

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)

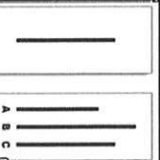
ASCH (1956) – CONFORMITY

- 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 more / Engineering students less likely to 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 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, 5 prisoners had to be released early from the 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 groups matched on her personalities. Random allocation of 2 guards and 1 prisoner. 8 day study.
- PPs didn't conform to their roles. Prisoners identified as a group and challenged guards. Guards failed to identify to role.

- ⊗ Conformity isn't automatic / Highly unethical / Demand characteristics of BBC and SPE hidden cameras / Support with Abu Ghraib / Androcentric / beta bias.

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) / gender differences (Androcentrism & beta bias)
- ⊗ High historical validity (same results 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 measure authoritarian 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.

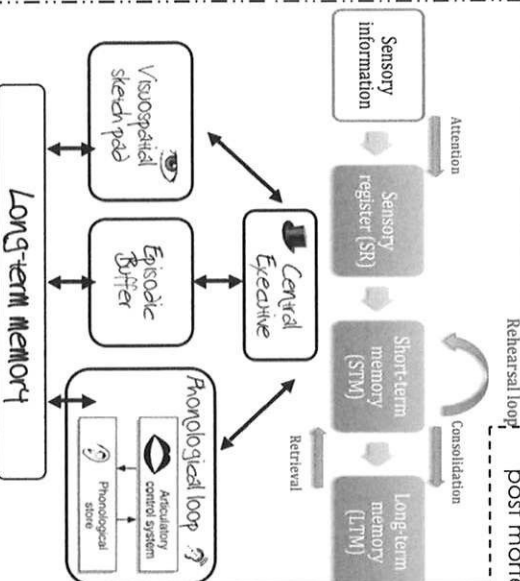
	Sensory Register A temporary store	STM	LTM
Capacity = amount	Large – Eg: Each eye has 100 million cells each storing visual data. (Sperling, 1960)	7 items +/- 2. (Jacobs, 1887 / Miller, 1956)	Unlimited
Coding = format	Based on senses, 2 most common: Iconic (Visual is stored visually) or Echoic (sound 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)

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, collates all information together and passes it onto LTM.



- dual-task performance and case studies of brain damage (KF)
- Central executive is vague and limited / reductionist / problems with case studies.

EYEWITNESS TESTIMONY - POST-EVENT DISCUSSION.

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

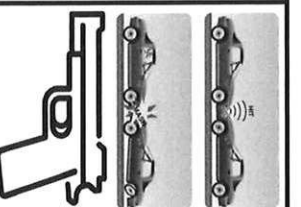
TYPES OF LTM

- 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.

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

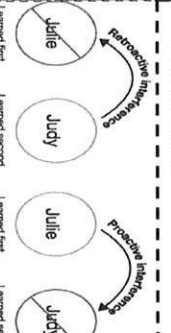
- 45 PPs shown 7 films of different traffic accidents and were asked to describe the accident.
- "How fast were the cars going when they X each other?"
- Smashed = 40.8mph / collided = 39.3mph / hit = 34mph / contacted = 31.8mph.
- "Was there any broken glass?" Those who were given the stronger verbs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

- Real life application (police interviews) / supporting research (Disneyland – false memory).
- Artificial test (ecological validity) / response bias / individual differences (children).



FORGETTING - INTERFERENCE

- Retrospective** → new learning interferes with past learning.
- Proactive** → past learning interferes with new learning.
- Artificial research / interference doesn't explain everything / individual differences.
- Real-world 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

IMPROVING EYEWITNESS TESTIMONY

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

- Mental reinstatement** – context of crime.
- Report everything** – free recall.
- Change order** – reverse to challenge schema.
- 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 TESTIMONY – ANXIETY

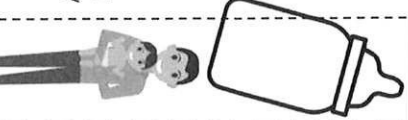
- Weapon focus effect** → PPs asked to sit in a waiting room where they heard an argument. A man runs out with either a pen covered in grease or a knife in blood. They were asked to identify the man.
- 49% identified the pen man, 33% identified the knife man.
- Anxiety can have a negative effect by drawing 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 months after 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 initiate humans / beneficial research for theory of mind.

DEVELOPMENT OF ATTACHMENT SCHAFER 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.



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)

- Greylog 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.



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 returning to work.
- Korea / Japan → child rearing practices / collectivist.
- Secure are universal / large sample
- Cultural differences within countries / imposed etc.

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.

EARLY ATTACHMENTS ON ADULTS – HAZAN & SHAVER

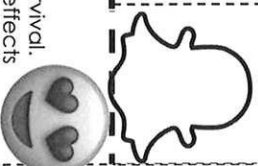
- Examined internal working model.
- Love quiz in local newspaper → 620 responses (205 men / 415 women)
- 56% secure / 25% avoidant / 19% resistant.
- Positive correlation between attachment type and love experience – secure had longer relationships and happier.
- Correlational – can't assume a link / poor memories / self-reporting / ignores freewill, very deterministic.

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 mums is emotional support. Dads are risk-taking physical play.
- Dads are capable of nurturing and showing emotional sensitivity, but social and biological factors may discourage this.

EXPLANATIONS – BOWLBY

- **Adaptive** – innate need to attach for both infant AND caregiver.
- **Social Releaser** – innate behaviour that encourages attention for caregivers for survival.
- **Critical Period** – 2-3y period but sensitive period of up to 5y. Can have irreversible effects otherwise.
- **Monotropy** – 1 main attachment figure.
- **Internal Working Model** – blueprint for future relationships based on your first attachment.
- Subsequent research uses Bowlby's ideas / Lorenz & Harlow support critical period / Brazelton & 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.



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.
- ⊗ Real-life application – we self-refer.

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)

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)

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)

CHARACTERISTICS

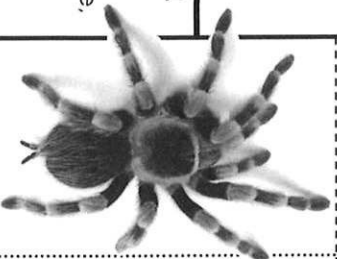
- Hypersomnia/ insomnia
- Low mood / low self-esteem
- Absolute thinking
- Suicidal thoughts.
- Panicked response.
- Avoidance of stimulus.
- Excessive, irrational and unreasonable thoughts.
- Irrational beliefs.
- Self-critical
- Irrational obsessions
- Hypervigilant
- Avoidance of stimulus
- Anxiety and distress
- Compulsions.
- Coping strategies.

Explanations of PHOBIAS

Classical + Operant conditioning = **TWO PROCESS MODEL** (Mowrer) → We **acquire** phobias through classical and **maintain** them through operant.

Alternate explanations → Vicarious reinforcement / Irrational thinking / biological preparedness

- ⊗ Real life application / Little Albert research
- ⊗ Diathesis-stress model / ignores cognition and evolution.



