

CLASS – 11

PSYCHOLOGY

Chapter – 5

Learning

Part – 2

Operant Conditioning (Instrumental Conditioning)

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OVERVIEW



1. Meaning of Learning

2. Classical Conditioning

3. Operant Conditioning

4. Key learning Processes

5. Observational Learning

6. Cognitive Learning

7. Verbal Learning

8. Skill Learning

9. Factors that Facilitate Learning

10. Learning Disabilities

MEANING

- Operant Conditioning is a form of learning in which the consequences of a behavior determine the likelihood of its recurrence.
- It was developed by B.F. Skinner.

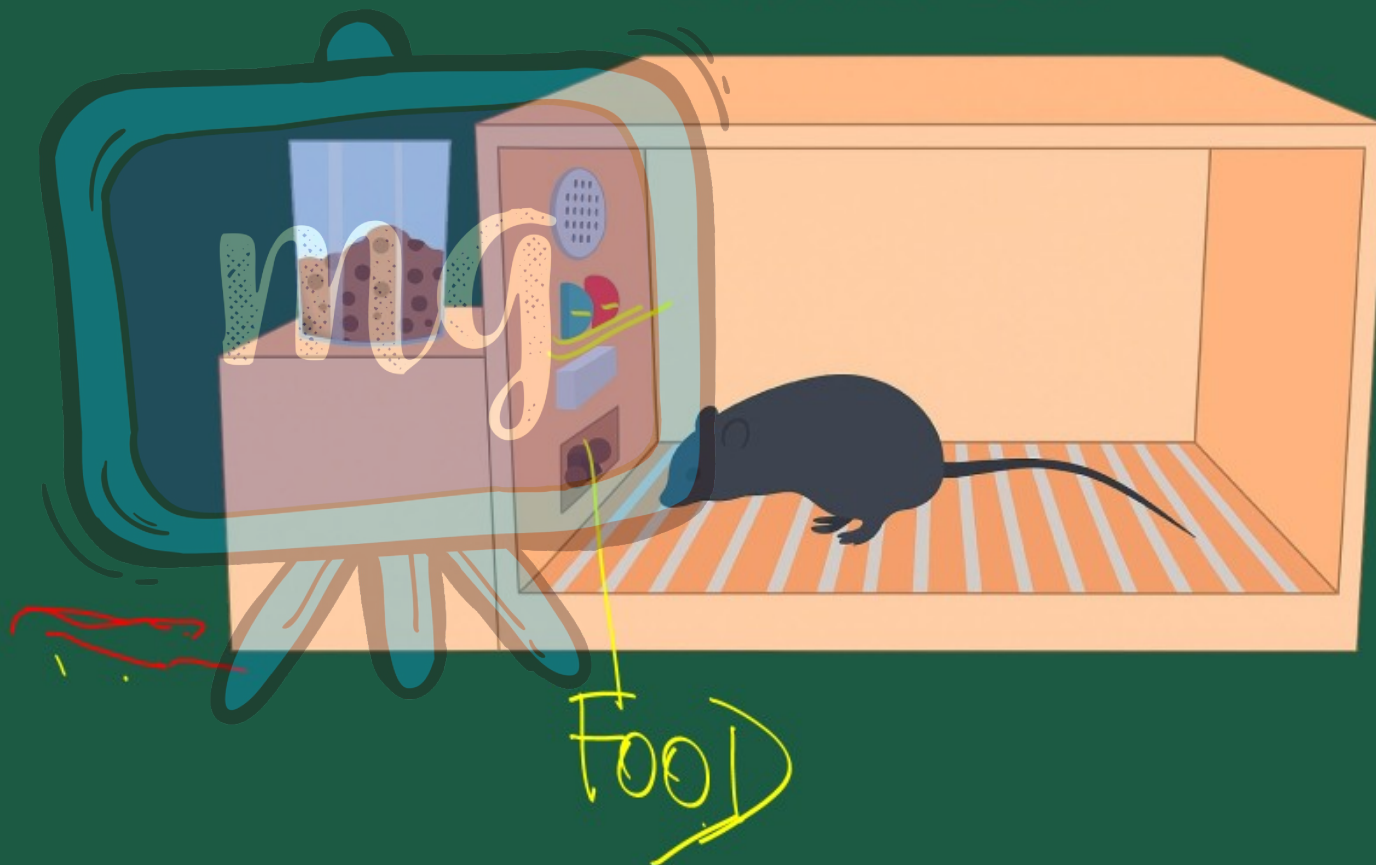


Organism operates on the environment,
and the behavior is shaped by the
rewards or punishments that follow.

Voluntary behaviors are learned
through reinforcement or punishment.

OPERANTS

Skinner Box



DETERMINANTS OF OPERANT CONDITIONING

1. Nature of Reinforcement :

- ✦ Stronger and more immediate
reinforcers lead to faster learning.



