Unit 1

Psychopathology

Definitions of abnormality:

Deviation from social norms, failure to function adequately, statistical infrequency and deviation from ideal mental health

Behavioural, emotional and cognitive characteristics of psychological disorders:

Phobias, depression and obsessive-compulsive disorder (OCD).

The behavioural approach to explaining and treating phobias:

The two-process model, including classical and operant conditioning.

Flooding, Systematic desensitisation, including relaxation and use of hierarchy.

The cognitive approach to explaining and treating depression:

Beck's negative triad and Ellis's ABC model.

Cognitive behaviour therapy (CBT), including challenging irrational thoughts.

The biological approach to explaining and treating OCD:

Genetic and neural explanations.

Drug therapy

Definitions of abnormality

Abnormality is difficult to define; psychologists disagree about the causes of mental disorders and how they reveal themselves. Four criteria for defining abnormality are examined here, each with its strengths and weaknesses.

As will become evident, no single definition is adequate on its own, although each captures some aspect of what we might expect from a true definition of the term. Consequently, abnormality is usually determined by the presence of several of the characteristics we discuss in this pack.

Statistical infrequency

This definition defines **behaviours that are abnormal as statistically rare**.

A normal distribution curve (as seen on the right) can be drawn to show what proportions of people share the characteristics or behaviour in question. Most people will fall on or near the mean for these.

Any **individuals that fall outside the 'normal distribution'** usually about 5% of a population (2 standard deviation points away from the mean) **are perceived as being abnormal**.
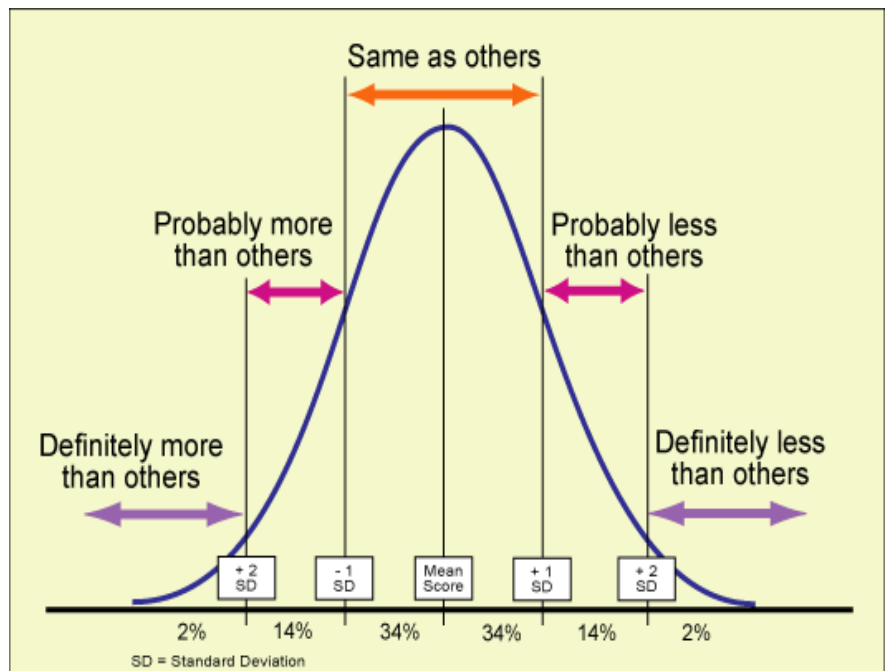
Example: Most people if asked to rate how fearful they are of dogs (if 1=no fear and 10=panic) will give a rating between 4 and 7. Their results would cluster around the middle. However, there would be a few people at either end of the scale, some very fearful and some not at all. These ratings would be considered the 'abnormal' ratings because they are not the 'norm'. We would expect to see a normal distribution graph very similar to the one above if we plotted this data.

Evaluation of the statistical infrequency definition

Strength – **Objective way of defining abnormality**	This way of deciding who is abnormal could be argued to be **objective,** if a way of collecting data about behaviour and a 'cut off point' has been agreed. It is also based on unbiased statistical data and so again could be considered objective. Therefore this definition of abnormality avoids the criticism of the other definitions such as deviation from social norms which is based on subjective standards of what is considered 'normal' within society. This could be considered a strength of this definition as it attempts to define what is abnormal in a way that is free from human bias.
Limitation – **Subjectivity of cut-off points**	A problem with this definition is deciding how much someone's behaviour must deviate from the statistical norm before it should be considered abnormal. Statistical definitions rely on arbitrary/subjective cut-off points for example, a person completing an anxiety diagnostic questionnaire may score 8 out of 10 which could be considered 'abnormal', due to being statistically infrequent, however another person may score 7 out of 10 and be considered 'normal' as this falls under the normal distribution therefore demonstrating the subjectivity of the cut-off points used in this definition of abnormality.
Limitation – **Overlooks desirable behaviours**	Another problem with this definition is that there are some abnormal behaviours that are actually quite desirable. For example individuals with a high IQ, which is statistically infrequent, would be deemed abnormal under this definition however a high IQ is very desirable trait therefore it is unlikely to be treated as an 'abnormality'. Similarly, there are some 'normal' behaviours that are undesirable for example depression is relatively common yet it is undesirable. Therefore using statistical infrequency to define abnormality means that we are unable to distinguish between desirable and undesirable behaviours. This is problematic because we need to be able to identify infrequent *and* undesirable behaviours in order to understand which behaviours need treatment.

Deviation from social norms

Each society has <u>social norms,</u> which are rules for acceptable behaviour. Quite often these rules are unwritten for example, not being naked in public or not pushing to the front of a queue.

Abnormal behaviour is behaviour that goes against these social norms (*deviation from social norms*).

The definition draws a line between desirable and undesirable behaviours and labels individuals behaving undesirably as social deviants. This is done for both the individual and for society as a whole. We are making a collective judgement as a society about what is right/correct behaviour. One important consideration is the degree to which a social norm is deviated from and how important society sees that norm as being.

Norms are specific to the culture that we live in and are likely to be different for different situations and different generations, so there are very few behaviours that would be considered universally abnormal.

Example: a person who is unable to discard useless or worn out possessions (hoarding) would be seen as abnormal as this behaviour is considered undesirable and deviates from social norms.

> This definition of abnormality is an example of **cultural relativism.**
>
> **Cultural relativism-** the way in which the function and meaning of a behaviour, value or attitude are relative to a specific cultural setting. Interpretations about the same behaviour may therefore differ between cultures.

Evaluation of the social norms definition

Strength – Developmental norms	This definition establishes what behaviours are normal for different ages, for example crying and screaming in a supermarket because they have ran of your favourite ice cream would be considered normal for a child but not for an adult. Therefore defining abnormality in this way means that individual differences in society are acknowledged when establishing if the behaviour is abnormal.
Limitation – Change over time	The norms defined by society often relate to moral standards that vary over time as social attitudes change. As an example, homosexuality was not removed from the mental disorders classification system (ICD) until 1990 however in today's society it is no longer deemed an 'abnormal' behaviour Therefore this definition is limited in its ability to define abnormality because norms are constantly changing.
Limitation – Cultural differences	Social norms vary within and across cultures so it is difficult to use this definition to assess when behaviour deviates from these norms. For example, in Western societies hearing voices can often be interpreted as a sign of a mental health disorder (schizophrenia) however in other cultures the experience of hearing voices is common and would not be deemed as unusual. As there are different sub-cultures within a society, some behaviours displayed by individuals within this sub-culture could be seen as deviating from the norms of that society and thus their behaviour will be judged as abnormal. This is problematic as it can lead to individuals being labelled as abnormal purely because their behaviour is different to the norms of the society they live in.