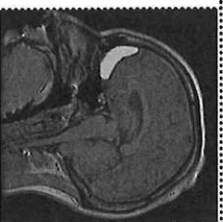
Treatment of PHOBIAS

SYSTEMATIC DENSITISATION → 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 longer fears them (extinction).

- ⊗ Effective in results / Flooding is cost-effective.
- ⊗ SD is time consuming / ignores cognition behind phobia / not suitable for all people.



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

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)

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 lead 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

NEURAL EXPLANATIONS → damaged orbitofrontal cortex which means 'worry signals' are looped in the brain. High dopamine 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 given the protein

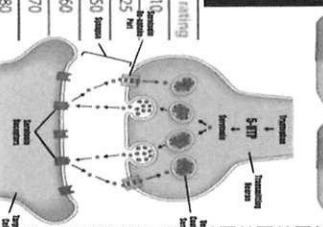
- ⊗ Alternate explanations / cause or effect / polygenic disorder / real life application.

Treatment of OCD

DRUG THERAPY → SSRIs increase serotonin which can reduce symptoms of OCD / synaptic transmission.

Alternatives to SSRIs → SNRIs / Tricyclics / psychosurgery

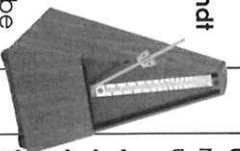
- ⊗ Very effective / quick and effortless
- ⊗ Drugs take a while to start working / only treats symptoms? / relapse likely / publication bias / cognitive treatment needed for obsessions.



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

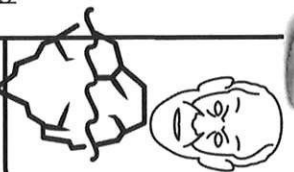


PSYCHODYNAMIC → Freud believed that all behaviour and feeling and influenced by unconscious drives which stem from childhood experiences.



Iceberg analogy → Under the water is the unconscious, an aspect of ourselves that we're unaware of. Under the surface is the conscious, where dreams and parapraxes seep through and above the water is our conscious, our present and current awareness.

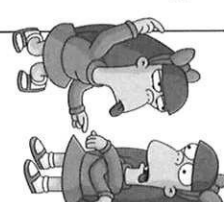
Tripartite personality → ID (demands instant pleasure), **EGO** (in contact with reality and responsible for compromise to reduce tension) and **SUPREEGO** (morals, responsible for guilt and pride)



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**.

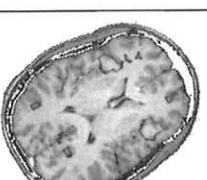
- Input
- Process
- Output



We develop **schema** (mental 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

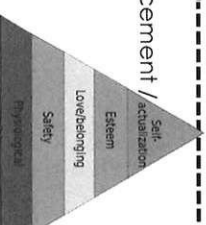


Social Learning Theory

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

Psychoanalysis →

Psychological problems are rooted in our unconscious which create symptoms.

- Dream analysis
- Free association
- 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 CENTRED 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)

FIGHT OR FLIGHT

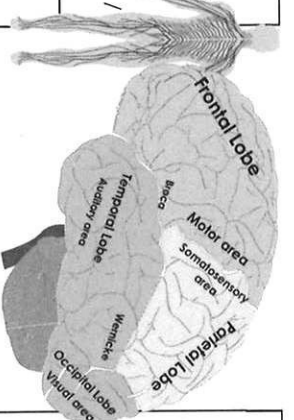
- Survival mechanism
- ANS & endocrine system work together.
- Dilated pupils / digestion and bladder inhibited / increased heart rate / increased sweat / pale skin / dry mouth.

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

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.



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 & Wernicke's aphasia / fMRI scans

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.

SPLIT-BRAIN RESEARCH – each hemisphere is responsible for a specific function. Left and right eye process information on the **OPPOSITE** hemisphere.

SPERRY → 11 ppts who had their corpus callosum removed. Describe what you see – Left hemisphere can describe, right cant. Tactile test – Left hemisphere can describe and identify on 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.

ENDOGENOUS PACEMAKERS → internal biological clocks

- ⊕ Suprachiasmatic nucleus → responds to light → melatonin releases melatonin which causes drowsiness/sleep.
- ⊕ Decoursey – chipmunks had their SCN destroyed and returned to their habitat. All died.
- ⊕ Ralph – bred mutant hamsters and adapted their cycles to 20 hours.

EXOGENOUS ZEITGEBERS → external environmental cues.

- ⊕ Entainmentment → getting babies into a routine to control their sleep/wake cycle.
- ⊕ Campbell – light on the back of the knees wakes PPs

BRAIN SCANS

fMRI → measures a change in energy released by haemoglobin in the brain. Low temporal resolution / High spatial resolution / 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.

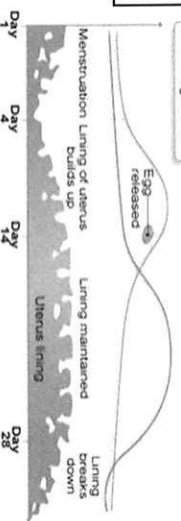
CIRCADIAN RHYTHMS → 24h cycle (sleep/wake)

- 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.

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

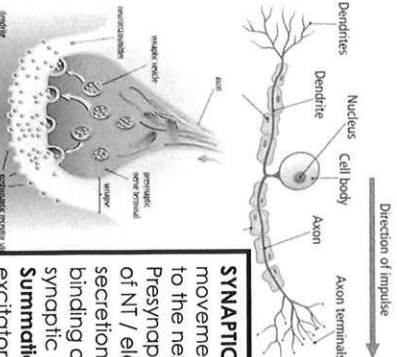
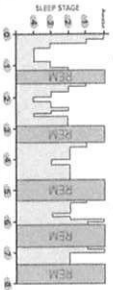


ULTRADIAN RHYTHMS → A cycle which repeated within 24h (5 stages of sleep)

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.
- ⊕ Kleitman – We live our entire sleep/wake cycle in periods of 90 minutes. And move from being alert to tired.

Stages of Healthy Sleep

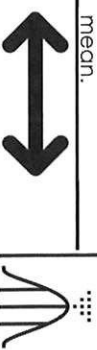


SYNAPTIC TRANSMISSION → the movement of information from one neuron to the next.

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 of excitatory / inhibitory neurons will fire.