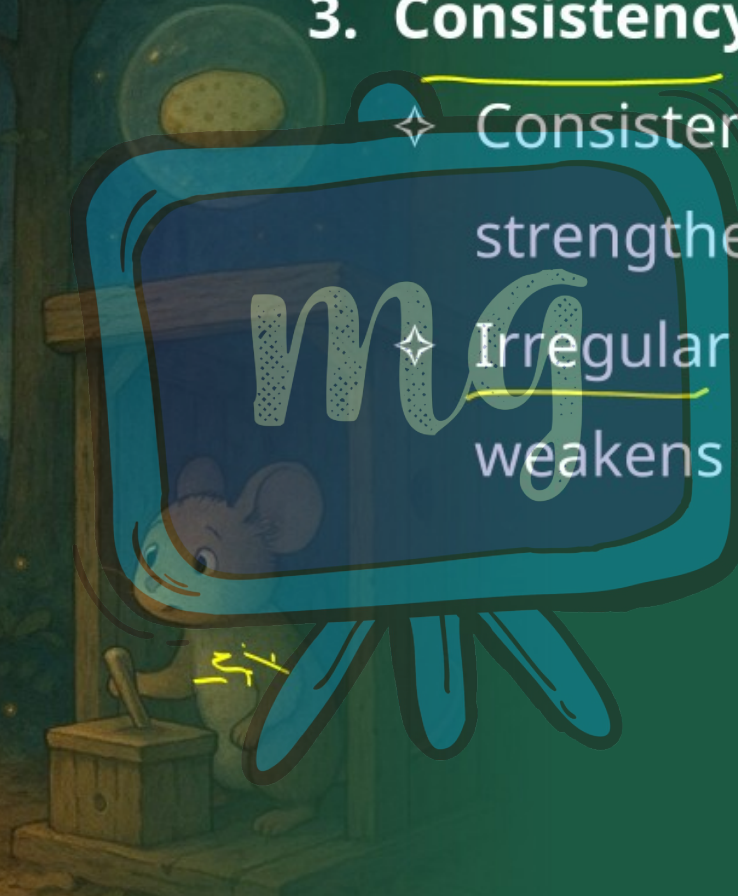
2. Time Gap Between Response and Reinforcement :

- ✧ Shorter the gap, stronger the conditioning.
- ✧ Immediate reinforcement is more effective than delayed reinforcement.



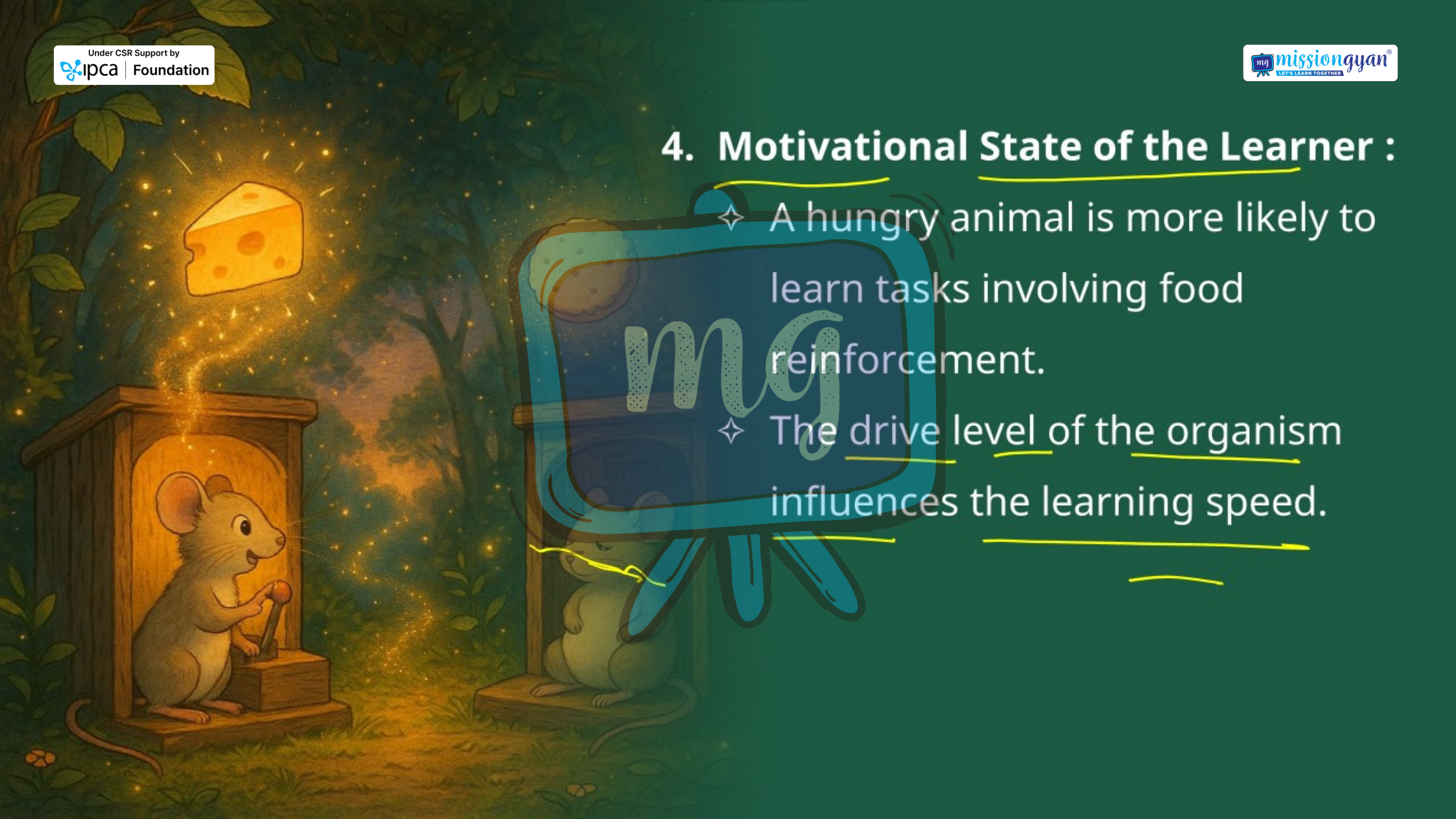
3. Consistency of Reinforcement :