Failure to Function Adequately

When someone's behaviour suggests that they **cannot cope with everyday demands** e.g. getting up in the morning, getting washed and dressed, and going to work, then they run the risk of being labelled as **abnormal** by this definition- they are failing to function adequately.

Behaviour is considered abnormal when it causes **distress leading to an inability to function properly**. It may also be characterised by an inability to experience a normal range of emotions or behaviours.

Rosenhan and Seligman (1989) suggested that the more of these seven features of dysfunction an individual shows the more they are classed as abnormal.

Features of personal dysfunction	Descriptions of features
Personal distress	A key feature of abnormality. Includes depression and anxiety disorders
Maladaptive behaviour	Behaviour stopping individuals from attaining life goals, both socially and occupationally.
Unpredictability	Displaying unexpected behaviours, characterised by loss of control, like attempted suicide.
Irrationality	Displaying behaviour that cannot be explained in a rational way
Observer discomfort	Displaying behaviour that causes discomfort to others i.e. friends, family members
Violation of moral standards	Displaying behaviour that violates society's moral standards e.g. causing pain to another person
Unconventionality	Displaying unusual or odd behaviour

Use the mnemonic below to help you remember the seven features.

Unique **P**eople **O**ften **M**eet **V**ery **U**nhappy **I**nsects

Evaluation of the failing to function definition

Strength – **Focuses on the individual's experience**	Unlike other definitions, this is more focused on the needs of the individual rather than society's expectation of the individual. The definition takes into account the subjective personal experiences of the individual, considering their thoughts and feelings the issues they are facing. It does not simply make a judgement based on a pre-defined list of symptoms. This suggests that the FFA definition is a useful tool for assessing abnormal behaviour as it takes into account the effect a person's symptoms have on their everyday life.
Limitation - **Abnormality is not always accompanied by dysfunction**	For example psychopaths can cause great harm yet still appear to function normally e.g. Harold Shipman was a English doctor who murdered at least 215 patients, thus was abnormal. However, he was considered to be a respectable doctor and did not display any features of dysfunction. This example demonstrates that many people would not be identified as abnormal according to this definition because they function normally, however if other definitions were used they would be considered vastly abnormal e.g. using your power in a role as a doctor to murder individuals would be considered a deviation from social norms and a deviation from ideal mental health (not an accurate perception of reality). Therefore, this definition alone is not sufficient enough to use to determine if a person's behaviour is abnormal.
Limitation – **Normal abnormality**	This definition does not consider situations in which a healthy, psychological response for someone may mean a period of inability to function adequately. For example, when a loved one dies then it is very normal to suffer distress and not be able to cope with everyday demands. Grieving is a perfectly natural response to overcoming loss and should not become a factor in defining that person as abnormal. This is an issue as it means someone's behaviour may be incorrectly identified as abnormal.

Deviation from ideal mental health

Compared with previous definitions that attempt to define what is abnormal, this definition **attempts to define what is normal behaviour** or an ideal state of mental health.

Thus **abnormality is seen as any deviation away from what is defined as normal** or the absence of the features described below.

Marie Jahoda (1958) attempted to justify the key features that define ideal mental health:

 This can be remembered with the acronym **PRAISE.**

- **Positive attitude towards self**: an individual should be in touch with their own identity and feelings. Have self-respect and a positive self-concept.

- **Resistance to stress**: individuals should be able to resist the effects of stress by having effective coping strategies.

- **Accurate perception of reality**: individuals should have an objective and realistic view of the world.

- **Independent (Autonomy):** individuals should be independent and self-reliant and able to make personal decisions.

- **Self-actualization**: individuals should be focused on the future and their own personal growth and development. 'Becoming everything one is capable of becoming'.

- **Environmental mastery**: being competent in all aspects of life and able to meet the demands of any situation. Having the flexibility to adapt to changing life circumstances.

The more characteristics individuals <u>fail</u> to meet and the further they are away from realising individual characteristics**, the more abnormal they are.**

Evaluation of the ideal mental health definition

Strength – Takes a positive and holistic view	Firstly, the definition focuses on positive and desirable behaviours, rather than considering just negative and undesirable behaviour (unlike the failure to function adequately definition). Secondly, the definition considers the whole person, taking into account a multitude of factors that can affect their health and well-being. Therefore, a strength of the deviation from ideal mental health definition of abnormality is that it is comprehensive, covering a broad range of criteria. In addition, this definition can be seen to advocate for a humanistic approach to treating abnormal behaviour.
Limitation – Over-stringent criteria	Most people do not meet all the criteria set out by Jahoda and as a result, under this definition, the majority of people would be classified as abnormal. For example, few people achieve self-actualisation and experience personal growth all the time. It may be more useful to consider the criteria as aspects we should be striving for (ideals) rather than actualities (how you actually are). This then questions the usefulness of this definition as a way of classifying abnormal behaviour.
Limitation – Cultural variation	Jahoda's views of ideal mental health are rooted in Western views. Many of the concepts, such as autonomy and self-actualisation, would not be recognised as aspects of ideal mental health in many cultures, for example collectivist cultures (non-western) tend to emphasise the importance of inter-dependence (everyone depending on each other) rather than autonomy (independence). This is problematic because it might lead to people from other cultures being considered abnormal because we are judging them from our own cultural stand point.

Behavioural, emotional and cognitive characteristics of psychological disorders

Definitions:

- **Behavioural characteristics** refer to how the person is behaving or acting.
- **Cognitive characteristics** refer to a person's thoughts and mental processes (how they process information
- **Emotional characteristics** refer to how the person "feels".

Characteristics of Phobias

Phobias are a type of anxiety disorder. Anxiety is an emotion all people experience and is a natural response to potentially dangerous stimuli, but **phobias are characterised by uncontrollable, extreme, irrational and enduring fears** and involve anxiety levels that are out of proportion to any actual risk.

It is difficult to estimate how many people suffer from a phobia (as many do not seek help) but it is likely that **10% of the population will suffer from a phobia at some point in their life**.

Phobias can be **long-lasting, enduring over many years**. They often **originate in childhood** and sufferers generally realise their reactions are irrational, but cannot consciously control them.

Sub-types of phobias	Description
Specific phobias	Fear of a specific thing e.g. spiders, blood, flying, water
Social phobias	Being over anxious in social situations e.g. public speaking, interacting with others, crowds
Agoraphobia	Fear of leaving home or a safe place. Can be a response to avoidance behaviours.

Behavioural characteristics of phobias

- **Panic -** A phobic person may panic in response to the presence of the phobic stimulus. Panic may involve a range of behaviours including crying, screaming or running away. Children may react slightly differently, for example, by freezing, clinging or having a tantrum.

