PY40S

**Learning**

**Most human and is the result of .**

How are sensation and perception related to learning?

3 Steps that illustrate how sensation and perception are closely related to learning:

**Step one:** – Our senses provide the raw materials through sight sound, touch, taste and smell

**Step two:** – Our mind then works with that information: selecting, organizing interpreting

**Step three:** – We then use this information to acquire knowledge and retain it so we can apply it in new situations

***:*** a term used by psychologists to describe how we acquire, store and use knowledge

***:*** a change in knowledge or behaviour as a result of experience

**Learning is not the only influence on our behaviour.**

***And :*** responses that members of a species are born with and that help them survive

***:*** inborn patterns of behaviour that are characteristic of a species

**Kinds of Learning**

**Two major types of Learning:**



***Conditioned Learning***: acquiring in the presence of an

* We learn to respond to a particular stimulus in a particular way.
* We share this type of learning with other species.

Examples of behaviours we are conditioned to do:

* Smile back when someone smiles at us
* Respond when someone says good morning
* Stop for a red light at the intersection

**Two types of Conditioning:**

3. **Classical Conditioning**

* Involves learning to transfer a natural response from one situation to another
* A learning procedure in which associations are made between a natural stimulus and a neutral stimulus
* Discovered by (1849-1936) – a Russian psychologist studying digestion
* Description of dog study - Page 53

***(UR):*** an automatic, unlearned (or natural) reaction to a stimulus

***(CR):*** a learned reaction

***(US):*** an event that elicits a certain predictable response typically without previous training

***(CS):*** a once-neutral event that elicits a given response after a period of training in which it has been paired with an unconditioned stimulus

US (food) UR (salivation)

US (food) + CS (bell) UR (salivation)

CS (bell) CR (salivation)

Examples: Taste Aversions

Music signals

Bed-wetting treatment

Conditioned emotions (fear)

: the CR gradually dies out

***Spontaneous Recovery***: previously extinguished CR may occur again when the CS is presented with the US



* Learning by consequence
* Learning in which a certain action is reinforced or punished, resulting in corresponding increases or decreases in occurrence
* Formulated by B.F. Skinner to describe behaviour that occurred before being triggered by outside events (no stimulus)
* Description of study – Page 55

Examples: Waving a hand to call a cab and it stops

A child asking for juice and receiving it

A driver slowing down at a red light to avoid an accident

***:*** a stimulus or event that follows a response and the likelihood that that response will be repeated

***:*** something good is presented, which encourages the behaviour in the future

***:*** something bad is removed, which encourages the occurrence of the behaviour

***:*** a stimulus or event that follows a response and the likelihood that that response will be repeated

***:*** something bad is presented, which discourages the behaviour in the future

***:*** something good is removed, which discourages the behaviour in the future

***Disadvantages of using punishment:***

* can produce unwanted side effects such as rage, aggression and fear
* people learn to avoid the person delivering the aversive consequences (aversive control: process of influencing behaviour by means of unpleasant stimuli)
* likely to suppress, but not eliminate, behaviours
* punishment alone does not teach appropriate and acceptable behaviour; desirable behaviours also need to be taught

: a person’s behaviour causes an unpleasant event to stop

: a person’s behaviour has the effect of preventing an unpleasant situation from happening; can be part of sustaining an anxiety disorder

***Classical Conditioning vs. Operant Conditioning***

|  |  |
| --- | --- |
| **Classical Conditioning** | **Operant Conditioning** |
| * Always a specific stimulus (US) that elicits the desired response * US does not depend upon the learner’s response * Learner responds to environment | * No identifiable stimulus; learner must first respond, then behaviour is reinforced * Reinforcement depends upon learner’s behaviour * Learner actively operates on its environment |



* Formulated to describe learning that occurs as we observe other people performing a new task

Examples: Playing a musical instrument

Driving a car

Playing a sport

**Albert Bandura identified 4 processes crucial to observational learning:**

|  |  |  |
| --- | --- | --- |
| **Process** | **Definition** | **Example** |
|  | You must pay attention to the behaviour of others to learn through observation. | Paying attention as someone shows you how to play a song on a piano. |
|  | You must store a mental representation of what you observe in your memory. | Noting what piano keys the person pressed and in what order so you can remember it. |
|  | You convert your stored memory into action. | Practicing the same song, trying to recall which keys to press and in what order. |
|  | You must believe the skill is useful or important in order to practice the skill. | Internal motivation: enjoying the song and wanting to play it.  External Motivation: wanting to please your parents who have paid for your piano lessons |