- ✦ Consistent reinforcement strengthens learning.
- ✦ Irregular or delayed reinforcement weakens the association.



4. Motivational State of the Learner :

- ✧ A hungry animal is more likely to learn tasks involving food reinforcement.
- ✧ The drive level of the organism influences the learning speed.

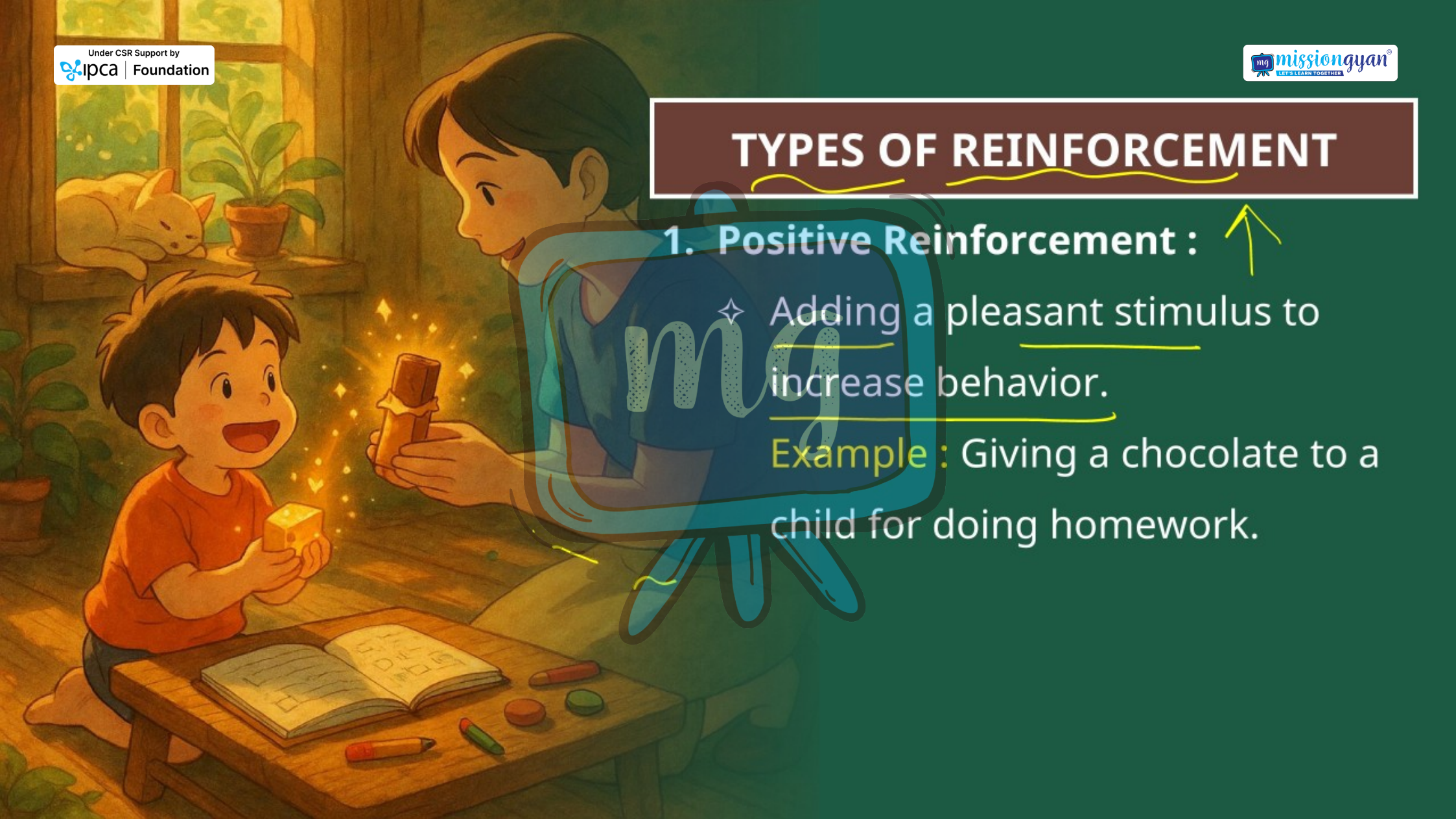


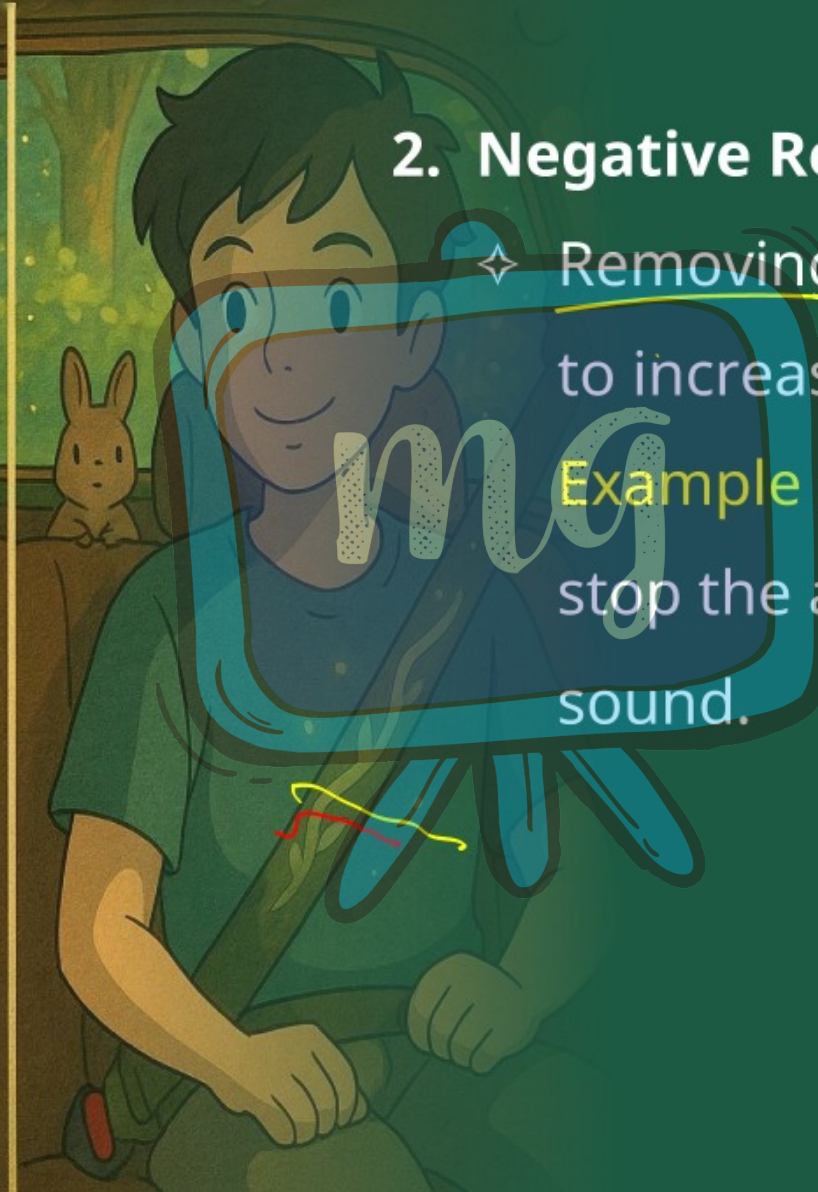
TYPES OF REINFORCEMENT

1. Positive Reinforcement :

✦ Adding a pleasant stimulus to increase behavior.

Example : Giving a chocolate to a child for doing homework.





2. Negative Reinforcement :

✦ Removing an unpleasant stimulus to increase behavior.

Example : Putting on a seatbelt to stop the annoying car beeping sound.

3. Positive Punishment :

✦ Adding an unpleasant stimulus to decrease behavior.

Example : Scolding a child for lying.



