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GENERAL PSYCHOLOGY

INTELLIGENCE

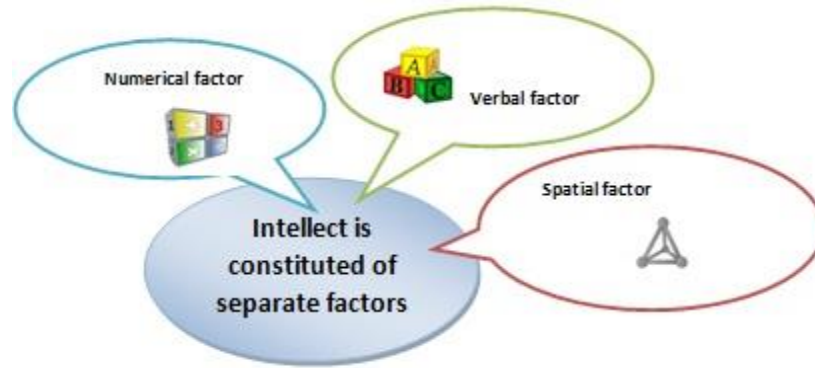
THORNDIKE & GUILFORD THEORY

(PG I SEM)

THORNDIKE THEORY

- American psychologist Edward Lee Thorndike assume that intelligence involve three mutually independent abilities
- **ABSTRACT INTELLIGENCE:**The ability to verbal and symbolic thinking
- **MECHANICAL INTELLIGENCE:**The ability to effectively control your body and manipulates objects.
- **SOCIAL INTELLIGENCE:**The ability to communicate with people understand and perform in social relation.

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- Thorndike believed that there was nothing like General ability. Each mental activity requires an aggregate of different set of abilities. He distinguished the following four attributes of intelligence.
 - LEVEL: It refers to the difficulty of task can be solved.
 - RANGE: It refers to a number of task at any given degree of difficulty.
 - AREA: It means that total number of situation at each level to which the individual is able to respond
 - SPEED: It is the rapidity with which we can respond to the items.



Thorndike believed that in almost every intellectual task some of the abilities are common and this causes the intercorrelation between different task. Thus according to him the intellect is constituted of separate factors minute-independent.

GUILFORD'S THEORY

- Joy Paul Guilford (March 7 1897 in Marquette, Nebraska-November 26, 1987 in Los Angeles) was a United States psychologist best remembered for his psychometric study of human intelligence, including the distinction between convergent and divergent production
- Developing the views of L.L. Thurston, Guilford rejected Charles Spearman's view that intelligence could be characterized in a single numerical parameter and proposed that three dimensions were necessary for accurate description: operation, content, and products.
- A review of General Psychology survey published in 2002 ranked Guilford as the 27th most cited psychologist of 20th century.

GUILFORD'S STRUCTURE OF INTELLECT

- According to Guilford's Structure of intellect (SI) theory 1955 an individual's performance on intelligence test can be traced back to the underlying mental abilities or factor of intelligence . SI theory compries up to 180 different intellectual abilities organised along three dimensions .Operation ,Content, and Products
- **OPERATION:** It means mental ability of nature.
- Cognition:The ability to understand, comperhend , discover,and become aware of information.
- Memory recording:The ability to encode information
- Memory retention:The ability to recall information
- Divergent production:The ability to generate multiple solution to a problem, creativity

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- Convergent production: The ability to deduce a single solution to a problem, rule following or problem solving.
- Evaluation: The ability to judge whether or not information is accurate consistent, or valid.
- **CONTENT:** This dimension means where that area items or information work on the basis of operation.
- Figural: Concrete real world information tangible objects things in the environment. It includes visual information perceived through seeing, auditory: information perceived through hearing
- Symbolic: Information perceived as symbol or sign that stand for something else the letter of alphabet musical and scientific notations

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- Symentic: Concern with verbal meaning and ideas. Generally considered to be abstract in nature.
- Behavioural: Information percieved as acts of people .
- **PRODUCT:** It contains result of applying particular operation to specific content.
- Units: Single items of knowledge
- Classes: Sets of unit sharing common attributes
- Relations: Units linked as opposites or associatios sequences or anlogies
- System: Multiple relations interrelated to comprise structure or network

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- Transformation: Changes ,perspective , conversion or mutation to knowledge.
- Implication: Prediction, inferences, consequences, or anticipation of knowledge.
- Therefore according to Guilford there are $5*6*6= 180$ intellectual abilities or factors .
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THANK YOU