WJEC Psychology A-level

The Behaviourist Approach

Notes

Part 1 — An Introduction to Behaviourism

A01 Introduction and Assumptions:

- The behaviourist approach is an approach to explaining behaviour which suggests that all behaviour is acquired and maintained through classical and operant conditioning. Hence, only behaviour which can be objectively measured and observed is studied, as demonstrated by Skinner's Box. This is due to the founders of behaviourism, Watson and Skinner, disagreeing with the subjective nature of Wundt's introspective methods, and the inability to formulate general laws and universal principles based on his observations.
- From a behaviourist perspective, the basic laws governing learning are the same across both non-humans and humans. Therefore, non-human animals can replace humans in behaviourist experimental research.

Classical Conditioning and Examples:

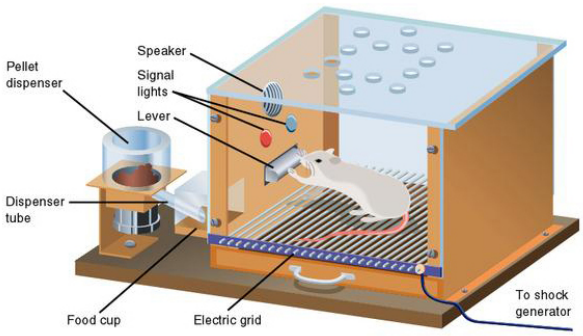
- Classical Conditioning = A type of learning which occurs through associations made between the unconditioned stimulus and the neutral stimulus. Before conditioning, the unconditioned stimulus (UCS) produces the unconditioned response (UCR). During conditioning, the neutral stimulus (NS) is repeatedly paired with the UCS, producing an UCR. After conditioning, the neutral stimulus becomes the conditioned stimulus, producing the conditioned response.
- Pavlov demonstrated that dogs could be conditioned to salivate upon hearing a bell, as follows:

1. Before conditioning, the unconditioned stimulus (food) produced an unconditioned response (salivation).
2. During conditioning, the unconditioned stimulus was repeatedly paired with a neutral stimulus (a bell), to produce the same unconditioned response of salivation.
3. An association was made between the unconditioned stimulus and the neutral stimulus.
4. After conditioning, the neutral stimulus became the conditioned stimulus, producing the conditioned response of salivation.

- Extinction occurs when the conditioned stimulus is no longer paired with the unconditioned stimulus, so the conditioned response becomes extinct/disappears.
- Spontaneous recovery occurs when the individual carries out the conditioned response some time after extinction has occurred.
- Generalisation occurs when slight changes in the conditioned stimulus, such as different pitches of the bell used in Pavlov's experiment, still produces the same conditioned response.

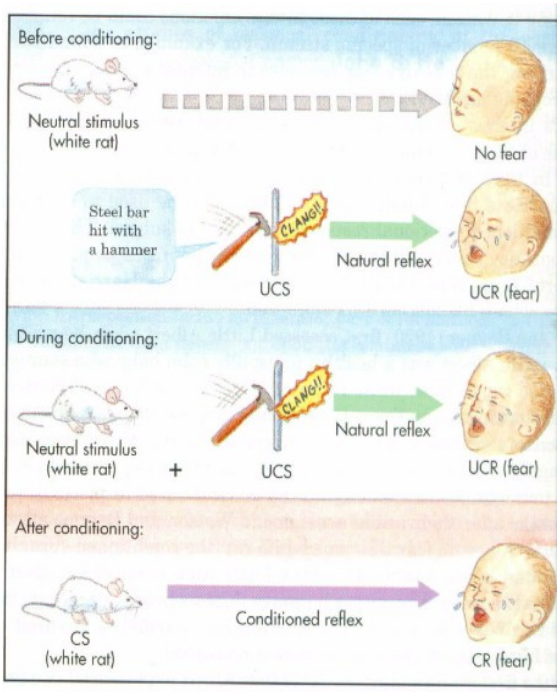
Operant Conditioning and Examples:

- Operant conditioning = A type of learning where behaviour is acquired and maintained based on its consequences. Reinforcement increases the likelihood of the observed behaviour being repeated, whilst punishment (an unpleasant consequence of behaviour) decreases this likelihood.
- There are two types of reinforcement - positive and negative. Positive reinforcement occurs when we carry out a behaviour to receive a reward e.g. completing homework to receive praise from a teacher. On the other hand, negative reinforcement



occurs when we carry out a behaviour to avoid negative consequences e.g. completing homework to avoid being given a detention.