4. Negative Punishment :

✦ Removing a pleasant stimulus to decrease behavior.

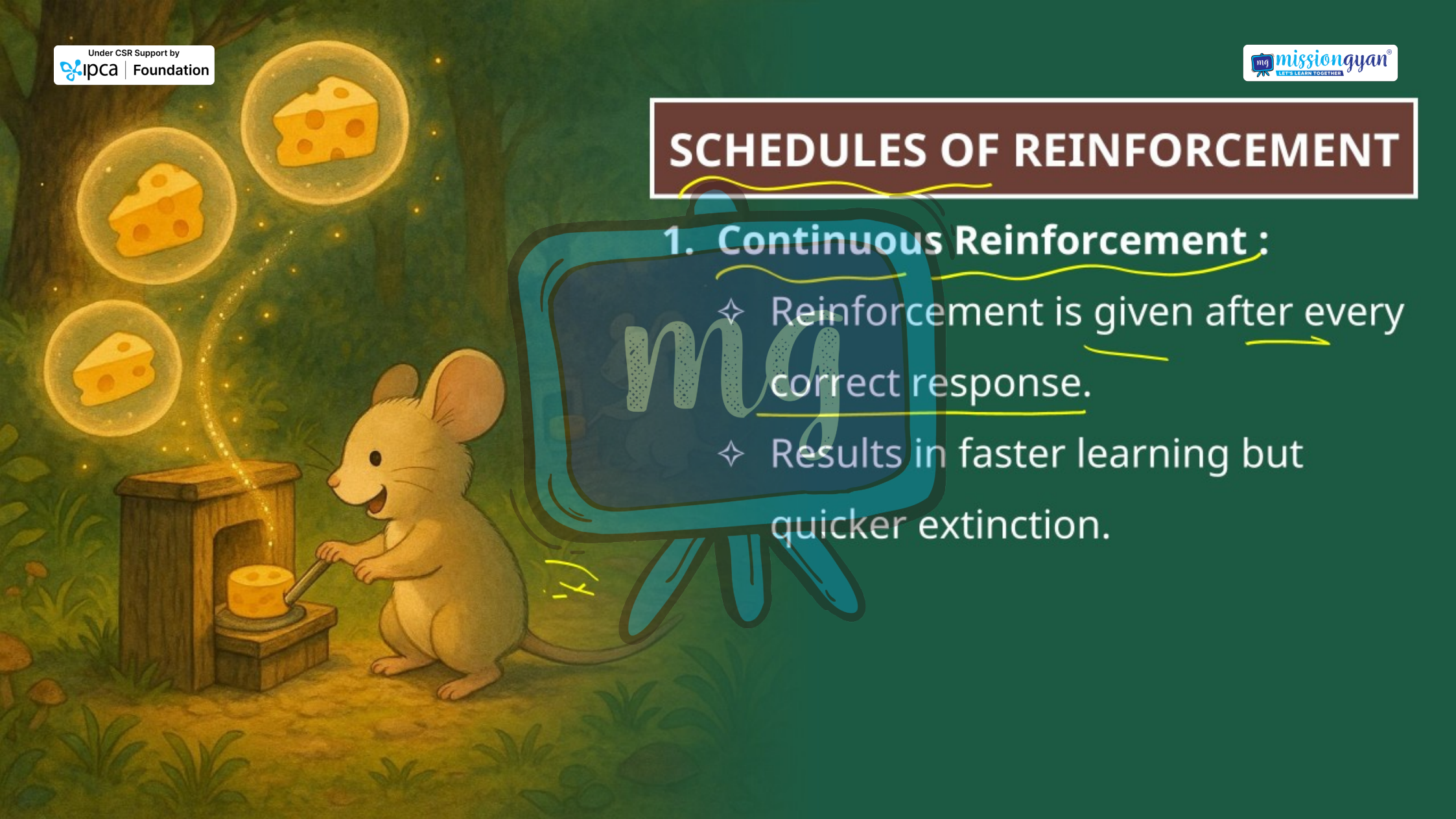
Example : Taking away a favourite toy when a child misbehaves.



SCHEDULES OF REINFORCEMENT

1. Continuous Reinforcement :

- ✧ Reinforcement is given after every correct response.
- ✧ Results in faster learning but quicker extinction.



2. Partial/Intermittent Reinforcement :

✦ Reinforcement is given only some of the time.

✦ Leads to slower learning but greater resistance to extinction.

