TYPES OF CONFORMITY [a type of social influence where we choose to go along with the majority].

- **Compliance** → "going with the flow" for group acceptance. It's a public and temporary influence. Eg, Asch.
- **Identification** → Conforming to a social roles for group membership. It's a temporary and public influence. Eg, Zimbardo.
- **Internalisation** → Genuinely accepting and joining a group publicly and privately. This is a permanent influence. Eg Religion, Veganism.

☹ Difficult to distinguish between compliance and internalisation.

☺ ~~Asch / Zimbardo / Sherif.~~

People conform because:

- **Normative Social Influence:**

To be accepted or liked by a group despite disagreeing privately. It's rewarding. (*Compliance, Identification*)

- **Informative Social Influence:**

Conforming to be 'right' or to gain knowledge. It avoids standing out (*internalisation*)

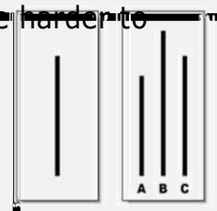
ASCH (1956) – CONFORMITY

- 123 male US undergraduates sat around a table to asked to match lines by length. 12/18 tasks the confederates were told to give false answers.
- On the 12 trials, 33% conformed and gave incorrect answers. 50% conformed on 6+ trials.
- When interviewed. PPs admitted that they had conformed to avoid disapproval and disagreed privately (**COMPLIANCE**)

VARIATIONS

- **Group size** → Max of 3 saw 33% conformity, but larger groups didn't see a rise.
- **Unanimity** → 1 confederate disagreeing decreases conformity from 33% - 5%.
- **Task difficulty** → Lines lengths were harder to spot. Conformity increases.

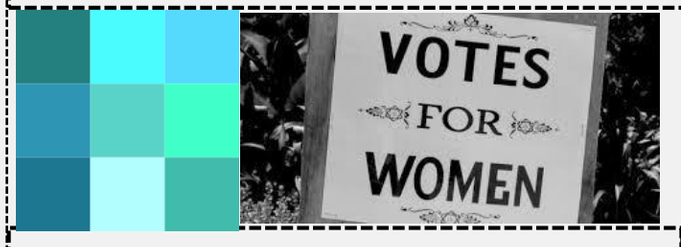
☹ Lack population validity (sample size/gender/students) / Androcentric / Beta bias / ethnocentric / Can't be applied to collectivist cultures / lacks temporal validity / Unethical (deception) / Women conform



RESISTANCE TO SOCIAL INFLUENCE

Social support → Asch found that unanimity promotes resistance. This introduces the idea that there are other answers/ideas possible which increases personal confidence.

Locus of control → perception of individual control. **INTERNALITY** (I have control) **EXTERNALITY** (controlled by other factors). High internals are likely to seek information / goal oriented and resist coercion from others.



MINORITY INFLUENCE → Consistency / Commitment / Flexibility needed to create a **conversion** process.

MOSCOVICI → groups of 6 (4 PPs, 2 confederates) asked to judge the colour of different blue slides. Confederates called the blue slides 'green'.

Green consistently = 8% influence which led to greater green chips being identified in later trials.

ZIMBARDO (1973) – SOCIAL ROLES

- 24 male student volunteers were assigned the role of 'guard' or 'prisoner' in a mock prison at Stanford University. Zimbardo was the prison warden, all PPs were given

more / Engineering students less likely to conform.

@Fin dlotte

☹ Public perceptions of 'deviant' will limit minority influence / social norm interventions aren't always successful and can make conforming people riskier.

SOCIAL CHANGE

- **VIA MINORITY:**
- Draw attention to the issue → cognitive conflict between beliefs → consistency → augmentation principle (suffering) → the snowball effect.
- Eg, smoking ban, suffragette's movement, gay marriage.
- **VIA MAJORITY (CONFORMITY)**
- **Social norms interventions** → identifying widespread misperception related to risky behaviour – "Most people don't drink at University".

AGENTIC STATE → attributing

uniform and props.

- Guards started to create their own punishments and volunteered to work longer hours. Prisoners started to riot, become passive and followed orders, 5prisoners had to be released early fromthe study 2 days in and the study was terminated on day 6 of 14.

VARIATION – BBC PRISON STUDY (2006)

- 15 male PPs were divided into 5 groupsmatched on her personalities. Random allocation of 2 guards and 1 prisoner. 8day study.
- PPs didn't conform to their roles.
- Prisonersidentified as a group and challenged guards. Guards failed to identify to role.

☹ Conformity isn't automatic / Highly

MILGRAM (1963) – OBEDIENCE

- 40 male PPs. 2 confederates (experimenter and learner). PP was always the teacher who had to punish the learner for incorrect answers via electric shocks. Learners sat in a different room and received fake shocks. If the teacher stopped, there were 'prods' to encourage them.
- 26/40 PPs (65%) shocked until 450V. All PPs shocked to 300V. 5 stopped

at 300V (12.5%).

VARIATIONS

- **Proximity** → in the same room (40% obeyed) / Moving the learner's hand onto a plate (30% obeyed) / Phone instructions (21% obeyed)
- **Location** → Laboratory (65%) / Run-down office (48% obeyed to 450V)
- **Uniform** → the more authority people appear to have; the more likely obedience will happen. Eg, Police Vs homeless.

☹ Socially sensitive / Highly unethical / lacks internal validity (mundane realism) /

unethical / Demand characteristics of BBC and SPE hidden cameras / Supportwith Abu Grahib / ~~Androcentric / betabias.~~

responsibility to someone else (authority figure). Shifting responsibility is AGENTIC SHIFT.
Eg, following orders of experimenter in Milgram's obedience study.

LEGITIMACY OF AUTHORITY → someone who is perceived to be in a position ofsocial control.
Eg, the experimenter.

AUTHORITARIAN PERSONALITY → a distinct personality patter characterised by strict following of values and a belief in obedience and submission to authority.

ADORNO → The F Scale → rigid andB&W thinkers, obeyed authority andlikely to had been raised by authoritarian parents.

☺ Altermeyer found a + correlationbetween high authoritarian personality and giving themselves electric shocks for incorrect answers.

gender differences (Androcentrism & beta bias)

☺ High historical validity (sameresults now) / controlled / understanding of obedience.

☺ Milgram et al (1966) follow-up study of 1963. 20 'obedient' PPs and 20 'defiant' PPs completed a personality test to measureauthoritarian personality. Higher levels found in the 'obedient' PPs.

☺ Left wing views associated with lower levels of obedience / Less-educated obey more than well- educated people.

☹ Social context/situation is stronger than disposition.

	Sensory Register A temporary store	STM	LTM A permanent store.
Capacity = amount	**Large** – Eg; Each eye has 100 million cells each storing visual data. (Sperling, 1960)	7 items +/-2. (Jacobs, 1887/ Miller, 1956)	**Unlimited**
Coding = format	Based on senses. 2 most common: **Iconic** (Visual is stored visually) or **Echoic** (sound is stored acoustically) (Sperling, 1960)	**Acoustic** (Baddeley, 1966)	**Semantic** (meaning). It's split into 3 stores: Episodic, Semantic and Procedural. (Baddeley, 1966)
Duration = timeframe	**Limited** – If no attention given, spontaneous decay takes place and it fades away quickly. (Sperling, 1960)	**Limited** (18-30) (Peterson, 1959)	**Unlimited** (Bahrick, 1975)

TYPES OF LTM

Declarative/Explicit (conscious):

- **Episodic** – Events and experiences (time/senses)
- **Semantic** – facts and knowledge

Implicit (unconscious)

- **Procedural** – skills and tasks.

☺ Brain scans show memories in different places / HM case study / Alzheimer patients.

☹ Case studies are limited / brain scans are limited, post mortem needed.

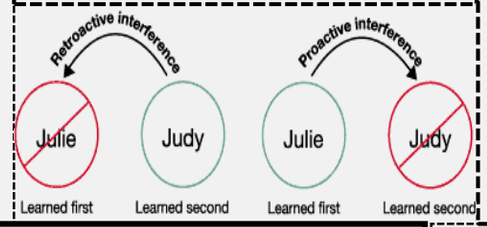
FORGETTING - INTERFERENCE

Retroactive → new learning interferes with past learning.

Proactive → past learning interferes with new learning.

☹ Artificial research / interference doesn't explain everything / individual differences.

☺ Real-word application to advertising.



Primacy effect → items are more likely to be remembered from the start.

Recency effect → items are more likely to be remembered from the end.

