Unit 2

Approaches

Origins of Psychology:
- Wundt
- Introspection
- The emergence of Psychology as a science.

Learning Approaches:
The Behaviourist Approach
- Classical conditioning and Pavlov’s research
- Operant conditioning, types of reinforcement & Skinner’s research

Social Learning Theory
- Imitation, identification, modelling, vicarious reinforcement, the role of mediational processes and Bandura’s research.

The Cognitive Approach:
- The study of internal mental processes and the role of schema,
- The use of theoretical and computer models to explain and make inferences about mental processes.
- The emergence of cognitive neuroscience.

The Biological Approach:
- Evolution and behaviour.
- The genetic basis of behaviour Genotype and phenotype,
- Biological structures and neurochemistry.

The Psychodynamic Approach:
- The role of the unconscious,
- The structure of personality, that is Id, Ego and Superego,
- Defence mechanisms including repression, denial and displacement,
- Psychosexual stages.

Humanistic Psychology:
- Free will,
- Self-actualisation and Maslow’s hierarchy of needs,
- The Self and congruence,
- The role of conditions of worth.
- The influence on counselling psychology.

Comparison of Approaches.
Origins of Psychology

What you need to know
- Wundt
- Introspection
- The emergence of Psychology as a Science.

<table>
<thead>
<tr>
<th>Key terms</th>
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<tbody>
<tr>
<td>Psychology</td>
<td>The scientific study of the human mind and behaviour</td>
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<tr>
<td>Science</td>
<td>A means of Acquiring knowledge through systematic and objective investigation.</td>
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<tr>
<td>Introspection</td>
<td>Introspection means “looking into” and refers to the process of observing and examining your own conscious thoughts or emotions.</td>
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<tr>
<td>Empiricism</td>
<td>All knowledge of reality is gained from sensory experience</td>
</tr>
<tr>
<td>Inference</td>
<td>Going beyond the immediate evidence to make assumptions about mental processes that cannot be directly observed.</td>
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Wilhelm Wundt (1832-1920)
- Wrote first textbook of psychology (Principles of Physiological Psychology, 1873-4)
- He opened the first Psychology laboratory in Leipzig, Germany, in 1879 and established psychology as a separate discipline in its own right.
- Used the scientific method to study the structure of sensation and perception
- Showed that introspection could be used to study mental states in replicable laboratory experiments

Introspection
Wundt was interested in conscious experience and he trained himself and others to describe their experiences through Introspection. Before Wundt, introspection had been used by philosophers for studying how new ideas are created.

Introspection refers to the systematic process of observing and examining your own conscious thoughts or emotions in response to a stimuli. An experience was analysed in terms of its component parts e.g. sensations, emotional reaction etc. Wundt strictly controlled the environments where introspection took place.

In Wundt’s lab, highly trained participants known as “observers” were presented with carefully controlled sensory events. These individuals were asked to describe their mental experiences of these events. Wundt believed that the observers needed to be in a state of high attention to the stimulus and in control of the situation. The observations were also replicated a numerous times.
Evaluation of Introspection

Highly controlled Procedure

Before Wundt, introspection had been used by philosophers for studying how new ideas are created. These philosophers did not set any limits on the tasks they studied or make any judgments about the relevance of thoughts. In contrast, Wundt strictly controlled the environments where introspection took place, controlled the stimuli and tasks that participants were asked to think about, limited the range of responses they might give and trained his participants so that they could give the most detailed observations possible.

Introspection does not adhere to the scientific method

It is easy to argue that Introspection is not a scientific or valid way of measuring behaviour as it is based on implicit thought and emotion which is potentially outside conscious awareness and therefore inaccessible through the methods used. Wundt also found participant observations were subject to bias as they relied on participants revealing their own private subjective experience. These also could not be replicated and were therefore seen as unreliable. These problems meant that Watson was able to argue that introspection should play no part in a scientific psychology and Behaviourism became the dominant approach in Psychology.

Introspection has had a useful contribution

Wundt’s work and Introspection has been influential in many Psychological domains and has not been entirely abandoned. Recent research has used methods of introspection as a way of making “happiness” and other emotions a measurable phenomenon. Wundt’s introduction of the scientific method to Psychology has paved the way for controlled empirical research used in the Behaviourist and Biological approaches and Wundt’s use of introspection inspired others to apply it to more complex mental processes, such as learning, language and emotion the study of mental processes e.g. by cognitive psychologists. Therefore the concept still has some useful application to Psychology today.
The Emergence of Psychology as a Science

Psychology is fundamentally based on a Philosophical view known as Empiricism. Empiricists believe that knowledge is derived from sensory experience. This “scientific approach” to Psychology is based on the assumptions:

1. Behaviour has a cause (determined)
2. Behaviour can be predicted
3. Behaviour can be tested in different conditions

Empirical methods of research are based on actual experience rather than on theory or belief. It involves gathering data in an objective way so that researchers’ preconceptions cannot influence the data. It also measures quantitative details so that patterns can be examined and inferences (assumptions made from observation) from the results are credible.

When Wundt first applied empirical and scientific methods to the study of human beings, Psychology began to emerge as a distinct entity.

The laboratory experiment

The laboratory experiment is the most important empirical method used in science. Laboratory experiments allow complete control of variables that might affect the results. Therefore, the researcher can be confident it’s only changes in the one variable they manipulate that cause the effect on what they measure. The control means that methods can be standardised and experiments replicated by other researchers to test they are reliable.
Evaluation of the Scientific Approach: Should Psychology be a science?

Determinism
Scientific methods rely on a belief of determinism and are therefore able to use scientific methods to test hypotheses and establish the causes of behaviour through the use of empirical and objective methods. Scientific knowledge can be corrected and scientific theory that no longer fits the facts can be refined or abandoned meaning knowledge is self-corrective. This means science can be progressive because Psychologists are always repeating each other’s experiments.

Examples of Approaches that adopt Determinism… (add to this pack at the end of the unit)

Examples of an approach that does not adopt determinism…

Objectivity reduces reality
By concentrating on objectivity and controls in observations, psychologists create contrived, artificial situations that tell us little about everyday life. This decreases the external (ecological) validity of research and therefore limits support for theory.

Examples of Approaches which use controlled lab experiments…. 

Examples of approaches that do not………

Much of the subject of Psychology is unobservable
A science has to be observable. Key areas of Psychology such as memory, perception, personality and emotion are unobservable therefore Psychology still requires inferences e.g. for cognitive processes. If the argument is that human behaviour is subject to laws and regularities then predictions become impossible and these methods are deemed inappropriate.

Examples of approaches that have concepts which are unobservable…..

Paradigm Shifts
A scientific approach has to have a scientific paradigm which is a specific idea or a belief system. Psychology has been criticised for being a science due to the subject lacking a common goal or perspective as there are five different approaches. Psychology has encountered several paradigm shifts from its origin with introspection Examples of clear paradigm shifts in Psychology.
The Learning Approaches

The Behaviourist approach
- Classical conditioning and Pavlov’s research,
- Operant conditioning, types of reinforcement and Skinner’s research

Social learning theory
- Imitation, identification, modelling and vicarious reinforcement,
- The role of mediational processes
- Bandura’s research

The Behaviourist Approach

Assumptions
- Human behaviour is learnt through experience
- Humans are born ‘tabula rasa’ (as a blank slate)
- Only observable behaviour can be studied scientifically
- It is valid to study animals as they share the same principles of learning

<table>
<thead>
<tr>
<th>Terms</th>
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<tbody>
<tr>
<td>Classical Conditioning</td>
<td>Learning by association when two stimuli are repeatedly paired together- an unconditioned stimulus (UCS) and a neutral stimulus (NS). The neural stimulus eventually produces the same response as the UCS now a CR</td>
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<tr>
<td>Stimulus</td>
<td>Anything in the environment that causes a response</td>
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<td>Response</td>
<td>Behaviour triggered by a stimulus in the environment</td>
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<tr>
<td>Operant Conditioning</td>
<td>Learning by Consequence, where behaviour is acquired and maintained by its consequences including positive reinforcement, negative reinforcement and punishment.</td>
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<tr>
<td>Reinforcement</td>
<td>A consequence of behaviour that increases the likelihood that a behaviour is repeated</td>
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<tr>
<td>Punishment</td>
<td>An unpleasant consequence that will result in the behaviour being less likely to be repeated</td>
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Video of Classical Conditioning
Classical conditioning is known as **stimulus-response psychology**.

Classical conditioning is learning by association when two stimuli are repeatedly paired together— an Unconditioned Stimulus (UCS) (a stimulus that naturally creates a response) and a Neutral Stimulus (NS). The Neutral Stimulus eventually becomes a Conditioned Stimulus as it produces the same response as the UCS now a Conditioned Response. Learning has now taken place.