- **Avoidance -** Unless the sufferer is making a conscious effort to face their fear they tend to go to a lot of effort to avoid coming into contact with the phobic stimulus, in order to reduce the chances of anxiety responses occurring. This can severely interfere with their ability to conduct everyday working and social functioning. For example, someone with a fear of public toilets may have to limit the time they spend outside the home in relation to how long they can last without a toilet.

- **Endurance -** The alternative to avoidance is endurance, in which the sufferer remains in the presence of the phobic stimulus but continues to experience high levels of anxiety. This may be avoidable in some situations, for example for a person who has an extreme fear of flying.

9

Emotional characteristics of phobias

- **Persistent excessive fear and anxiety -** Phobias produce an emotional response of anxiety and fear. Anxiety is an unpleasant state of high arousal. This prevents the sufferer from relaxing and makes it difficult to experience any positive emotion. This emotional response can occur in the presence of or in anticipation of feared objects and situations.

- **Fear from exposure to phobic stimulus -** Phobias can produce an immediate fear response, even panic attacks, due to the presentation of the phobic object or situation.

- **Unreasonable response -** Emotional responses to phobic stimuli are unreasonable and wildly disproportionate reactions to the danger posed by the object or situation.

Cognitive characteristics of phobias

People with phobias process information about phobic stimuli differently from other objects of situations.

- **Selective attention to the phobic stimulus -** A sufferer will often not be able to look away from the phobic stimulus. From evolutionary purposes this would have been useful to humans so we are able to react quickly to something potentially dangerous. However, this is not so useful when the fear is irrational. For example, a pogonophobic will struggle to concentrate on what they are doing if there is someone with a beard in the room.

- **Irrational beliefs -** A phobic may hold irrational beliefs in relation the phobic stimuli. For example, social phobias can involve beliefs like 'if I blush people will think I'm weak'. This kind of belief increases the pressure on the sufferer to perform well in social situations.

- **Cognitive distortions -** The phobic's perceptions of the phobic stimulus may be distorted. For example, a coulrophobic may see clowns as scary and dangerous.

Acronym to help you remember these characteristics:

A P E   P U F   S I C

The ape was afraid of the cigarette because it made him sic(k)

Avoidance, **P**anic, **E**ndurance

Persistent excessive fear, **U**nreasonable response, **F**ear when exposed

Selective attention, **I**rrational beliefs, **C**ognitive distortions

Characteristics of depression

Depression is an affective **mood disorder** involving lengthy disruption of emotions. About 20% of people will suffer from some form of depression throughout their lifetimes, with women twice as vulnerable as men.

At least 5 symptoms must be apparent every day for 2 weeks for depression to be diagnosed by a doctor, with an impairment in general functioning also evident. One of these symptoms must be a constant depressed mood or lessened interest in daily activities.

Type of depression	Description
Major depressive disorder	Severe but often short-term depression
Persistent depressive disorder	Long-term or recurring depression- also called dysthymic depression
Unipolar depression	Sufferers only experience depression and not manic episodes. Clinical symptoms usually occur in cycles.
Bipolar depression	Sufferers experience mixed episodes of mania and depression.

Behavioural characteristics of depression

- **Loss of energy -** Depressed people can have reduced amounts of energy, resulting in fatigue, lethargy and high levels of inactivity. In severe cases this may mean not being able to get out of bed. In some cases, people with also experience the opposite effect- known as psychomotor agitation e.g. not being able to relax.

- **Social impairment -** There can be reduced levels of social interaction with friends and relations.

- **Weight changes -** Significant decreases or increases in weight are often associated with depression. Appetite and eating behaviour is disrupted by this disorder.

- **Poor personal hygiene -** Depressed people often have reduced incidence of washing, wearing clean clothes etc.

- **Sleep pattern disturbance -** Depression is often characterised by constant insomnia (inability to fall asleep or stay asleep) or hypersomnia (oversleeping).
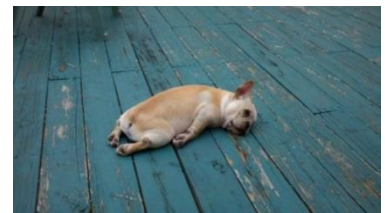
Emotional characteristics of depression

- **Loss of enthusiasm -** Depression is often characterised by a lessened concern with and/or lack of pleasure in daily activities.

- **Constant lowered mood -** A key characteristic is the ever present and overwhelming feelings of sadness/negativity, sometimes described as feelings of 'emptiness'.

- **Worthlessness -** Those suffering from depression often have constant feelings of reduced worth and/or inappropriate feelings of guilt. It can also be accompanied by lowered self-esteem- liking themselves less than usual. In extreme cases describing a sense of self-loathing (hating themselves).

- **Anger -** Sufferers of depression also frequently experience anger, directed at the self or others. On occasion these emotions can lead to aggressive or self-harming behaviour.

Cognitive characteristics of depression

People suffering from depression tend to process information about several aspects of the world quite differently from the 'normal' ways that people without depression think.

- **Reduced concentration -** There can be difficulty in paying/maintaining attention and/or slowed-down thinking and indecisiveness. This is likely to interfere with an individual's work or everyday functioning.

- **Attending to and dwelling on the negative -** When suffering an episode people with depression are inclined to pay more attention to negative aspects of a situation and ignore the positives-> "glass half empty". They also have negative schemas. They might also experience absolute thinking (black and white thinking), whereby they will see an unfortunate situation as an absolute disaster.

- **Thoughts of death -** Depressives can have constant thoughts of death and/or suicide.

Acronym to help you remember these characteristics:

WASPS WALL ANT

The wasps tried to build themselves a wall but the ant did it first and depressed them all

Weight (gain or loss)**, A**ctiveness (lack of), **S**leep disturbance, **P**ersonal hygiene , **S**ocial impairment
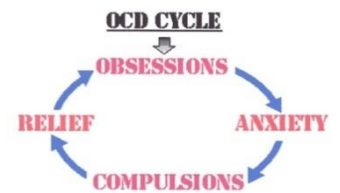
Worthlessness, **A**nger, **L**oss of enthusiasm, **L**owered mood

Attention problems**, N**egative schemas, **T**houghts of suicide

12

Characteristics of Obsessive Compulsive Disorder (OCD)

OCD is an **anxiety disorder** where sufferers experience persistent and intrusive thoughts occurring as obsessions, compulsions or a combination of both.

Obsessions tend to be things people think about, which lead to feelings of extreme anxiety (**the cognitions**). They comprise forbidden or inappropriate ideas and visual images that aren't based in reality e.g. being convinced that germs are everywhere.

Compulsions are what people do as a result of the obsessions (**the behaviour).** They comprise intense, uncontrollable urges to repetitively perform tasks and behaviours e.g. obsessively washing hands to remove germs. The compulsions are carried out in order to reduce distress or prevent feared events.

Most sufferers realise their obsessive ideas and compulsions are **excessive and inappropriate**, but cannot consciously control them, resulting in even higher anxiety. They also appreciate their compulsions are only temporary solutions.

A sufferer's obsessions and compulsions become **very time-consuming**, thus interfering with the ability to conduct everyday activities.

