

Two Factor Theory of Intelligence

Intelligence is the-

- ability to solve problems
- capacity to acquire and apply knowledge and skills
- ability to understand and learn, and to make judgments based on reason
- general mental adaptability to new environment
- innate cognitive ability
- thinking ability

Spearman's Two Factor Theory

- Charles Edward Spearman, a British Psychologist developed the two factor theory of intelligence using factor analysis technique.
- Spearman proposed that intelligence is comprised of two factors–
 - a) **General mental ability** known as ‘G’ factor
 - b) **Specific mental abilities** known as ‘S’ factors.
- The intelligence of an individual is determined by both the ‘G’ factor and the ‘S’ factors.
- The total intelligence of an individual is the sum of ‘G’ factor and ‘S’ factors.
- The performance of a particular task depends on the general ability (**G-factor**) and the particular specific abilities (**S-factors**).

Characteristics of 'G' factor

- ❖ **Universal ability:** It is found in case of all human beings
- ❖ **Inborn ability:** It is obtained by birth.
- ❖ **General mental ability:** It is common sense of human beings
- ❖ **Constant in nature:** it remains same and unchanged in all activity throughout life
- ❖ **Vary individual to individual:** Amount of 'g' varies from individual to individual
- ❖ **Applied in every activities:** It is used in all activities of life. No activity can be performed without g factor
- ❖ **Greater the 'g' of an individual, greater is the success in life.**
- ❖ **Base to perform:** G factor is the base to perform any task.

Characteristics of 'S' factor

- **Learned and acquired:** Specific abilities or 'S' factors are learned or acquired abilities of an individual
- **Specific activities:** It is involved only in specific type of activities
- **Varies activity to activity:** The amount of 'S' factors varies activity to activity in the same person
- **Individual differs:** The amount of 'S' factors also differ from individual to individual
- **Changing in nature:** The specific abilities or 'S' factors can be changed or modified through learning and training
- **Influenced by environment:** It is mostly influenced by environmental factors.
- **Success in particular field:** It is responsible for the success in a particular task/activity.

The two factor theory of intelligence can be understood better with the help of the diagrams below:

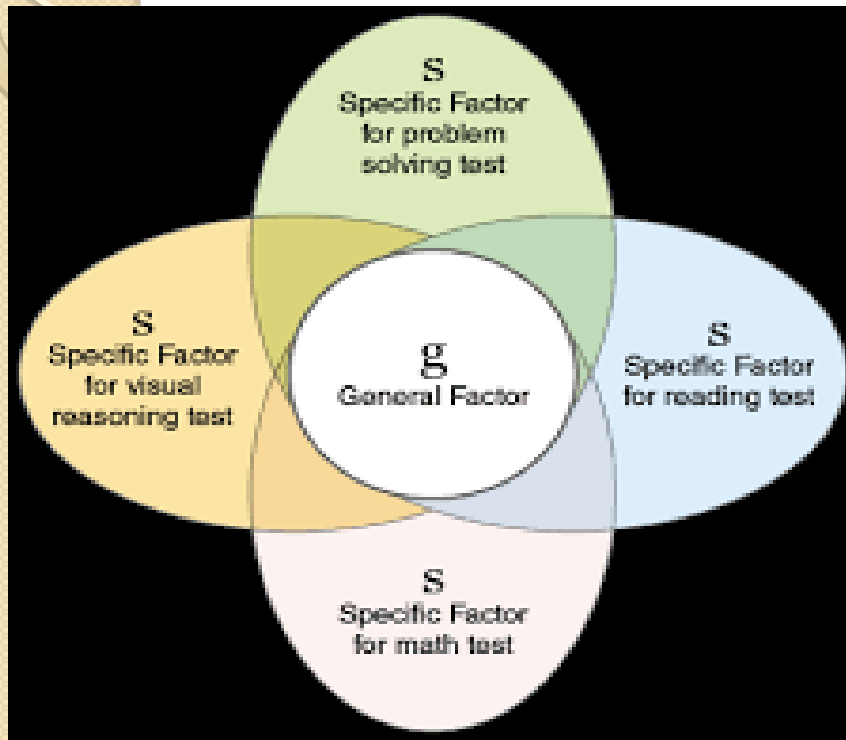


Figure.1

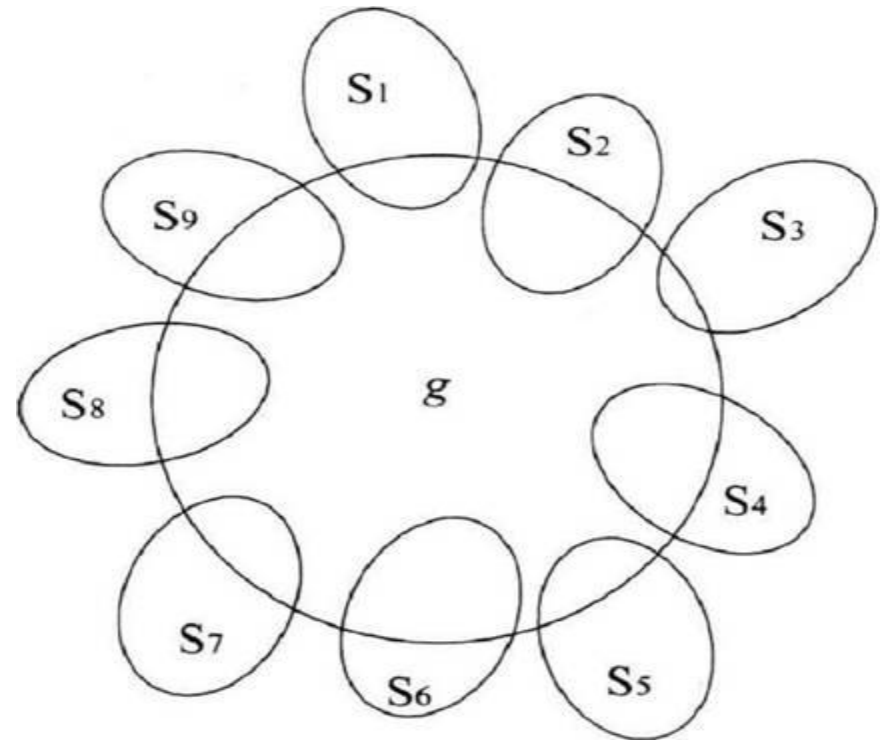


Figure.2

Educational Implications

- **Helps teachers:** The theory gives a better insight to the teacher about the nature of intelligence.
- **Focus individual difference:** Teachers should look into individual difference while teaching.
- **Improve abilities:** 'S' factors varies in degree so it can be modified and improved through learning and training.
- Student requires different amount of 'G' and 'S' factors for achieving success in different subjects.
- **High quality:** high quality of 'G' factor helps to score equal marks in every subject.
- This theory could be used to guide and to construct a set of ability test.



*THANK
YOU*