Theory of Operant Conditioning

[B.F. skinner]

Operant conditioning is the process through which organism learn to repeat behaviours that yield +ve outcome

Other names.

→ Reward learning.
→ Instrumental conditioning {responses emitted from the learner acts as instrument for bringing reinforcement}
→ R-type conditioning. {The emitted response is conditioned}

Experiment was done on rats

It is similar to that of Thorndike's experiment. Skinner designed a box called skinner box, which was a modified form of Thorndike's puzzle box. He placed a hungry ~~cat~~ rat in the above described box. when the rat presses the lever inside the box, it gets a pellet of food. Gradually the rat learned to press the lever to get the food.

Although the experiment was similar to that of Thorndike's experiment, the explaination given by skinner was entirely different.

According to him, there are two types of responses.

Elicited responses (respondents)

these are always connected to some known stimulus {S–R}

Emitted responses (operants)

these are actions performed by organisms that are not connected to any known stimuli {R}

"In operant conditioning, operants (emitted responses) are made more frequent by providing reinforcement."

when an operant is immediately followed by ~~provided with~~ a stimulus, it can be strengthened or weakened depending upon the stimulus provided.

The stimulus provided can be either reinforcement or punishment.

	Reinforcement	Punishment
+ve Positive	adding pleasant stimulus. Strengthens R	adding unpleasant stimulus. Weakens R
−ve Negative	removing unpleasant stimulus. Strengthens R	Removing pleasant stimulus. Weakens R

Educational implications

→ By providing an immediate stimulus for a particular response, the response can be either strengthened or weakened.

→ Positive reinforcements can be used for developing good behaviour in children.
Similarly, bad habits can also be eliminated.

→ The theory of operant conditioning has contributed a lot to the development of teaching machines and programmed learning.