There are many different types of OCD, including:

- Hygiene and contamination e.g. washing hands and clothes
- Counting and numbers e.g. multiples
- Hoarding and collecting
- Fear of harming others e.g children
- Sexual ruminations e.g. fearful of being gay

Behavioural characteristics of OCD

- **Compulsive behaviour**
  - Compulsions are **repetitive**. Typically sufferers feel compelled to repeat a behaviour e.g. washing hands, counting etc.

  - Compulsions **reduce anxiety**. A majority of these behaviours are performed in an attempt to manage anxiety produced by obsessions e.g. compulsive hand washing is a response to the obsessive fear of germs.

- **Avoidance:** The behaviour of OCD sufferers may also be characterised by their avoidance as they attempt to reduce anxiety by keeping away from situations that trigger it. For example, an obsessive fear of germs may mean the sufferer avoids emptying their rubbish bins, and this can interfere with leading a normal life.

Emotional characteristics of OCD

- **Anxiety and distress -** OCD is regarded as a particularly unpleasant emotional experience because of the excessive anxiety that accompanies both obsessions and compulsions. Obsessive thoughts-> unpleasant/frightening-> anxiety-> urge to repeat compulsion-> anxiety

- **Accompanying depression -** Anxiety is often accompanied by low mood and lack of enjoyment in activities. It can also involve other negative emotions such as irrational guilt or disgust (directed at the self or something external e.g. dirt)

Cognitive characteristics of OCD

- **Obsessive thoughts -** The major cognitive feature of OCD is obsessive thoughts i.e. thoughts that recur over and over again. They vary from person to person (mind-map on pg 14) but are always unpleasant.

- **Irrational -** People suffering from OCD are aware that their obsessions and compulsions are not rational. In spite of this insight, OCD sufferers experience catastrophic thoughts about the worst case scenarios that might result if their anxieties were justified. For example, exposure to germs could result in them catching a disease and dying.

- **Hyper-vigilant** i.e. maintain constant alertness and attentions focused on potential hazards.
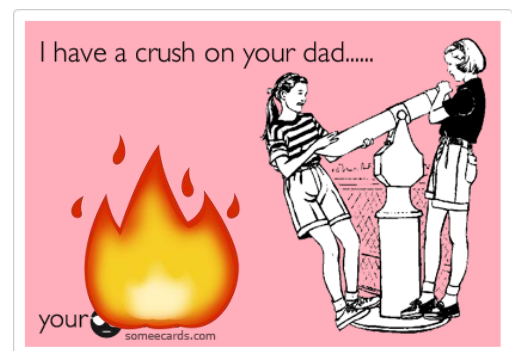
Acronym to help you remember the characteristics:

CARA   DAD   HOTI

Cara is obsessed with thinking her best friends dad is a hoti

Compulsions -**A**nxiety reducing and **R**epetitive**, A**voidance

Distress & **A**nxiety**, D**epression

Hyper-vigilant**, O**bsessive **T**houghts, **I**rrational

Summary of all disorders and their characteristics

	Phobias	Depression	OCD
Behavioural	Avoidance Panic Endurance	Weight changes Activeness Sleep disturbance Personal hygiene Social impairment	Compulsive behaviour (anxiety reducing and repetitive) Avoidance
Emotional	Persistent excessive fear Unreasonable response Fear when exposed	Worthlessness Anger Loss of enthusiasm Lowered mood	Distress & anxiety depression
Cognitive	Selective attention Irrational beliefs Cognitive distortions	Attention problems Negative schemas Thoughts of death	Hyper-vigilant, Obsessive thoughts, Irrational

The Behavioural Approach to Explaining Phobias

The two-process model (Acquisition-Maintenance Model)

Mowrer (1947) proposed this model which suggests that phobias are first **acquired through classical conditioning** and then **maintained through operant conditioning**.

Below are descriptions of how a phobia is acquired and then maintained according the Behaviourism.

Classical conditioning: How phobias are acquired.

Phobias are acquired by associating a neutral stimulus with a fear response.

The following case study is an example of how a phobia can be acquired through classical conditioning (note – you can also use this as supporting evidence):

The case study of Little Albert (Watson & Raynor, 1920)

Before conditioning:

When Albert was presented with a white rat, he showed no fear response.

White rat = neutral stimulus (NS)

Watson & Raynor found that Albert showed a natural fear response to loud noises (unconditioned stimulus – UCS).

During conditioning:

Albert was presented with the white rat (NS) again and at the same time the researchers struck a steel bar, making a loud noise (UCS) – this led to Albert crying (unconditioned response -UCR)

This was repeated several times.

After conditioning:

Now, the white rat (previously the NS but is now the conditioned stimulus – CS) alone makes Albert afraid/cry (conditioned response – CR)

Once a phobia has been acquired, **it is maintained by operant conditioning**.

16

Operant conditioning: How phobias are maintained

Operant conditioning states that if **behaviours are reinforced they are likely to be repeated**.

In the case of phobias, the **phobic response is unpleasant and escaping from the object or situation causes a reduction in fear**.
This is an example of negative reinforcement because you are removing/taking away something negative and are rewarded for doing so (you feel less anxiety).

For example: Peter is afraid of wasps, when he sees a wasp he becomes very anxious. He does not go out and play with his friends in the park which means he is able to avoid a situation where there may be a wasp. This leads to his anxiety being reduced as he no longer has to worry about coming into contact with a wasp.

Describing the two process model as a whole

Outline the two process model as an explanation of phobias

The two-process model suggests that phobias are acquired through classical conditioning: learning by association, and are maintained through operant conditioning: negative reinforcement.
According to the theory of classical conditioning, humans can learn to fear an object or stimulus, such as a dog, by forming an association between the object and something which triggers a fear response, for example being bitten. In this example, the dog, which was originally a neutral stimulus, becomes associated with being bitten, which is an unconditioned stimulus. This pairing leads to the dog becoming a conditioned stimulus, which when encountered will elicit fear, a conditioned response.
According to operant conditioning, avoiding the phobic stimulus acts as negative reinforcement because an unpleasant consequence is removed. For example, if a person with a dog phobia sees one whilst out walking, they might avoid it by crossing the road. This reduces the person's anxiety and so negatively reinforces their behaviour, making the person more likely to continue avoiding dogs, thus maintaining their phobia.

Evaluation of the two-process model

Supporting evidence for the acquisition of phobias via classical conditioning	For example, the case of Little Albert (see above). Furthermore, **Sue et al (1994)** found that people with phobias often recall a specific incident when their phobia appeared e.g. being bitten by a dog or experiencing a panic attack in a social situation. Both of these studies support the acquisition part of the model through the principles of a stimulus-response association (classical conditioning) however these studies do not tell us how these phobias were maintained therefore we cannot conclude that they fully support the two-process model.
Challenging evidence for the acquisition of phobias via classical conditioning	Not all phobias are acquired as a result of a negative experience. For example, **Ost (1987)** notes that many people with severe fears of snakes, germs, aeroplanes & heights have had no particularly unpleasant experiences with any of these objects or situations. This challenges the two-process model as it is based on the principle that phobias are learnt through experiences. This is a limitation of the model as it suggests that it cannot explain how all phobias are acquired.
Individual differences	Furthermore, some people have negative experiences without developing a phobia. For example, **Dinardo (1988)** found participants in a control group without a phobia of dogs, experienced a similar proportion of fearful incidents with a dog but had not developed a phobia. This challenges the two-process model as it suggests that not everyone will learn a fear response after a negative experience. This could mean that there may be individual differences in, for example, cognition that may play a role in the development of the phobia which the behaviourist approach does not consider.

