

Reinforcement and punishment

According to behaviourist theory, animals (including humans) learn as a consequence of association (classical conditioning) or reinforcement and punishment (operant conditioning). This spread looks at different kinds of reinforcement and punishment.

Reinforcement

A pleasant experience
Leads to a behaviour being repeated.

Positive reinforcement

Receiving a reward for a behaviour.
Leads to repeating the behaviour.
e.g. praise for doing something

Negative reinforcement

Avoiding something unpleasant.
Leads to repeating the behaviour.
e.g. avoiding a shock

Primary reinforcement

The thing that acts as a reinforcer meets a basic human need (that requires no learning).
e.g. food (being given food for a task), affection

Secondary reinforcement

The thing that acts as a reinforcer has become associated with something of biological significance.
e.g. money associated with food

Schedules of reinforcement

A plan of how often and when reinforcement will be given.

Continuous reinforcement

Reinforcement always follows the behaviour.
The effects are not long-lasting.
e.g. receive payment every time you complete a task

Partial reinforcement

Reinforcement is not continuous.
There are four possibilities:

- Fixed ratio
- Variable ratio
- Fixed interval
- Variable interval

Punishment

An unpleasant experience
Leads to a behaviour not being repeated.
Not to be confused with negative reinforcement.

Positive punishment

Something unpleasant is experienced following a behaviour.
e.g. being kicked

Negative punishment

Something pleasant is removed following a behaviour.
e.g. paying a fine

Ratio

Fixed ratio

Reinforcer after specified number of behaviours.

Variable ratio

Reinforcer after unpredictable number of behaviours.
The number of behaviours varies around a mean value.

Interval

Fixed interval

Time between reinforcers is constant.

Variable interval

Time between reinforcers is unpredictable. The time varies around a mean value.

Examples of reinforcement schedules

	Fixed	Variable
Ratio	Reward student every fifth time they complete homework.	Sometimes reward student — but the mean frequency of rewards will be every fifth time.
Interval	Reward student every week if at least one homework completed that week.	Reward student occasionally if at least one homework completed in the time period. The time periods vary around a mean length of time. Only one homework needs to be completed during this period to gain a reward.

Variable interval reinforcement tends to result in the most consistent behaviour.

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