<p>Content analysis → analysing the content of secondary data by creating a code BEFORE and sample method. Eg, every 2nd page, tallying the number of gender stereotypes.</p> <p>Thematic analysis → converts qualitative data into quantitative data by creating a category/code AFTERWARDS and tallying the number of times these appear within the data. Eg dream themes.</p> <p>RELIABILITY → how consistent is the data? Can it produce the same results on different occasions?</p> <p>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.</p> <p>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.</p> <p>Standardisation → to ensure that each procedure is robust and repeated consistently across trials. This will improve reliability.</p> <p>VALIDITY → How accurate is your data? Are you measuring what you intended?</p> <p>Ecological → the ability to generalise the research results to different environments and achieve the same results.</p> <p>Mundane realism → how realistic are the tasks to the real world. Eg counting backwards in 3s.</p> <p>Temporal → the ability for the research results to be generalised to different time periods. Eg Asch.</p> <p>Population → Can the research results be generalised to other samples of participants.</p> <p>Concurrent → to compare your research results to other similar results in the field and assessing if they're similar findings.</p> <p>Face → to extent in which the test measures what it claims to measure Eg, IQ test – intelligence or memory?</p>			<p>Alternative hypothesis → A testable statement about the relationship / difference / association between 2+ variables.</p> <p>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)</p> <p>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.</p> <p>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.</p> <p>SAMPLING</p> <p>Opportunity → Use PPs that are the most convenient or most available. Eg, students in a school.</p> <p>Random → names/numbers out of a hat.</p> <p>Stratified → subgroups of the population are identified, and a proportionate amount is selected. Eg 2 from Y7, 2 from Y8 etc.</p> <p>Systematic → Every 5th, 7th, 10th person from a list of people. Eg a phonebook.</p> <p>Volunteer → Advertise in a newspaper/notice board and wait for people to volunteer.</p>					
<p>5 FEATURES OF A SCIENCE:</p> <ol style="list-style-type: none">Empirical methods – observable and quantitative data.Objectivity – no bias or opinions involved.Replicability – does it produce the same results with different people?Theory construction – general principals, laws or classifications can be made.Hypothesis testing – test and refine / theory and test. <p>Falsifiability → always aiming to prove your hypothesis wrong.</p> <p>Paradigm → a set of ideas which can change over time due to a paradigm shift.</p>			<p>PEER REVIEW → Specialists in the field assess the scientific work produced by others to assess the quality and accuracy of their research.</p> <p>ETHICS - Can Do Can't Do with PPs</p> <p>TYPES OF DATA:</p> <p>Primary / Secondary / Qualitative / Quantitative / Meta-analysis</p> <ul style="list-style-type: none">Nominal → named categoriesOrdinal → data that can be ordered.Interval → Data with equal measurements in-between each value and that can go below 0.			<p>EXPERIMENTAL DESIGN</p> <p>Repeated measures → All PPs do each condition. BUT this could cause an ORDER EFFECT so we need to</p> <p>COUNTERBALANCE (ABAB or ABBA).</p> <p>Independent → Separate groups do separate conditions and we need to RANDOMLY ALLOCATE PPs to groups.</p> <p>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.</p> <p>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.</p> <p>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.</p>		
<p>Calculated value → The number they give you in the exam. Their CALCULATED score.</p> <p>Critical value table → The table you plot the score into.</p> <p>ALWAYS ASSUME 0.05 UNLESS TOLD.</p>			<p>DESCRIPTIVE STATISTICS</p> <p>Measure of central tendency provide averages or information about the 'middle' of a set of data:</p> <ul style="list-style-type: none">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. <p>Measure of dispersion provides information about the spread of data.</p> <ul style="list-style-type: none">Range – the distance between the top and bottom values in data.Standard deviation – precise measure of spread which measures the average distance between each data item above and below the mean.			<p>JOURNAL REFERENCE</p> <ul style="list-style-type: none">Authors name, date, title of article, journal title, volume (issue number) <p>BOOK REFERENCE</p> <ul style="list-style-type: none">Authors name, date, title of book, place of publication, publisher. <p>DESIGN A STUDY QUESTION → Answer the BULLET POINTS and JUSTIFY your choices / KEEP IT SIMPLE.</p>		
<p>Directional → My hypothesis directly predicts the direction of the results (X will have a positive effect on Y)</p> <p>Non-directional → my hypothesis states there is a difference but doesn't state which way (X and Y will have a difference)</p> <p>One tailed → You're using a directional hypothesis.</p> <p>Two-tailed → you're using a non-directional hypothesis.</p> <p>IV → What you're manipulating. The conditions/trials.</p> <p>DV → What you're measuring. It needs to be operationalised so it can be measured clearly.</p> <p>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).</p> <p>Extraneous → Aspects which you try to control – time of day, light, temperature of room.</p>			<p>Testing association or correlation</p> <p>Chi-Squared COWELL</p> <p>Mann-Whitney MORE</p> <p>Sign test SIMON</p> <p>Wilcoxon WANTS</p> <p>Related t-test (parametric) RECEIVING</p> <p>Unrelated t-test (parametric) UNANIMOUS</p> <p>Spearman's rho SINGERS</p> <p>Pearson's r (parametric) PRAISE</p>					



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.

ESTROGEN → 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.

COGNITIVE - KOHLBERG

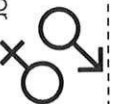
• As we age our cognitive abilities enhance and we can start to think abstractly about gender and development.

1. **GENDER LABELING** → 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 (beta bias) / stages not needed.



BIOLOGICAL

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

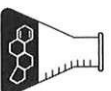
KLINEFELTERS SYNDROME → XXY configuration. Penis and typical male but less testosterone means they look less masculine, less facial hair, broader hips and some breast tissue. They may be infertile.

TURNERS SYNDROME → XO configuration. The 2nd chromosome 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.



COGNITIVE - GENDER SCHEMA 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 and can create distorted stereotypes / sexism.

ATYPICAL 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 identity and female identification.

• **Father-daughter** → identity to males due to severe paternal rejection, so become male to gain acceptance (psychic determinism)

• **Conditioning** → via SLT and parenting.

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 determined to perform certain tasks efficiently (social role theory).

• 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 if counter-stereotyping is displayed.

SOCIAL LEARNING THEORY

• Children learn appropriate gender roles through indirect reinforcement (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 by society / 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

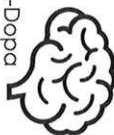
BIOLOGICAL EXPLANATIONS

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



PSYCHOLOGICAL TREATMENT

CBT → 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 breach human rights.

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 likely to relapse / Cannabis increases risk of Sz 7x.

- ⊗ Too many treatments at once can be time-consuming

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-blind 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 suppress 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.

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.

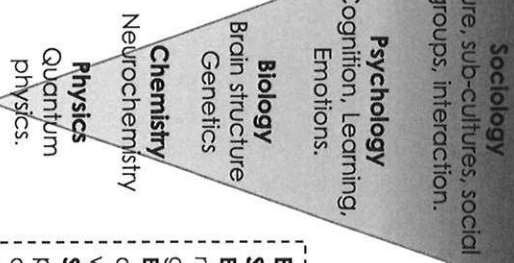
NATURE – NURTURE

- **NATURE** → Behaviours are 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.



IDIOPHATIC – NOMOTHEIC (an approach to researching)

- **IDIOPHATIC** → 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.
- **NOMOTHEIC** → Studying populations of groups of people to make generalisations and conclusions 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 predict behaviour.
- **Combination** → Each approach complements each other. We need idiographic to create nomothetic laws, and we need nomothetic laws to understand group influences on individuals (social influence). We're all striving to be 'unique' but aren't we all the same by doing so?



