Learning Theories

Behaviourism, behavioural psychology is a field that concerns itself with the study, analysis and understanding of human and animal behaviour.

Behaviourism is a theory of learning that advocates that learning is a change in behaviour due to external factors or conditions. It focuses on observable phenomema in human behaviour and disregards any role of the human mind in the learning process.

B.F. Skinner theorised that learning happens through a series of punishments and rewards.

Rewards increase the probability that a behavior will be repeated.

Punishment decreases the probability that a behavior will be repeated.

Rewards and punishments are of two types either positive or negative.

+ give or add something: interaction is positive

\_ take something away: the interaction is negative

**Example1:** giving a candy to a pupil each time he is focused on the course reward or positive reinforcement repeated focus

**Example 2:** a child cries because crying resulted in reinforcing consequences in similar situations in the past. (being given milk)

Behaviours are controlled by environmental stimuli.

“changing behaviours through manipulating consequences”

“ all consequences are seen as directly influencing whether behaviours will recur in the future.”

Reinforcers are events that increase the probability of recurrence of the behaviours they follow eg: food, attention or social praise (positive reinforcement)

* Behaviours can also be strengthened through the removal of an aversive (negative) stimulus following a behaviour. This operation is termed (negative reinforcement )
* Eg: a child learns to apologise if the apology terminates (avoids) being scolded by his/her parents.
* Eg 2: if you do not complete your homework, you will give your teacher 50 Da. You will complete your homework to avoid paying 50 Da, thus strengthening the behavior of homework completion.

2/ **Punishment**

Punishment consists of two operations, but these weaken the likelihood of behaviours recurring.

A/positive punishment: the representation of the consequence following the behavior results in weakening future occurences of a behaviour.

Receiving a minus each time the learners does not do the homework the learner will do the homework.

B/Negative Punishment: removing a reinforcing stimulus can weaken the behaviour.

Example: taking away TV watching privileges for a short time to weaken a child’s lying behaviour.

**Cognitivism**

Jean Piaget denied the idea that learners are passive and simply reply to stimuli in the environment. He assumed that cognitivism is based on the idea of how the mind functions in order to do the learning process. i.e. learning is an internal mental process rather than an external phenomenon based on observable behaviour. The mind is similar to a computer.

It takes information (absorbs). Then, it processes that information. Later on it uses that information as learning outcomes.

 processing

Input output

Cognitivism involves thoughts and feelings (two things that a behaviourist cannot identify or measure overtly.

In cognitivism, learning happens when the learner reorganises information either by finding new explanations or adapting old ones. This is viewed as a change in knowledge and is stored in the memory rather than just being viewed as a change in behaviour. In classroom settings, teachers relate concepts together through linking concepts to real-life examples, discussions and problem-solving situations.

According to Piaget there are four developmental stages

1. Sensori-motor stage (0-2 years): child learns basic schemas and object permanence. The idea that something still exists when you can’t see it.
2. Pre-operational stage (2-7 years): the child develops more schemas and the ability to think more symbolically, egocentism.
3. Concrete-operational stage (7-11 years) working things out in their head. They develop the ability to conserve (something stays the same even if it looks different.)
4. Formal-operational stage: (11- to adulthood): this is when abstract thinking is developed in addition to logic and hypothesis testing.