Extended evaluation

This model cannot fully explain why some phobias are more common than others; the ***biological preparedness explanation*** could offer a better explanation for this. This explanation originates from the ***evolutionary approach*** and describes the way that humans are more likely to have phobias for stimuli that would have been a real threat to survival. For example, fear of poisonous animals like spiders.

The Behavioural Approach to Treating Phobias

Systematic desensitisation (SD)

Systematic desensitisation (SD) is a behavioural therapy designed to **gradually reduce phobic anxiety** through the principles of classical conditioning. If the sufferer can learn to relax in the presence of the phobic stimulus they will be cured.

Essentially a **new response to a phobic stimulus is learned** (phobic stimulus is paired with relaxation instead of anxiety). This is called *counterconditioning.*
In addition it is impossible to be afraid and relaxed at the same time, so one emotion prevents the other. This is called *reciprocal inhibition.*

SD can be in-vivo (where they are directly exposed to phobic stimulus) or in-vitro (where they imagine exposure to the phobic stimulus).

Three main processes are involved in SD:

Relaxation:

Relaxation techniques are taught to the service user; these include:

- Focussing on breathing and taking slow, deep breaths as when we are anxious we breathe quickly so slowing this down helps us to relax.
- Being mindful of the 'here and now'.
- Focussing on a particular object or visualising a peaceful scene.
- Progressive muscle relaxation is also used where one muscle at a time is relaxed.

Hierarchy:

At the beginning of therapy, the therapist and the service user create a hierarchy from most to least fearful stimuli.

Here is an example of a hierarchy for arachnophobia:

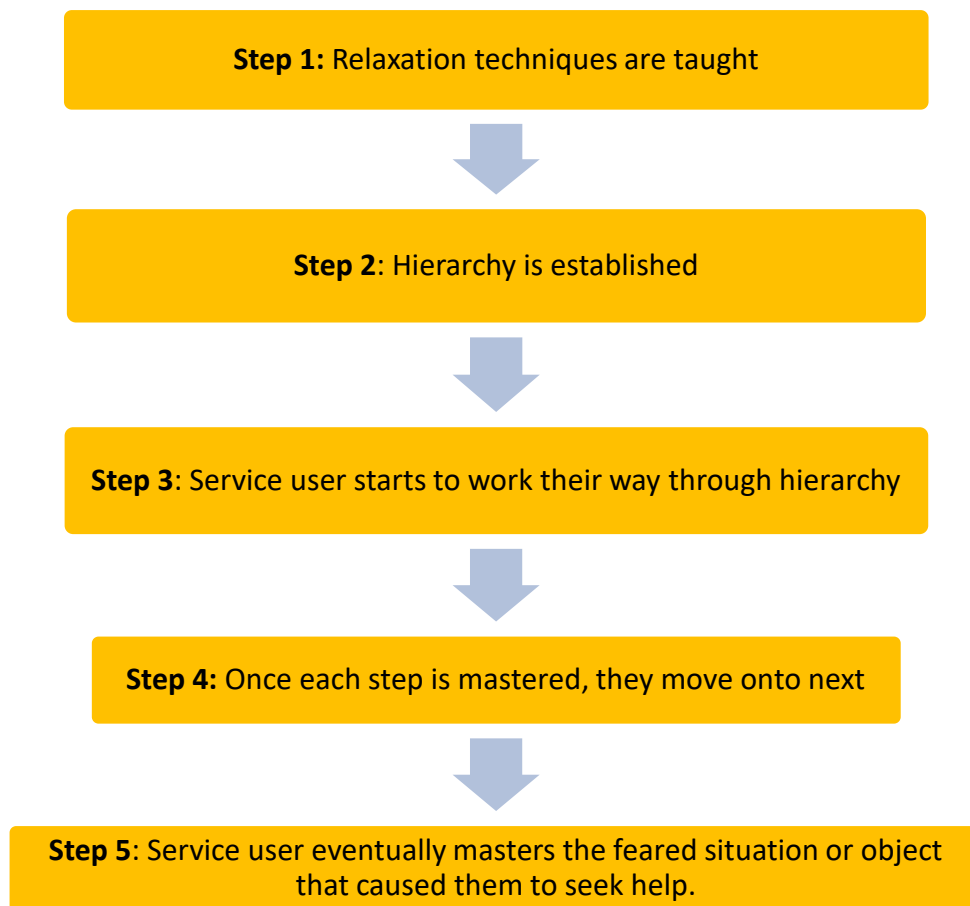| Behavior	Fear rating
Think about a spider.	10
Look at a photo of a spider.	25
Look at a real spider in a closed box.	50
Hold the box with the spider.	60
Let a spider crawl on your desk.	70
Let a spider crawl on your shoe.	80
Let a spider crawl on your pants leg.	90
Let a spider crawl on your sleeve.	95
Let a spider crawl on your bare arm.	100

Gradual Exposure:

SD works by gradually exposing the service user to fearful situations one step at a time. At each stage they practice relaxation so the situation becomes more familiar and their anxiety reduces.

Treatment is successful when they can remain relaxed in situations high on the hierarchy.

Below is a diagram which shows the stages of the therapy:

Step 1: Relaxation techniques are taught

Step 2: Hierarchy is established

Step 3: Service user starts to work their way through hierarchy

Step 4: Once each step is mastered, they move onto next

Step 5: Service user eventually masters the feared situation or object that caused them to seek help.

Outlining systematic desensitisation as a treatment for phobias.

Systematic desensitisation is a behavioural therapy designed to gradually reduce phobic anxiety through the principles of **classical conditioning**. It uses **counter-conditioning** to help the sufferer 'unlearn' their phobias, by eliciting another response: relaxation instead of fear. A service user works with their therapist to create a fear **hierarchy**, ranking the phobic situation from least to most anxiety-inducing. They are also taught relaxation strategies, such as breathing techniques, to help them remain calm when exposed to their fear. Finally, they work through their fear hierarchy, starting at the bottom, while trying to remain relaxed at each stage. Systematic desensitisation works on the assumption that two emotional states cannot exist at the same time, a theory known as **reciprocal inhibition**, and eventually relaxation will replace the fear.

…. Evaluate treatments:

Two important factors to consider when evaluating treatments it is how '*effective'* the treatment is and how '*appropriate'* the treatment is.

In order for us to comment on the effectiveness of a treatment, we tend to look to research studies that have been conducted as they can provide us with evidence on whether the treatment is successful or not.

When commenting on the appropriateness of a treatment, we may consider the following points: how long the treatment takes, if there are any side effects and if the treatment is suitable for all sufferers.

Occasionally these evaluation points are interlinked but as long as you can explain how the point links to appropriateness and/or effectiveness you will have a sound evaluation.

Other ways to evaluate treatments include a *comparison* with other treatments.