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)

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 interpretation can reduce socially sensitive research.
- **Milgram** → Positive ethical implication because we understand how/why people obey BUT social sensitive because we can use this to manipulate people.
- **Bowlby** → reformed childcare practices BUT encouraged the view that mothers need to raise children instead of returning to work or they would face a burden.
- **Biopsych.** → Research into shift work and health effects can be socially sensitive because it can encourage people to leave their jobs.
- **Cyrl Burt** and 11+ exams.
- **Loftus** → EWT research reformed cognitive interview.



TOP DOWN APPROACH → American / FBI

1. A general overview of the offender, bg information of victims and details of the crime.
2. Data is organised into patterns → time of day / type of murder / location
3. Organised or Disorganised crime.
4. An offender profile is constructed which is used to work out a strategy for investigation.
5. A report is given to the police and matching persons are interviewed. Repeat from step 2 if no new evidence revealed.
6. If a suspect is apprehended, each step is checked for accuracy.

- ⊗ Useful method used today
- ⊗ Difficult to distinguish between organised and disorganised / method is flawed as its based on guessing and inaccurate descriptions.

PSYCHOLOGICAL - EYSENCK

Personality determines criminality based on 3 dimensions, there is some biological basis for these traits which are innate.

- **Extraversion-introversion** → arousal within the nervous system. Extraverts are under-aroused.
- **Neuroticism-stability** → Neurotics are reactive under pressure so the sympathetic nervous system will react.
- **Psychoticism-normality** → higher levels of testosterone.
- ⊗ Extraversion & psychoticism are good indicators of delinquency.
- ⊗ Twin study correlation not strong enough / Personality isn't consistent / Personality tests aren't reliable / Not ideal for diagnosis but good for treating criminals.

PSYCHOLOGICAL - DIFFERENTIAL ASSOCIATION THEORY

Sutherland → offending behaviour can be explained via SLT. He suggested a formula of frequency + duration + intensity to predict criminality.

- Children learn attitudes towards crime from intimate personal groups via direct and indirect operant conditioning.
- Frequency, duration and degree of influence is important – role models / vicarious reinforcement / social norms for the group.
- ⊗ Changed views about the origins of criminal behaviour / Explains family trends and adolescent behaviours.
- ⊗ Methodological issues (correlation) / Can't explain all types of crime / ignores biological factors.

BOTTOM UP APPROACH → British

- **Investigative Psychology** → profiling should be based on theory and research (interpersonal coherence / Forensic awareness / Small space analysis)
- **Geographical profiling** → Locations are specifically chosen by offenders for ease and familiarity (Circle theory / Criminal geographical targeting).
- ⊗ Scientific basis – stats and analysis / Investigative is useful but doesn't help catch offenders all the time.
- ⊗ Circle theory is limited – not all criminals work in this way / Geographical profiling only highlights the location of crime not details about the offender.

PSYCHOLOGICAL - COGNITIVE

HOSTILE ATTRIBUTION BIAS → when we assume a malicious intention in behaviour we observe which leads to negative interpretation and aggressive behaviour.

MINIMALISATION → Underplaying the consequence of an action to reduce negative emotions such as guilt.

MORAL REASONING → Based on Kohlbergs levels where people progress through the 6 stages as their biological maturity and cognition develops. Criminals only reach level 2 – similar to a 10yo.

- ⊗ Real-life application – UK laws only for 10+ / Criminal misinterpret non-verbal cues and facial expressions / sex offenders often minimise their crimes / Cognitive theories can be used in treatment / Kibbutzim community had stronger morals than non-kibbutzim.
- ⊗ Moral thinking and moral behaviour aren't the same.

PSYCHOLOGICAL - PSYCHODYNAMIC

MATERNAL DERIVATION (BOWLBY) → 44 thieves' study and affectionless psychopathy – a lack of normal affection, shame or sense of responsibility due to prolonged separations before 2.5y.

SUPEREGO (FREUD) → The superego causes feelings of guilt if the ids demands for gratification are met. It develops alongside morals during childhood.

- **Underdeveloped** – caused by inability to identify with same-sex parent during the phallic stage. This leads to little control over anti-social behaviour and high impulsivity.
- **Overdeveloped** – caused by strong identification to strict parent. This leads to extreme feelings of guilt and anxiety. Crimes would be committed with a desire to be caught to experience guilt.
- **Deviant** – normal identification to criminal parents means the child develops immorality.

- ⊗ Considers emotional factors / Real world application of Bowlby /
- ⊗ Gender bias in Freud's theory / Best to use a combination of theories rather than just one.



BIOLOGICAL

GENETIC → **MAOA** gene + **CDH13** gene both linked to violent crimes BUT could be triggered by a stressor (dialysis-stress) from childhood maltreatment or anti-social behaviour.

NEURAL → Reduced functioning in the **prefrontal cortex** (emotion and morals) or abnormal asymmetries in the **limbic system**, with reduced activity on the left amygdala and increased on right (emotion and motivation)

- Low **serotonin** leads to impulsivity and high **dopamine** enhances this. Very high and low levels of **noradrenaline** are linked to violence.
- ⊗ Adoption studies show some support (Crowe) / Real-world application for treatment
- ⊗ Biological explanations can't explain non-violent crimes / Crime is a social construct / Biological determinism / cause or effect? / Research should be based on aggression not offending.



PERSONALITY TYPES

ATAVISTIC (Lombroso) → 18 physical characteristics which define criminal behaviour. Asymmetrical face, large jaw and cheekbones, unusual ears. Based on post-mortems of 50k bodies. 43% of criminals had at least 5 characteristics.

SOMATOTYPES → 4k criminals created 4 body types – Asthenic, Athletic, Pyknic, Dysplastic.

- ⊗ Founder of modern criminology / supporting evidence for somatotypes / Criminal theories have now developed into personality and criminality.
- ⊗ Lack of control in early criminal research / Androcentrism towards female criminals /

DEALING – RESTORATIVE JUSTICE

Seeks to achieve justice by repairing or restoring the situation to what it was before the crime, typically involving the victim. Offered instead of prison if the victim agrees.

Aims include rehabilitation of offenders / atonement for wrongdoing / victims perspective.

- **Wachtel** → repairing relationships between offender, victim and society are more important than the punishment (reparation, responsibility, reconciliation). Peace circles foster an environment of respect to support victims and offenders.
- ⊗ 85% satisfaction from victims / Reduces reoffending following face-to-face meetings with victim / meeting victim is a deterrent
- ⊗ Some crimes are not appropriate to meet victims / ethical issues for victim.



DEALING – TOKEN ECONOMY

Based on operant conditioning where desirable behaviour is rewarded and reinforced with 'tokens' that can be exchanged. This shapes behaviour.

Hobbs and Holt – 91% of delinquent males improved their behaviour after 1.E introduction.