FORGETTING – RETRIVAL FAILURE

Context dependent → Memory recall is better when the environment is the same as where it was learnt. Eg, *Scuba diver study.*

State dependent → Memory recall is better when your mental state is the same as when you learnt it. Eg, *Drunk vs Sober study.*

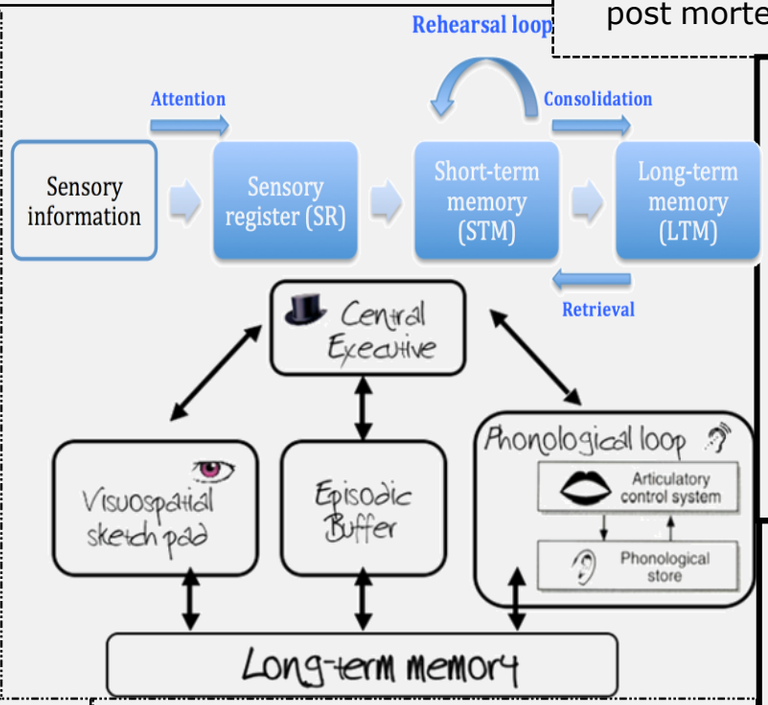
☺ Real world application (mental reinstatement) / supporting research

MULTI-STORE MODEL (1969)

- Sensory register holds sensory information.
- If attention is focused, information is passed onto the STM. Maintenance rehearsal is needed to move information into LTM, other it decays.

☹ Reductionist / unitary stored challenged by WMM and Tulving / LTM needs more than rehearsal.

☺ Lots of evidence for separate stores / brain damage case studies show separate stores.



WORKING MEMORY MODEL (1974)

- Challenged MSM, stating that STM has stores within it because we can see and listen at the same effectively, but struggle to listen or see 2 items at once.

- **Central executive** → directs information to the correct 'slave systems.
- **Phonological loop** → limited capacity, auditory store which breaks down into phonological store (inner ear) and articulatory processes (inner voice).
- **Visuo-spatial sketchpad** → visual/spatial awareness.
- **Episodic buffer** → added in 2000.

☺ dual-task performance and case studies of brain damage (KF)

☹ Central executive is vague and limited / reductionist / problems with case studies.

collates all information together andpasses it onto LTM.

EYEWITNESS TESTIMONY - LEADING QUESTIONS → Loftus and palmer (1974)

- 45 PPs shown 7 films of different traffic accidents and were asked to describe the accident.
- "*How fast were the cars going when they X each other*?"
- *Smashed* = 40.8mph / *collided* = 39.3mph / *hit* = 34mph / *contacted* = 31.8mph.
- "*Was there any broken glass*?" Those who were given the stronger verbs were likely to say yes.

☺ Real life application (police interviews) / supporting research (Disneyland – false memory).

☹ Artificial test (ecological validity) / response bias / individual differences (children).

IMPROVING EYEWITNESS TESTIMONY

COGNITIVE INTERVIEW → a police technique for interviewing witnesses to reduce inaccurate information from leading questions.

1. **Mental reinstatement** – context of crime.
2. **Report everything –** free recall.
3. **Change order –** reverse to challenge schema.
4. **Change perspective** – other witness POV to challenge schema.

☺ Effective and increases accuracy / increases quantity of recall.

☹ Individual differences (negative stereotypes) / time consuming for police / artificial research / different police regions will use slightly different techniques.

EYEWITNESS TESTOIMONY - POST-EVENT DISCUSSION.

- Memory can be altered or contaminated by co-witnessesif they're interviewed together, interviewed multiple times or able to discuss what they saw.
- 71% of PPs who discussed an event before recall mistakenlyrecalled information.

EYEWITNESS TESTIMONY – ANXIETY

- **Weapon focus effect** → PPs asked to sit in a waiting room where they heard an argument. A man runs out with either a pen covered in grease or a knife in blood. They were asked to identify the man.
- 49% identified the pen man, 33% identified the knife man.
- Anxiety can have a negative effect by drawing people to specific details of the crime and away from features of the criminal.
- **Positive effect** → evolutionary argument – it's adaptive to remember details to promote survival. In real-life crimes, witnesses are likely to remember 75% of detail up to 15 monthsafter the crime.
- **YERKES-DODSON EFFECT** → too much anxiety will impair recall accuracy.

CAREGIVER-INFANT INTERACTIONS

- **Reciprocity** → Communication turn-taking between infants and caregivers. Natural pauses.
- When mums stopped showing any expression or response to their babies, the child becomes upset and tried to provoke a response.
- **Interactional synchrony** → Mirroring of facial expressions during communication.
- Infants will imitate and expression or gesture shown by an adult from 2w of age.

☹ difficult to test baby behaviour / can't replicate / Individual differences (attachment).

☺ Babies only imitate humans / beneficial research for theory of mind.

DEVELOPMENT OF ATTACTMENT SCHAFFER AND EMERSON (1964)

1. **Indiscriminate attachment (0-2m)** – same response to all objects.
2. **Start of attachment (2-7m) –** forming preferences
3. **Discriminate attachment (7m) -** separation and stranger anxiety towards primary caregiver.
4. **Multiple attachment (8m+) -** secondary attachments develop.

☹ Biased sample / self-reported data / supported by Bowlby / cultural differences / stages are inflexible.

ANIMAL STUDY – HARLOW

- 8/16 Rhesus monkeys were caged with 2 wire mothers; one provided comfort the other food. Time spent on each was measured.
- All monkeys spent up to 22h on the comfort mother, only leaving to feed. When frightened they would cling to the comfort mother.
- 90-day critical period & maternal deprivation shown.

☺ Challenges the learning theory / Supports maternal deprivation / reformed animal treatment.

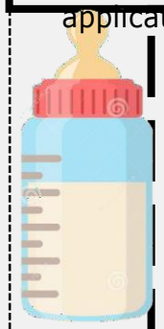
☹ Confounding variables of mother heads / ethics / can't be generalised.

ANIMAL STUDY – LORENZ (1935)

- Greylag geese eggs were separated between their natural mother and an incubator. When incubator eggs hatched the followed Lorenz around (imprinting)
- **Critical period** of 2 days.

☺ Chicks imprint onto yellow gloves.

☹ Imprinting can be reversed / limited application to humans.



EXPLANATIONS – LEARNING THEORY

Classical → caregiver becomes a conditioned stimulus because it's associated with food.

Operant → Negative reinforcement by feeding infants to remove discomfort.

Drive reduction → by feeding an infant we are positively reinforcing their crying and rewarding them with food, thus meeting a need.

☹ Food-giver isn't always primary attachment / Infants have multiple attachments / environmental reductionism / Geese imprint before feeding / Contact-comfort is more important than food.

TYPES OF ATTACHMENT – AINSWORTH

- Controlled observation, 8 episodes, 9-18m infants, mother and a stranger. 108 infants.
- Separation anxiety, reunion behaviour, stranger anxiety and secure bases observed.
- **Secure** (B) 70% → moderate separation distress and stranger anxiety. Accepts reunion comfort.
- **Avoidant** (A) 15% → Low separation and stranger anxiety. No reunion comfort needed.
- **Resistant** (C) 15% → High stranger and separation anxiety, resists reunion comfort.

☺ High reliability - .94 kappa score / real-world application.

☹ Lacks ecological validity / Disorganised attachment discovered / infants respond differently with each parent / unethical / ethnocentric.

MATERNAL DEPRIVATION – BOWLBY

Deprivation during the critical period will have impact on development. Deprivation → an extended separation and loss of emotional care.

Long term effects:

Lower IQ → the longer a child spends in care the lower their IQ and social maturity.

Affectionless psychopathy → 86% of juvenile thieves had frequent separations. Leads to lack of guilt, empathy and remorse.

Dwarfism → emotional deprivation can lead to stunted growth, sleep issues, delayed sexual development.

Anaclitic depression.

☺ Impact on child development.

☹ Individual differences - not all children are affected / Rutter criticised lack of differentiation between privation & deprivation.

CULTURAL VARIATIONS

- Meta-analysis of 32 studies in 8 countries.
- **Secure** is most common.
- **Avoidant** was 2nd most common except in Israel and Japan - collectivist.
- **Resistant** is least common in individualistic cultures.
- Germany → encourages independence and interpersonal distance.
- Italy → low rates explained by mothers retuning to work.
- Korea / Japan → child rearing practices / collectivist.

☺ Secure are universal / large sample

☹ Cultural differences within countries / imposed etic.

EFFECTS OF INSTITUTIONALISATION – RUTTER

- ERA – 165 Romanian adoptees. 11 adopted before 2y and the remaining 54 by 4y. Children were tested at ages 4, 6, 11 and 15. Control group of 52 UK children adopted before 6m.
- Romanian children were smaller, weighed less and had low IQ, but caught up with British children if adopted **before 6m**.
- Romanians adopted **after 6m** showed disinhibited attachment and longer consequences.
- Physical underdevelopment / poor cognitive development / disinhibited attachment / poor parenting effects of institutionalisation.