Evaluation of SD

Effectiveness of systematic desensitisation	**Gilroy et al (2003)** followed up 42 patients who had been treated for spider phobia in three 45 minutes sessions of systematic desensitisation. Spider phobia was assessed on several measures including the 'Spider Questionnaire' and by assessing response to a spider. A control group was treated by relaxation without exposure. At both 3 months and 33 months after the treatment the systematic desensitisation group were less fearful than the relaxation group. This shows that the gradual exposure element of systematic desensitisation is crucial to the effectiveness of treating phobias as the control group showed more fear when just given relaxation. It also suggests systematic desensitisation is an effective long term treatment for phobias.
Appropriateness of systematic desensitisation	Evidence suggests that SD may be more effective in treating specific phobias whilst other treatments, for example CBT, are better for treating complex phobias such as social phobias. This might be because, rather than simply trying to change the patient's response to the phobic stimulus, CBT aims to identify and challenge irrational thoughts which can have more of an impact on the development of complex phobias in comparison to specific phobias. This means that SD may not be an appropriate treatment for all types of phobias therefore it is important that when considering which treatments to use the type of phobia should be taken into account.
Appropriateness of systematic desensitisation	As SD involves gradual exposure to the phobic stimulus and involves the client being relaxed in the presence of the phobic stimulus before moving up the hierarchy, it may be seen as a more ethical treatment than flooding as it causes less psychological distress. This means it may be more appropriate to use SD when treating phobias, especially when treating vulnerable people such as children.

Extended evaluation
Making links: What does this suggest about the strength of the behavioural explanation?
How could you use this point to critique the behavioural treatments further?

Flooding

THE FAR SIDE® BY GARY LARSON
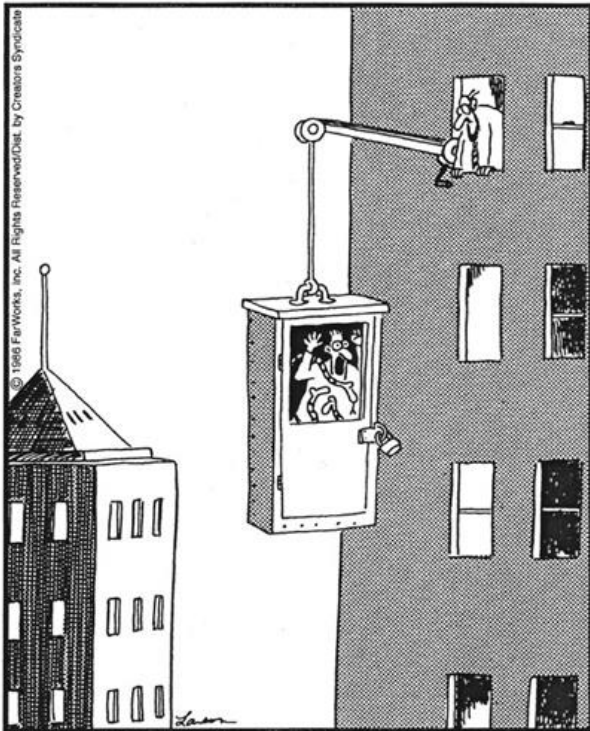
Professor Gallagher and his controversial technique of simultaneously confronting the fear of heights, snakes, and the dark.

Flooding is a behavioural therapy which involves immediate and direct exposure to the phobic stimulus, rather than exposing the person gradually. E.g. a person who has a phobia of enclosed spaces would be placed into an elevator and would not be able to leave until their anxiety levels reduce.

With flooding, a person is **unable to avoid** (*negatively reinforce*) **their phobia** and through continuous exposure, anxiety levels eventually decrease. Since the option of avoiding the phobic stimulus is removed and high levels of anxiety cannot be maintained for a long period of time the fear will eventually subside.

Flooding sessions normally last longer than SD sessions, one session often lasting 2-3 hours. Sometimes only one long session is needed to cure the phobia.

Evaluation of Flooding

Effectiveness of flooding	For example, **Kaplan and Tolin (2011)** found that 65% of patients with a specific phobia who were given a single session of flooding showed no symptoms of specific phobia 4 years later. This shows that flooding is an effective long term treatment for specific phobias however not all patients were completely cured of their phobia so this suggests flooding may not be suitable for everyone.
Appropriateness of flooding	Flooding is effective for specific phobias however it appears less effective for more complex phobias such as social phobias. This may be because social phobias have cognitive aspects (e.g. sufferers experience unpleasant thoughts about social situations). Therefore, similar to SD, we must be cautious when using flooding as a general treatment for all phobias, perhaps considering other treatments such as CBT for phobias which involve fear of particular situations.
Appropriateness of flooding	Although patients give consent to take part in flooding, it can be highly traumatic for them as it involves forcing the sufferer to experience high levels of anxiety. Therefore it may not be seen as suitable for children or vulnerable adults and so is not an appropriate treatment for all sufferers. Also, because flooding causes intense levels of anxiety the drop-out rate is sometimes rather high which means that it could actually enhance their fear rather than reducing it.

Other evaluation points relevant to both treatments

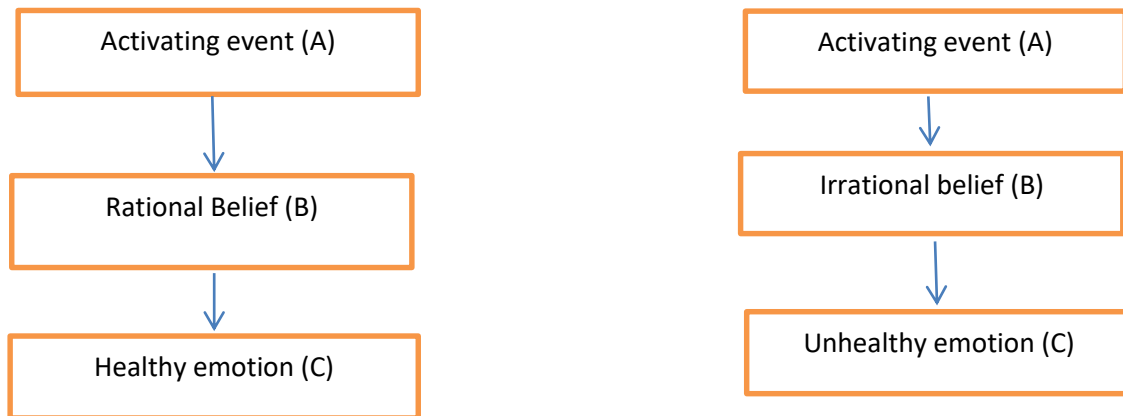|	
Issue of generalisation outside of the clinical setting	The patient may well respond positively towards the previous fearful stimuli when in a clinical setting but may not have the same response when faced with the stimuli in a natural setting. Sometimes systematic desensitisation is done through imagining scenarios (in vitro desensitisation) and sometimes it involves actual contact (in vivo desensitisation) therefore if the former is used, it is possible that when the patient is faced with the actual object or situation they would still have a phobic response. Therefore it could be argued that behaviourist treatments may not always be successful at stopping the phobic response outside of the clinical setting.
Ethical considerations	Both treatments gain consent from the sufferer before they take part in the treatment however they can still be very psychologically distressing. This is because in both treatments the individual has to confront their fear. However, it is important to consider that the short term cost of distress may outweigh the long term benefits of removing the fear response.

