AP PSYCHOLOGY

OPERANT CONDITIONING

Unit 3: Development & Learning

OPERANT CONDITIONING

The process in which behavioral change (i.e., learning) occurs as a function of the consequences of behavior.

B.F. SKINNER

CONSEQUENCES

Reinforcement

Any event that *strengthens* the behavior it follows.

PRIMARY

Fulfills basic drive

SECONDARY

Everything else

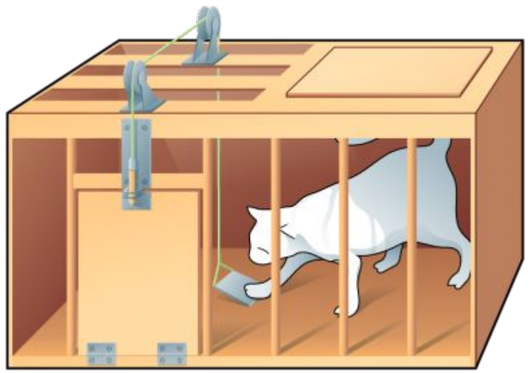
Punishment

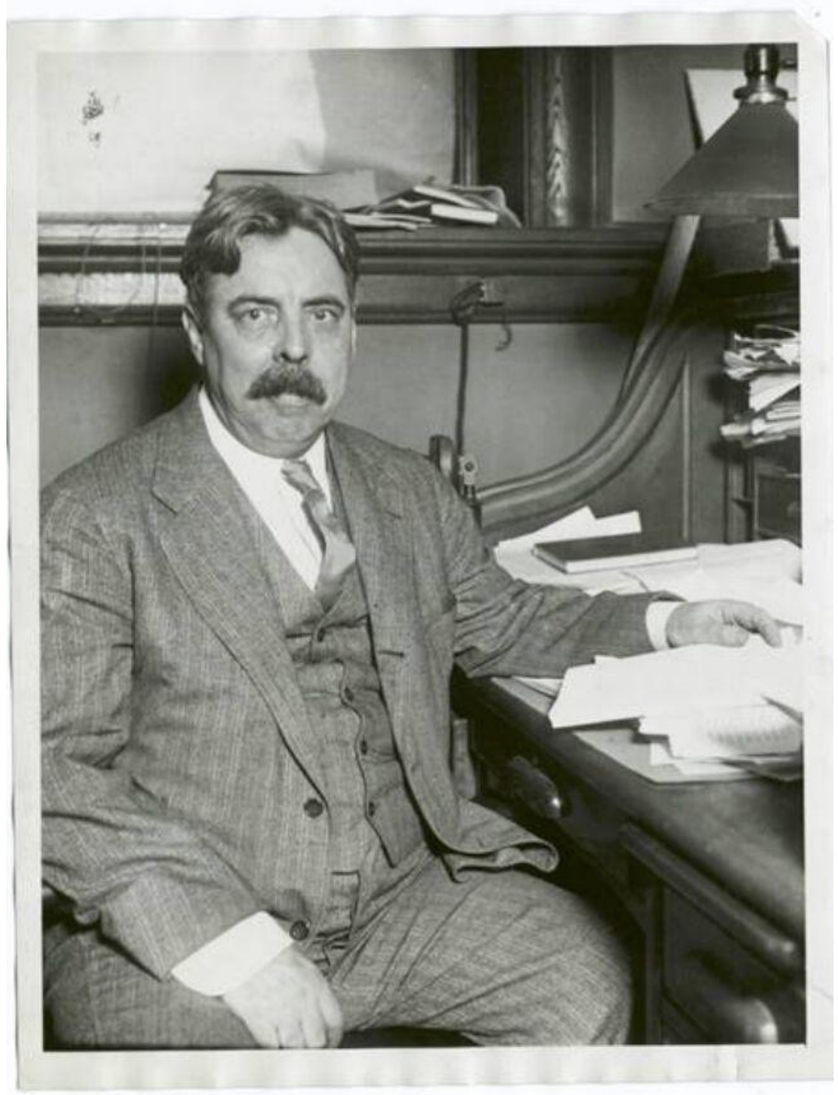
Any event that tends to *decrease* the behavior that it follows.