- ⊗ Real-world application to custody & schools / Easy to implement /
- ⊗ Ethical issues (desirable behaviour?) / Only works in institutions so short-term benefits / Individual differences – does work for all.



DEALING – ANGER MANAGEMENT

A form of CBT which aims to reduce anger and aggression by reconceptualising the issue. It's the most common rehabilitation methods in prisons and aims to reduce prison aggression and recidivism rates upon leaving. (**Novaco**)

- **STRESS INOCULATION MODEL** → a form of CBT which teaches people how to deal with stress to protect themselves against future situations. Involves 3 steps – Cognitive preparation / Skill acquisition / application training.
- ⊗ 75% improvement rates in reducing anger / real-world application.
- ⊗ Difficult to measure effectiveness of AM courses / CBT isn't effective for everyone / Focus on short term goals rather than long term / Anger, aggression and crime are not necessarily related.



TYPES OF CONFORMITY – ASCH | ZIMBARDO

Compliance / Identification / Internalisation / Normative Social Influence (compliance and identification) / Informative Social Influence (internalisation)

Difficult to distinguish between compliance and identification but supported by Asch, Zimbardo and Sherif.

CONFORMITY – ASCH

Male undergraduates asked to match lines to a control line / 12/18 trials, confederates were asked to give false answers / 33% conformed on 12 trials and gave incorrect answers / 50% conformed to 6+ trials / PPs conformed to avoid disapproval (compliance/NSI)

VARIATIONS

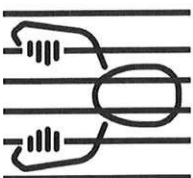
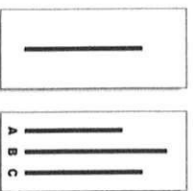
Group size / Unanimity / Task difficulty

Lacks population validity, shows androcentrism and is unethical. Also women are more likely to conform and lacks temporal validity.

SOCIAL ROLES – ZIMBARDO

Male undergraduates were assigned guard or prisoners / Guards started to create their own punishments and volunteered to work longer hours / Prisoners started to riot, become passive and followed orders / 5 prisoners had to be released early from the study 2 days in and the study was terminated on day 6 of 14.

Highly unethical and demand characteristics evident. Also androcentric but supported by Abu Grahb soldiers and challenged by the BBC study where PPs didn't conform to their roles.



OBEDIENCE – MILGRAM

Male PPs assigned as teacher and asked to administer an increasing electric shock to every wrong answer the learner (confederate) gave / prods were given if PPs were hesitant / 26/40 PPs (65%) shocked until 450V. All PPs shocked to 300V. 5 stopped at 300V (12.5%).

Highly unethical, socially sensitive and androcentric but strong understanding of obedience, high historical validity and controlled.

EXPLANATIONS FOR OBEDIENCE

Agentic state / Agentic shift / passing on responsibility Legitimacy of authority / a person in a position of power

SITUATIONAL VARIABLES

Proximity / Location / Uniform

DISPOSITIONAL VARIABLES OF OBEDIENCE

Authoritarian personality / strict values and beliefs from parents / Adorno / The F-Scale / Milgram follow-up study found higher levels of authoritarian traits in obedient PPs.

EXPLANATIONS OF RESISTANCE TO SOCIAL INFLUENCE

Social support / Asch found that unanimity promotes resistance by introducing other ideas/beliefs / Locus of control / perception of individual control (**INTERNALITY** / **EXTERNALITY**) / High internals are likely to seek information / goal oriented and resist coercion from others.

MINORITY INFLUENCE - MOSCOVICI

Consistency / Commitment / Flexibility / conversion / snowball effect / social cryptoamnesia.

MOSCOVICI

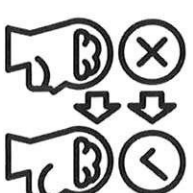
groups of 6 (4 PPs, 2 confederates) asked to judge the colour of different blue slides. Confederates called the blue slides 'green' / Green consistently = 8% influence which led to greater green chips being identified in later trials.

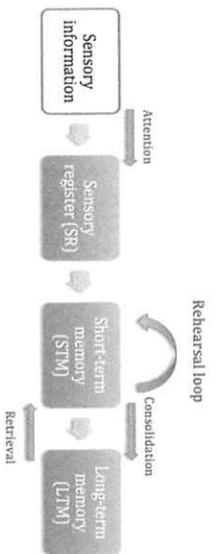
SOCIAL CHANGE VIA MINORITY

Draw attention to the issue → cognitive conflict between beliefs → consistency → augmentation principle (suffering) → the snowball effect.

VIA MAJORITY (CONFORMITY)

Social norms interventions → identifying widespread misperception related to risky behaviour – "Most people don't drink at University" / Public perceptions of 'deviant' will limit minority influence / social norm interventions aren't always successful and can make conforming people riskier.





MULTI-STORE MODEL

Sensory register holds and passes on information to the STM if attention is paid. Maintenance rehearsal is needed to transfer information into the LTM otherwise it decays.

This is a reductionist theory which is challenged by the WMM and Tulving. LTM needs more than rehearsal but there is various evidence of separate stores including brain damage case studies.

WORKING MEMORY MODEL

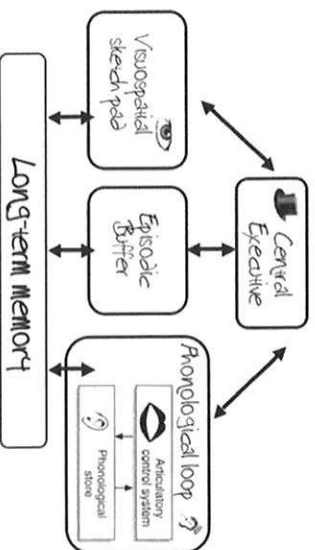
Challenged MSM, stating that STM has stores within it because we can see and listen at the same time effectively, but struggle to listen or see 2 items at once / Central executive / Phonological loop / phonological store / articulatory processes / Visuo-spatial sketchpad / Episodic buffer

Dual-task performance and case studies of brain damage support but central executive, case study issues and reductionist approach of STM.

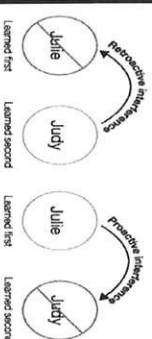
TYPES OF LONG-TERM MEMORY

Declarative memory – conscious / Episodic / Semantic
Implicit – unconscious / Procedural

Brain scans shows memories in different locations (Tulving)



	Sensory Register A temporary store	STM	LTM
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)



FORGETTING

INTERFERENCE

Retroactive (new interferes with past) / Proactive (old interferes with new)

Artificial research and interference doesn't explain all forgetting but there is real-world application to advert.

RETRIVAL FAILURE

Context dependent / State dependent

Real-world application to learning and the diver study.

EYEWITNESS TESTIMONY - LEADING QUESTIONS – LOFTUS & PALMER

PPs shown 7 traffic accidents on film 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 to police interview and supporting research on false memories but lacks ecological validity and can't be applied to children.