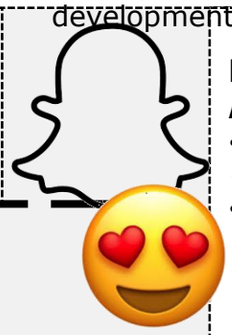
☺ Real-life application / Longitudinal study.

☹ Individual differences in children can influence care received / deprivation is one of many factors in the orphanage / slower development rather than poor development.

ROLE OF THE FATHER

- Fathers given more rights over children (paternity leave).
- Schaffer & Emerson → 3% of dads were primary attachment / by 18m, 75% of infants had an attachment with dad.
- Dads seen as playful parents, whereas mum is emotional support. Dads are risk-taking physical play.
- Dads are capable of nurturing and showing emotional sensitivity, but social and biologicalfactors may discourage this.

EXPLANATIONS - BOWLBY



EARLY ATTACHMENTS ON ADULTS – HAZAN & SHAVER

- Examined internal working model.
- Love quiz in local newspaper → 620 responses (205 men / 415 women)

- **A***daptive* – innate need to attach for both infant AND caregiver.
- **S***ocial Releaser* – innate behaviour that encourages attention for caregivers for survival.
- **C***ritical Period* – 2-3y period but sensitive

period of up to 5y. Can have irreversible effectsotherwise.
- **M***onotropy* – 1 main attachment figure.
- ***I****nternal Working Model* – blueprint for future relationships based on your first attachment.

☺ Subsequent research uses Bowlby's ideas / Lorenz & Harlow support critical period / Brazleton &Tronick support social releasers / Internal working model has real life application.

☹ Little support for Monotropy – Schaffer & Emerson say there are multiple attachments and different parents have different roles / Temperament determines attachment / Deprived children can form attachments / socially sensitive and can impact mothers' choices / IWM is deterministic.

- 56% secure / 25% avoidant /19% resistant.
- Positive correlation betweenattachment type and love experience – secure had longer relationships and happier.

☹ Correlational – can't assumea link / poor memories / self- reporting / ignores freewill, very deterministic.

Abnormal implies something is undesirable and requires change.

DEVIATION FROM SOCIAL NORMS

→ Any behaviour which breaks the **unwritten** rules of society. Eg, Homosexuality.

☹ Lacks cultural bias / Normal changes over time (single mothers & Homosexuality) / ignores context / subjective definition.

☺ Easy to distinguish normal from abnormal.

STATISTICAL INFREQUENCY

→ Statistically uncommon, rare or anomalous behaviours. Eg, High IQ & normal distribution curve.

☹ Lacks cultural bias / some behaviours are desirable (high IQ) / some behaviours are

common but undesirable (Depression) / Labelling causes

more distress.

☺ Objective measure / real-life application.

DEVIATION FROM 'IDEAL MENTAL HEALTH'

→ Jahoda's 6 criteria need to be met to be 'normal' (self-attitude, self-actualisation, integration, autonomy, reality, mastery)

☹ Too unrealistic / culture bias / reality changes over time

☺ Can be used as an aspiration.

FAILURE TO FUNCTION ADEQUATELY

→ Unable to cope with he demands of daily life. Eg, interpersonal rules, observer discomfort, personal distress, irrational or dangerous)Eg, Schizophrenia.

☹ Difficult to define / ignores context.

DEPRESSION

- 5 or more symptoms (1 must be low mood or loss of interest in pleasure)
- 2-week period.
- Daily life affected (work, school, social, relationships)

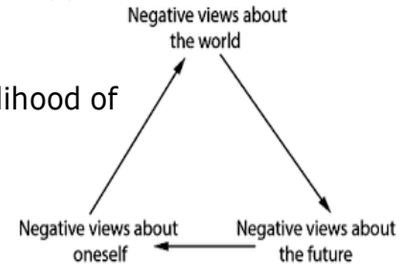
CHARACTERISTICS

- Hypersomnia/ insomnia
- Low mood / low self-esteem
- Absolute thinking
- Suicidal thoughts.

Explanations of **DEPRESSION**

BECK:

Negative self-schema + **negative automatic thoughts** = increased vulnerability to developing depression. This leads to the **Negative Triad**.



ELLIS:

Irrational thoughts increases the likelihood of depression.

A – Activating event (trigger)

B – Belief (values and thoughts)

C – Consequence (behaviour)

PHOBIAS

- Persistent fear of a social or performance situation which provokes anxiety which lasts 6 months.
- The individual knows they are unreasonable, excessive and irrational but actively avoids the stimulus.
- Daily life affected (work, school, social, relationships)

- Panicked response.
- Avoidance of stimulus.
- Excessive, irrational and unreasonable thoughts.
- Irrational beliefs.
- Self-critical

OCD

- A presence of obsession that are intrusive and or compulsions that reduce anxiety.
- Time consuming (1+ a day) over 2 weeks.
- Daily life affected (work, school, social, relationships)

- Irrational obsessions
- Hypervigilant
- Avoidance of stimulus
- Anxiety and distress
- Compulsions.
- Coping strategies.

Explanations of **PHOBIAS**

Classical + Operant conditioning = **TWO**

☺ Real-life application – we self-refer.

Treatment of **DEPRESSION**

CBT → 50 min sessions / goal-orientated / present focus / teaches techniques / combination of Ellis and Beck's treatment.

REBT → Dispute irrational thoughts with 'arguments' (Empirical, Logical, Pragmatic) which will leader to a desired Effect / Feeling.

CT → Therapist identifies **negative automatic thoughts** and challenges them using dysfunctional thought diaries **or goals outside of therapy.**

☺ Real life application / root cause / very effective

☹ Time consuming / therapist experience / willingness to seek therapy

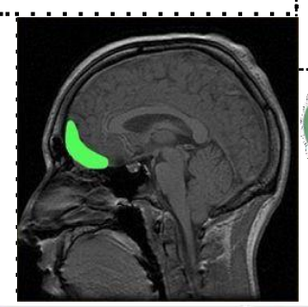
Explanations of **OCD**

PROCESS MODEL (Mowrer) → We **acquire** phobias through classical and **maintain** themthrough operant.

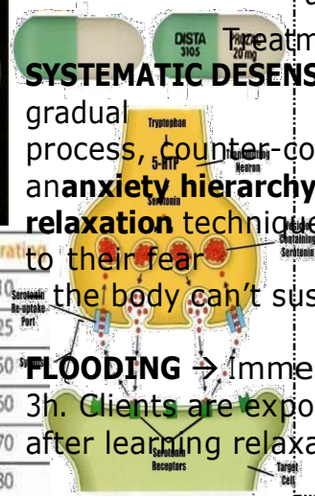
Alternate explanations → Vicarious reinforcement / Irrational thinking / biologicalpreparedness

☺ Real life application / Little Albert research

☹ Diathesis-stress model / ignores cognition andevolution.



Behavior	Fear rating
Think about a spider.	10
Look at a photo of a spider.	25
Look at a real spider in a closed box.	50
Hold the box with the spider.	60
Let a spider crawl on your desk.	70
Let a spider crawl on your shoe.	80



Treatment of **PHOBIAS**

SYSTEMATIC DESENSITISATION → gradual process, counter-conditioning. Clients create an**anxiety hierarchy** and are taught **relaxation** techniques and gradually **exposed** to their fear the body can't sustain high arousal for long.

FLOODING → Immediate exposure over 2-3h. Clients are exposed to their phobias after learning relaxation techniques until it

no longerfears them (extinction).
☺ Effective in results / Flooding is cost-effective.
☹ SD is time consuming / ignores cognition behind phobia / not suitable for all people.

NEURAL EXPLANATIONS → damaged orbitofrontal cortex which means 'worry signals' are looped in the brain. Highdopamine and low serotonin can cause a damage.
GENES → COMT gene regulates the production of dopamine. SERT gene transports serotonin. If these genes are faulty, it can lead to damages in the brain.
SAPAP3 – animal study shows that mice lacking these gene excessively groomed themselves which stopped when giventhe protein
☹ Alternate explanations / cause or effect / polygenic disorder / real life application.

Treatment of **OCD**

DRUG THERAPY → SSRIs increase serotonin which can reduce symptoms of OCD / synaptic transmission.
Alternatives to SSRIs → SNRIs / Tricyclics / Psychosurgery

☺ Very effective / quick and effortless
☹ Drugs take a while to start working / only treats symptoms? / relapse likely / publication bias / cognitive treatment needed for obsessions.

ORIGINS OF PSYCHOLOGY –
Philosophical roots which led to **Wundt** opening the 1st experimental lab in Germany 1879.
Introspection – examining your thoughts, feelings, emotions and sensations. Metronome used → first attempt at controlled lab.
Psychology as a science (needs to be empirical, objective, replicable with a hypothesis and general laws)
☹ Reductionist / Subjective / non-observable
☺ Led to the development of alternate approaches / real-life application.

BEHAVIOURISM (**PAVLOV & SKINNER**)
ALL behaviour is learnt and only measure observable behaviour.
Classical Conditioning → Learn through association to create to CR.
Operant Conditioning → Learn through + / - reinforcement.