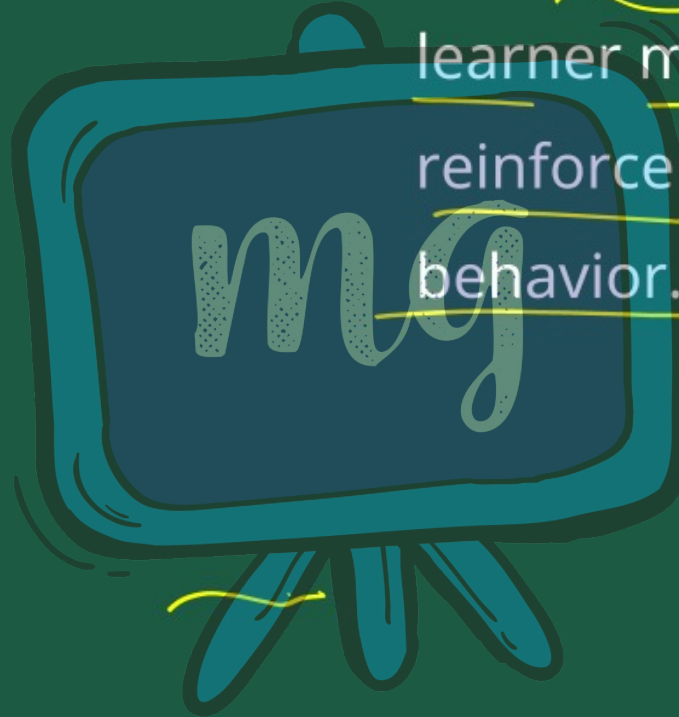


3. Delayed Reinforcement :

✦ The longer the delay between a behavior and its reinforcement, the weaker the learning tends to be.

✦ Immediate reinforcement creates a stronger association between action and outcome.

- ✦ With delayed reinforcement, the learner may not associate the reinforcement with the specific behavior.



KEY LEARNING PROCESSES IN OPERANT CONDITIONING

1. Acquisition :

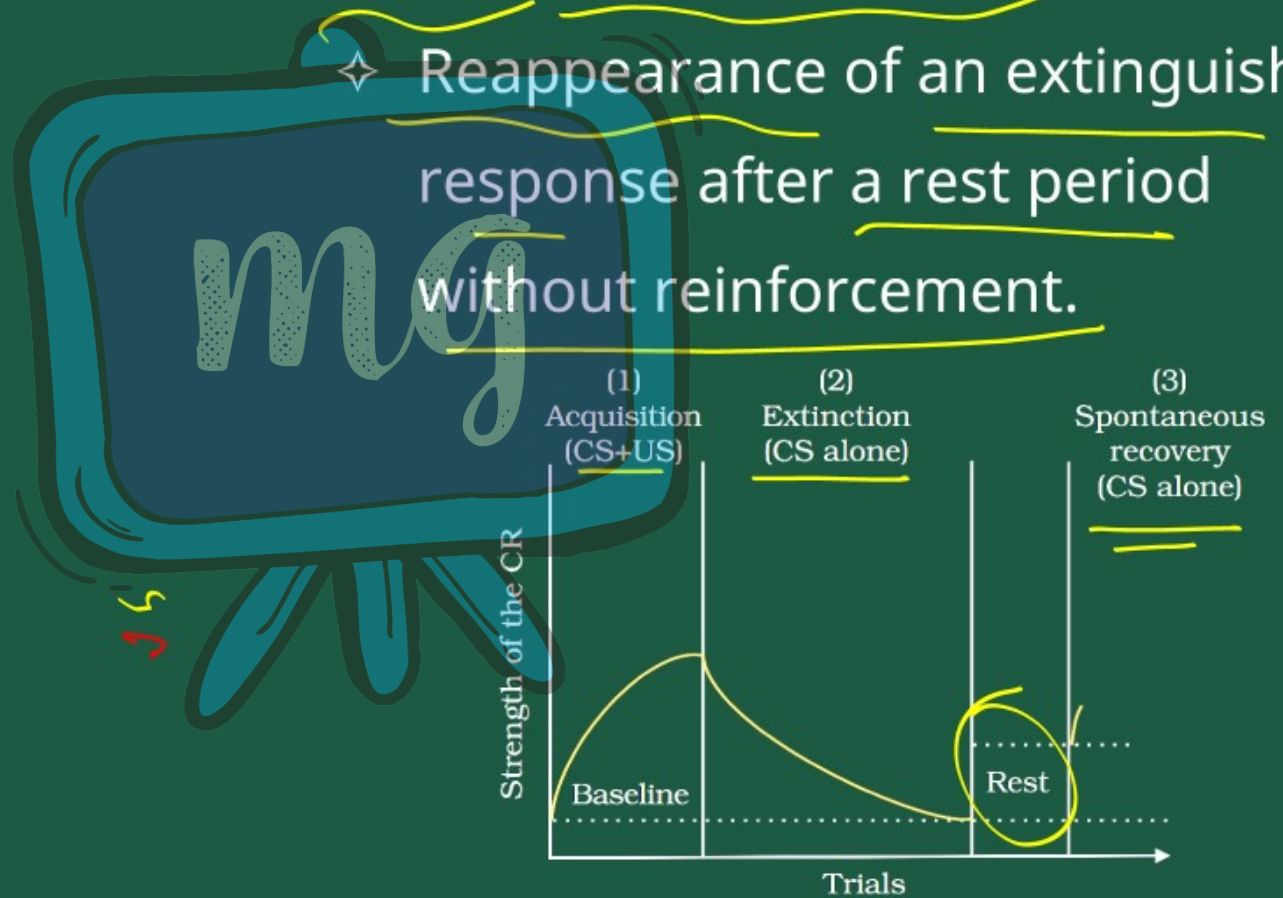
- ✦ Initial stage where the organism learns to associate a response with reinforcement.