EYEWITNESS TESTIMONY - POST-EVENT DISCUSSION

Memory can be altered or contaminated by co-witnesses if they're interviewed together, interviewed multiple times or able to discuss what they saw / 71% of PPs who discussed an event before recall mistakenly recalled 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 / YERKES-DODSON EFFECT → too much anxiety will impair recall accuracy.



IMPROVING EYEWITNESS TESTIMONY

COGNITIVE INTERVIEW

A police technique for interviewing witnesses to reduce inaccurate information from leading questions - Mental reinstatement / Report everything / Change order / change perspective.

Effective and increases accuracy and quality of recall but is time consuming and requires specialist training. Enhanced cognitive interview introduced later.

CAREGIVER-INFANT INTERACTIONS

Reciprocity / interactional synchrony / Tronick's still face experiment / innate

It's difficult to test infant behaviour and there are individual differences such as attachment type and temperament but babies only imitate humans and these interactions offer support to Bowlby's social releasers



ANIMAL STUDIES – LORENZ | HARLOW

LORENZ – GREYLAG GEESE

Greylag geese eggs were separated between their natural mother and an incubator. When incubator eggs hatched they imprinted onto Lorenz / Critical period of 2 days.

Supporting evidence of chicken and yellow gloves and peacocks and tortoise but imprinting can be reversed and poor application to humans.

HARLOW – RHESUS MONKEYS

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 and supports maternal deprivation however unethical and can't be generalised.



EXPLANATIONS OF ATTACHMENT – BOWLBY | LEARNING THEORY

MONOTROPIC THEORY – BOWLBY

Adaptive – Social Releaser – Critical Period – Monotropy – Internal Working Model (ASCM)

Research to support Bowlby includes Tronick, Harlow and Hazan * Shaver but IWM is deterministic, the theory is socially sensitive and there is little support for monotropy.

LEARNING THEORY

Classical conditioning through association to food / Operant condition through negative reinforcement when crying and positive reinforcement when feeding

The food-giver isn't always the primary caregiver and infants have multiple attachment. Harlow found contact-comfort is more important than food and the whole theory is environmental determinism.

DEVELOPMENT OF ATTACHMENT – SCHAEFFER & EMERSON

Indiscriminate attachment (0-2m) / Start of attachment (2-7m) / Discriminate attachment (7m) / Multiple attachment (8m+)

Biased sample of PPs and the use of self-reporting data but supports Rutter in the age of attachments developing.

ROLE OF THE FATHER

Fathers now have more paternity rights compared to previous generations / Schaffer & Emerson found that only 3% of primary attachments were fathers which can be challenged / Fathers typically seen as physically playful and risk-taking whereas mothers seen as nurturing.

Reinforced gender roles and minimal research into father-infant relationships but fathers could be an important role for mothers who then support children effectively.



EARLY ATTACHMENTS ON ADULTS – HAZAN & SHAVER

Examined internal working model and attachment types in later adulthood / 'love quiz' in a local newspaper / 56% secure / 25% avoidant / 19% resistant - Positive correlation between attachment type and love experience – secure had longer relationships and happier / follow-up study found 22% had changed their attachment type.

Methodological issues and deterministic view of behaviour but supports Bowlby's internal working model and replications of the study have found similar results.

TYPES AND CULTURAL VARIATIONS OF ATTACHMENT – AINSWORTH | VAN IJZENDOORN

AINSWORTH

Controlled observation of mother and infant with 8 episodes / Separation anxiety, reunion behaviour, stranger anxiety and secure bases observed / **Secure** (B) 70% / **Avoidant** (A) 15% / **Resistant** (C) 15%

High inter-rater reliability of 0.94 but Type D added later, infants respond differently to each parent and ethnocentric.

CULTURAL VARIATIONS

Examined Ainsworth's findings with a 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.

Secure is universal attachment type and large sample used but there are cultural differences between cultures and largely western sample used.

MATERNAL DEPRIVATION & INSTITUTIONALISATION – BOWLBY | RUTTER

MATERNAL DEPRIVATION – BOWLBY

Deprivation during the critical period will have impact on development / Deprivation is an extended separation and loss of emotional care / Long term effects include Lower IQ / Affectionless psychopathy / Dwarfism / Anaclitic depression.

Real-life application to modern childcare understanding but there are individual differences and a lack of differentiation between privation and deprivation.

EFFECTS OF INSTITUTIONALISATION – RUTTER

ERA Romanian Orphanage longitudinal study found that 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 such as Physical underdevelopment / poor cognitive development / disinhibited attachment / poor parenting effects of institutionalisation.

Real-life application but individual differences and unique experience but all children recovered and developed slowly rather than poorly.

DEVIATION FROM SOCIAL NORMS

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

Normal changes over time and lack cultural bias but easy to apply.

STATISTICAL INFREQUENCY

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

Lacks cultural bias and can't explain desirable traits but objective definition and used by medical professionals.

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 demanding and unrealistic and based on individualistic values but can be used as aspiration.

FAILURE TO FUNCTION ADEQUATELY

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

Difficult to define adequate and ignores context but accurate process for self-referral.

DEPRESSION

5 or more symptoms (1 must be low mood or loss of interest in pleasure) / 2-week period / Daily life affected / hypersomnia/ insomnia / Low mood / low self-esteem / Absolute thinking / Suicidal thoughts.

EXPLANATIONS – BECK | ELLIS

Negative self-schema + negative thoughts = increased vulnerability to developing depression / negative triad.

ACB model (activating event, belief, consequence)

TREATMENT – CBT | REBT

CBT → 50 min sessions / identifies negative thoughts / goal-orientated (thought diary) / present focus / teaches techniques / combination of Ellis and Beck's treatment.

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

Real-life application to CBT/NHS and the economy and it identifies the root cause but can be time consuming and requires a willingness to seek therapy.

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 / Panicked response / Avoidance of stimulus / Irrational beliefs / Self-critical.

EXPLANATIONS – MOWRER

Classical + Operant conditioning = **TWO PROCESS MODEL** → We **acquire** phobias through classical and **maintain** them through operant.

Alternate explanations → Vicarious reinforcement / Irrational thinking / biological preparedness

TREATMENT – SD | FLOODING

SYSTEMATIC DENSITISATION → 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 longer fears them (extinction).

Flooding is cost and time effective but unethical but both ignore the cognition behind phobias and not suitable for everyone.

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

EXPLANATIONS - BIOLOGICAL

NEURAL EXPLANATIONS → damaged orbitofrontal cortex which means 'worry signals' are looped in the brain. High dopamine and low serotonin can cause a damage.

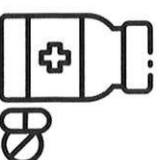
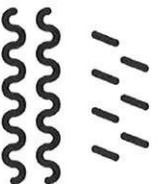
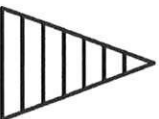
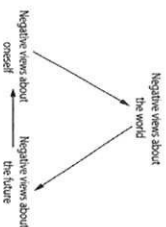
GENES → COMT gene regulates the production of dopamine. SERT gene transports serotonin. If these genes are faulty, it can lead to damages in the brain.