☹ Animals → unethical / deterministic / ignores cognition & biology
☺ Controlled / Scientific / Real-life application

PSYCHODYNAMIC → Freud believed that all behaviour and feeling and influenced by unconscious drives which stem from childhood experiences.
Iceberg analogy → Under the water is the **unconscious**, an aspect of ourselves that we're

unaware of. Under the surface is the **preconscious**, where dreams and parapraxes seep through and above the water is our **conscious**, our present and current awareness.

Tripartite personality → **ID** (demands instant pleasure), **EGO** (in contact with reality and responsible for compromise to reduce tension) and **SUPEREGO** (morals, responsible for guilt and pride)

Defence mechanisms → Protect the ego and reduces conflict and anxiety between the id and superego. **DENIAL, DISPLACEMENT** and **REPRESSION**

COGNITIVE → internal mental processes. We rely on **inference** a to **predict** behaviour and use **models**.

- **I**nput
- **P**rocess
- **O**utput

We develop **schema** (metal shortcut) to help us understand the world → can lead to stereotypes!
Cognitive Neuroscience → combination of cognitive & biological. Study of brain structure and neurology.
☹ Lab-based / machine reductionism
☺ Lab-based / real-life application

Social Learning Theory
Observation + Vicarious reinforcement / Identification = Imitation
Mediational processes:
1. *Attention*
2. *Retention*
3. *Motor Production*
4. *Motivation* (Vicarious reinforcement)

BANDURA → Bobo doll / role models / 72 children / all imitated their model.
☺ Explains cultural norms / mediational processes.
☹ Lab study / ignores biology / difficult to test → external variables present / doesn't explain HOW children learn aggression.

Psychosexual stages → Stages that each child progresses through. They experience conflicts at each stage that they must resolve.

- Oral
- Anal
- Phallic
- Latency
- Genital

☺ Real-life application / evidence of DM / qualitative data.
☹ Gender bias / Determinism / abstract and difficult to test / cultural bias

Psychoanalysis → Psychological problems are rooted in our unconscious which create symptoms.
- Dream analysis
- Free association
- Freudian slips
- Transference relationships

Oedipus complex → During the phallic stage, boys will develop unconscious desires for his mother and will want to rid their rival father. They develop castration anxiety and eventually identify with their father.

BIOLOGICAL → ALL behaviour is internal (brain, genes, neurochemistry, hormones, evolutionary)
- **Monozygotic** twins (100%) & **Dizygotic** twins (50%) → The higher the **concordance** rate the higher the genetic basis.
- Adoption studies combat twins shared environment, Family studies show concordance through generations.
- **Genotype** (DNA code) & **Phenotype** (external feature)
- Brain structure (4 lobes)
- Neurochemistry (serotonin & Depression)
- Evolutionary theory (Adaptation and innate)

☹ Biological reductionism / determinism / lab-based / ignores environment.
☺ Scientific / real-life application / nature-nurture → diathesis-stress model.

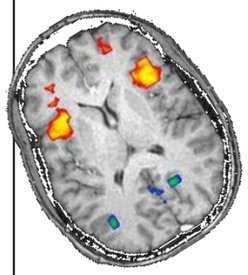
HUMANISM → Focuses on conscious experiences in the present day, humans have free will over their behaviour and should be viewed holistically.

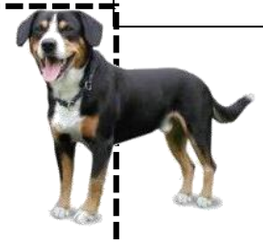
MASLOW → Hierarchy of needs. We are all striving towards **self-actualisation** and will oscillate through the hierarchy of needs during life until we meet it. Our behaviour adapts to meet our needs.
☺ Real-life application → education / business.
☹ Individualistic / abstract / idiographic.

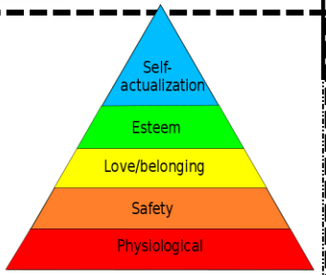
ROGERS → Humans have a basic need to feel valued and accepted by others (**Unconditional Positive Regard**) but we live in a society where there are **Conditions of Worth** placed upon us which affect our **congruence**.
Self-concept → Self-worth / Self-image / Ideal-self

Congruence → When our ideal self and our self-image match.
Incongruence → When our ideal self and our self-image don't match. This can lead to negative self-worth and increased use of defence mechanisms to hide the difference.
Q-SORT test → an objective test to produce a congruence score.
PERSON CENTRERD COUNSELLING → A talking therapy which creates an atmosphere of unconditional positive regard, aims to identify conditions of worth and supports the client in reaching self-actualisation.
☺ Real-life application / holistic / tried to be scientific with Q-Sort.
☹ Not scientific / relies on self-awareness.

Philosophy → Wundt → Psychodynamic → Behaviourism → Humanism → Cognitive → Social Learning Theory → Biological → Cognitive Neuroscience.

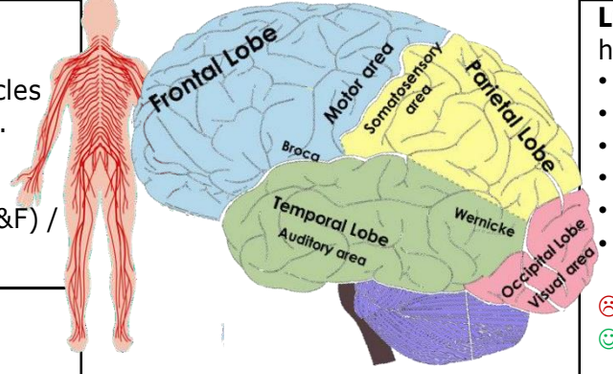






THE NERVOUS SYSTEM → collects, processes and responds to the environment & coordinates muscles and glands via neurotransmitters.

- **Central Nervous System**
- **Peripheral Nervous System** → Autonomic Nervous System (F&F) / Somatic Nervous System (R&D)



LOCALISATION OF FUNCTION → specific areas of the brain have specific functions Eg, Broca, Wernicke, Occipital lobe.

- Frontal Lobe → motor cortex / movement.
- Parietal Lobe → Somatosensory / senses.
- Occipital Lobe → Visual.
- Temporal Lobe → Auditory.
- **Broca's** → LEFT frontal lobe / speech production.
- **Wernicke's** → LEFT temporal lobe /language comprehension.

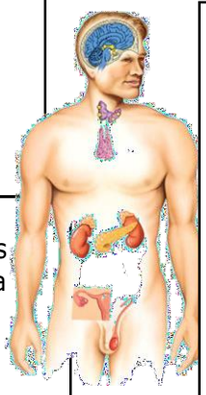
☹ Biologically reductionist / gender differences
☺ Broca & Wernickes aphasia / fMRI scans

CIRCADIAN RHYTHMS → 24h cycle (sleep/wake)

- Primarily controlled by the **SCN** but needs light to reset each day.
- **Siffre** case study → Lived in a cave for 61 days* and found that his free-running body clock increased to 25 hours. When repeated at 60, his body clock increased to 36 hours.
- Shift work and jet lag.
- Aschoff and Wever → 4 weeks in a bunker. All ppts increased to 25h.
- Folkard → reduced the time of the day, nobody could adjust.

FIGHT OR FLIGHT

- Survival mechanism
- ANS & endocrine system work together.
- Dilated pupils / digestion and bladder inhibited / increased heartrate / increased sweat / pale skin / dry mouth.



PLASTICITY → The brain develops new neuronal connections and physical changes throughout life.
Synaptic pruning → 'removes' unused connections.

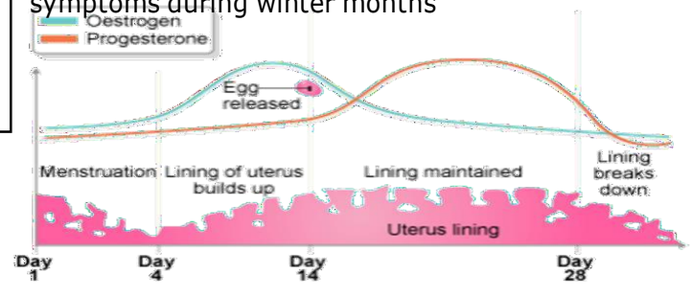
MAGUIRE → MRI scans of 16 right handed taxi drivers with 1.5y experience and compared to 50 non-taxi drivers. Found increased grey matter in the taxi drivers in the hippocampi.

FUNCTIONAL RECOVERY → A form of plasticity where the brain compensates for damaged areas.

- **Neuronal unmasking** → dormant synapses 'unmask' and compensate.
- **Stem cells** → Implanted or transplanted from healthy areas.
- **Spontaneous recovery** → Natural recovery which slows down./
- **Axonal sprouting** → New nerve endings grow and connect to damaged nerves.

☹ Spontaneous recovery is short-term / negative plasticity
☺ Musicians / animal studies with complex environments / cognitive reserve.

INFRADIAN RHYTHMS → A cycle longer than 24h (menstruation)
FSH / Oestrogen / Progesterone all linked to the menstruation cycle.
☺ McClintock → pheromone study found that women who smelled the pheromones of other women altered the length of their cycle
SAD → yearly rhythm which creates depressive-like symptoms during winter months



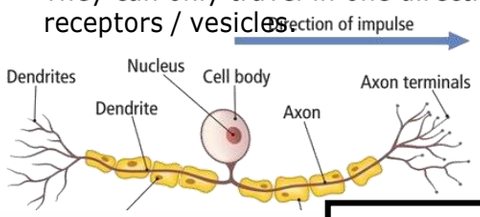
THE ENDOCRINE SYSTEM → secretes hormones through blood vessels via glands.

