

THORNDIKE'S TRIAL AND ERROR THEORY

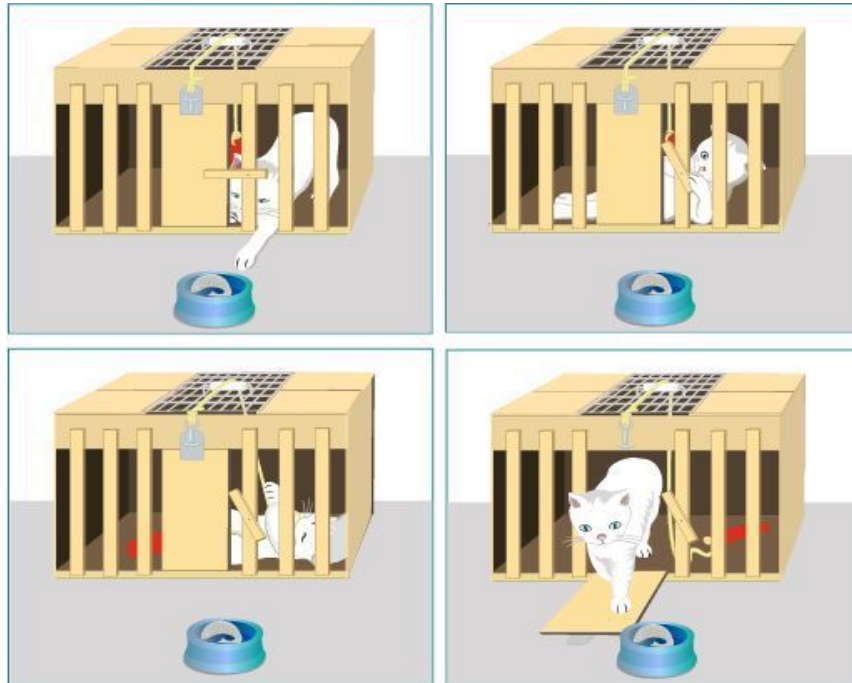
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E. L. Thorndike

- American psychologist
- known as the **founder of modern educational psychology**
- Father of educational psychology

- He propounded '**Trial and Error Theory**' which represents that learning is the result of associations forming between stimulus and responses.
- "**Mistakes teach individual**" statement is based on 'Trial and Error Theory'.
- Known as **connectionism**

His experiments conducted on - Cat in the puzzle box



- Learning is the result of associations forming between stimuli and responses.
- Edward Thorndike developed the first three laws of learning: Law of readiness, Law of exercise, and Law of effect.

Law of Readiness

- When any conduction unit is ready to conduct (an individual ready to learn something), for it to do so is satisfying.
- When any conduction unit is not in readiness to conduct, for it to conduct is difficult. So, it implies that if you are not ready to learn something, you cannot learn it effectively.

- Readiness implies a degree of concentration and eagerness.
- In other words, when students are ready to learn, they meet the instructor at least halfway, simplifying the instructor's job

- Thorndike's Law of readiness emphasizes:-

- A) Reinforcements
- B) Degree of concentration and eagerness
- C) Basis of drill and practice
- D) None of the above

Law of Exercise

- "learning becomes efficient through practice and exercise"
- this law is further divided in the two
 - 1) Law of use
 - 2) Law of disuse

- **Law of Use** - learning are strengthened with repeated trial or practice
- **Law of disuse** - the learning are weakened when trial or practice are discontinued

Law of Effect

- satisfying state lead to consolidation and strengthening of the connection whereas dissatisfaction, annoyance or pain lead to the weakening or stamping out of the connections.

Secondary Laws

1) Law of Multiple Response:

Confronted with a new situation the organism responds in a variety of ways arriving at the correct response.

2) Law of Set Attitude:

The learner performs the task well if he has his attitude set in the task.

3) Law of Analogy:

According to this law, the individual makes use of old experiences or acquisitions while learning a new situation.

4) Law of Polarity:

Polarity deals with those connections which occur more easily in the direction in which they were originally formed than the opposite.

5) Law of Pre-potency of Elements:

Thorndike observed that a learner could filter out irrelevant aspects of a situation and response only to significant (proponent) elements in a problem situation. Different responses to the same environment would be evoked by different perceptions of the environment which act as the stimulus to the responses. Different perceptions would be subject to the pre-potency of different elements for different perceivers.

6) Law of Associative Shifting:

According to this law, "Any response may be elicited from the learner, of which he is capable, in association with any situation to which he is sensitive."

Thorndike illustrated this by the act of teaching a cat to stand up at a command.

Educational Implications of Trial and Error Theory of Learning

1. Importance of readiness
2. Importance of motivation
3. Importance of experience
4. Strengthening of bonds
5. Importance of repetition
6. Role of reward and punishment
7. Transfer of learning

THANK YOU