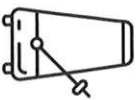
SAPAP3 – animal study shows that mice lacking these gene excessively groomed themselves which stopped when given the protein

TREATMENT – DRUG THERAPY

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

Drugs are effective and cost-effective but only treats the symptoms and cognitive treatment needed for obsessions.





ORIGINS OF PSYCHOLOGY – WUNDT

Introspection / 1879 / First experimental lab - metronome / Germany
Led to psychology becoming a science and introspection influences cognitive approach

BIOLOGICAL APPROACH

All behaviour is innate through genes, neurotransmitters, hormones or evolution.

Monozygotic twins / dizygotic twins / concordance rates / genotype / phenotype / diathesis-stress model / biological reductionism / biological determinism / scientific

Real life application to Biopsychology and drug therapy but animal studies are unethical.



PSYCHODYNAMIC – FREUD

Unconscious drives and childhood experiences / preconscious / conscious / Psychosexual stages, conflicts and fixations (OAPLG) / tripartite personality (id, ego, super ego) defence mechanisms (denial, repression, displacement) / psychoanalysis.

Real-life application of psychoanalysis and evidence of defence mechanisms but gender bias and difficult to test unobservable concepts.

BEHAVIOURISM - PAVLOV | SKINNER

All behaviour is observable, measurable and conditioned / operant conditioning / positive and negative reinforcement / classical conditioning / stimulus-response / environmental determinism / environmental reductionism / nomothetic / scientific

Animal studies are unethical / real-life application to phobias and treatment.

HUMANISM – MASLOW | ROGERS

Conscious experiences and free will over our behaviour / Humans have a basic need to feel valued by others (URP) / hierarchy of needs / self-actualisation / Unconditional Positive Regard (UPR) / Conditions of Worth / Congruence / Incongruence / Q-Sort / Person-centred Counselling

Real-life application of both hierarchy to education and PCC but individualistic concepts and studied via idiographic methods that rely on self-awareness.

COGNITIVE APPROACH

- Input
- Process
- Output

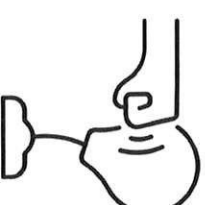
Inferring information / predicting behaviour based on I-P-O model / schema

Uses scientific methods and subjective experiences. Led to the development of cognitive neuroscience and real-life application to education and CBT.

SOCIAL LEARNING THEORY - BANDURA

Observation + vicarious reinforcement + identification + mediational processes = imitation.

Easy application to children learning aggression but doesn't explain HOW we learn behaviour.



COMPARISON ESSAYS

Outline one approach and evaluate through comparison to another approach.

Whereas / additionally / similarly / conversely / however / compared to / Although

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

THE NERVOUS SYSTEM

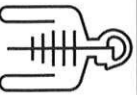
Collects, processes and responds to the environment & coordinates muscles and glands via neurotransmitters / **Central Nervous System** / **Peripheral Nervous System** - Autonomic Nervous System (F&F) / Somatic Nervous System (R&D)

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 / **Thyroid** - Thyroxine / **Ovaries** - oestrogen / **Testes** - testosterone / **Adrenal medulla** - adrenaline / **Adrenal cortex** - cortisol

FIGHT OR FLIGHT

Combination of the autonomic nervous system which controls physical movement and endocrine system which controls physiological processes - Dilated pupils / digestion and bladder inhibited / increased heart rate / increased sweat / pale skin / dry mouth.



NEURONS

Chemical and electrical signals that only travel in one direction - **Sensory** → carry information **towards** the CNS / **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).

SYNAPTIC TRANSMISSION

The movement of neurotransmitters 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 of excitatory / inhibitory neurons will fire.



BIOLOGICAL RHYTHMS

CIRCADIAN RHYTHMS

24h cycle of sleep/wake / Controlled by the SCN but needs light to reset each day / Siffre lived in a cave and his body clock shifted to 25 hours / shift work and jet lag desynchronise the body clock / Aschoff & Wever PPs spent 4 weeks in a bunker and their body clocks increased to 25h / Folkard reduced the time in a day and no PPs could adjust.

ULTRADIAN RHYTHMS

A cycle which repeated within 24h / 5 stages of sleep which lasts around 90 minutes and repeats throughout the day (Kleitman) / Dement found that PPs woken during REM recalled dreams whereas PPs woken during N-REM couldn't.

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 other women's pheromones would start to adjust their cycle / SAD – yearly rhythm which affects mood during winter.

ENDOGENOUS PACEMAKERS

Internal biological clocks that control all biological rhythms / **Suprachiasmatic nucleus** responds to light and secretes melatonin to induce sleep / Decoursey chipmunks SCN severed and all chipmunks died in natural habitat / Ralph's mutant hamsters adapted to implanted 20h sleep/wake cycle.

EXOGENOUS ZEITGEBERS

External environmental cues that reset endogenous pacemakers / light, noise, sound, food / Entrainment - getting babies into a routine to control their sleep/wake cycle / Campbell – light on the back of the knees wakes PPs.

BRAIN SCANS

fMRI - measures a change in energy released by haemoglobin in the brain. Low temporal resolution / High spatial resolution / 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.



LOCALISATION OF FUNCTION

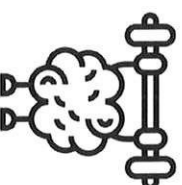
Specific areas of the brain have specific functions - Frontal lobe → motor cortex / Parietal lobe → Somatosensory cortex / Occipital lobe → Visual / Temporal lobe → Auditory / **Broca's** → LEFT frontal lobe / speech production / **Wernicke's** → LEFT temporal lobe / language comprehension.

Biologically reductionist and there are gender differences within language centres but Broca and Wernicke's aphasia are real conditions and fMRI scans highlight different roles.

HEMISPHERIC LATERALISATION - SPERRY

Each hemisphere is responsible for its own function / Sperry found that when the corpus callosum was severed PPs brained failed to communicate if only one eye processes information / Left hemisphere dominates language and right hemisphere dominates visual-motor.

Supports localisation of function and was a control experiment. Chickens can also perform 2 tasks at once, but pop-psychology has reduced the concept of lateralisation and realistically the language centres work with the motor and visual areas of the brain too.



PLASTICITY - MAGUIRE

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 / Stem cells / Spontaneous recovery / Axonal sprouting

Spontaneous recovery is short-term and negative plasticity can be caused by drug use but strong evidence with musicians, animals and cognitive reserve and trauma recovery.

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

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 / Low 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 and 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 / 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 so lacks predictive validity → too many outcomes to predict treatment / recovery.

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%.