2. Extinction :

- ✦ The decline of learned behavior when reinforcement is no longer provided.

3. Spontaneous Recovery :

✦ Reappearance of an extinguished response after a rest period without reinforcement.



4. Generalisation :

✦ Responding in the same way to similar stimuli.

Example : A pigeon pecking at any round object after being trained to peck a disc.



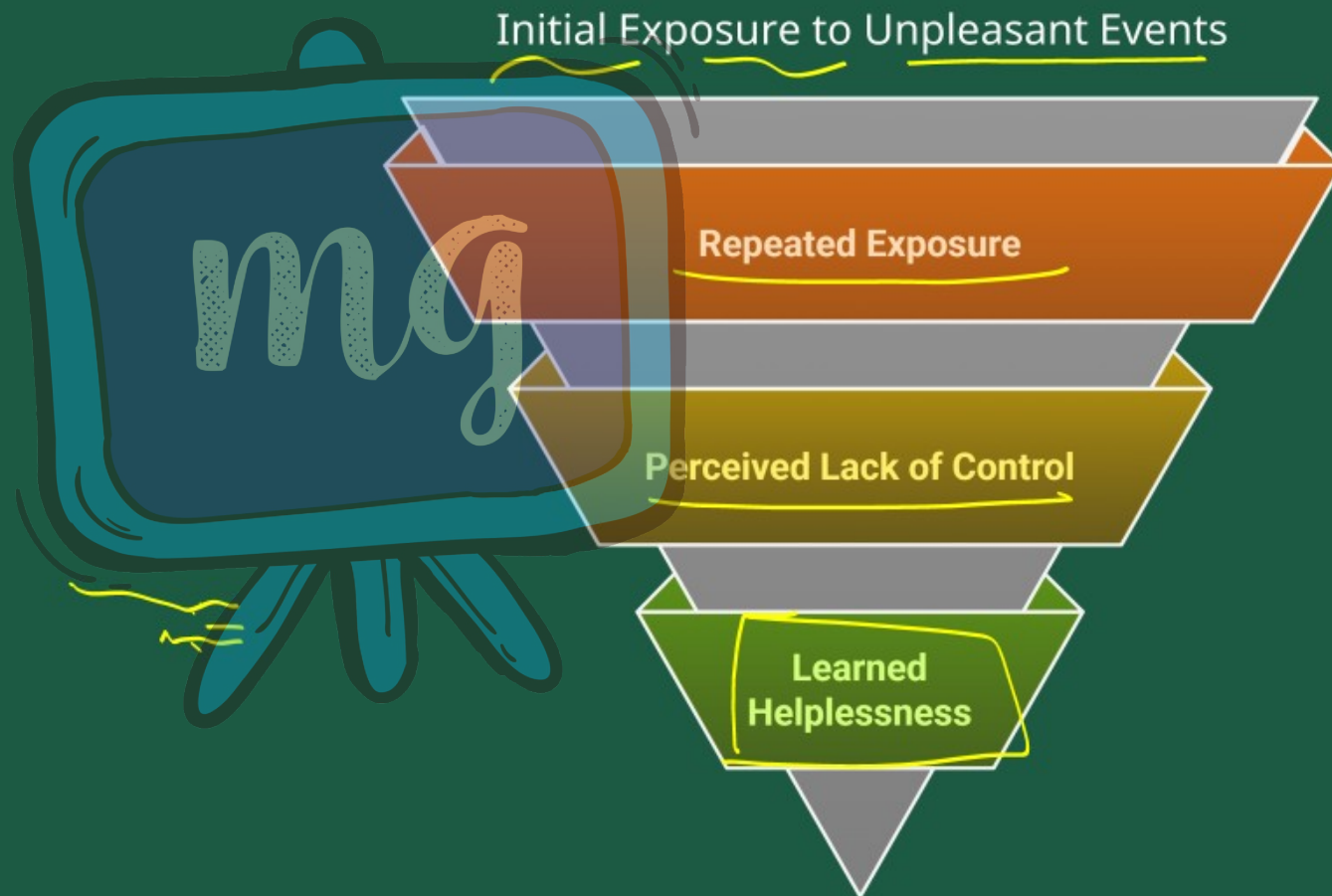
5. Discrimination :