The cognitive approach to explaining depression

The underlying assumption of the cognitive explanation is that <u>depression is the result of disturbance in 'thinking'.</u> In terms of understanding abnormality, cognitive psychologists are most concerned with how *irrational* **thinking** leads to a mental disorder. Since depression is very much characterised by faulty and negative thinking, cognitive explanations are particularly appropriate.

There are two examples of the cognitive approach to explaining depression developed by **Albert Ellis** and **Aaron Beck**.

Ellis' ABC Model (1962)

Ellis's ABC model was developed to explain responses to negative events and how people react differently to stress and adversity. Ellis emphasises the role of the **situation or event** that can trigger **irrational thoughts**. Ellis used the ABC model to explain how irrational thoughts affect our behaviour and emotional state.

Activating event (A)	Activating event (A)
↓	↓
Rational Belief (B)	Irrational belief (B)
↓	↓
Healthy emotion (C)	Unhealthy emotion (C)

A refers to an activating event (e.g. you get fired at work)

B is the belief about why the event occurred, which may be rational or irrational (e.g. 'The company was overstaffed' or 'I was sacked because they've always had it in for me').

C is the consequence- the feelings and behaviour the belief now causes. Rational beliefs lead to healthy emotions (e.g. acceptance) whereas **irrational beliefs lead to unhealthy emotional and behavioural consequences** (e.g. depression)

The source of irrational beliefs lies in **mustabatory thinking**- thinking that certain ideas or assumptions must be true in order for an individual to be happy. Ellis identified a range of irrational beliefs:

- I *must* be approved of or accepted by people I find important.
- I *must* do well or very well, or I am worthless.

An individual who fails an exam may experience depression not because they have failed the exam but because they hold an irrational belief regarding that failure (e.g. 'I must always do well so failing the exam means I'm stupid').

Beck's Theory

Beck believed that individuals experience depression because their **thinking is biased** towards **negative interpretations** of the themselves, the world and the future – the negative triad.

Beck's negative triad

The negative triad involves people consistently thinking negatively about:

1. **The self**- where individuals see themselves as being hopeless, worthless, and inadequate i.e. 'nobody loves me'
2. **The world**- an example would be 'the world is a cold hard place'. This creates the impression that there is no hope anywhere.
3. **The future**- where personal worthlessness is seen as blocking any improvements i.e. 'I will always be useless.'
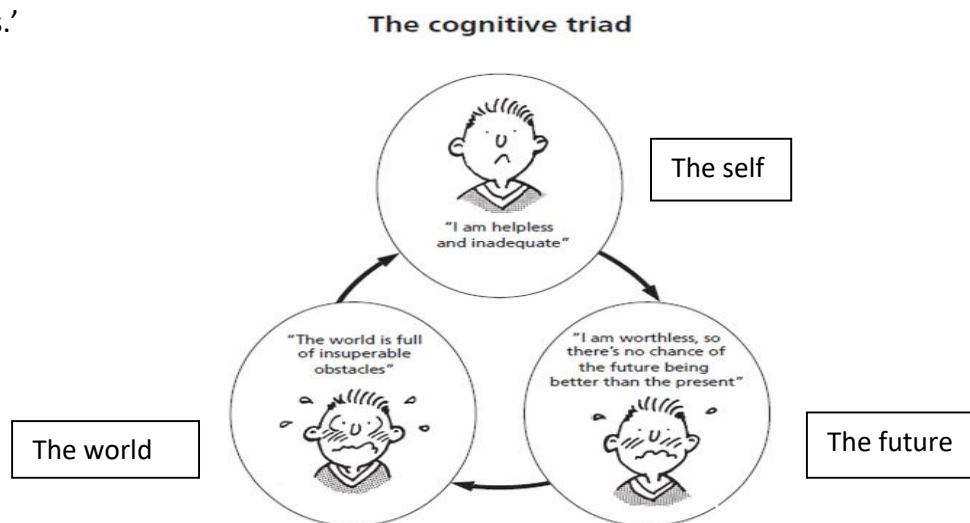
Beck suggested that the **negative triad is maintained by negative schemas and cognitive biases/distortions.**

Negative self-schemas

A schema is a **mental framework** for the interpretation of information and is developed through experience.

Beck suggested that negative self-schemas are **developed in childhood and adolescence**, which may come from negative experiences, for example criticism, abuse or bullying. These then continue into adulthood and dominate thinking (see cognitive biases below).

We use schemas to interpret the world, so if we have a negative self-schema (information about ourselves) we interpret all information about ourselves in a negative way.

Examples include:
*   **Self-blame schema**- makes people with depression feel responsible for all misfortunes
*   **Ineptness schema**- makes people with depression expect to fail

Cognitive biases

Cognitive biases are faulty or unhelpful thinking patterns. Beck referred to some of these biases as "automatic thoughts", suggesting they are not entirely under conscious control. According to Beck, people with depression are more likely to focus on the negative aspects of a situation and ignore positives. There is a tendency for them to make overly negative and self-defeating interpretations that lead to a **lack of motivation, low mood and feelings of hopelessness.**

Common cognitive biases include:

- **Overgeneralisation-** sweeping conclusions drawn on the basis of a single event. For example, a student regarding poor performance on one test as proof of his worthlessness

- **Catastrophising-** exaggerating a minor setback until it becomes a complete disaster. For example, believing that if you make one small mistake at your job, you may get fired.

Outlining the cognitive approach to explaining depression

Cognitive theories for explaining depression include Beck's Negative Triad and Ellis's ABC Model.

Beck believed that individuals experience **depression** because their thinking is biased towards negative interpretations of the self, the world and the future, which he called the negative triad. For example, they may have the view that they are worthless or inadequate (the self), they may feel like they will never be good enough (the future) and they may have the view that the world is a cold, hard place (the world). Beck suggested the negative triad is maintained through negative self-schemas and cognitive biases. Negative self-schemas lead to the person interpreting all information about themselves in a negative way, one example is the self-blame schema where someone with **depression** feels personally responsible for all their misfortunes. Cognitive biases are faulty thinking patterns. According to Beck, people with **depression** are more likely to focus on the negative aspects of a situation and ignore the positives. One example of a cognitive bias that some with depression may have is catastrophising which is where they exaggerate minor setbacks as complete disasters.

Ellis proposed the ABC model, to explain how irrational thoughts can lead to **depression**. Ellis emphasises the role of the situation or event that can trigger irrational thoughts. An activating event (A) occurs, for example, you pass a friend in the corridor at school and they ignore you, when you say 'hello'. Your belief (B) is your interpretation, which could either be rational or irrational. According to Ellis, an irrational belief (e.g. 'my friend must hate me') can lead to unhealthy emotional consequences (C), including **depression**.

> **Exam tip:** Unless the exam question specifically asks you to outline Beck or Ellis' theory you can either write about one in detail (Beck would be good to do) or both in less detail.

