

Revision Notes

Chapter 6: Learning

- Learning is any relatively permanent change in behaviour or behavioural potential produced by experience or practice. It is an inferred process and differs from performance which is the observed behaviour/response/action.
- The main types of learning are: classical and operant conditioning, observational learning, cognitive learning, verbal learning, concept learning, and skill learning.
- Pavlov first investigated classical conditioning in the course of studies on digestion in dogs. In this kind of learning an organism comes to associate stimuli. A neutral stimulus (CS) that signals an unconditioned stimulus (US) begins to produce a response (CR) that anticipates and prepares the organism for US.
- Skinner first investigated operant or instrumental conditioning (OC). An operant is any response voluntarily emitted by an organism. OC is a type of learning in which response is strengthened if followed by reinforcement. A reinforcer can be any event that increases the frequency of preceding response. Thus, the consequence of a response is crucial. The rate of OC is influenced by the type, number, schedule, and delay of reinforcement.
- Observational learning is also known as imitation, modeling and social learning. We acquire knowledge by observing a model's behaviour. The performance depends on whether the model's behaviour is rewarded or punished.
- In verbal learning words get associated with one another on the basis of structural, phonetic, and semantic similarity and contrast. They are often organised in clusters. In experimental studies, paired-associates learning, serial learning, and free recall methods are used. Meaningfulness of material, and subjective organisation influence learning. It may be incidental also.
- Concept is a category. It involves a set of features connected with a rule or instruction. A concept can be natural or artificial. Artificial concepts are well-defined while natural concepts are usually ill-defined. Experimental studies of well-defined concepts have been undertaken through selection and reception procedures. The natural concepts have fuzzy boundaries.

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- Skill refers to the ability to carry out complex tasks smoothly and efficiently. They are learned by practice and exercise. The skilled performance is the organisation of S-R chain into large response patterns. It passes through cognitive, associative, and autonomous phases.
 - Effect of prior learning on new learning is called transfer of learning. It may be general (e.g., warm-up) or specific. It depends on similarity of S-R associations in the two learning tasks.
 - Factors facilitating learning include motivation and preparedness of the organism.
 - Learning style refers to the way in which each learner begins to concentrate on, process, and retain new and difficult information.
 - Learning disabilities (e.g., reading, writing) restrict learning in people. They are hyperactive, lack sense of time, and eye-hand coordination, etc.
 - The principles of learning are applied in organisations, treatment of maladjustive reactions, child rearing, and school learning.