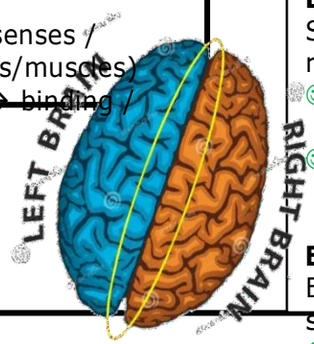
- Hypothalamus → controls the pituitary gland.
- Pituitary gland → controls all other glands with its hormones.
- Pineal gland → melatonin / sleep
- Thyroid → Thyroxine / metabolism
- Ovaries → oestrogen / reproduction
- Testes → testosterone / reproduction
- Adrenal medulla → adrenaline
- Adrenal cortex → cortisol

SPLIT-BRAIN RESEARCH – each hemisphere is responsible for a specific function. Left and right eye process information on the **OPPOSITE** hemisphere.
SPERRY → 11ppts who had their corpus callosum removed.
Describe what you see – Left hemisphere can describe, right cant.
Tactile test – Left hemisphere can describe and identify an item, right can NOT describe but CAN identify.
Drawing task – Left hemisphere draw poorly; Right hemisphere can draw clearly.
☹ ~~Case study of JW / pop-psychology~~
☺ Controlled experiment / chickens can perform 2 tasks at once.

NEURONS → chemical and electrical signals.

- **Sensory** → carry information **towards** the CAN.
- **Relay** → Found within the CNS, connect sensory and motor.
- **Motor** → Carry information **away** from the CNS to muscles/glands.
- **Receptors** → collect information from senses / **Effectors** → receive information (glands/muscles)
- They can only travel in one direction → binding / receptors / vesicles.



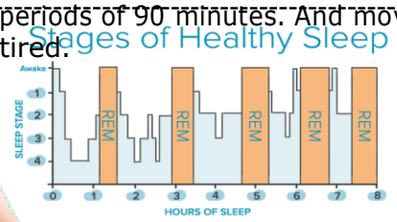


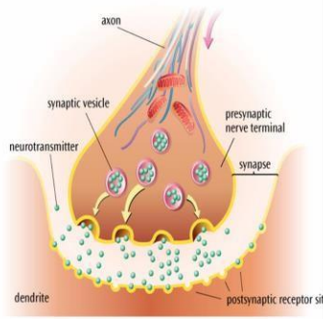
ENDOGENOUS PACEMAKERS → internal biological clocks
Suprachiasmatic nucleus → responds to light → melanopsin releases melatonin which causes drowsiness/sleep.
☺ Decoursey – chipmunks had their SCN destroyed and returned tot heir habitat. All died.
☺ Ralph – bred mutant hamsters and adapted their cycles to 20 hours.

EXOGENOUS ZEITGEBERS → external environmental cues.
Entrainment → getting babies into a routine to control their sleep/wake cycle.
@ Campbell – light on the back of the knees wakes PPs

ULTRADIAN RHYTHMS → A cycle which repeated within 24h (5 stages of sleep)

5 stages of sleep which last about 90 minutes and repeat during 'sleep'
☺ Dement – Found ppts who were woken during REM recorded dreaming whereas PPTs woken during N-REM struggled to return to sleep.
☺ Klietman – We live our entire sleep/wake cycle in periods of 90 minutes. And move from being alert to tired.





SYNAPTIC TRANSMISSION → the movement of information from one neuron to the next.
Presynaptic membrane holds vesicles full of NT / electrical current encourages secretion across the synaptic cleft / binding on to the receptors of the post synaptic membrane.
Summation → the higher net value ofexcitatory / inhibitory neurons will fire.

BRAIN SCANS

fMRI → measures a change in energy released by haemoglobin in the brain. Low temporal resolution / High spatialresolution / non-invasive but expensive.
EEG → Measures electrical activity on the scalp via electrodes. High temporal resolution / Low spatial resolution / can't record deep brain / non invasive and cheap.
ERP → Measures brain activity via electrodes on the scalp when the ppt performs a task. High temporal resolution / low spatial resolution / can't record deep brain / non invasive and cheap.
Post Mortem → structural examination after death. Detail examination on humans rather than animals / invasive / time between death and post-mortem / small samples.

Content analysis → analysing the content of secondary data by creating a code and sample method. Eg, every 2nd page, tallying the number of gender stereotypes.
Thematic analysis → converts qualitative data into quantitative data by creating a category/code and tallying the number of times these appear within the data. Eg dream themes.

RELIABILITY → how **consistent** is the data? Can it produce the same results on different occasions?

Inter-observer reliability → When another observer repeats the test and compares their results with yours to see if you have high agreement (1) or low (0) this is a kappa score. To improve this score you can include/amend behaviour categories.
Test-retest → Giving the same group of PPs the same test at a different time and assessing the score similarity. This can be improved by making your test question detailed and specific.
Standardisation → to ensure that each procedure is robust and repeated consistently across trials. This will improve reliability.

VALIDITY → How **accurate** is your data? Are you measuring what you intended?

Ecological → the ability to generalise the research results to different environments and achieve the same results.
Mundane realism → how realistic are the tasks to the real world. Eg counting backwards in 3s.
Temporal → the ability for the research results to be generalised to different time periods. Eg Asch.
Population → Can the research results be generalised to other samples of participants.
Concurrent → to compare your research results to other similar results in the field and assessing if they're similar findings.
Face → to extent in which the test measures what it claims to measure Eg, IQ test – intelligence or memory?

5 FEATURES OF A SCIENCE:

1. **Empirical methods** – observable and quantitative data.
2. **Objectivity** – no bias or opinions involved.
3. **Replicability –** does it produce the same results with different people?
4. **Theory construction –** general principals, laws or classifications can be made.
5. **Hypothesis testing –** test and refine / theory and test.

Falsifiability → always aiming to prove your hypothesis wrong.
Paradigm → a set of ideas which

PEER REVIEW → Specialists in the field assess the scientific work produced by others to assess the quality and accuracy of their research.
ETHICS - Can **D**o **C**an't **D**o **W**ith **P**ps
TYPES OF DATA:

can change over time due to a paradigm shift.

Alternative hypothesis → A testable statement about the relationship / difference / association between 2+ variables.
Null hypothesis → An assumption that there is no relationship / difference / association. Nothing is going on. When conducting research, we aim to reject our null hypothesis (**Falsifiability**)

TYPE 1 ERROR → False positive. I've rejected the null hypothesis when I should have accepted it. You believe you have found a genuine positive effect when there isn't on. Eg, a male being pregnant because they have all the symptoms.
TYPE 2 ERROR → You fail to reject the null hypothesis (you accept it) and believe there isn't a negative effect when there is on. A pregnant female being told she's not pregnant because of other factors.

SAMPLIING
Opportunity → Use PPs that are the most convenient or most available. Eg, students in a school.
Random → names/numbers out of a hat.
Stratified → subgroups of the population are identified, and a proportionate amount is selected. Eg 2 from Y7, 2 from Y8 etc.
Systematic → Every 5th, 7th, 10th person from a list of people. Eg a phonebook.
Volunteer → Advertise in a newspaper/notice board and wait for people to volunteer.

EXPERIMENTAL DESIGN
Repeated measures → All PPs do each condition. BUT this could cause an **ORDER EFFECT** so we need to **COUNTERBALANCE** (ABAB or ABBA).
Independent → Separate groups do separate conditions and we need to **RANDOMLY ALOCATE** PPs to groups.
Matched Pairs → 2 groups of PPs who are matched on a characteristic, typically the DV. It's best to conduct a **PILOT STUDY** to consider which variables need controlling.

SINGLE BLIND → The PP is not aware of the aims of the research condition they are receiving so they can't seek cues or react.
DOUBLE BLIND → The researcher and PP are not aware which condition the pp is receiving, so both researcher and PP can't react to cues or provide prompts.

Directional → My hypothesis directly predicts the direction of the results (X will have a positive effect on Y)
Non-directional → my hypothesis states there is a difference but doesn't state which way (X and Y will have a difference)
One tailed → You're using a directional hypothesis.
Two-tailed → you're using a non-directional hypothesis.

IV → What you're manipulating. The conditions/trials.
DV → What you're measuring. It needs to be operationalised so it can be measured clearly.
Confounding → A variable which can change the DV but can't always be controlled (mood) but can caused confusion in the results (time of day).
Extraneous → Aspects which you try to control – time of day, light, temperature of room.

JOURNAL REFERENCE
- Authors name, date, title of article, *journal title,* volume (issue number)

BOOK REFERENCE
- Authors name, date, *title of book,* place of publication, publisher.

DESIGN A STUDY QUESTION → Answer the BULLET POINTS and JUSTIFY your choices / KEEP IT SIMPLE.

Calculated value → The number they give you in the exam. Their CALCULATED score.
Critical value table → The table you plot the score into.
ALWAYS ASSUME 0.05 UNLESS TOLD.