DOPAMINE HYPOTHESIS

Snyder → Too much = positive symptoms → Sz drugs REDUCES dopamine / L-Dopa INCREASES 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

fMRI scans show enlarged ventricles which are associated with negative symptoms.



PSYCHOLOGICAL TREATMENT

CBT

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.

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.

TOKEN ECONOMY (MANAGEMENT)

Operant conditioning within institutions. Clinicians set targets and are rewarded when desirable behaviour is displayed.

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 suppress 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

Combining explanations and treatments to provide holistic diagnosis and prognosis.

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 likely to relapse / Cannabis increases risk of Sz 7x.

DEFINITIONS & ANDROGYNY - BEM

SEX - biological / GENDER - personal identification / **STEREOTYPES** societies expectations for gender and sex behaviour / **ANDROGYNY** - a combination of male and female characteristics measured using the BSRI - **BSRI SCALE** → 7-point Likert scale of feminine and masculine characteristics.

BIOLOGICAL EXPLANATIONS FOR GENDER

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.

CHROMOSOMES - Humans have 23 pairs, which contain all genes. XX (female) XY (male) chromosomes 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 chromosome is missing meaning females are born with a vaginal/womb, lack of monthly periods, possibly infertile / **INTERSEX** - a person who doesn't fit the typical male/female characteristics Eg. David Reimer / Caster Semenya

PSYCHODYNAMIC EXPLANATION FOR GENDER - FREUD

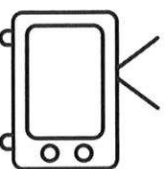
Genital stage requires successful resolution of the 'conflict' to be psychologically healthy / Unable to identify can lead to immoral behaviour or homosexuality.

OEDIPUS COMPLEX

Boy desires mother, sees dad as rival and develops castration anxiety, so identifies with father and internalises his gender identity to 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 mother to develop gender identity and find a mate.



CULTURE AND MEDIA EXPLANATIONS

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



ATYPICAL GENDER DEVELOPMENT - GENDER IDENTITY DISORDER

Incongruence between assigned gender and expressed gender with a desire to remove sexual characteristics.

BIOLOGICAL EXPLANATIONS

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 PRs report erections and sensations from an early age.

SOCIAL EXPLANATIONS

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 identity and female identification / **Father-daughter** → identity to males due to severe paternal rejection, so become male to gain acceptance (psychic determinism) / **Conditioning** → via SLT and parenting.

COGNITIVE EXPLANATIONS FOR GENDER - KOHLBERG | MARTIN

KOHLBERG

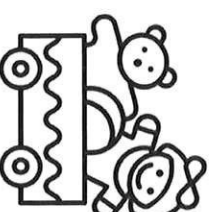
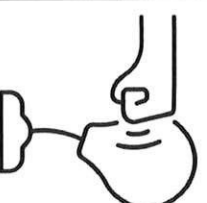
As we age our cognitive abilities enhance and we can start to think abstractly about gender and development / **GENDER LABELLING** → 2-3y - children label themselves and others as boy/girl. It's superficial Eg. long hair = girl / **GENDER STABILITY** → 4y - gender knowledge is stable but not consistent across situations. Eg men playing with dolls are still men. View gender superficially on external features (appearance) / **GENDER CONSTANCY** → 6y - gender is constant across situations and will learn gender-appropriate behaviour.

GENDER SCHEMA THEORY - MARTIN

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.

SOCIAL LEARNING THEORY EXPLANATION

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



GENDER BIAS

Alpha bias / Beta bias / Androcentrism / Universality

APPLICATION

SOCIAL INFLUENCE – Beta bias - Milgram, Asch and Zimbardo only tested male undergraduates but applies their finding incorrectly to females.

SCHIZOPHRENIA - Androcentric because society is male dominated, male over diagnose and the criteria is based on healthy males.

FREUD - Alpha bias → femininity is failed masculinity; females experience penis envy.

CULTURE BIAS

Alpha bias / Beta bias / Ethnocentrism / Cultural relativism / Emic approach / Etic approach

APPLICATION

ATTACHMENT - Ainsworth showed ethnocentrism by assuming all cultures had secure attachment as their majority.

SCHIZOPHRENIA - DSM/ICD tools show different criteria and research shows cultural differences between diagnosis and clinician assessment.



FREE WILL – DETERMINISM

Free will / Self-determining / Determinism / Hard Determinism / Soft Determinism / Environmental Determinism / Psychic Determinism / Biological Determinism / Environmental Determinism / Doubly-determined / Causal explanations

APPLICATION

HUMANISM – Free will, self-actualisation and Person-centred counselling.

COGNITIVE – Soft determinism. Humans have free will, but some behaviours are controlled (Aggression/Mental health). Psychopathology.

BIOLOGICAL – hard and biological determinism. Genes, neurotransmitters, hormones, brain structure all control behaviour – Gender, Aggression, Schizophrenia.

BEHAVIOURAL → Socialisation, conditioning, Stimulus-response, law of effects, Attachment, Gender, Aggression.

NATURE – NURTURE

Nature / innate / adaptive / Nurture / socialisation / environmental / Interactionism / Diathesis-stress model

APPLICATION

ATTACHMENT – innate and adaptive to attach to caregivers and infants AND Learning theory explanation of attachment.

GENETICS – Concordance rates show the closer the relation, the higher the concordance (genetic) Eg. MZ and DZ twins.

BIOPSYCHOLOGY – The role of endogenous pacemakers and exogenous zeitgebers.

ETHICAL IMPLICATIONS & SOCIAL SENSITIVITY

Ethical issues / Ethical implication / Positive or negative impact / social sensitivity

APPLICATION

MILGRAM - Positive ethical implication because we understand how/why people obey BUT social sensitive because we can use this to manipulate people.

BOWLBY - Reformed childcare practices BUT encouraged the view that mothers need to raise children instead of returning to work or they would face a burden.

BIOPSYCHOLOGY - Research into shift work and health effects can be socially sensitive because it can encourage people to leave their jobs which could negatively impact economy.

REDUCTIONISM – HOLISM

Holism / Reductionism / Levels of explanation / interactionism / Diathesis-stress model / biological reductionism / environmental reductionism.

APPLICATION

HUMANISM – Holism – Person-centred counselling.

BIOPSYCHOLOGY – The brain functions as one, holistically but can be analysed in pieces.

SCHIZOPHRENIA – Reductionism as it explains the cause on a neurochemical level, but treatment often takes a holistic approach – drugs and therapy.

IDIOGRAPHIC – NOMOTHEIC

Idiographic / Qualitative / Subjective / Nomothetic / Quantitative / Objective / General laws / Classification / Principles / Dimensions / Combination.

APPLICATION

HUMANISM – Idiographic due to qualitative methods and unique experiences.

BEHAVIOURAL – Nomothetic because very scientific and aims to make predictions about behaviour.

COMBINATION - Each approach complements each other. We need idiographic to create nomothetic laws, and we need nomothetic laws to understand group influences on individuals. We're all striving to be 'unique' but aren't we all the same by doing so?