### Ivan Pavlov

**Aim** To investigate stimulus-response associations in dogs

**Method**

Lab experiment

Pavlov paired the presentation of food, (which naturally produced a saliva response - reflex) with a number of different neutral stimuli (e.g. a bell) (UCS + NS = UCS). Pavlov repeated this pairing several times. Eventually, Pavlov presented the neutral stimulus in isolation of the UCS. He inserted a small test tube into the cheek of each dog to measure salivation.

**Results**

After a number of pairings, the dogs would salivate when they heard the bell ringing (without the presentation of food)

The dog had learned an association between the bell and the food and a new behaviour had been learnt.

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<tr>
<th>Food (UCS)</th>
<th>Bell (NS)</th>
<th>Salivation (UCR)</th>
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<tr>
<td>Food (UCS)</td>
<td>Bell (NS)</td>
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</table>

**Conclusions**

Behaviours could be learnt through making stimulus-response associations.
John Watson believed we are born as a blank slate “Tabula rasa.” John Watson proposed that the process of classical conditioning (based on Pavlov’s observations) was able to explain all aspects of human psychology.

"Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take any one at random and train him to become any type of specialist I might select - doctor, lawyer, artist, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations and the race of his ancestors" (Watson, 1924, p. 104).

**Watson & Rayner (1920)**

**Aim** To demonstrate that phobias could be learnt through Classical Conditioning.

**Method**

Lab experiment

Watson claimed he conditioned a fear of white rats in a 9 month old baby (Little Albert).

Albert showed no fear response to stimuli including, fire, a small monkey and a white rat. These were therefore neutral stimuli to Albert as they created no response. Albert did however demonstrate a fear response (startled and crying) when presented with a loud noise. This was then known as the unconditioned stimulus (noise) as it created an unconditioned response (natural response of fear)

The researchers hit a metal bar with a hammer to create a loud noise which startled Albert. They then presented this alongside a white rat and repeated this pairing.

**Results**

1. **Loud noise** UCS = **Fear response** UCR
2. **White rat** NS = No response
3. **Loud noise** UCS + **White rat** NS = **Fear response** UCR
4. **White rat** CS = **Fear** CR

After a number of pairings, Albert then showed distress when presented with the white rat and other furry white objects in isolation of the noise. This suggests an association had taken place and a fear response learnt through Classical Conditioning.

**Conclusions**

Phobias are learnt through classical conditioning and making stimulus-response associations.
Evaluation of Classical Conditioning

Experimental methods

A Strength of Pavlov’s research evidence for Classical Conditioning is his use of experimental methods which uses controlled conditions in an attempt to discover relationships between variables. This allowed Pavlov to accurately measure the effects on the stimulus on the dog’s behaviour and to establish a cause and effect relationship. This adds internal validity to the research and therefore validity to the Behaviourist approach whilst also allowing the research to be able to be replicated to increase its reliability.

Contribution of the development of Behavioural therapy

Classical Conditioning has useful applications as it has led to the developments for treatments of phobias such as systematic desensitisation. This therapy involves eliminating the learned anxious response (CR) that is associated with a feared object or situation (CS). This fear response (e.g. anxiety) is replaced with another pleasant response (relaxation). This approach can be found to be effective for a range of phobias for example a fear of flying (aerophobia).
Operant conditioning - Learning through Consequence

**Skinner**

Skinner’s Operant Conditioning suggests that organisms produce different behaviours and these behaviours produce consequences for that organism which may be desirable, rewarding and reinforcing the behaviour or undesirable, punishing the behaviour. This will then dictate whether or not the behaviour is repeated or not. Skinner studied the behaviour of rats and pigeons. Skinner developed a ‘skinner box’ to investigate Operant Conditioning in Rats.

<table>
<thead>
<tr>
<th><strong>Aim</strong></th>
<th>To investigate operant conditioning in rats and pigeons.</th>
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<tbody>
<tr>
<td><strong>Lab experiment</strong></td>
<td>Skinner placed animals in a 'Skinner Box'</td>
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<tr>
<td>1. (positive reinforcement) The box contained a lever on the side, and as the rat moved about the box, it would accidentally knock the lever. Immediately after a food pellet would drop into a container next to the lever. Skinner also tested to see what would happen if the food pellet stopped being released.</td>
<td></td>
</tr>
<tr>
<td>2. (negative reinforcement) The rat was placed in a box and then subjected to an unpleasant electric current which caused it some discomfort. As the rat moved about the box it would accidentally knock the lever. Immediately it did so the electric current would be switched off.</td>
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| **Results** | |
| 1. The rat continued pressing the lever as it received a positive consequence and the behaviour has been reinforced. When the food pellet stopped being released then the rat stopped the behaviour as the reinforcer had been removed (extinction). |
| 2. The rats quickly learned to go straight to the lever after a few times of being put in the box. The consequence of escaping the electric current ensured that they would repeat the action of pressing the lever. |

| **Conclusions** | Behaviours are more likely to be repeated if they are reinforced and less likely to be repeated if punished. Therefore, behaviour is learnt through the consequences of actions. |
Types of Reinforcement

**Reinforcement** - Something in the environment that **rewards** and then **reinforces** a particular behaviour and so makes the behaviour **more likely to reoccur**.

- **Positive Reinforcement** = Occurs when behaviour produces a **positive consequence** strengthening the likelihood that that behaviour will be repeated.
  
  Child sits nicely at dinner > child receives a sticker reward > Child sits nicely again

- **Negative Reinforcement** = Occurs when **something unpleasant is removed** or **stopped** to reinforce the desired behaviour.
  
  Car is sounding alarm > driver puts on seatbelt > car alarm stops > driver always wears seat belt

  Baby is crying > Carer comforts child > Baby stops > Carer learns to comfort child

**Types of Punishment**

This refers to the circumstance where behaviour is followed by an unpleasant/ experience. This would make the behaviour likely to **discontinue**.

- **Positive punishment** – involves the addition of an **unpleasant consequence**
  
  Example: A school detention for bad behaviour

- **Negative punishment** - Occurs when something pleasant is removed
  
  Example: Removing a student’s phone to stop them being distracted in class
Evaluation of Operant Conditioning

Use of animal research
Skinner's research has seen criticism because the experiments involved the study of non-human animals rather than humans which arguably limits our understanding of human behaviour. Criticism argues that extrapolation from animal research cannot occur as human beings are more complex in their cognitive abilities, emotions and motivation. By researching on animals and treating human beings as a product of conditioning means that evidence for the role of cognition is ignored suggesting the behaviourist approach is insufficient in fully explaining human behaviour.

Environmental Determinism
The Behaviourist approach is an example of environmental determinism as it suggests all behaviour has a cause from the environment. This is a type of hard determinism as it suggests behaviour and characteristics are caused by experience and therefore Skinner suggested that free will is an illusion. This determinist point of view is not favored by many as it suggests individuals do not have choice over their behaviour and this can have negative implications for example if offending behaviour is determined by an individual's environment this may form an excuse for the behaviour and have implications on the legal system.

Contribution to Behaviour Management- Token Economies
The Principles of Conditioning have been applied to a range of behaviour modification programs. For example Operant conditioning is the basis of token economy systems that have been found to effectively manage behaviour in institutions such as prisons. This works on the principles of operant conditioning where appropriate behaviour is rewarded with secondary reinforcers (tokens) which can be exchanged for privileges such as access to leisure facilities (primary reinforcers). This has been found to be effective at reducing undesirable behaviour and encouraging positive behaviour contributing to the rehabilitation of service users in institutions demonstrating the useful application of the Operant conditioning and the Behaviourist approach.
Social Learning Theory

According to Bandura, Behaviourism does not take account of the cognitive aspects of learning, even though humans are likely to have much more complex cognitive processes than animals.

Assumptions

- Behaviour is learned from the environment through the process of observational learning which involves modelling, imitation, identification and vicarious reinforcement.
- The consequences of others behaviour is observed and this guides future behaviours (vicarious reinforcement)
- Mediation (cognitive) processes occur between stimuli (the role model’s behaviour) and response (imitation) these include attention, retention (memory) and motivation.