THE LAW OF EFFECT

Reinforcement strengthens behavior

Punishment weakens behavior





EDWARD THORNDIKE

COMMONALITIES WITH CLASSICAL CONDITIONING

ACQUISITION

EXTINCTION

SPONTANEOUS RECOVERY

STIMULUS GENERALIZATION

STIMULUS DISCRIMINATION

SHAPING

An operant conditioning procedure in which reinforcers guide behavior toward closer and closer approximations of the desired behavior.

INSTINCTIVE DRIFT

The tendency of learned behavior to gradually revert to biologically predisposed patterns.

REINFORCEMENT VS. PUNISHMENT

REINFORCEMENT

Increases the likelihood of behavior happening again

PUNISHMENT

Decreases the likelihood of behavior happening again

POSITIVE VS. NEGATIVE

POSITIVE

Adds a stimulus

NEGATIVE

Removes a stimulus

Training Techniques of Operant Conditioning

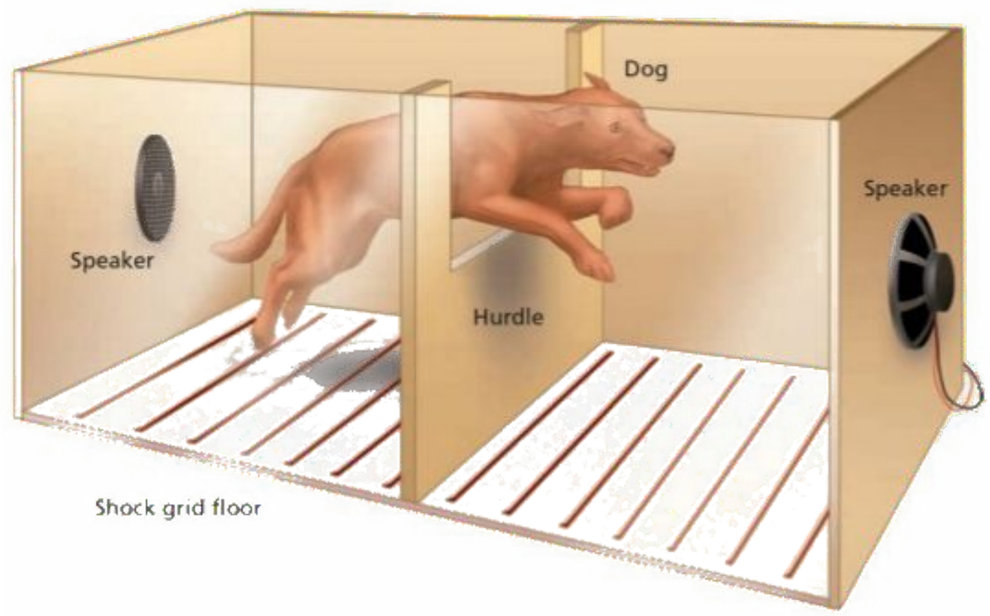
CONSEQUENCES

STIMULUS	STRENGTHEN	WEAKEN
ADDITION OF	**POSITIVE REINFORCEMENT** Strengthens behavior by giving you something you like	**POSITIVE PUNISHMENT** Weakens behavior by giving you something you don't like
REMOVAL OF	**NEGATIVE REINFORCEMENT** Strengthens behavior by taking away something you don't like	**NEGATIVE PUNISHMENT** Weakens behavior by taking away something you do like

SUPERSTITIOUS BEHAVIOR

Superstitious behavior occurs when consequences reinforce unrelated behaviors.

LEARNED HELPLESSNESS



The hopelessness and passive resignation humans and other animals learn when unable to avoid repeated aversive events.

DEPRESSION

Schedules of Reinforcement

Schedules of Reinforcement

CONTINUOUS

In operant conditioning, the reinforcement of every correct (desired) response.