DESCRIPTIVE STATISTICS
Measure of central tendency provide averages or information about the 'middle' of a set of data:
- **Mean –** add all the data, divide by the number of values. Can only be used with ration and interval data.
- **Mode –** Most frequent data. Used with nominal data.
- **Median –** Middle values of an ordered list. Used with ordinal data.

Measure of dispersion provides information about the spread of

		Testing difference	
Primary / Secondary / Qualitative / Quantitative / Meta-analysis	• **Nominal** → named categories • **Ordinal** → data that can be ordered. • **Interval** → Data with equal measurements in-between each	value and that can gobelow 0.	NominalOrdinal Interval

Testing difference (unrelated) Independent Groups

Chi-Squared testMann-Whitney

Unrelated t-Test(parametric)

(related) Repeated Measures / Matched PairsSign test

Wilcoxon

Related t-Test(parametric)

Testing association or correlation

Chi-Squaredtest

Spearman's rho.

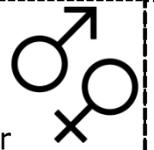
Pearson's r

(parametric)

data.

- **Range** – the distance between the top and bottom values in data.
- **Standard deviation** – precise measure of spread which measures the average distance between each dataitem above and below the mean.

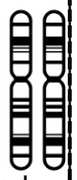
STEREOTYPES AND ANDROGYNY



SEX → biological / genetic.
GENDER → personal identification.
STEREOTYPES → societies expectations for gender and sex behaviour.
ANDROGYNY → a combination of male and female characteristics measured using the BSRI (**BEM**).
BSRI → 7-point Likert scale of feminine and masculine characteristics.
☺ Mothers treat boy/girl babies differently / real-world applications to gender-neutral parenting / test-retest reliability of 0.94.
☹ Adjectives in BSRI are restrictive / response bias / temporal validity.

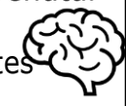
BIOLOGICAL - HORMONES
TESTOSTERONE → produced prenatally and affects genital development. Some XY individuals have an insensitivity to the hormone and don't develop a penis which means they're raised as female. XX females exposed to high testosterone levels show interest in male-activities and tomboyish behaviours.
OESTROGEN → XY babies will develop as female without testosterone exposure. Female hormone for menstruation/pregnancy.
OXYTOCIN → bonding hormone. Content/calm feelings. Required for breastfeeding. Links or orgasms, wound healing and fight/flight

BIOLOGICAL
CHROMOSOMES → Humans have 23 pairs, which contain all genes. XX (female) XY (male) chromones will encourage the development of sexual organs.



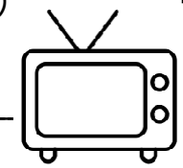
KLINEFELTERS SYNDROME → XXY configuration. Penis and typical male but less testosterone means they look less masculine, less facial hair, broader hips and some breast tissue. They may be infertile.
TURNERS SYNDROME → XO configuration. The 2nd chromones is missing meaning females are born with a vagina/womb, lack of monthly periods, possibly infertile.
INTERSEX → a person who doesn't fit the typical male/female characteristics Eg, David Reimer / Caster Semenya
☹ Biology isn't the only factor for gender development Eg Batista boys and their culture.
☺ real-world application – Olympics/surgery / female monkeys exposed to high testosterone during pregnancy were more aggressive.

AYTPICAL GENDER DEVELOPMENT
GENDER IDENTITY DISORDER → incongruence between assigned gender and expressed gender with a desire to remove sexual characteristics.
BIOLOGICAL:
- **Pesticide** → DDT contains oestrogen which exposes males to high levels. Could lead to more feminised play.
- **Gene** → MtF transsexuals more likely to have a longer androgen receptor gene which reduces testosterone levels and impact prenatal development.



- **Brain-sex theory** → BSTc is 2x larger in male brains which correlates with preferred sex rather than biological sex.
- **Cross-wiring** → sex organs send mixed signals to the brain leading to 'phantom' penis where PPs report erections and sensations from an early age.

SOCIAL:
- **Mental health / trauma** → maladaptive upbringing could 'trigger' GID but this has been challenged heavily (ethnocentrism / determinism / case study)
- **Mother-son** → distorted parent attitudes leads to confused gender identify and female identification.
- **Father-daughter** → identify to males due to severe paternal rejection, so become male to gain acceptance (psychic determinism)
- **Conditioning** → via SLT and parenting.



PSYCHODYNAMIC - FREUD
OEDIPUS COMPLEX → boy desires mother, sees dad as rival and develops castration anxiety, so identifies with father and internalises his gender identity to create distorted stereotypes / sexism.

THEORY
- Challenges Kohlberg, Martin explains that children learn schemas of gender roles by 3y.
- Gender schemas develop via socialisation, parenting, media, culture to create a personal definition of gender.
- Children identify to **ingroup** schema to enhance their self-esteem and help them evaluate their opposing **outgroup** and become **resilient**to challenge gender schemas.
- Same-sex peers and play will reinforce gender schemas and ingroups.

☺ Organises memory via ingroup/outgroup schema / supporting research.
☹ Schemas hard to override andcan

CULTURE AND MEDIA
- Culture changes over time (Uk gender roles) / Tribal research shows reversed gender roles (ethnocentrism?) / there are universal characteristics that both sexes prefer in mates / both sexes are biologically redetermined to perform certain tasks efficiently (social role theory).

COGNITIVE - GENDER SCHEMA

(beta bias) / stages not needed.

COGNITIVE - KOHLBERG
- As we age our cognitive abilities enhance and we can start to think abstractly about gender and development.

1. GENDER LABELLING → 2-3y – children label themselves and others as boy/girl. It's superficial Eg, long hair = girl.
2. GENDER STABILITY → 4y – gender knowledge is stable but not consistent across situations. Eg men playing with dolls are still men. View gender superficially on external features (appearance)
3. GENDER CONSTANCY → 6y – gender is constant across situations and will learn gender-appropriate behaviour.
☺ Supported by research
☹ Methodology of tasks / age differences / gender differences

form his own.

ELECTRA COMPLEX → Girl desires mother but has penis envy, transfers desires to father and overcomes this by desiring a baby. She identifies with motherto develop gender identity andfind a mate.

- Genital stage requires successful resolution of the 'conflict' to be psychologicallyhealthy. Unable to identify canlead to immoral behaviour or homosexuality.

☺ case study support (Little Hans)

☹ Requires child sexual awareness which children don't have at 5y / lacks predictive validity for single parent families /psychic determinism / Feminism argument for penis envy.

- Culture expresses itself through media → modelling and imitation.
- Gender differences within the media, both sexes portrayed differently (androcentric/alpha bias).

☹ Difficult to measure the impact of culture and media –can't isolate / not all media promotes stereotyped gender roles (Disney, GoT)

☺ Canada TV study / gender stereotyping is reduced ifcounter-stereotyping is displayed.

SOCIAL LEARNING THEORY

- Children learn appropriate gender roles through indirectreinforcement (socialisation) which increases if they identify with their model.
- Positive / negative reinforcement via mediational processes (attention, retention, reproduction, motivation)

☺ Children are likely to pick gender-neutral items if they identify with the model / gender roles are reinforced bysociety / BANDURA

☹ Biology plays a role before birth.

DIAGNOSIS

POSITIVE SYMPTOMS

→ Additional to normal experiences, distort behaviour or thoughts and respond to medication.

- Hallucinations (all senses)
- Delusions

NEGATIVE SYMPTOMS

→ disrupt normal functioning, respond poorly to medication.

- Avolition
- Speech poverty
- Affective flattening
- Anhedonia

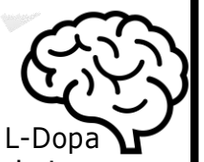
BIOLOGICAL EXPLANATIONS

GENETICS

- polygenic / diathesis-stress model plays a big role.
- 16% of children with Sz mother developed Sz compared to 2% of children with a non-Sz mother.
- **Gottesman** → MZ twins (48%) both parents (46%) DZ twins (17%)
- **Joseph** → meta-analysis. MZ twins (40%) DZ twin (7%)
- **Tienari** → adoption study. 7% of children with biological Sz mothers developed Sz compared to 2%.

☹ Concordance s never 100%

DOPAMINE HYPOTHESIS



- **Snyder** → Too much = positive symptoms → Sz drugs REDUCES dopamine / L-Dopa INCREASES dopamine and gives symptoms / drugs INCREASE dopamine and gives symptoms.
- **Davis** → Not everyone has high levels → atypical drugs affect dopamine and serotonin. He suggests that positive symptoms are caused by TOO MUCH (Mesolimbic) and negative symptoms are caused by a DEFICIT (Mesocortical) - supported by rat study.

NEURAL CORRELATES

- MRI scans show enlarged ventricles which are associated with negative symptoms.

ALTERNATE EXPLANATIONS

- **Smoking during pregnancy** → heavy nicotine increases risk of Sz by 38%
- **Evolution** → there must have been an advantage to Sz symptoms for it to still be common.
- **Socio-cultural** → deprivation, city life, population density, unemployment and increased inequality increases risk.

DRUG THERAPY

→ blocks dopamine receptors on the post-synaptic neuron.