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<td><strong>Imitation</strong></td>
<td>Copying the behaviour of others</td>
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<tr>
<td><strong>Role Model</strong></td>
<td>A person who is seen to possess similar characteristics to the observer and/or are admired for their achievement and have high status</td>
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<tr>
<td><strong>Identification</strong></td>
<td>When an observer associates themselves with a role model and wants to be like the role model</td>
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<tr>
<td><strong>Modelling</strong></td>
<td>The role model demonstrates (models) a specific behaviour that can be imitated by the observer. The Observer imitates (models) the behaviour of the role model</td>
</tr>
<tr>
<td><strong>Mediation</strong></td>
<td>These are cognitive processes that occur between a stimulus (role model’s behaviour) and a response (imitation). These include Attention, Retention, Motivation and Motor Reproduction</td>
</tr>
<tr>
<td><strong>Direct Reinforcement</strong></td>
<td>An individual’s behaviour is they are rewarded directly and therefore more likely to repeat the behaviour.</td>
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<tr>
<td><strong>Vicarious (indirect) Reinforcement</strong></td>
<td>Reinforcement that occurs through observing someone else being rewarded for their behaviour. If an individual observes a role model being rewarded for a behaviour then they are more likely to be motivated to imitate that behaviour</td>
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</table>
Mediational Processes

Social Learning theory is often known as the bridge between traditional learning theory and the cognitive approach as it outlines how mental factors are involved in learning. These mental processes mediate (intervene) in the learning process to determine whether a behaviour is imitated.

Attention

Learning can only take place if a model is attended to. More attention is paid to role models who have status and those that we can identify with e.g individuals of the same Gender.

Retention

Learning will only take place if the Behaviour we have observed is stored in memory.

Motor reproduction

This relates to the performance of the behaviour. The observer must be physically able to perform the behaviour for imitation to occur. For example a child may want to imitate the skills of a footballer but lack the necessary ability required to reproduce the behaviour.

Motivational processes

The consequences of behaviour can be direct or vicarious and would determine the observers will to perform the behaviour Positive reinforcement would encourage behaviour to be repeated. Punishment reduces the likelihood of imitation.
Bandura et al (1961)
The original Bobo Doll study

Aim: To find out if children would show more aggressive behaviour if exposed to an aggressive role model and less aggressive behaviour if exposed to a non-aggressive role model.

Method:
72 Children were split into three groups of 24 (12 boys, 12 girls)
Condition one (Aggressive)
Children observed an adult (role model) attack a five foot inflatable doll. The doll was kicked and punched and the attacker used aggressive statements such as “Punch him on the nose”. Bandura used males and females as role models.
Condition two (Non Aggressive)
Children observed an adult assembling a toy showing no aggression
Condition three (Control)
No adult model was observed
After this first stage each child was taken to a second room filled with toys and a bobo doll. The child was filmed playing with the toys for twenty minutes Bandura observed the children and recorded imitative aggression, partial imitation and non-imitative aggression.

Results: The children who had observed the aggressive model (condition one) displayed higher levels of aggressive behaviour to the doll than those in either of the other two conditions. Children were more likely to directly imitate same sex role models.

Conclusions: Bandura concluded that behaviour can be learned by observation and imitation. Individuals are more likely to imitate role models that they identify with e.g those of the same gender.

Bandura et al (1963) – Filmed role models
In one later variation (Bandura 1963 of the study children observed films instead of live observations of the role models. Bandura found no significant difference between the level of imitation of live role models or filmed role models. Bandura also found that imitation levels were the same for filmed models dressed as fantasy characters and

Bandura et al - Rewards & punishment
In a replication of the original study Bandura aimed to find out if children would be more likely to imitate a role model they see being rewarded (vicarious reinforcement) and less likely to imitate a role model they see being punished (vicarious punishment). He also wanted to see if the children would be more likely to imitate if they themselves were offered rewards. Bandura found that children were much less likely to imitate the role model when they observed the model being punished. Also the children were significantly more likely to imitate the behaviour when they themselves were directly reinforced and offered a reward. This research provides support for the role of vicarious and direct reinforcement in motivating the observer to imitate behaviour thus demonstrating the role of operant conditioning in social and observational learning.
Evaluation of Bandura’s Research

:) Experimental methods and Internal validity
Banduras research study was a laboratory experiment and therefore allowed for the precise control of variables such as the role model used and the time the children observed the behaviour. This allows for cause and effect to be established enhancing the validity of the findings and the validity of the Social learning theory. The experiment also used standardised procedures and instructions that allowed for it to be replicability. The research has been replicated with slight changes such as the use of a video instead of live role models and similar results were found enhancing its reliability.

:( Artificial settings and Ecological Validity
A limitation of using laboratory studies such as Banduras on imitation is that it has low ecological validity. The situation involved a child and an unfamiliar adult role model in an artificial setting with no interaction between adult and child. This is a limited social situation which is unlike real life modelling that takes place in a family or school context. Also the imitation was measured almost immediately making this a snap shot study which cannot tell us about the long term effects of the single exposure to the behaviour. This therefore challenges the ecologically validity of Bandura’s findings as support for social learning theory and the theory’s ability to explain learnt behaviour over time.
Evaluation of Social Learning Theory

SLT highlights the importance of Cognitive Factors
Social Learning theory provides a more comprehensive explanation of human learning by recognising the role of mediational processes. This is an advantage of the approach over the Behaviourist theories of Classical and Operant Conditioning as SLT recognises that Individuals are active in their processing and interpretation of an observed behaviour, and therefore make decisions about their behaviour. This means the theory is a more complete explanation of behaviour as it recognises the role of both Learning and Cognition. Furthermore it can better explain the occurrence of individual differences in behavioural response to stimuli. It also can be complemented for considering that individuals do exert some level of control and free will over their behaviour supporting a soft determinism argument over a hard deterministic view.

Underestimating the role of Nature
A criticism of Social learning theory is that it makes little reference to the impact of biological factors on human learning and behaviour and therefore underestimates its contribution. The Social learning theory supports the role of nurture as it suggests the origin of behaviour is our social environment. This underestimates the role of nature (biology) which suggests behaviour is innately determined. This may be a limitation of the SLT’s ability to fully explain behaviour. For example the Bobo doll experiments demonstrated that boys were more aggressive than girls in all of the conditions regardless of situation or the sex of their role model. Critics argue that these differences could be best explained through biological factors such as hormones e.g. the role of higher levels of testosterone in boys and its found link to aggression. This creates doubt over the Social learning theory’s ability to fully explain all human behaviour.

Social Learning theory can explain cultural differences in behaviour
Social learning principles can account for how children learn from social agents such as parents, peers and the media. It therefore has the advantage of being able to explain cultural differences in human behaviour as it can explain how cultural norms form and are transmitted through societies. For example the Social learning theory can explain cross cultural differences in Gender roles and can also explain findings showing Cultural Variation in Attachment types. The Social learning theory is therefore supported by cultural difference enhancing its validity and it is useful in its understanding of why cultural differences occur.

Social Learning theory has explanatory power and has had positive implications
The principles of Social Learning theory have been usefully applied to enhance our understanding of the impact of observation and imitation on human behaviour. For example the theory can explain the development of gender typical behaviour through the observation of same sex role models in everyday life and the media. This has theory has been able to explain the development of sex role stereotypes which has contributed to sexism and discrimination. The Social learning theory’s explanatory power has led to positive social change including legislation informing advertising agencies to avoid gender stereotypes in the media. The theory is therefore useful in providing explanations for behaviour and when applied can have positive implications on society.
The Cognitive Approach

Assumptions
- Behaviour can be largely explained through internal mental processes such as thought
- Conscious Thought can influence behaviour
- Mediation processes occur between stimulus and response.
- The information processing approach suggests the mind works in a way similar to a computer: inputting, storing and retrieving data.
- Mental processes can be scientifically studied using laboratory experiments

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<td>Inference</td>
<td>Going beyond the immediate evidence to make assumptions about mental processes that cannot be directly observed.</td>
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<tr>
<td>Schema</td>
<td>A schema is a mental structure which contains knowledge based on experience. A schema organises information and acts as a guide to behaviour.</td>
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<tr>
<td>Theoretical models</td>
<td>A simplified, objective and descriptive representations of how our minds might work.</td>
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<tr>
<td>Information processing (computer) model</td>
<td>The mind is compared to a computer suggesting there are similarities in the way information is processed and stored.</td>
</tr>
<tr>
<td>Cognitive Neuroscience</td>
<td>The Scientific study of brain structures, mechanisms and chemistry that are responsible for cognitive processes</td>
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Inference
Cognitive Psychology focuses on how people perceive, store, manipulate and interpret information and studies processes like perception, memory, thinking and problem solving. Cognitive Psychologists therefore believe many different kinds of processes that contribute to us and therefore it is necessary to look at these processes in order to truly understand behaviour. However these mental processes cannot be studied directly as they cannot be observed. Therefore they must be studied indirectly by inferring what goes on as a result of directly observed behaviour. This leads to Psychologists developing theories and models about mental processes for example the information processing model “The multistore model” was constructed through inference to describe short term memory.
Schemas (or schemata)

A schema is a mental structure which contains knowledge based on experience. A schema organises information and acts as a guide to behaviour. Schemas affect what we notice, how we interpret things and how we make decisions and act. These schemas are learnt from a young age through experience. Schemas save time because they help you to make shortcuts when you organise and interpret new or large amounts of information rapidly. Schemas therefore also prevent us from becoming overwhelmed by environmental stimuli. Once a schema is learnt, individuals tend to pay more attention (selective attention/attentional bias) to information that is relevant or agrees with their schema and ignore or distort information that may challenge their pre-existing schema.

