CC-13
P.G. Sem-III

HABITUATION

⇒ Habituation is the simplest form of learning. It involves not acquisition of new responses but the loss of old once. It this case, when an animal's is repeatly given a stimulus, its nature response gradually decreases and it may disappear entirely. Thus, the phenomenon is which repeated appeications of stimulus result is decreased responsiveness is called Habituation.

Animals are constantly bombarded by a host of different stimuli, emamating from the environment. It is a way of eliminating responses to stimuli by which are some times important but, which ing particular case are irrelevant. like wise, the escape response of bush to a shadow passing over head diminished Progessively, it the bird cease to react at all. Similarly, the orientation of the total towards potential peny Prosessively, declines of Non edible prey like objects are Presented repeatedly.

The speed of habituation depends on the nature of the stimulus. Different stimuli Produce their characteristic rate of habitation.

Characteristics of habituation —

(a) Stimulus specificity → the decrease in responsiveness occurs only with reference to the habituating stimulus. It is shown clearly in territorial stickle backs.

(b) Length of the inter-stimulus interval → : The length of the inter-stimulus interval (ISI) is important factor influencing habituation. The longer the ISI the less habituation occurs.

Davis (1970) investigated the effects of increasing the ISI in rates. He trained animals to expect different ISIs for a 50ms alarm tone of 120db, then compared their tendencies to habituate under indentical conditions He bound that long ISIs were less effective in Producing habituation but has longer losting effects over all.

(C) Dishabituation → If a Novel stimulus is Presented during the Process of habituation, then there is an increase in responsiveness is known as dishabituation.

(d) Sensitisation → : It is the opposite kind of change where habituation means to become less sensitive to a stimulus, but sensitisation means to become more sensitive to a stimulus e.g. In an Aplysia, receives an alarming stimulus such as an electric shock on the tail, it then respond more readily to other stimuli it has become more sensitive.

Examples of Habituation :-

(A) A study by Clark (1960) on the Nereis illustrate some of the typical feature of habituation Neris is an annelid marine worm which lives in burrow constructs in mud. The Worms head Protrudi from the tube whilst it feeds from the surface of mud. At such a time variety of sudden stimulus is caused, the worm to Jerk back rapidly into the burrow, but in the lab. He found that a variety of stimulus such as jarring the basin fetching the head of worm a sudden shade Passing over wound all close rabid retraction into the tube, but the majority of worms emerged with in a minute. So Clark found that habituation occurs more rabidly if stimuli were given to closer together.

(B). Habituation was 1st reported in 1877 by investigators testing the reaction of spider's to vibrating tunning fork, when the fork was vibrated a spider would drop from its web by a thread to a distance of half meter. It would remain their bore a time before returning to the web, with repeated tests and the spider gradually reduce the distance to which dropped and shorted the time of its return remaind on the web in spite of vibrations.

(C) Various birds are preyed up on by hawk. Timbergn has shown that these bird will flew if a hawk silhouette is displayed over head. this shows a valal of habituation.

Finally it should be stressed that habituation is an important Process where by an animal adjusts its behaviour to its environment animal adjusts its behaviour to its environment not all stimuli have their attendent consequence and the animal learns to ignore the neutral stimuli.