TYPICAL → 1st gen. Only treats positive symptoms and only acts on dopamine. Symptoms reduce in a few days. Severe side effects.

ATYPICAL → modern drugs with side effects. Treats positive, negative and cognitive symptoms. Acts on serotonin and dopamine.

☹ only treats symptoms / biologically reductionist / reinforces diagnosis and removes accountability.

☺ Medication is more effective than placebo / cost effective / economy / atypical advantageous.

RELIABILITY & VALIDITY

RELIABILITY → Consistency of the diagnosis tool / **VALIDITY** → Accuracy of the tool and clinician.

DIAGNOSIS & CLINICIANS

DSM & ICD used in different countries and have different criteria.

☹ Lack of inter-rater reliability (0.11 / 0.46 / 0.4) between clinicians using DSM, which means low criterion validity – the tools are inaccurate, and clinicians misinterpret.

☺ ROSENHAN study – all PPs were admitted. Hospital couldn't identify real/fake patients → socially sensitive research.

GENDER BIAS

- Healthy adult behaviours is based around male norms (androcentric) / clinicians ignore male symptoms / male clinicians are likely to over diagnose female patients.

CULTURE BIAS

- Hearing voices is acceptable in some cultures / Clinicians are ethnocentric towards voices and abnormal behaviour / white clinicians distrust and misinterpret black patients / negative voices common in western cultures where its not accepted / diagnosis more likely in western cultures.

SYMPTOM OVERLAP

- DID patients have more Sz symptoms / Sz and Bipolar often misdiagnosed / SZ and Bipolar share genetic overlap.

COMORBIDITY → 2+ conditions developing at the same time.

- OCD and Sz common (Dopamine?) / co-morbid Sz are often excluded from research which impacts treatment and validity / diagnosis of patients rarely share same symptoms, so outcome will be different for all / lacks

PSYCHOLOGICAL TREATMENT

CBTP → NICE recommend 16 sessions to treat residual symptoms drugs can't treat / Aims to identify and challenge delusions and hallucinations and establish links between thoughts, feelings and actions.

- **Reality-testing –** examining evidence, challenging and assessing delusions & hallucinations (NIGEL)
- **Normalising** – reduces stigma and anxiety.

☺ Reduces rehospitalisation / no side effects or addiction.

☹ Limited availability / only beneficial at certain stages of illness / often used alongside drugs.

FAMILY THERAPY → aims to treat family dysfunction for 10 sessions over a year.

- Psychoeducation – understanding the illness.
- Support network / Improving communication / decrease guilt and responsibility.

☺ meta-analysis show smallest readmission rates and highest medical compliance, reduction in relapse for up to 2y / positive impact on whole family / cost-saving for NHS.

TOKEN ECONOMY (MANAGEMENT) → operant conditioning within institutions. Clinicians set targets and are rewards when desirable behaviour is displayed.

☺ Works best in institutions when paid hourly.

☹ Make patients socially acceptable / targets can breech human rights.

predictive validity → too many outcomes to predict treatment/recovery.

PSYCHOLOGICAL EXPLANATIONS - FAMILY DYSFUNCTION

SZ MOTHER (1948)

- Psychodynamic / focus on childhood / cold, rejecting, controlling, tension and secrecy leads to paranoid delusions.
- Can be supported by EE / Double-bind and Insecure Avoidance attachment.

DOUBLE-BIND THEORY

- Contradictory messages from parents leads to failure to develop internal construction of reality → affective flattening, paranoid delusions and disorganised thinking.

EXPRESSED EMOTION

- The communication style of the family is critical, hostile, over-involving, intense, conflicting and negative.
- Can lead to relapse if vulnerable to stress.
- **Vaughn** → High EE and no drugs = 92% relapse / High EE on drugs = 53% relapse / Low EE and no drugs = 15% relapse.

COGNITIVE DYSFUNCTION

Metarepresentation → inability to reflect on own thoughts which impacts insight into intentions and goals – explains auditory hallucinations.

Central control → inability to supress automatic responses, this can explain derailment (disorganised speech)

- Impaired insight leads to an inability to recognise cognitive distortions and failure to substitute realistic explanations for events.
- Sz with hallucinations are hypervigilant so expect to experience them more and less likely to reality-test noises or sounds.

INTERACTIONIST APPROACH → we need to look at biological, behavioural and cognitive explanations to understand Sz (biopsychosocial).
Diathesis → biological vulnerability. Eg early trauma which can encourage the HPA to become overactive and make a person more vulnerable to stress.
Stress → stressful life event. Eg, children who experience trauma before 16 are Sz likely to develop Sz / High EE 4x more likelyto relapse / Cannabis increases risk of Sz 7x.
☹ Too many treatments at once can be time-consuming

NEURAL & HORMONAL

LIMBIC SYSTEM → coordinates behaviours that satisfy motivation and emotional urges Eg aggression and fear.

- **Amygdala** → quickly evaluates the emotional importance of sensory information and prompts and appropriate response (animal studies)
- **Hippocampus** → involved in forming long-term memories and learning from previous aggressive events.

SEROTONIN → low levels allow the amygdala to fire, which leads to impulsive and aggressive behaviour BUT low levels can also reduce aggression by inhibiting response to emotional stimuli.

☺ PPs with lower amygdala volumes showed higher levels of violence and aggression / MRI scans show asymmetries in impulsive criminal brains / increasing serotonin via diet decreased aggression within monkeys.

TESTOSTERONE → male hormones which influences aggression. Removing testosterone from animals results in lower aggression / violent criminals had higher testosterone levels in saliva.

GENETIC

MAOA GENE → regulates the metabolism of serotonin, low levels leads to impulsive and aggressive behaviour - Dutchy family / MAOA-L linked to anti-social behaviour if maltreated during childhood (warrior gene)

☹ Poor sample / difficult to assess aggression.

☺ Finnish prisoners have MAOA-L and CDH13 which is associated with extreme aggression/ MAOA linked to x chromosome, which explains gender differences.

ETHOLOGICAL EXPLANATION

INNATE RELEASING MECHANISMS → an innate neural mechanism which when exposed to specific triggers will release a FAP.

FIXED ACTION PATTERNS → innate stereotyped behaviours which occur in specific conditions in specific species.

Ritualistic aggression → threat displays (chest pounding) are used to intimidate opponent without the need for physical contact.

Animals → when a wolf loses, it submissively exposes its neck which prevents the dominant wolf from continuing the fight. Doves simply fly away, as do humans.

☺ Humans display FAPs (smiling, eyebrow flashing) / ritualised aggression is beneficial for animals and humans to deescalate conflict.

SOCIAL PSYCHOLOGICAL - DEINDIVIDUATION

- When part of an anonymous group, people can lose their personal identity and inhibitions about violence.
- Being part of a group gives people anonymity and

removes personal consequences but can also lead to prosocial behaviour too.

- **Zimbardo** → SPE – guards wore uniforms and mirrored glasses.
- **Zimbardo** → hooded/anonymous PPs are more likely to give electric shocks to victims and hold the buzzer for twice as long compared to identifiable PPs.

☺ Changing appearance evident in cultural tribes / 'baiting' crowds increase suicide jumps/lynching severity.

☹ Gender differences / inconclusive evidence – can be anti-social or pro-social.

EVOLUTIONARY EXPLANATION

Adaptive behaviour which promotes survival and reproduction.

Sexual competition → Those who are successfully aggressive are successful in acquiring mates and passing on genes, which leads to a genetic transmission of aggressive tendencies. Eg, men have larger muscle mass, thicker jawbones and robust skulls.

Sexual jealousy → violent threats to other mates to prevent female infidelity. 17% of UK murder cases are due to sexual jealousy. Links to domestic violence.

Aggression in warfare → aggressive behaviour is attractive to women with male warriors having more sexual partners and children. It also increases status.

☹ Socialisation explains why genders are different / aggression isn't always adaptive or beneficial / gender bias in females in warfare / evolution doesn't explain mass aggression (genocide/mutilation).

SOCIAL PSYCHOLOGICAL – SLT

- Children observe role models they identify with and imitate their behaviour through vicarious reinforcement. Children learn **mental representations** of expectant future outcomes and will perform acts if the reward is expected to be larger than the punishment.
- Children also develop self-efficacy the more successful they are with their actions which increases their confidence and directly rewards them.

☹ BOBO doll study lacks realism / can't explain cultural differences

☺ real-life application – counterconditioning learned violence with positive parenting programmes.

SOCIAL PSYCHOLOGICAL - FRUSTRATION-AGGRESSION HYP.

Frustration is caused when people are prevented from getting something they want. This is essential foraggression and is a cause-effect relationship between frustration, aggression and catharsis.

Unjustified frustration produces anger and aggressionrather than justified frustration.

ggression is displaced when the object isunattainable.

☹ Aggression isn't an automatic response to frustration / lack of research for catharsis.

☺ Real world application – mass killing / sports violence.

INSTITUTIONAL AGGRESSION (PRISON) → 10% more deaths and 23% more self-harm in 2018.

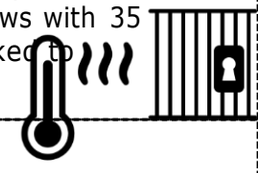
DISPOSITIONAL → Norms, values, beliefs attitudes and experiences are 'imported' into the prison as this is seen as a survival technique in 'street culture'. This can be used to negotiate, establish power and status and gain access to resources → gang membership.