Gender Schema theory

The concept of Schema has been used in Psychology to explain Gender Stereotypes. Martin and Halverson suggest that there are two types of sex-related schema: the “in-group out-group” schema and the “own-sex” schema. So a girl might begin by identifying toys which are for the in-group (a doll for a girl) or out-group (a train for a boy) and then move on to the “own-sex” schema by thinking: ‘A doll is for a girl. I am a girl. A doll is for me’.

Research support for Gender Schema

The concept of Gender schemas is supported by research which shows that children will remember Gender Consistent information better than information which challenges their gender. Martin and Halverson found that when children were asked to recall pictures of people, children under six recalled more of the gender-consistent ones (such as a male fire-fighter) than the gender-inconsistent ones (e.g. a male nurse). The research therefore supports the important role of attention and retention in informing Schema and the role of schema in the development of children’s gender identity.

Understanding Schemas can be useful

Understanding the role of Schemas is useful in explaining symptoms of psychological illness. Negative schemas of the self, future and the world can be demonstrated in individuals suffering from depression and could explain the low mood experienced by sufferers of this condition also. These can then be challenged in methods used in Cognitive Behaviour therapy to help the service user develop more positive schemas to help treat negative or distorted thinking.

Information that does not fit a schema could be ignored or distorted. We form schemas based on our experiences in life. Once they are formed, however, schemas have a tendency to remain unchanged — even in the face of contradictory information. This is because Schemas lead to attentional bias as individuals will only attend to information that fits into their schema.

The cognitive approach is therefore useful in its ability to explain the role and implications of attentional bias and the role of schemas on behaviour.
Theoretical models

Scientific models aim to provide simplified, objective representations and descriptions of how our mental processes might work.

Theoretical models are descriptive versions of how some aspect of the human mind and behaviour works, which may be represented visually. One important theoretical model is the information processing approach which suggests information flows through the cognitive system in a sequence of stages including input, storage and retrieval. The Multistore model is an example of this. Further examples of theoretical models include Ellis ABC model and Becks Cognitive triad which have both been used to explain the role of cognition in the onset of mood disorders such as depression.

Computer models

Computer models compare the mind to a computer and are software simulations of internal mental processes that are created in collaboration with computer scientists. These models use concepts of a central processing unit, the concept of coding and the use of stores to link the human mind to the processing of a computer. Such models have proved useful in the development of robotics “thinking machines” or artificial intelligence which attempts to make computers simulate cognitive performance.

Machine Reductionism

"The brain seems to be a computer with a radically different style. For example, the brain changes as it learns, it appears to store and process information in the same places...Most obviously, the brain is a parallel machine, in which many interactions occur at the same time in many different channels." This contrasts with most computer functions which involves serial processing and relatively few interactions. (Churchland, 1989)

Although there are similarities between the human mind and the operations of a computer, the computer analogy has been criticised by many due to its machine reductionism. Reducing the complexity of the human mind and behaviour to the processing and function of a machine fails to consider the complexity of the human brain and its physiology, including its ability to adapt and change due to experience (neural plasticity) which computer processors are not able to do. Furthermore it fails to consider the influence of emotion and motivation on human cognition which may affect the way in which we process information. One example of this is the wealth of evidence supporting the effect of anxiety on human memory. This limits the ability for computer models to fully explain the complexity of human behaviour challenging the usefulness of this assumption of the Cognitive approach.
The Emergence of Cognitive Neuroscience

Cognitive Neuroscience is the **scientific study** of the influence of **brain structure, function** and **chemistry** on **Cognitive mental processes** such as **thinking**.

It uses **scanning techniques** to locate the **Biological basis to cognitive processes** in the brain. The use of techniques such as Positron emission tomography (PET) and functional magnetic resonance imaging (fMRI) help psychologists to understand **how the brain** supports different cognitive activity. In the last twenty years, the rapid **advances in technology** and in ways of studying the brain have meant that neuroscientists are now able to study the living brain and localise areas of the brain associated with specific Cognition. For example **Paul Broca** identified how damage to a specific area of the brain (frontal lobe) permanently impaired **speech production**.

Research supporting the **Cognitive Neuroscience approach** demonstrates how **memory** has a **biological basis in the brain**. **Sir Colin Blakemore (1988)** carried out a case study on **Clive Wearing**. Blakemore discovered that damage to Clive Wearing’s brain had been to the **hippocampus**, which seems to be the part of the brain where the Short Term Memory (STM) rehearses information to encode it into LTM which can explain his memory loss. **Tulving et al** were able to show how different **types of long term memory** are **localised** in different areas of the brain. Tulving found that when individuals recalled historical facts blood flow increased in the temporal lobe, whereas when they thought about childhood experiences blood flow increased in the hippocampus. The activation of the different areas of the brain when recalling facts or episodes suggests a biological basis to the different types of memory in LTM.

Scanning techniques have also proved useful in establishing a **neurological basis of some symptoms of psychological disorders** such as **OCD and psychosis**.

Research has found sufferers of OCD have **elevated levels of activity in the orbitofrontal cortex and the caudate nucleus** (located in the basal ganglia). PET scans of patients with OCD have shown higher levels of activity in the OFC. The orbitofrontal cortex is part of a brain circuit; one of the functions of this circuit appears to be turning sensory information into thoughts. This elevated activity can explain why those with OCD experience the cognitive symptoms of **irrational and obsessive thought**. More recently computer generated models have been designed to “read” the brain leading to the development of **Brain imaging and scanning** that can display the processing of patients with psychological disorders and live images of the brain can now be used in **talking therapy treatment** for such disorders.

**Allen et al. (2007)** scanned the brains of patients experiencing auditory hallucinations and compared them to a control group whilst they identified pre-recorded speech as theirs or others. **Lower activation levels** in the **superior temporal gyrus** and **anterior cingulate gyrus** were found in the hallucination group, who also made **more errors** than the control group. We can thus say that reduced activity in these two areas of the brain may contribute to the experience of **auditory hallucination**.
Evaluation of the Cognitive Approach

The Cognitive Approach is Scientific.
Cognitive Psychologists emphasise scientific methods which is a particular strength of the approach as the use of experimental methods which use controlled conditions in an attempt to discover relationships between variables. The emergence of Cognitive Neuroscience has meant that Psychologists are now able to use technology to dramatically enhance the scientific methods used in researching cognition such as the use of PET scanning techniques to evidence the biological basis of mental processes. These are able to improve the objectivity of the research support for the role of cognition and reduce the reliance on making inferences about how the mind works. Therefore conclusions drawn on mental processing have more scientific credibility which is strength of the Cognitive Approach.

Limitations in Inference
The Cognitive approach occasionally suffers from being too abstract and theoretical in nature as it relies on making inferences about the mind from observed behaviour. As Cognition cannot be directly observed, researchers must infer what is happening from the evidence available. This therefore involves a level of subjective interpretation by the researcher which places the research at risk of bias. This questions the internal validity of such research and support for the Cognitive approach.

Cognitive Research Lacks External Validity
Experimental research is often used which lacks ecological validity as they involve tasks which do not mimic real life experienced. For example artificial and controlled word list memory tests tell us little about what we can or cannot recall naturally e.g. why some childhood memories are forgotten. One example of this is Loftus’ experiment on misleading questions and Eye Witness Testimony which was criticised due to its artificial task involving participants watching a video of a car crash which is an experience free from the emotion and distraction experienced when witnessing such an event in real life. As a result it is hard to generalise findings of such tests to real-life situations therefore the research and approach can be criticised for lacking ecological validity and failing to explain behaviour that occurs in the real world.

Useful contribution to the development of Psychological treatments
The Cognitive Approach to Psychopathology has helped to explain the link between abnormal behaviour and faulty thinking e.g. the role of negative thinking in the development of mood disorders such as depression. This has contributed to the development of treatments such as Cognitive Behaviour therapy which have been found to be effective at reducing symptoms long term. This demonstrates the usefulness of the Cognitive Approach and its contribution to the development of Psychological treatments.
The Biological approach

Assumptions

- Behaviour can be largely explained in terms of Biology (e.g. genes/hormones/ neurochemistry).
- Human genes have evolved over millions of years to adapt behaviour to the environment. Therefore, most behaviour will have an adaptive / evolutionary purpose.
- Behaviour and processes can be explained by the structure and function of the human nervous system, particularly the brain.
- Psychology should be seen as a science, to be studied in a scientific manner (usually in a laboratory).