PARTIAL

In operant conditioning, any pattern of reinforcement in which only some responses are reinforced.

Partial Reinforcement

PREDICTABLE VS. UNPREDICTABLE

Fixed **Variable**

BEHAVIOR VS. TIME

Ratio **Interval**

Fixed Ratio

In conditioning, an arrangement in which reinforcement is given after a specified number of responses.

High, steady rate of response

Variable Ratio

A type of intermittent reinforcement in which a response is reinforced after a unpredictable or average number of responses.

Most resistant to extinction

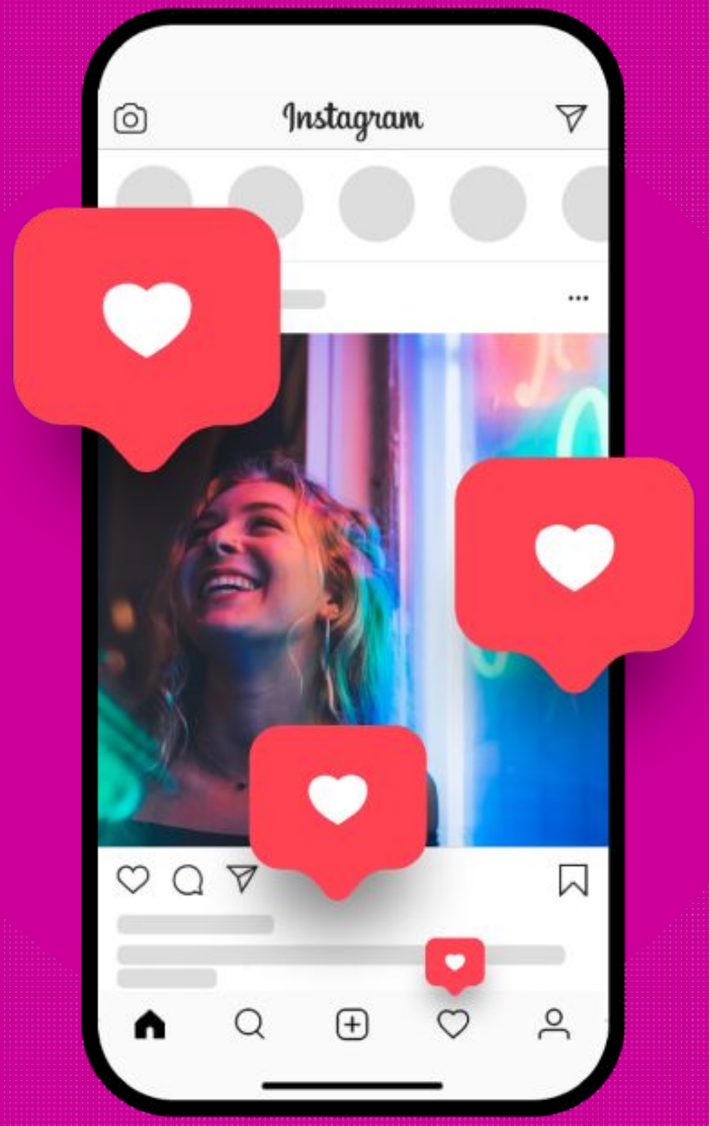
Fixed Interval

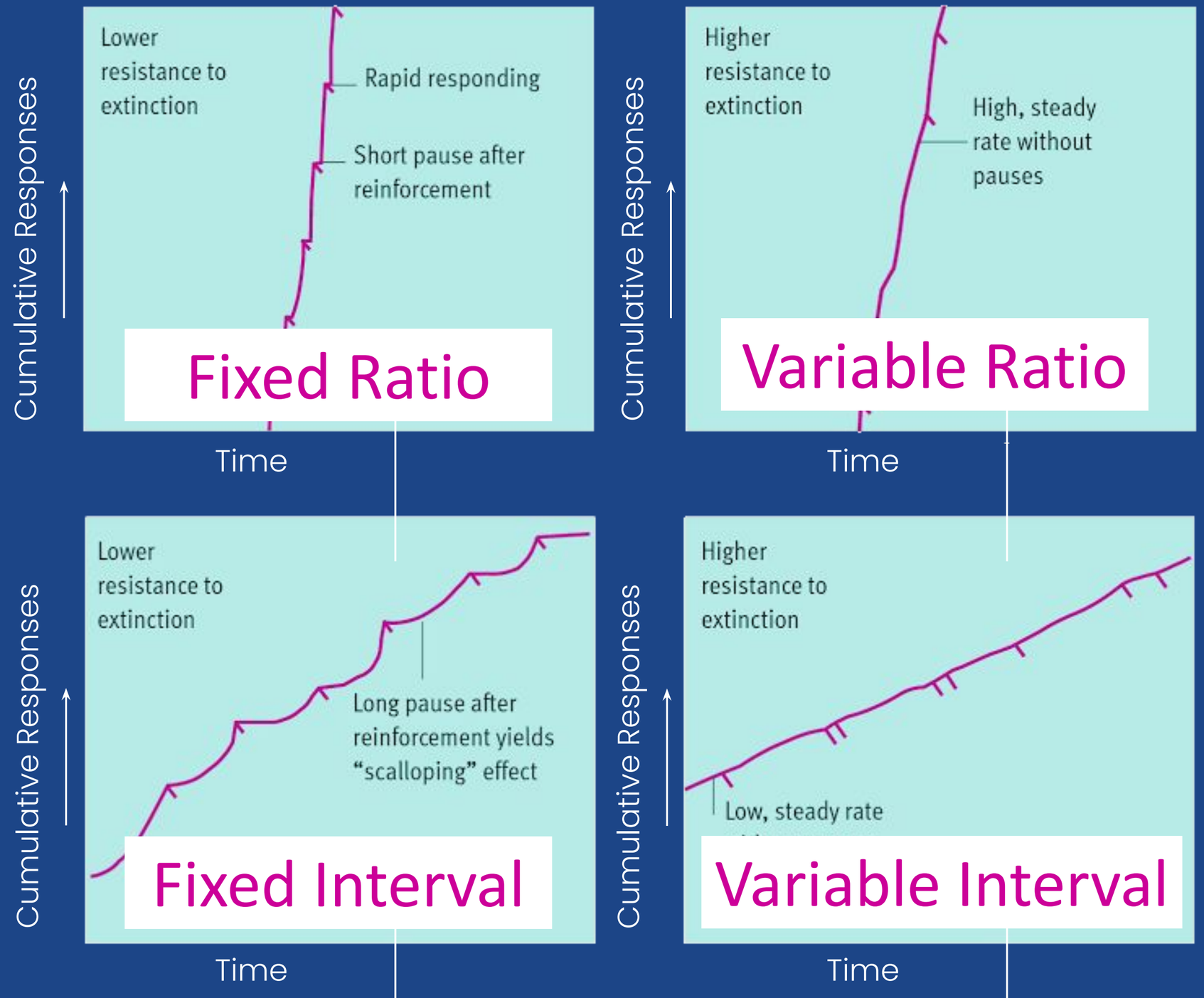
An arrangement, formerly known as periodic reinforcement, in which the first response that occurs after a set interval has elapsed is reinforced.

Moderate & erratic response rate

Variable Interval

A type of interval reinforcement in which the reward is presented for the first response after a variable period has elapsed since the previous reinforcement; not dependent on the number of responses during the intervals.




Cumulative Responses
Lower resistance to extinction
Rapid responding
Short pause after reinforcement
Fixed Ratio
Time
Cumulative Responses
Higher resistance to extinction
High, steady rate without pauses
Variable Ratio
Time
Cumulative Responses
Lower resistance to extinction
Long pause after reinforcement yields "scalloping" effect
Fixed Interval
Time
Cumulative Responses
Higher resistance to extinction
Low, steady rate
Variable Interval
Time