

cognitive approach

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- developed against behaviourists stimulus-response approach
- main concern of the cognitive approach is how information is received from senses + how this directs how we behave
- Cognitive psychologists study internal mental processes in an objective way.
- internal mental processes include perception, attention, memory etc. (investigates areas of behaviour that behaviourists neglected)
- study the brain indirectly
- Computer Analogy → information flows through a sequence of stages e.g. input, storage and retrieval.

schemas

- Schemas are packets of information helping us to organise information based on previous experience.
- babies are born with simple motor schemas which become more developed.
- Schemas are useful → predict what will happen in the world based on experiences. Avoid being overwhelmed of environmental stimulus.
- Schemas are not useful → can lead to faulty conclusions, unhelpful behav. There may be bias / inaccurate / distorted.
- Example = rat man study.

cognitive neuroscience

- Cognitive neuroscience looks at how neuromechanisms (neurons, neural circuits etc) associate with certain cognitive processes
- Scanning techniques → during 19th century, studied brain using post-mortems. Through scanning techniques + experimental methods, cognitive neuroscience has become one of the most dominant paradigms / model in modern psychology.
- 1860s: Paul Broca → found out that damage to the frontal lobe could permanently impair speech production (Broca's Area)

evaluation

- **Strength** = scientific methods. CA has involved the use of lab experiments to produce reliable, objective data. CN enabled cognitive + biological fields to work together, establishing a scientific basis.
- **Strength** = RWA. CA's made contributions to AI and thinking machines (robots) can also be used to treat / explain behaviour based on faulty thinking processes.
- **Weakness** = relies on inference. CA may be too abstract + theoretical → not accurate explanation for behav. Consequence → reduces internal validity + reduces credibility of CA.
- **Weakness** = machine reductionism → computer analogy makes cognitive psychologists neglect influence of emotions, genes + brain functioning on behav. Reduces credibility of CA.
- **Weakness** = Some experimental tasks lack mundane realism (measure of external validity / generalisation to real world based on procedures / materials used.) Unrealistic tasks → don't fully reflect real world psychological behaviour (e.g. word lists).