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolution</td>
<td>Refers to the change over successive generations of the genetic make-up of a particular population</td>
</tr>
<tr>
<td>Natural Selection</td>
<td>The Process by which inherited characteristics that enhance an individual’s reproductive success are passed on to the next generation and so become more widespread</td>
</tr>
<tr>
<td>Heredity</td>
<td>The passing of characteristics from one generation to the next through genes.</td>
</tr>
<tr>
<td>Heritability</td>
<td>The amount of variability in a trait within a population that can be attributed to genes</td>
</tr>
<tr>
<td>Gene</td>
<td>A part of the chromosome of an organism that carries information in the form of DNA</td>
</tr>
<tr>
<td>Genotype</td>
<td>The genetic make-up of an individual. The genotype is a collection of inherited genetic material that is passed from generation to generation</td>
</tr>
<tr>
<td>Phenotype</td>
<td>The observable characteristics of an individual. This is a consequence of the interaction of a genotype with the environment</td>
</tr>
<tr>
<td>The Central Nervous System (CNS)</td>
<td>A connected system that processes, interprets and stores information and issues orders to muscles and glands. The CNS includes the brain and the spinal cord. The spinal cord bridges the gap between the brain and peripheral nerves.</td>
</tr>
<tr>
<td>The Peripheral Nervous System (PNS)</td>
<td>A connected system that transmits information to and from the CNS comprising of the somatic and autonomic nervous system</td>
</tr>
<tr>
<td>Neurochemistry</td>
<td>The Study of chemical and neural processes associated with the nervous system</td>
</tr>
<tr>
<td>Neuron</td>
<td>Nerve Cell</td>
</tr>
<tr>
<td>Neurotransmitter</td>
<td>A chemical that communicates information from one neuron to another</td>
</tr>
</tbody>
</table>
Evolution and Behaviour

The Evolution of animals and plants is a fact. Charles Darwin argued that, over time organisms become adapted to their environment through Biological Evolution.

The mechanism behind Biological Evolution is natural selection. Individuals must compete for access to resources those who survive go on to have more reproductive success than those who do not.

These behaviours will be passed on to offspring and will become more widespread in the population; through the process of natural selection, successive generations will develop behaviours that are even more likely to lead to survival.

Examples of the Evolutionary approach to Psychology

Attachment - Bowlby
Bowlby’s evolutionary approach to attachment suggests that attachment is an innate system that is biologically programmed into babies from birth in order to help them survive. One aspect of the theory, the critical period argues that for our distant ancestors it would have been vital for infants to become attached as soon as possible and evidence of this is shown in young monkeys who cling to their mothers fur. Bowlby argues that human infants seek proximity and develop one strong emotional bond with the mother early on during a critical period to meet the biological needs of the infant and aid the infant’s survival.

Psychopathology- Biological Preparedness of Phobias
Biological preparedness can explain the fact that many phobias often do not develop as a result of a traumatic incident and cannot be explained through learning theories. Biological Preparedness and the theory of Evolution can also explain why people are more likely to develop phobias of “ancient fears” which would have been a threat to our ancestors such as spiders and snakes over modern threats such as toasters or cars. Martin Seligman argued that animals including humans are genetically programmed to rapidly learn an association between potentially life-threatening stimuli and fear. This idea of
Genetics and Behaviour

Heredity is the passing of characteristics from one generation to the next through genes. Genes carry the instructions for a particular characteristic (such as temperament or intelligence), but how this characteristic develop partly depends on the interaction of the gene with other genes and how they interact with the environment (nature vs nurture debate).

Genotype and Phenotype

- The Genotype of a person refers to their genetic make-up inherited from parents. For instance, a person may have genes that code for being tall.
- The Phenotype of that person is the physical appearance and observable characteristics and behaviour that depend on genes and environment. For example, height may be reduced by a child’s diet or by illness.

The Genotype can only be known from studying a person’s genetic code since anything we observe is a Phenotype.

The Genetic basis of behaviour

Studies have often used twin and family studies to investigate heritability; how likely it is that a characteristic can be explained genetically. The logical assumption is that individuals who are more closely related genetically are likely to share the same or similar characteristics.

The most genetically similar people are identical twins (monozygotic – meaning one egg), who are therefore assumed to be 100% alike. Dizygotic- two eggs (non identical) twins, siblings and parent-child share 50% of their genes. Therefore it would be expected that something like intelligence, if genetic, would lead to a perfect (+1) correlation between identical twins and a strong positive (+0.5) correlation for those sharing 50% of genes.

Bouchard et al conducted a meta-analysis of studies exploring the role of genetics in intelligence and found the following concordance rates. A perfect concordance would be 100%.

<table>
<thead>
<tr>
<th>Concordance Type</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Same person tested twice</td>
<td>87%</td>
</tr>
<tr>
<td>Identical twins reared together</td>
<td>86%</td>
</tr>
<tr>
<td>Identical twins reared apart</td>
<td>72%</td>
</tr>
<tr>
<td>Non-identical twins reared together</td>
<td>60%</td>
</tr>
<tr>
<td>Biological siblings reared together</td>
<td>47%</td>
</tr>
<tr>
<td>Parent and child living together</td>
<td>42%</td>
</tr>
<tr>
<td>Cousins</td>
<td>15%</td>
</tr>
<tr>
<td>Adopted children living together</td>
<td>0%</td>
</tr>
<tr>
<td>Unrelated people living apart</td>
<td>0%</td>
</tr>
</tbody>
</table>

The findings here for example suggest there is a genetic component particularly as the identical twins had a similar concordance to when the same person was measured twice, and a much greater concordance than non-identical twins. However, the fact identical twins do not yield 100% concordance rates suggests that genes are not the only influence on measured intelligence.
Biological structures

The Nervous System

- The Nervous system is comprised of several connected systems
  - The Central nervous system (CNS) comprises of the Brain and Spinal Chord
  - The Peripheral Nervous System (PNS) comprises of the somatic and autonomic nervous systems
- The Nervous system carries messages from one part of the body to another, using nerve cells called neurons.
- **Neurotransmitters** send electrical signals between nerve cells throughout the body which control many aspects of behaviour such as eating, sleep and sexual arousal.
- Those neurotransmitters that trigger nerve impulses and stimulate the brain into action are called **excitatory** neurotransmitters. Those that inhibit nerve impulses in order to calm the brain and balance mood are called **inhibitory** neurotransmitters. For example serotonin is an inhibitory transmitter which stabilises mood.

The Brain

The brain consists of two **hemispheres** and four parts or lobes: frontal, parietal, occipital and temporal. At the back of the brain below the occipital lobe is the **cerebellum**. The hemispheres are connected by nerve fibres called the **corpus callosum**.

**Hemispheric lateralisation and split brain** research by Sperry evidences the idea that the two hemispheres have **specialised functions**. Research shows there are important **localised structures** within the brain that have **functions** such as the hypothalamus and hippocampus. The Case study of Clive Wearing who had problems with his long term memory demonstrated how a virus damaged his hippocampus, which is known to be involved in storing memories. **Neural plasticity** evidences how the brain can change and adapt as a result of experience and recover functions from a damaged area of the brain.

The Endocrine system

The Endocrine system works alongside the nervous system to control vital **functions** in the body. Various **glands** produce **hormones**. Hormones are chemicals secreted into the bloodstream by specialised endocrine cells. **Hormones** such as adrenaline and cortisol are released when people are under stress. Androgens and oestrogens are sex hormones that are associated with behaviours such as aggression or empathising respectively. In general, androgens levels are much higher in males than females whereas oestrogen levels are much higher in females and the Biological approach argues that these are important in Gender development.
Evaluation of the Biological Approach

Scientific methods

The Biological Approach uses the **Scientific method** particularly the use of the **Experiment method**, As the experiments take place in highly **controlled environments** other researchers are able to **replicate studies** under the same conditions thus improving the **reliability** of the original findings. Furthermore the increase of **sophisticated imaging** and **recording techniques** has increased the precision and **objectivity** of experimental research in this approach. This enhances the scientific credibility of the Biological approach and the research which provides support for its assumptions.

