Classical Conditioning
↓
Learning by association

Unconditioned Stimulus (UCS)
any stimulus producing a natural, unlearned response
Unconditioned Response (UCR)
a response that occurs naturally (a reflex action)

Neutral Stimulus (NS)
an environmental stimulus that does not
produce a response itself (no association)

Conditioned Stimulus (CS)
a stimulus that has been associated with an
UCS so that it now produces the same response
Conditioned Response (CR)
a behaviour that is shown in response to a
learned stimulus.

Stimulus generalisation
CS produces the same behaviour to similar stimuli
after response has been conditioned
eg. runs to ALL tins, not just cat food.

- links to evolutionary approach
bad effect → CAUTIOUS of all similar → survive

Stimulus discrimination
learning only occurs in response to a specific stimulus
eg. Runs to can at only a certain time of day

- links to evolutionary approach.

know a safe option → STICK to it → survive.

Extinction
- removal of a behaviour
- if CS constantly presented without UCS - gradually learn to disassociate
- association may not be ENTIRELY lost

Spontaneous Recovery
- accelerated form of learning association
- after extinction if old CS paired w/ UCS the association is quickly learned

extinction ≠ unlearning

Operant Conditioning
↓
Learning by consequence

Thorndike (1911) → 'Instrumental Learning'
- Puzzle box
- Kitten had to solve puzzle to escape and receive reward
- more trials = Faster

'Law of effect'
Behaviour followed by nice consequence will be replicated
Behaviour followed by bad consequence will be withdrawn.

Skinner
- Skinner box   · scientific principles
- ABC model
Antecedent → skinner box presents stimulus that triggers behaviour
Behaviour → response made that can be observed as an outcome of the antecedent
Consequence → reward/punishment after behaviour

Stimulus-response link is only learned if POSITIVE consequence, its weakened if NEGATIVE

Types of reinforcement:
Positive → giving/adding
Negative → removing

pto.

Positive Reinforcement
giving something good (a reward)

Negative Reinforcement
removing something bad (to make conditions better)

Positive Punishment
giving something bad

Negative Punishment
removing something good

Primary Reinforcement
basic need - food/drink/comfort

Secondary Reinforcer
money/tokens/sweets - man made
(associated w/ primary eg. money can buy food)

Schedules of Reinforcement

A 'rule' that dictates the situations in which a behaviour will be reinforced.

Continuous reinforcement
desired behaviour is reinforced every time it occurs
Partial reinforcement
desired behaviour only reinforced some of the time

Behaviour learned through partial takes longer to learn but is <u>more resistant to extinction</u>

Partial reinforcement can be broken into 4 schedules:

fixed interval → rewarding of a behaviour after a preset amount of time has passed

variable interval → rewarding after a set amount of time has passed.

Learning takes longer with fixed BUT response rate is higher towards the end.
With fixed there is a scalloping effect - response rates drop dramatically immediately after rein.

fixed ratio → behaviour reinforced after a preset number of responses

variable ratio → behaviour reinforced after a set number of correct response

Skinner said variable is good for maintaining

Behaviour Modification.

Ideas:
- extinguish undesirable behaviour
- replace w/ desirable behaviour + reinforce it

Shaping Behaviour
Skinner developed the method of successive approximations
- → related, general, desirable behaviours rewarded
- → rewards become more selective
- → step-by-step, gradual process

- used as a mode of therapy for ADHD and OCD
- Target behaviour identified and rewards given for behaviours that get closer to the target

Token Economy
- encourage desirable through reward
- reduce undesirable through punishment
- tokens are SECONDARY reinforcers that can be exchanged for primary reinforcers
- tokens only given for desirable behaviour
- used in schools + prisons

Social Learning Theory
↓
Learning by observation

Behaviour of a model is observed then imitated

More likely to copy if observer can identify
with the model eg. same sex
                    same status/power

More likely to copy if consequences are rewarding
rather than resulting in a punishment.
↓
this is known as vicarious reinforcement

The 'Stages' of Social Learning: Bandura.
Attention
- Must be paid to the model for learning to take place
- Children more likely to attend to models similar to them

Retention
- Must retain/store what they have attended to
- Store as mental images + verbal descriptors

Reproduction
- Showing the modelled behaviour
- Affected by physical capabilities + self-observation

Motivation
- More likely to reproduce if there is a reward
- Intrinsic motivation → inherent satisfaction

- Extrinsic motivation → something tangible
- Vicarious reinforcement → witnessing

Evaluation?
- commitment to scientific research - based on lab-based research methods
- but artificial setting → generalisability + ecological validity
- allows for individual differences (cognitive + motivational factors)
- contributes to psych of aggression + gender development
- basis for treatments of phobias.
- less deterministic than other learning theories
- doesn't acknowledge the influence of free will
- breaks down complex behaviours to merely observational learning → reductionist

Phobias
↓

an anxiety disorder + complex behaviour

Types:
Specific → animals/inanimate objects/illness
Social → fear of eating in public places/public
speaking etc.
Agoraphobia → places of assembly

Classical Conditioning:
- the association of a UCS with a NS can lead to a phobia of the NS (CS)
- has been demonstrated through naturalistic observations
- not all phobias can be linked

Operant Conditioning:
- linked to social phobias
- deal by avoiding/escaping = rewarding
- removal of unpleasant emotions increases avoidance behaviour
  ↳ why they are maintained + hard to treat

Social Learning Theory:
- observing the consequences of others' behaviour
- observe - see sibling scream @ spider
vicarious reinforcement - parents comfort sibling
imitation - child screams @ spider
reinforcement - parents comfort (reinforce fear)

Treatments for Phobias

As a phobia is 'learned' its believed it can be 'unlearned'

2 categories: exposure treatments
             modelling

Systematic Desensitisation
• Based on the idea of reciprocal inhibition
                                    ↓
        you can't be anxious + relaxed at same time
• can be in vivo   or   in vitro
            ↓   ↓
exposed to real   imaginary exposure
object

Four processes:
Functional Analysis
conversation between therapist + client to identify nature + triggers
Anxiety Hierarchy
least anxiety provoking to most. client inputs + speed of treatment and stages are determined
Relaxation Training
client taught how to relax eg. deep breathing/ visualisation
Gradual Exposure
work through the anxiety hierarchy at agreed speed

Evaluation
• improve more than non-treatment group → effective
• less time + effort than other therapies

- can treat yourself via simulations
- no ethical issues
- can only treat certain anxiety disorders
- not effective at phobias linked to survival eg. dark
  ↳ difficult to remove such deep rooted fears

Flooding
- phobic being placed w/ the feared object/situation for a prolonged period of time
- continual exposure causes it to be seen as less fear producing
- escape is not possible
- implosion is imaginary version
- flooding facilitates the extinction
  ↳ too exhausted for CR to occur?
  ↳ prevents avoidance response?

Evaluation
- much faster than other therapies
- can increase strength of CR
- unethical? - distress - social control
- implosion: can associate w/ shut eyes (Barrett)

Developmental Psychology

Gender Identity

- more likely to copy behaviour of someone of the same sex
- vicarious reinforcement
  ↳ child motivated to imitate in future

Fagot (1978)
- observation - praise/punishment
- toddlers playing at home w/ parents
- boys reinforced for playing w/ gender appropriate ~~toys~~
  punished   dolls
- gender role behaviour = learned from environment

- gender socialisation could have changed since 70s
- SLT can't account for cognitive influences
                              cultural differences
- similarities in gender behaviour across world = genes?