☺ Interviews found 'street code' belief systems within prisons / violence is likely if they were violent pre-prison.

☹ Ignores situational explanations and the role of prison officials.

SITUATIONAL → Stressful and oppressive conditions can cause aggressive responses. Eg, prison regimes, loss of freedom, loss of autonomy, loss of resources, loss of relationships → frustration / **Prison-specific** – overcrowding, heat, noise, prison staff burnout.

☺ In 371 US prisons overcrowding, lack of privacy and meaningless tasks increased assaults / interviews with 35 homicide inmates found motivations were linked to deprivation, power, relationships and goods.



☹ ~~Interactionist approach - both are needed.~~

MEDIA EXPLANATIONS

DESENSITISATION → numerous repeated exposures to violent media will allow the individual to 'normalise' violent behaviour which reduces anxiety that would usually inhibit them from being violent.

☺ Adaptive in the Army / PPs show reduced physiological changes after watching and playing 30 mins of violent media.

☹ It reduces altruism / inconclusive evidence.

DISINHIBITION → Violent media which justifies violence can change our perception of social norms and morals which legitimises violence and undermines social sanctions.

☹ Less likely when negative consequences are shown / identification needed / not all children affected by high action.

COGNITIVE PRIMING → Cues in the media can trigger us to become pro-social or anti-social Eg, Cancer research. 'Priming' refers to the accessibility of thoughts and ideas a s a result of these cues.

☺ Violent games had frequent violent thoughts / PPs who watched violent clips had faster reaction times / pro-social radio messages leads to higher cooperation.

MEDIA INFLUENCES - COMPUTER GAMES → Aggression is measured usingexperiments, correlations, longitudinal studies and meta-analysis.

- **Experiment** → Students played violent and non-violent game and blasted white noise at a non-existent opponent. Students who playedviolent game delivered higher Db of white noise.
- **Correlation** → 227 US juvenile offenders with aggressive histories had group interviews on violent video game playing. Significant correlation found between how often and enjoyment of violent games.
- **Longitudinal** → 26y study in New Zealand. The more TV watched, themore convictions for aggressive and violent crime and more APD diagnosis.
- **Meta-analysis** → 431 studies (68k PPs) found that exposure to media
  violence on behaviour, thoughts or feelings significantly increasedaggression in both genders and all cultures (universal)

GENDER BIAS

- **Alpha bias** → exaggerates differences between men and women
- **Beta bias** → Minimises differences between men and women.
- **Androcentrism** → male point of view.
- **Universality** → conclusion that can be applied to everyone regardless of time, gender or culture.

- **Kohlberg** (moral development) Beta bias, because he only tested males and assumed both sexes developed morals in the same way.
- **Schizophrenia** → Androcentric because society is male dominated, male over diagnose and the criteria is based on healthy males.
- **Freud** (psychosexual stages) Alpha bias → femininity is failed masculinity; females experience penis envy.

CULTURE BIAS

- **Alpha bias** → exaggerates the differences between cultures.
- **Beta bias** → ignores or minimises cultural differences. Assumes universality.
- **Ethnocentrism** → Believing that your own culture is normal and correct.
- **Cultural relativism** → There is no right or wrong, we need to understand the context.
- **Emic approach to research** → Studying one culture to understand specific behaviour as an insider, leads to alpha bias.
- **Etic approach to research** → Observing cultural behaviour without understanding the context within, leads to beta bias

- **Ainsworth** → Ethnocentric - assumed all cultures had secure attachment as their majority.
- **IQ tests** → Beta bias because they only test specific cultures and their context.
- **DSM/ICD** → Link to Sz and different diagnosis rates between cultures and the different criteria.

REDUCTIONISM – HOLISM

HOLISM → to view humans as whole beings and understand their context.

- Humanism → PCT/Gestalt. We can't focus on specific factors of behaviour; we must consider the whole person to understand how they function.

REDUCTIONISM → It's easier to analyse behaviour if it's broken down into smaller components such as **levels of explanation**.

- **Interactionist approach** → levels of explanation combine to give a

better understanding of behaviour.

- **Diathesis-stress model** → by understanding different causes and triggers of behaviour we can create different combinations of treatment (Sz – drug therapy / CBTp / FT)

FREE WILL – DETERMINISM

Free will → we are self-determining and have control and choice over all thoughts and actions. Can't be tested scientifically.
Rogers (**HUMANISM**) → PCT, congruence, conditions of worth,

UPR, self-actualisation.

Determinism → Behaviour is controlled by internal or external forces.
Soft D. →[**COGNITIVE**] Humans have free will, but some behaviours are controlled (Aggression/Mental health)
Hard D. → [**BIO/BEHAV/PSYCH**] Human behaviour is a result of internal or external forces which are predictable and causes.

Biological D → Genes, neurotransmitters, hormones, brain structure all control behaviour.
Environmental D. → Socialisation, conditioning, law of effects.
Psychic D. → Unconscious, psychoanalysis, psychosexual stages, ide, ego, superego, parapraxes.
Doubly-determined → When 2 or more forces are responsible for behaviour (parenting and hormones)
Causal explanation → Determinism can show that all behaviour has a

NATURE – NURTURE

NATURE → Behaviours is caused by inheritance, innate mechanisms and evolutionary ideas.

- **Attachment** → Innate and adaptive to attach to caregivers and infants.
- **Concordance rates** → the closer the relation, the higher the concordance (genetic) Eg, MZ and DZ twins.

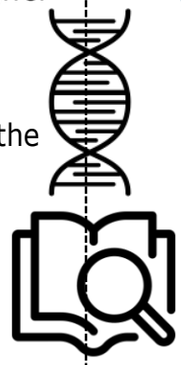
- Biological approach.

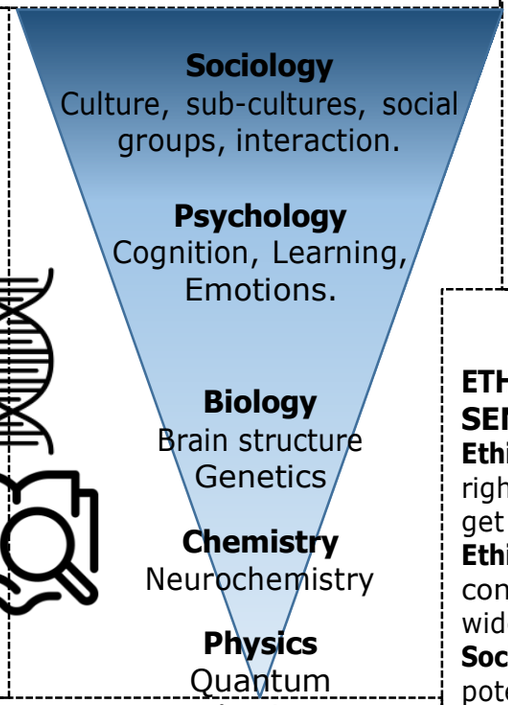
NURTURE → All behaviour is learnt by different levels of the environment (socialisation, culture, parenting).

- Behavioural approach.

Interactionist approach → We must use both together.

- Diathesis-stress model – genetic vulnerability + life stressor = risk of developing disorder.
- Biopsych. – EP and EZ are needed to reset circadian rhythms.
- Epigenetics – Lifestyle can alter genetic activity Eg smoking, drinking.





IDIOGRAPHIC – NOMOTHETIC (an approach to researching)

cause and can be controlled within ascientific study.

ETHICAL IMPLICATIONS & SOCIAL SENSITIVITY

Ethical issues → a conflict between PP rights and Researcher aims (deception to get accurate results).
Ethical implications → the impact or consequence that research has on the wider context.
Social sensitivity → Research has a potentially sensitive/controversial consequence or implication on society.

- The research question / the methodology / the institutional context and

IDIOGRAPHIC → to focus research on individuals with an emphasis on the self and
uniqueness of each person. It's avoids generalisations and conclusions.

- Prefers to use qualitative data, self-reporting, case studies, unstructured interviews.
- **Humanism** → self-reporting within therapy / we all have unique self-actualisation
  goals and free will.

NOMOTHETIC → Studying populations of groups of people to make

generalisations andconclusions about behaviour. Uses general laws (Classification, principles and dimensions).

- Prefer to use quantitative data, objective measures and structure interviews.
- **Behavioural** → Very scientific and aims to make predictions about behaviour.
- **Biological** → Very scientific and aims to make classification systems to predictbehaviour.

Combination → Each approach complements each other. We need idiographic to create nomothetic laws, and we need nomothetic laws to understand group influenceson individuals (social influence). We're all striving to be 'unique' but aren't we all the same by doing so?

interpretation can reduce socially sensitive research.

- **Milgram** → Positive ethical implication because we understand how/why peopleobey BUT social sensitive because we can use this to manipulate people.
- **Bowlby** → reformed childcare practices BUT encouraged the view that mothers need toraise children instead of returning to work orthey would face a burden.
- **Biopsych**. → Research into shift work and health effects can be socially sensitive because it can encourage people to leavetheir jobs.
- **Cyril Burt** and 11+ exams.
- **Loftus** → EWT research reformed cognitiveinterview.