Issues with Causation

However much of the findings from experimental research in the Biological approach are **correlational**. For example research findings may demonstrate a **relationship** between levels of activity in the brain or hormones in blood and a specific behaviour or emotion but this does not evidence a **causal relationship**. For example if levels the stress hormone cortisol is positively correlated with sleep deprivation one cannot conclude that stress is the cause of the sleep deprivation. It may be that there is a two way or bi-directional relationship, there could also be a third variable which is at the root cause of this relationship e.g substance misuse or late night studying which could be the **underlying cause** for both stress and sleep poverty. Furthermore much of the support for the role of neurotransmitters as an explanation for the cause of mental illness comes from studies that show a particular drug which acts on this neurotransmitter reduces symptoms thus **assuming a neurochemical cause**. This is like assuming that the cause of a headache is a lack of paracetamol. Observing a **relationship** between two factors does not mean that one is the cause this is a **limitation** of the biological approach in its assumption of a biological basis to human behaviour based on research where only an association can be concluded.

Biological Reductionism

Biological Reductionism is the belief that **complex** human behaviour can be explained by **breaking it down** into its smallest **component parts**, such as the action of genes, neurochemicals and hormones. The Reductionist approach is useful as it enables **scientific investigation** of **isolated variables**. Others argue that biological reductionism is too **simplistic** and we can never fully understand the complexity of human behaviour without taking into account all potential influences. For example research into neurochemical imbalances suggests these are the **main cause** of psychological disorders however this **reduces** the disorder to **one single cause** ignoring cognitive, cultural and emotional factors which are known to influence abnormal behaviour.
We cannot separate Nature from Nurture

The Biological Approach has difficulty in investigating the true influence of nature on behaviour. Higher concordance rates for identical twins, non-identical twins and family members compared to those with little to no genetic similarity are interpreted as support for a genetic cause of behaviour. However individuals who are closely related are also exposed to very similar environmental conditions furthermore identical twins are often treated by others more similarly than non-identical twins. Therefore difference in concordance rates may be influenced by environmental factors. It is therefore to isolate and truly measure the influence of nature (genetics) and nurture (environment). This therefore challenges the validity of the research support for the role of genetics from the Biological approach.

Useful Application

The Biological Approach can be complimented for the usefulness of its research support for the role of biological factors in our behaviour including the role of biological mechanisms in psychological illness. Theory and research from this approach has had a significant contribution to treatment for example research into the neurochemical imbalance in depression and anxiety has led to the development of the drug treatments called SSRIs which have been found to be effective at reducing symptoms enabling individuals to access further treatment such as talking therapies or engage more fully with everyday life. Furthermore, through understanding the role of dopamine in symptoms psychosis has led to the development of antipsychotics which have also been found to reduce the severity of positive symptoms such as hallucinations and delusions. This demonstrates the useful contribution research from the Biological approach in Psychology has and continues to make to our understanding of psychopathology and the development and use of drug therapies to treat symptoms of psychological illness.
The Psychodynamic Approach

Assumptions

- Freud suggested our behaviour and feelings are powerfully affected by unconscious motives.
- Our behaviour and feelings as adults (including psychological problems) are rooted in our childhood experiences.
- Personality is composed of three parts, the ID, Ego and Superego which are in constant conflict with one another.
- Personality develops in stages shaped as innate drives are modified by different conflicts at different times in childhood during psychosexual development.
- Psychic determinism: all behaviour has a cause/reason.

Key Terms

<table>
<thead>
<tr>
<th>Definitions</th>
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<tbody>
<tr>
<td>Defence Mechanisms</td>
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<tr>
<td>Psychoanalysis</td>
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<tr>
<td>Unconscious</td>
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<tr>
<td>The Tripartite personality</td>
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<tr>
<td>Psychosexual stages</td>
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</tbody>
</table>

The Role of the Unconscious

Sigmund Freud believed in the existence of a part of the mind that was inaccessible to conscious thought. He referred to this as the unconscious mind. Freud believed most of our everyday actions and behaviours are not controlled consciously but are the product of the unconscious mind.

Freud believed the mind prevents traumatic memories from the unconscious from reaching conscious awareness which might cause anxiety and therefore the mind uses defence mechanism to prevent this.
Defence Mechanisms

Repression
This refers to the **unconscious blocking** of unacceptable thoughts and impulses. These repressed **thoughts** and **feelings** still influence behaviour without the individual being aware. For example a child who is abused by a parent may have no recollection of these events but has trouble forming relationships.

Denial
Denial is the **refusal to accept reality** so as to avoid having to deal with any painful feelings that might be associated with that event. The person acts as if the traumatic event had not happened something that those around them find to be quite bizarre. For example, an alcoholic will often deny they have a drinking problem even after being arrested several times for being drunk and disorderly.

Displacement
This involves the **redirection of thoughts or feelings** in situations where the person feels unable to express themselves in the presence of the person they should be directed towards. Instead they may take this our on another individual or object, this gives their feelings a route for expression even though they are misapplied.

The Structure of personality (Freud’s Tripartite personality theory)
Freud divided the personality into **three** structures each of which demands gratification but is frequently in conflict with other parts.

The Id-
The Id operates solely in the unconscious Freud describes this as an individual’s **animal instincts**. It operates according to the **pleasure principle** and demands immediate gratification.

The Ego-
The Ego is the **mediator** between the ID and the Super Ego. The Ego forms compromise between the instinctive Id and moralistic demands of the Super Ego and operates on the **reality principle**

The Superego –
The Superego is the **morality principle** which is formed around the age of 5. It is the individual’s internalised state of right and wrong. It is said to be formed by parental upbringing and punishes the ego for wrongdoing through the feeling of guilt.
**Freud’s Psycho Sexual Stages**

Freud stressed that the first five years of life are crucial to the formation of adult personality. Personality developed through a sequence of five stages. These are referred to as Psycho-sexual stages to emphasise that the most important driving force is **sexual energy (libido)**. During the stages the id must be controlled in order to satisfy social demands; this sets up a conflict between frustrated wishes and social norms. The ego and superego develop in order to exercise this control and direct the need for gratification into socially acceptable channels. **Gratification centres** in different areas of the body at different stages of growth, making the conflict at each stage psychosexual.

Frustration (due to the individuals needs not being met), Overindulgence, or any combination of the two may lead to what psychoanalysts call **fixation** at a particular stage. Freud claimed that, during development, becoming fixated on one of these stages would **restrict full development** result in displaying specific **personality** symptoms. For example an 'anally retentive' personality is one such symptom – he proposed that when conflict occurs over potty training during the anal stage a person could become fixated on cleanliness and orderliness to an extreme.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Age</th>
<th>Focus of Libido/Activities</th>
<th>Development</th>
<th>Consequence of Fixation Adult Personality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>0-1</td>
<td>Mouth, tongue Biting and chewing</td>
<td>Weaning off breast feeding</td>
<td>Smoking, overeating</td>
</tr>
<tr>
<td>Anal</td>
<td>1-3</td>
<td>Anus Bowel and Bladder control</td>
<td>Toilet training Ego develops</td>
<td>Orderliness/messiness</td>
</tr>
<tr>
<td>Phallic</td>
<td>3-6</td>
<td>Genitals Masturbation</td>
<td>Oedipus and Electra Complex Superego is formed</td>
<td>Deviancy, Sexual Dysfunction</td>
</tr>
<tr>
<td>Latency</td>
<td>6-10</td>
<td>Repression of sexual urges</td>
<td>Cognitive and Social Development Superego develops further</td>
<td>None</td>
</tr>
<tr>
<td>Genital</td>
<td>12+</td>
<td>Genitals</td>
<td>Sexual maturity Development of intimate and sexual relationships</td>
<td>If all stages completed then sexual maturity and positive mental health is achieved</td>
</tr>
</tbody>
</table>
The Oedipus complex

Freud proposed that during the **phallic stage** of personality development, **boys** experience the **Oedipus complex**. At around age 3 or 4, the young boy begins to desire his mother as she has been his main source of **pleasure** and he therefore wants her complete **attention**. This means he sees his **father** as a **rival**, experiences jealousy of his mother’s desire for the father and wishes he was dead. This then creates **anxiety** and the **repressed** fear that his father will **castrate him**. This fear and anxiety alongside jealousy creates conflict and the only way the child can cope with and resolve this is through the development of a defense mechanism known as “identification with the aggressor.” The boy looks for ways to be similar to the father and identifies his father’s attitudes and behaviour forming his **gender identity**. It is at this point that also the superego is formed as the child learns their **morality** from their **identification** with the father and his values and attitudes.