- Skinner's Box = Skinner demonstrated, using a rat, the mechanisms of positive and negative reinforcement. Positive reinforcement was shown when the rats pressed down on a lever to receive food as a reward, and subsequently learnt to repeat this action to increase their rewards. Negative reinforcement was shown when the rat learnt to press down on the lever to avoid the unpleasant consequence of an electric shock.



A02 Potential Application Questions:

1. An understanding of the role of classical conditioning in the acquisition and maintenance of a phobia of white rats in Little Albert (Watson and Rayner, 1920). It would be particularly useful to discuss the extinction of Little Albert's phobia when the loud bang /conditioned stimulus no longer produced the conditioned response of crying (when the loud bang was not paired with the sight of the rat). Generalisations of his phobia to other white, fluffy objects may also be discussed.
2. Being able to differentiate between classical and operant conditioning. These two types of learning involve different mechanisms and have been demonstrated in different scenarios.

A03 Evaluation:

+ Scientific Rigour = In an attempt to objectively and systematically collect reliable data, the behaviourist approach makes use of highly scientific research methods, particularly the laboratory experiment. Strictly-controlled conditions reduce and control for the effects of confounding and extraneous variables, increasing the reliability and internal validity of the findings (as these are more likely to be replicated when research is conducted under the same conditions). By focusing on behaviour which is observable and can be measured, the behaviourist approach increases the scientific credibility of psychology.

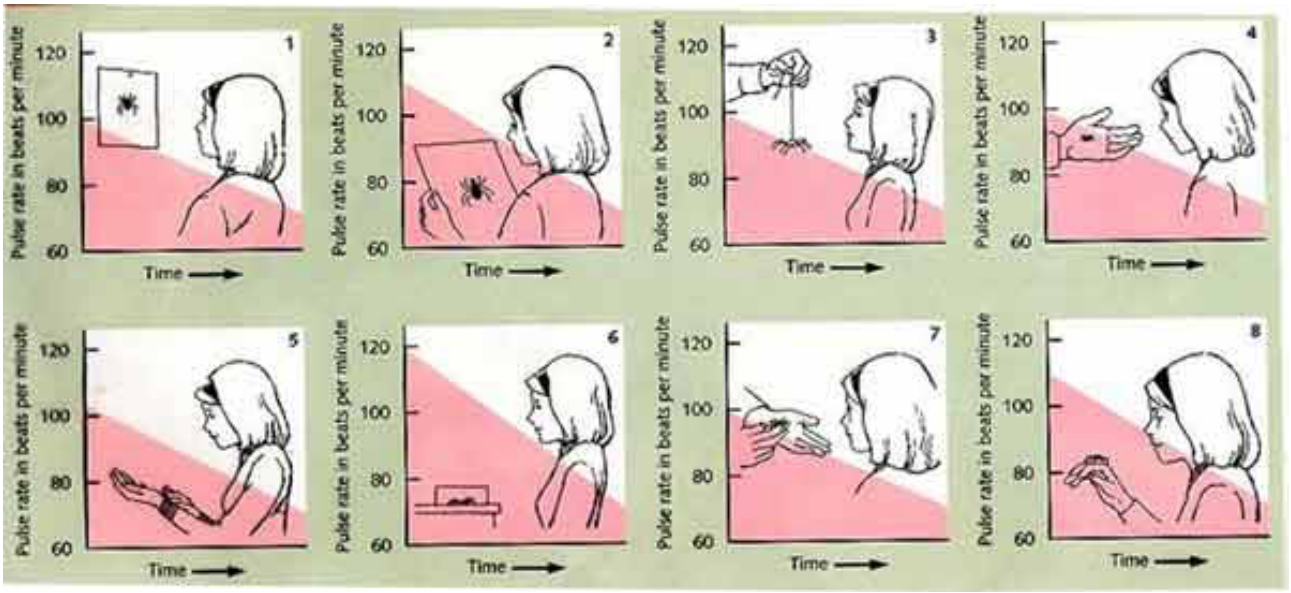
+ Real-Life Applications = An increased understanding of classical and operant conditioning has led to the development of treatments and therapies for serious mental disorders. For example, token economies have been used as a way of dealing with offending behaviour: inmates who carry out socially-desirable behaviour (such as tidying their cell and avoiding conflicts) receive tokens (secondary reinforcers) which can be traded for privileges (primary reinforcers), such as extra TV-time. Therefore, behaviourist principles have had positive impacts on the lives of many.