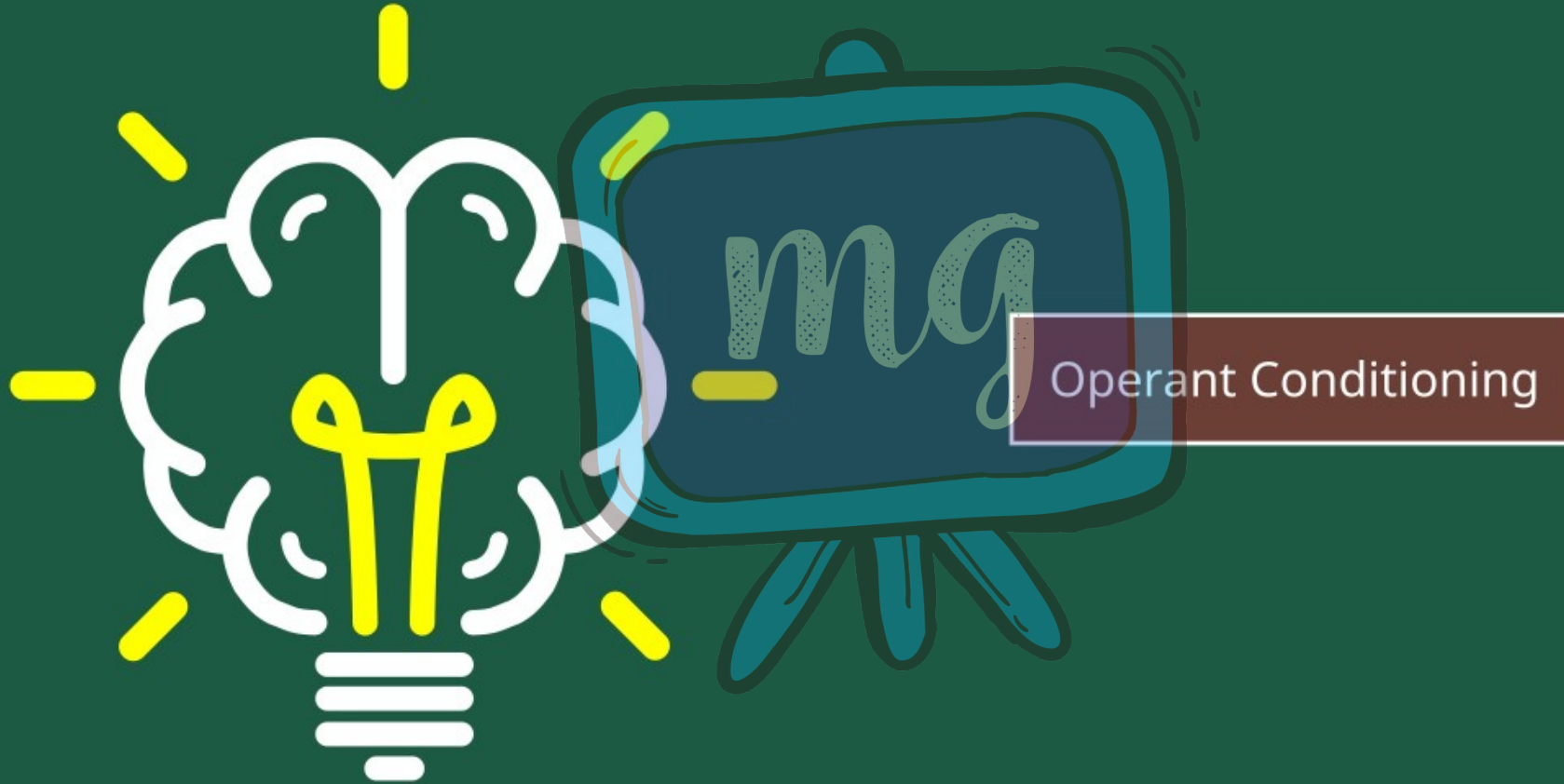
✦ Learning to respond only to a specific stimulus and not others.

Example : A dog sitting only when a specific hand signal is given.



Development of Learned Helplessness





1

Who developed the theory of Operant
Conditioning?

- ☐ A Ivan Pavlov
- ☐ B John B. Watson
- ☐ C B.F. Skinner
- ☐ D Albert Bandura

2 | Operant conditioning deals with:

- ☐ A Reflexive responses
- ☐ B Voluntary behavior
- ☐ C Unconscious learning
- ☐ D Classical responses

B

3

Which of the following increases the likelihood of a behavior happening again?

- ☐ A Punishment
- ☐ B Extinction
- ☐ C Reinforcement
- ☐ D Habituation