In the development of Freud’s theory, Carl Jung proposed the **Electra complex**. During the **phallic stage**, a little girl also starts off by desiring her mother but then envies her father who has her mother’s attention. She begins to thus **admire** and **desire** her father and realises that she does not have a penis so cannot be like him. This leads to the development of **penis envy** and the desire to be a boy. Freud claimed that little girls **blame** their mothers for their ‘**castrated state**.’ This is resolved by the girl repressing her desire for her father and substituting the wish for a penis with the wish for a baby, which creates great tension. However, these feelings are repressed in order to remove the tension, and instead a little girl **identifies** with her **mother** and **internalises** her mother’s **gender identity**, so that it becomes her own. She will also develop her superego through this identification and **internalisation** of her mother’s values.
The Case study of Little Hans

Freud supported his concept of the Oedipus complex with his case study of Little Hans. Freud did not directly work with Hans but through correspondence with Han’s father.

At the age of three Hans developed an active interest in his ‘widdler’ (penis). Throughout this time this was the main theme of Hans’ fantasies and dreams. When Hans was five years old he developed a phobia of horses. He was afraid to go out of the house because of his phobia. Hans’ father wrote to Freud “He is afraid a horse will bite him in the street and this fear seems somehow connected with him being frightened by a large penis”

Hans said that he was especially afraid of white horses with black around the mouth who were wearing blinkers. Hans’ father interpreted this as a reference to his moustache and spectacles. Freud believed that the horse was a symbol for his father, and the black bits were a moustache. The father and child had often played at ‘horses’ together. During the game the father would take the role of horse, the son that of the rider. The father also recorded an exchange with Hans where the boy said ‘Daddy don’t trot away from me!

Towards the end of Hans’ phobia of horses he experienced several fantasies. During one of which Hans imagined that a plumber had come and first removed his bottom and widdler and then gave him another one of each, but larger. Freud interpreted this as Hans’ desire now to be like his father and the beginning of his “identification with the aggressor”

Hans did recover from his phobia after his father (at Freud’s suggestion) assured him that he had no intention of cutting off his penis.

Conclusion:

Freud interpreted that the horses in the phobia were symbolic of the father, and that Hans feared that the horse (father) would bite (castrate) him as punishment for the desires towards his mother (castration anxiety).

Freud suggested that Hans’ phobia was a form of displacement in which his fear of his father and the fear of castration was displaced onto horses during the Oedipus complex.
Evaluation of the Psychodynamic Approach

Untestable concepts
Critics argue that the Psychodynamic approach does not meet the scientific criterion of falsification as it cannot be empirically tested (and possibly disproved) which therefore would challenge the scientific status of Psychology. Many of Freud’s concepts are said to exist at an unconscious level making them impossible to empirically test. Philosophers such as Karl Popper argue that the approach should therefore be considered a pseudoscience rather than a real science. This arguably reduces the validity and usefulness of the theory and research from the approach.

Can explain the unexplainable
Although the assumptions of the Psychodynamic approach are controversial it has had an important influence on Psychology and has been used to explain a wide range of phenomena including personality, abnormal behaviour and moral development some of which cannot be explained by other approaches. The approach is also significant in highlighting the connection between early experiences in childhood such as early attachment type and its influence on later attachment and deviant behaviour.

Gender Bias
Freud’s Psychoanalytic approach has been criticised for displaying Gender Bias. The approach is centred on and dominated by males or the male viewpoint. The approach displays Alpha Bias as it exaggerates the difference between males and females. This is demonstrated in Freud’s original theory because he explains femininity as failed masculinity and the theory is based on the viewpoint that women are inferior to men. Many argue these viewpoints outdated and this is problematic for the approaches application and influence today.

Useful applications - Psychoanalysis
The Psychoanalytical approach and the Freud’s development demonstrates the potential of successful psychological rather than biological treatments for disorders such as depression and anxiety. The approach has led to successful treatments using methods of Psychoanalysis which are said to treat the root cause of such disorders as opposed to drug treatments which can be criticised for treating just symptoms showing only minimal and short term improvement in symptoms. Improvements in symptoms using Psychotherapy are often maintained in the years after treatment.
Humanistic Psychology

Assumptions
- Humans have **free will**; not all behaviour is determined.
- All individuals are **unique** and have an innate (inborn) drive to achieve their maximum **potential**.
- A proper understanding of human behaviour can only be achieved by **studying humans** - not animals.
- Psychology should study the individual case (**idiographic**) rather than the average performance of groups (**nomothetic**).

Humanism was developed by **Carl Rogers** and **Abraham Maslow** in the 1950s. It became known as the **third force** in psychology alongside behaviourist and psychodynamic approaches.

<table>
<thead>
<tr>
<th>Key Terms</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Will</td>
<td>The ability to act at one’s own discretion e.g. choose how to behave despite or in the absence of influence from internal or external forces</td>
</tr>
<tr>
<td>Hierarchy of Needs</td>
<td>A motivational theory proposed by Maslow, often displayed as a pyramid of needs. The most basic needs are at the bottom and must be met for the individual to progress to meeting higher needs at the top</td>
</tr>
<tr>
<td>Self-Actualisation</td>
<td>The desire to grow psychologically and fulfil ones full potential</td>
</tr>
<tr>
<td>Self</td>
<td>Our personal identity used synonymously with the terms “self-image” and “self-concept”</td>
</tr>
<tr>
<td>Congruence</td>
<td>Congruence is the match/consistency between the perceived self (how you see yourself) and the ideal self (the self you would like to be).</td>
</tr>
<tr>
<td>Unconditional</td>
<td>When the love and acceptance given by others is unconditional. The individual is accepted regardless of who they are or what they say or do. Conditional regard is when they are loved and accepted only if they meet certain conditions of worth</td>
</tr>
<tr>
<td>Positive regard</td>
<td></td>
</tr>
<tr>
<td>Conditions of Worth</td>
<td>These are conditions that significant others put upon the individual and they must achieve these if they are to be accepted or loved. When an individual receives conditional positive regard they develop conditions of worth.</td>
</tr>
</tbody>
</table>

**Free will**

Unlike most other approaches humanistic theories emphasise that people have **full conscious control** over their destiny. This is not to say that we are not subject to many other **internal and external forces** including biological and societal influences however humanistic psychologists believe humans are able to make significant personal **choices** about their **behaviour**
Maslow’s Hierarchy of needs and Self Actualisation

Maslow developed a theory of human motivation (1943). He suggested that humans have an intrinsic motivation to grow and develop and to eventually self-actualise, which occurs when all their needs are met. The Hierarchy of Needs is often shown as a pyramid. The most basic physiological needs such as food and shelter are represented at the bottom and these are the most difficult to ignore. The most advanced needs focusing on self-esteem such as respect and fulfilment are nearer the top. Each level must be fulfilled before a person can move up to a higher need. As one need is met, humans turn their attention to other ‘higher’ needs and in that way their future plans can change. Maslow argued that those who had all their needs met achieved self-actualisation. These individuals shared similar characteristics such as creativity, an accurate perception of the world, free of all inhibition and fear and an acceptance of all others.

Carl Rogers, the self and positive regard

‘Self’ means our conscious understanding of our identity, including who we are and what we mean to others. Carl Rogers thought that personal growth depended on holding a positive self-concept or self-regard. Rogers claimed that issues with self-esteem in adulthood can link to a lack of unconditional positive regard in childhood. How we feel about ourselves depends on being valued and respected by other people as we are (unconditional positive regard) rather than as the people they would like us to be. Conditional positive regard exists when people believe that they would be loved or valued more if they met certain conditions of worth of those close or important to them.

Congruence

Rogers argued that for personal growth to be achieved a state of Congruence must be achieved where an individual’s concept of self (the way they see themselves) must be broadly equivalent to, with their ideal self (the person they want to be). The closer these images are the greater the congruence and the higher the level of self-worth.

The influence of Humanistic Counselling – Client Based Therapy

The Humanist approach has led the positive Psychology movement which began in the 1970s and is of great influence to a variety of methods of counselling and therapy today. Person or client centred therapy was developed by Carl Rogers. This is non-directive approach where the therapist and regards themselves as a guide. The client-therapist relationship is of high importance. The therapist displays empathy and unconditional positive regard and the client is encouraged to discover their own barriers and solutions within a warm, supportive and non-judgemental environment. The emerging “third wave” CBT integrates humanistic ideas with methods of cognitive behavioural therapy and
research by Elliot (2002) has evidenced its effectiveness as the meta-analysis showed significant improvement in clients when compared with outcomes from other treatments.

**Evaluation of Humanistic Psychology**

**Untestable Concepts**
The humanistic approach uses concepts which can be considered as vague and difficult to measure scientifically e.g. the concept of self-actualisation. Psychologists would argue that without experimental evidence, evaluation of a theory or say therapies' effectiveness becomes difficult and therefore it is impossible to verify the validity of Humanistic Psychology. Some studies have shown personal growth as a result of having humanistic counselling but these do not objectively evidence that the therapy was the cause of these changes therefore the approach challenges a fundamental requirement of scientific Psychology.

