Learning

"Changes in behaviour as a result of experience"

Conditioning - Reaction to a stimulus modified by learning

Associative Learning - Learning an association between 2 stimuli or behaviour + stimulus

Classical Conditioning   Passive Associative Learning
Learning associations between stimulus and behavioural responses

Food — Unconditioned Stimulus - that provokes unconditioned response

Salvating — Unconditioned Response - to an unconditioned stimulus

Bell — Neutral Stimulus

(Response comes after critical event)
(acquisition occurring)

Bell — Conditioned Stimulus - repetitions of NS and UCS together, provokes CR
(before)   (after)

Salvating — Conditioned Response - Learned response to CS (acquisition successful)

Acquisition - Initial stage of conditioning
Extinction - No more response to CR
Spontaneous Recovery - Return of CR despite extinction after a rest period.
Means memory is still there
Examples - Ivan Parlov's Dog
        - John Watson, Little Albert
        - John Garcia Effect, Taste Aversion

UCS - radiation   Acquisitioned occurred after 1 trial
UCR - vomiting/nausea   Persisted even after a long delay
NS - sweetened water   Specific to food/drink
CS - sweetened water
CR - vomiting/nausea   Conditioned Taste Aversion is adaptive survival
                                                          mechanism

Acquisition - Associates response with outcome/consequence
Response comes <u>before</u> critical event

Operant Conditioning   Active Association Learning

Learning the association between behavioural responses and outcome

e.g. Child : associates behaviour with consequences
Response - being polite
Consequence - getting cookie
Behaviour strengthened

Edward Thorndike's Law of Effect
Any behaviour followed by (un)pleasant consequences is ~~likely~~
(un)likely to be repeated

Positive - adding a stimulus
Negative - removing a stimulus

Reinforcement - Increases behaviour
Punishment - Decreases behaviour

Positive punishment - <u>Spanking child</u> so <u>doesn't steal money</u>
                           positive   punishment

Negative punishment - <u>No TV time</u>   "   "
                         negative

Positive reinforcement - <u>Jumping in hot shower</u>
                     positive   Completing a task outside in winter

Negative reinforcement - <u>Taking away the cold</u>
                     negative

Continuous
~~Continuous~~ reinforcement - Acquires desired behaviour very quickly
    Partial reinforcement - Acquires desired behaviour slower, but persists
                              longer without reward

Fixed Interval - Rewards every hour
Fixed Ratio - Rewards for a selected behaviour
Variable Interval - Rewards randomly as time passes
Variable Ratio - Rewards random behaviour

Observational Learning

Learning by watching ~~somebody~~ a model
e.g. Sharing, washing laundry
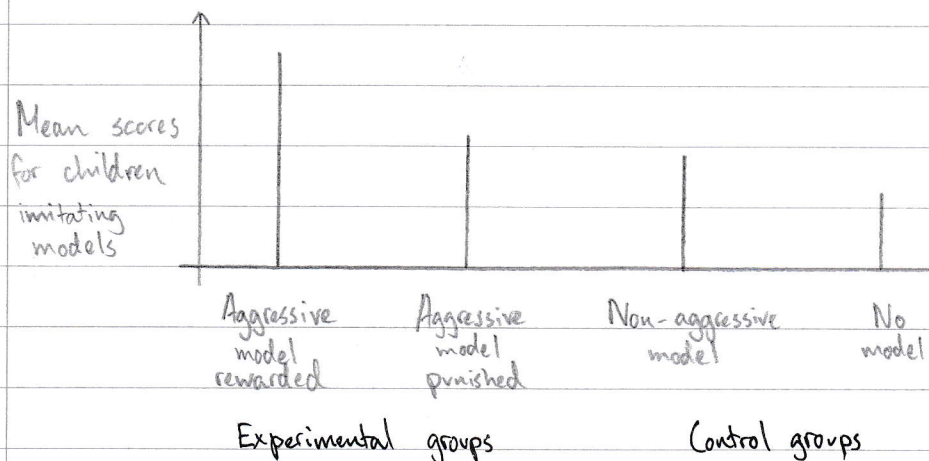
Albert Bandura - 4 stages to observational learning

1) Attention - paying attention to model's behaviour and its consequences

2) Retention - remembering what you saw

3) Reproduction - access mental representation and change into behaviour

4) Motivation - encounter situation where response is rewarded

washing laundry → clean clothes

Bobo Doll Studies
Study 1 - live models playing roughly with inflatable clown
Study 2 - filmed models   "   "   "
Study 3 - study 2 with changed consequences model received (reinforcement/punishment)

Mean scores for children imitating models (y-axis)

Aggressive model rewarded | Aggressive model punished | Non-aggressive model | No model

Experimental groups | Control groups

Desensitization - muted reaction to real violence

Numbing effect - individuals who played violent games were less likely to help "injured victim"