— Environmental Determinism = The behaviourist approach sees all behaviour as the product of past reinforcement contingencies, leaving no room for free will or conscious choices. This hard deterministic stance may be a more appropriate explanation for animal behaviour, whereas explanations of human behaviour should also account for emotions,

motivations and reasoning skills (e.g. as social learning theory does). Hence, the behaviourist approach may be a limited explanation for human behaviour.

— Cost-benefit analyses with the use of animals in experimental research = Skinner's box caused considerable physical harm to the rats, breaching the BPS ethical guideline of protection from harm. Watson and Rayner's classical conditioning experiments on Little Albert failed to protect him from psychological harm, as well as not offering him the opportunity to withdraw. Therefore, much behaviourist research, at least by modern standards, would be viewed as unethical. However, a cost-benefit analysis may show that the benefit of increased understanding of the different types of learning (classical and operant conditioning) outweigh the ethical costs.

Part 2: The Behavioural Approach to Treating Phobias



N.B. This is a practical application of systematic desensitisation and flooding to the treatment of phobias, both of which are based on the principles of classical and operant conditioning.

Systematic desensitisation is a behavioural therapy designed to reduce phobic anxiety through gradual exposure to the phobic stimulus. It relies upon the principle of counterconditioning i.e. learning a new response to the phobic stimulus i.e. one of relaxation rather than panic. This works due to reciprocal inhibition i.e. it's impossible to be both relaxed and anxious at the same time. Firstly, the patient and therapist draw up an anxiety hierarchy together, made up of situations involving the phobic stimulus, ordered from least to most nerve-wrecking. The therapist then teaches the patient relaxation techniques e.g. breathing techniques and meditation, to be used at each of these anxiety levels. The patient works their way up through the hierarchy, only progressing to the next level when they have remained calm in the present level. The phobia is cured when the patient can remain calm at the highest anxiety level.

+ Supporting evidence = Gilroy et al. followed up 42 patients treated in three sessions of systematic desensitisation for a spider phobia. Their progress was compared to a control group of 50 patients who learnt only relaxation techniques. The extent of such phobias was measured using the Spider Questionnaire and through observation. At both 3 and 33 months, the systematic desensitisation group showed a reduction in their symptoms as compared to the control group, and so has been used as evidence supporting the effectiveness of flooding.

+ Systematic desensitisation is suitable for many patients, including those with learning difficulties = Anxiety disorders are often accompanied with learning disabilities meaning that such patients may not be able to make the full cognitive commitment associated with cognitive behavioural therapy, or have the ability to evaluate their own thoughts. Therefore, systematic desensitisation would be a particularly suitable alternative for them.

+ More acceptable to patients, as shown by low refusal and attrition rates. = This idea also has economical implications because it increases the likelihood that the patient will agree to start and continue with the therapy, as opposed to getting 'cold feet' and wasting the time and effort of the therapist!

Flooding is a behavioural therapy designed to reduce phobic anxiety in one session, through immediate exposure to the phobic stimulus. This occurs in a secure environment from which the patient cannot escape - without the option of practising avoidance behaviour, such behaviour is not reinforced and so the phobia is not maintained. Thus, in the case of a spider phobia, the patient will instantly be exposed to a room full of large spiders, which can crawl over them. This relies on the principle that it is physically impossible to maintain a state of heightened anxiety for a prolonged period, meaning tat eventually, the patient will learn that the phobic stimulus is harmless.

+ = Cost-effective - Ougrin compared flooding to cognitive therapies and found it to be cheaper. This is because the patient's phobia will typically be cured in one session, thus freeing them of their symptoms and allowing them to continue living a normal life.

— = Less effective for complex phobias. Social phobias involve both anxiety and a cognitive aspect i.e. thinking unpleasant thoughts about a situation. Thus, in such cases, cognitive therapy may be more appropriate because this therapy can target the distal causes of the phobia, as opposed to the mere proximal (indirect) causes. This suggests that alternatives may be more effective.