**Humanistic Psychology is Holistic**
Many psychologists praise the Humanistic approach for its positive and holistic focus on behaviour. Humanists reject breaking up human behaviour into smaller components (reductionism). Other approaches such as behaviourism and Biological psychology are criticised as they reduce behaviour to basic processes over simplifying the complexity of human behaviour. Humanistic Psychology however advocates a Holistic view of human nature. It is the only approach that argues that subjective experience can only be understood by studying the whole person and thus attempts to consider all aspects of human behaviour inclusive of free will and human choice. This is deemed a more positive approach to psychology and its holistic nature arguable has validity as it considers all meaningful human behaviour within real life contexts.

**Cultural Bias**
The Humanistic approach has been criticised for being culturally biased. Many of the ideas that are central to humanistic Psychology, such as individual freedom, autonomy and personal growth are more readily associated with individualistic cultures in the Western World. Collectivist cultures emphasise the needs of the group and community over the individual. Nevis (1983) challenges Maslow hierarchy of needs as the research found that in China belongingness was deemed more fundamental than physiological needs. Therefore one would argue it is possible that the Humanistic approach is culturally biased and is a product of the cultural context in which it was developed challenging its validity and usefulness.

**Humanism can be applied to real life**
Humanistic Psychology has been criticised for having little real world application compared to other approaches however many argue that the approach has revolutionised counselling techniques. A number of therapies have developed from Humanism; one of these is person-centred or client-centred therapy, which is often known as counselling. The aim is for the client to resolve their problems with the support of a counsellor known as a guide. The emerging “third wave” CBT integrates humanistic ideas with methods of cognitive behavioural therapy and research by Elliot (2002) has evidenced its effectiveness as the meta-analysis showed significant improvement in clients when compared with outcomes from other treatments. Maslow’s hierarchy has also useful application and has been used to explain motivation in the workplace has
been linked to economic development and informs the practice of educational, Health and Social care professionals.
<table>
<thead>
<tr>
<th>Approach/Issue or Debate</th>
<th>Research (Is there research to support the assumptions? What methodology does it use?, is it scientific? Qual/Quan?)</th>
<th>Issues / debates (what does it fail to explain, relevant issues or debates?)</th>
<th>Application/Alternative (has it had a useful contribution? Has it had useful application? Is there a more appropriate alternative approach?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviourism</td>
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<tr>
<td>SLT</td>
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<tr>
<td>Cognitive</td>
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<tr>
<td>Biological</td>
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<tr>
<td>Psychodynamic</td>
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<tr>
<td>Humanistic</td>
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</tbody>
</table>
### Compare statement

<table>
<thead>
<tr>
<th>One similarity between the ___________________ approach and the ___________________ is</th>
<th>The ___________________ approach suggests....</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Approach 2) Likewise, the ___________________ also suggests ...</td>
<td></td>
</tr>
<tr>
<td>So What?</td>
<td></td>
</tr>
</tbody>
</table>

### Contrast statement

<table>
<thead>
<tr>
<th>One difference between the ___________________ approach and the ___________________ is ...</th>
<th>Example (Approach 1) The ___________________ approach suggests</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Approach 2) However, the ___________________ suggests........</td>
<td>So What?</td>
</tr>
</tbody>
</table>

### Sample comparative essay Questions

- Outline and evaluate the social learning theory approach. Refer to the behaviourist approach as part of evaluation (16 Marks)
- Outline and evaluate the Biological approach comparing the biological approach to the Cognitive approach (16 marks)
- Outline the psychodynamic approach in psychology. Discuss one or more differences between the psychodynamic approach and the humanistic approach. (16 marks)
- Outline assumptions of Humanistic Psychology. Discuss how humanistic Psychology is different from other approaches within Psychology (16 marks)
Sample Exam Questions

Origins of Psychology
- Explain Wundt’s contribution to the development of Psychology (4 Marks)
- Explain what is meant by the term introspection (4 marks)
- Explain the emergence of Psychology as a science (6 marks)
- Discuss the emergence of Psychology as a science (16 marks)

Behaviourist Approach
- Read the following descriptions of behaviour: How can the behaviour described in A and B be explained by learning theories? (6 marks)

A Sarah is terrified of lifts because she was trapped in one for 5 hours. She cannot go in a lift now
B Jerry watches as his brother James is given sweets for cleaning their pet hamster’s cage. The next day, Jerry’s mum finds Jerry cleaning out the hamster cage.

- Outline the main findings of the Skinner’s research (4 marks)
- Explain two types of reinforcement as suggested by the Behaviourist approach (4marks)
- Discuss the contribution of behaviourist psychologists such as Pavlov and Skinner to our understanding of human behaviour. (16 marks)

Social Learning Theory
- Explain what is meant by the term identification (2 marks)
- Explain the role of mediational processes in learning. (6marks)
- Outline the main findings of Bandura’s research into Social Learning (4 marks)
- Outline and evaluate the social learning theory approach. Refer to the behaviourist approach as part of evaluation (16 Marks)

Cognitive Approach
- Explain what is meant by internal mental processes, schema, theoretical and computer models and cognitive neuroscience (2 marks each)
- In a laboratory study of problem-solving, cognitive psychologists asked participants to solve problems presented in different colours of ink. They found that it took longer to solve problems presented in green ink, than it did to solve problems presented in other colours. They inferred that the mental processing of problems is made more difficult when a problem is presented in green ink. Explain what is meant by inference referring to the study(4 marks)
- Briefly explain how theoretical models are used in Cognitive Psychology to make inferences about mental processes (4 marks)
- Outline and evaluate the Cognitive Approach to Psychology (16 marks)

Biological Approach
- Explain what is meant by the terms Genotype and Phenotype (2 marks + 2 marks)
- Using an example explain how neurochemistry can influence behaviour (3marks)
- Outline the relationships between Evolution and Behaviour ( 6 marks)
- Outline two strengths and two limitations of the biological approach (6 marks)
- Outline and evaluate the Biological approach comparing the biological approach to the Cognitive approach ( 16 marks)
Psychodynamic Approach

- Outline two psychosexual stages (4 marks)
- Identify one Freudian defence mechanism and explain how it would affect behaviour (3 marks)
- Describe the structure of the personality according to the psychodynamic approach. [4 marks]
- From a psychodynamic perspective explain how your personality would respond to the following scenario
  “You are sat on a bus and someone has left a wallet full of £50 notes
- Outline the psychodynamic approach in psychology. Discuss one or more differences between the psychodynamic approach and the humanistic approach. (16 marks)

Humanistic Psychology

- Outline what is meant by ‘congruence’. Explain one way in which Dominic might achieve ‘congruence’. (4 marks)
- Outline Maslow’s Hierarchy of needs explaining the term self-actualisation (4 marks)
- Outline and briefly evaluate the influence of humanistic Psychology on counselling (5 marks)
- Outline the role of conditions of worth in the development of the self (3 marks)
- Outline assumptions of Humanistic Psychology. Discuss how humanistic Psychology is different from other approaches within Psychology (16 marks)

Essay planning

Outline and Evaluate the Cognitive Approach to Psychology (8marks)

Outline (3 marks)
Assumption 1 (including key terminology)

Assumption 2 (including key terminology)

Evaluate (5 marks)

Evaluation point 1. (Strength?)
P
E
S

Evaluation 2. (Limitation?)
P
E
S
Discuss the emergence of Psychology as a science (8 marks)

Outline and evaluate social learning theory. Refer to the behaviourist approach as part of evaluation (16 Marks)

Outline key features of the cognitive approach in psychology. Compare the cognitive approach with the Humanist approach. (Total 16 marks)
Application essay planning- examples

Reminder: A01: 6  A02: 4  AO3:6

Oliver’s parents were very intelligent so there is a good chance that he had inherited the potential to be as intelligent as him. However his parents died when he was very young and he has been brought up by his aunt who has five other children. Oliver has just started school however he appears to be behind his year group and requires extra support.

Discuss the Biological approach referring to Oliver’s case in your answer. (16 marks)

Veronica sometimes cannot control her urge to just eat everything that is in her treat drawer. When she does eat it all she feels extremely guilty and gets upset. To deal with this Veronica tries to make sure her treat drawer is not too full. When confronted about eating her treats Veronica will say that she did not eat them and someone else must of. Veronica also says that her parents should not have let her have a treat drawer in the first place

Outline and evaluate the assumptions of the Psychodynamic approach referring to the case of Veronica (16 marks)