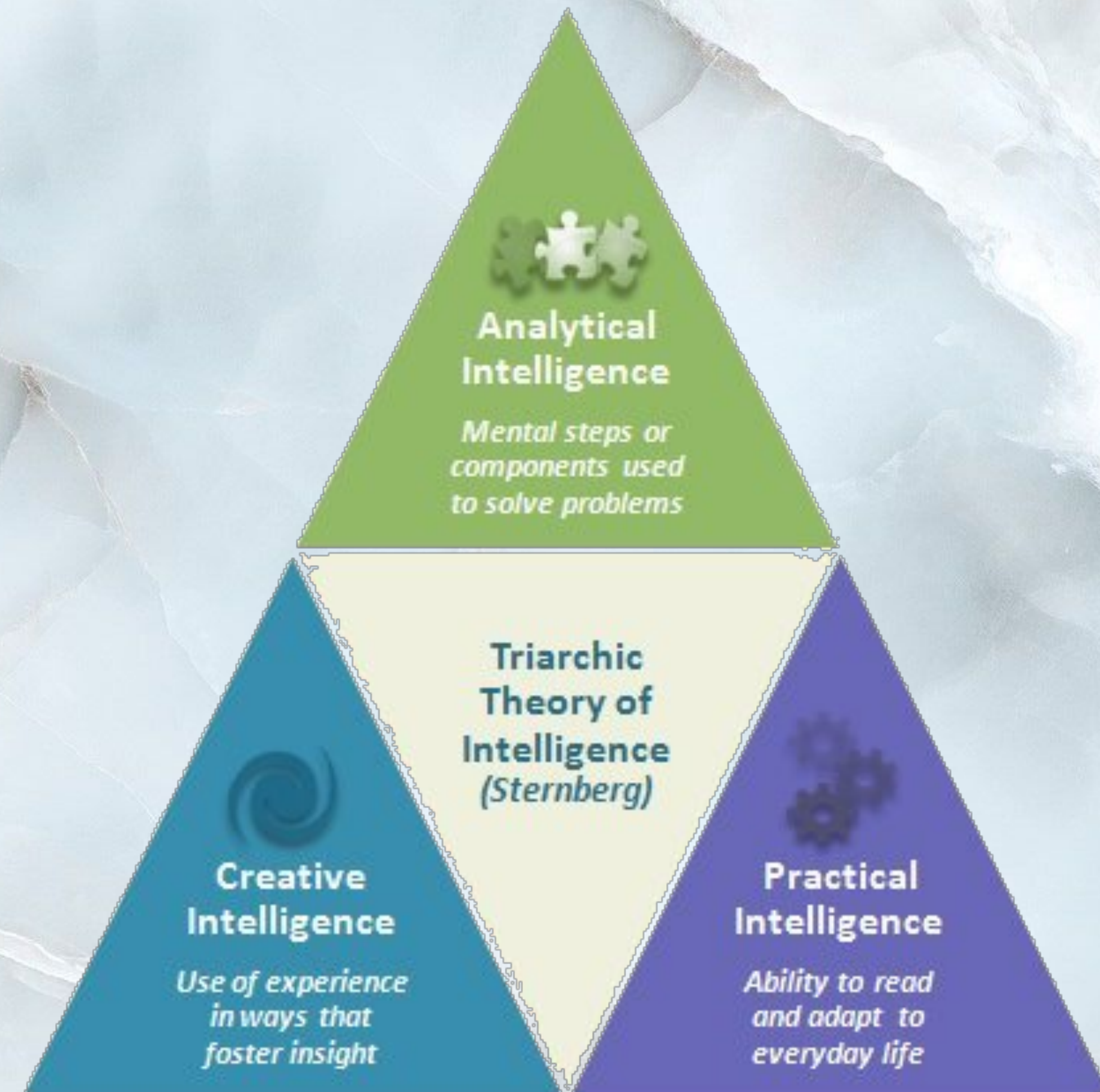
Practical Intelligence:

How you react your environment and your ability to adapt to it or change it to suit your needs.

Creative Intelligence:

The way a person approaches new information or a new task

Applying existing knowledge to a new problem



Triarchic Theory of Intelligence

Two Categories

Novelty

How a person reacts the first time they encounter something new.

Automatization

How a person learns to perform repeated tasks automatically

Triarchic Theory of Intelligence

Analytical intelligence

Relates to how a person processes and analyzes information.

Three Components

Executive component

Performance Component

Knowledge Acquisition Component

Triarchic Theory of Intelligence

Executive Component

Used for analyzing and choosing strategies for solving problems.

Performance Component

Carry out the actions that are necessary for solving problems.

Knowledge Acquisition Component

Allow new information to be gained and stored in memory.

Could also be thought of as a person's capacity for learning

Application of the Triarchic Theory

Assessment

Measuring the analytical, practical, and creative aspect of intelligence using Sternberg Triarchic Abilities Test (STAT). It contains item in two formats: multiple choice and essay.

The latest generation of this instrument is referred to as the Aurora Battery. It is designed for elementary and middle school children.

Application of the Triarchic Theory

Industrial/Occupational

Sternberg and his colleagues worked with the U.S. Army to quantify the practical abilities of U.S. officers by capturing, describing, and measuring their “tacit” knowledge of military leadership so that this knowledge could be integrated into the training of military cadets preparing for future leadership roles.

Education

Demonstrate the value of multiple pedagogical approaches that ensure that children are taught in ways that challenge and develop their analytical, practical, and creative abilities.

Develop a triarchic-based curriculum in United States based on its national standards.

Advantage & Disadvantage of Strenberg's Triarchic Theory

Advantages

It does not limit the definition of intelligence to cognitive abilities. Instead, it evaluates a person's intelligence by measuring three different kinds of reasoning processes and how they contribute to a person's success.

Sternberg (1999) showed that teaching with this model as a basis tends to result in significant improvements in academic performance.

Both contextual and experiential sub-theories highlight the importance of experience.

This means that the theory can be said to have high real world validity.

Advantage & Disadvantage of Sternberg's Triarchic Theory

Disadvantage

Sternberg's research and tests for measuring his proposed three kinds of reasoning processes have so far been criticized as providing little support for his triarchic theory.

Theory may be ethnocentric - traditional intelligence tests may not be an accurate measure of intelligence in children in other cultures. Sternberg (2002)

- Kenyan children do not appear to learn well at school.



Thank you.