Evaluation of the cognitive approach to depression

Supporting evidence	There is a wealth of supporting evidence for the idea that cognitive vulnerability links to the onset of depression, with depressives selectively attending to negative stimuli. For example, **Boury et al. (2001)** monitored students' negative thoughts with the Beck depression inventory (BDI), finding that depressives misinterpret facts and experiences in a negative fashion and feel hopeless about the future. This supports Beck's theory that people with depression often have biased, negative interpretations of the world.
Issue with causation	Most evidence linking negative thinking to depression is correlational and doesn't indicate negative thoughts as a cause of depression. So it is still unclear whether there is a cause and effect relationship**.** Does depression cause negative thinking? Or do negative thoughts cause depression? Beck came to believe it was a *bi-directional relationship*, where both elements influence each other (see diagram below). As a result, we cannot conclude from the research evidence that faulty thinking is the cause of depression.
An interactionist approach may be more appropriate	Attempting to explain why or how depression occurs is complex therefore it could be argued that trying to explain depression from a purely cognitive standpoint may not be appropriate. There is ample research to support the role biological factors play in the development of depression for example, low serotonin levels and a genetic vulnerability in depressed people. However, the cognitive approach does offer a concise explanation for the distorted thinking present in people with depression, which cannot be explained well by a biological approach. Therefore, it may be better to explain depression by considering both the biological and cognitive approaches.

Negative thoughts ⟷ Depression
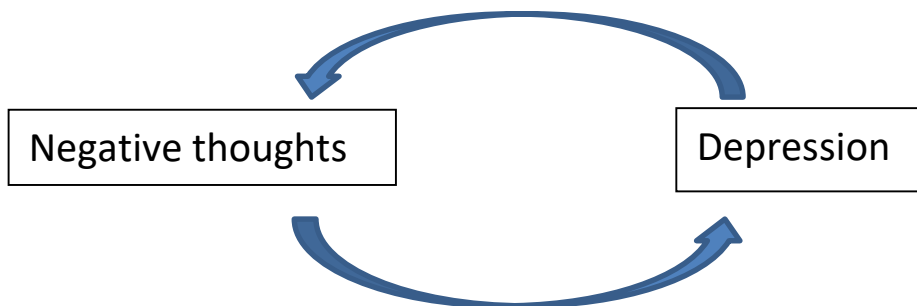
The Cognitive Approach to Treating Depression

Cognitive behavioural therapy (CBT)

Cognitive behavioural therapy (CBT) is the most common treatment for depression and has been developed based on the key concepts from the cognitive explanation of depression. As behaviour is seen as being a result of negative thinking, the most logical and effective, way of treating depression is to **change or modify the irrational thoughts** and negative schema.

Alongside the cognitive aspects of CBT, the therapist may also work to encourage the service user to be more active and engage in positive behaviour patterns and activities. This is called **Behavioural Activation.**

Cognitive Behavioural Therapy is, in fact, an umbrella term for many different therapies that share some common elements. One form of CBT is Ellis's Rational Emotive Behaviour Therapy (REBT).

Ellis's Rational Emotive Behavioural Therapy (REBT):

The aim is for the individual with depression to **identify and challenge their negative thoughts and beliefs** by re-interpreting them in a more positive way. This helps to **prevent further negative thinking and emotions such as low mood and feelings of worthlessness.**

REBT extends the ABC model (see explanation) to an ABCDE model – the D stands for **dispute** (challenging the irrational thoughts) and the E stands for **effect** (irrational beliefs are replaced with rational beliefs).
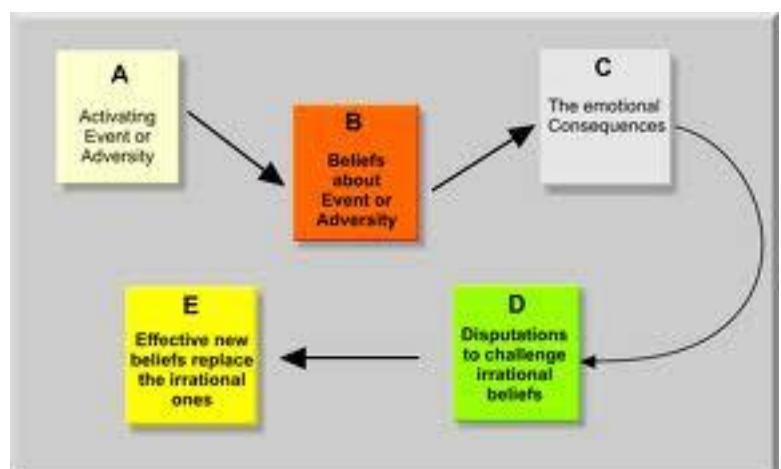
The central part of REBT is to **identify and dispute irrational thoughts and beliefs**.

The individual will firstly **identify** any previous experiences and activating events, which may have resulted in their negative and irrational beliefs and subsequent behaviours.

The therapist then uses **rational confrontation to reduce negative cognitive and emotional symptoms of depression.**

One way the therapist does this is through **empirical dispute**; this involves asking the patient for **proof** that their negative thoughts or beliefs are true. For example asking for evidence to support the individual's negative self-schema *"what **evidence** do you have that others no one likes you."*

Another way is **logical dispute** which involves asking if the negative belief is logical or based on common sense *"Is it rational to assume that you are a complete failure after this one set back."*

Outlining CBT as a treatment for depression

The aim of CBT is for the individual with depression to identify and challenge their negative thoughts and beliefs to prevent further negative thinking patterns and their emotional effects such as **low mood and feeling of worthlessness.** Ellis developed his ABC model to include D (dispute) and E (effect) to inform methods of CBT. The individual will firstly identify any previous experiences or activating events, which may have resulted in their negative and irrational beliefs and subsequent behaviours. The therapist will use rational confrontation to dispute (D) the sufferer's irrational beliefs which have the effect (E) of **reducing the cognitive and emotional symptoms of depression**. An example of dispute is empirical dispute which involves asking the patient for proof that their negative thoughts or beliefs are true. For example, *"what evidence do you have that others no one likes you."* The therapist will also use behavioural activation to encourage the service user to be more active and engage in positive behaviour patterns to help **reduce symptoms of depression**.

Evaluation of CBT

Effectiveness of CBT	There is a large amount of supporting evidence for the effectiveness of CBT being used to treat depression. For example, **David et al (2008)** found, using 170 patients suffering from major depressive disorder, patients who were treated with 14 weeks of REBT had better treatment outcomes than those treated with the drug fluoxetine 6 months after treatment. This suggests that CBT is a more effective treatment for depression than the drug therapies and that it provides a suitable long term treatment for depression. However, **Craighead and Dunlop (2014)** carried out a meta-analysis to find out whether CBT is more effective when used on its own or in combination with drug therapy. For long-lasting depression, combined treatment was generally more effective. This suggests that biological factors also play a role in the depression and that it is not suitable to just use CBT to treat depression long term.
Appropriateness of CBT	In cases of severe depression, patients may not be able to motivate themselves enough to engage in CBT so it may be more appropriate to treat these patients with anti-depressants and commence CBT when they are able to fully engage with the treatment. Therefore CBT may be more effective when used as a combined approach to treating severe depression.
Effectiveness of CBT	The success of the treatment could be down to the patient-therapist relationship rather than the particular techniques that are used. Many comparative reviews (e.g. Luborsky et al, 2002) find very small differences, supporting the idea that simply having someone to talk to and who will listen is what is most important. Therefore support groups could be used instead as it may not be necessary for a trained mental health professional to be involved in the treatment.

Extended evaluation:

CBT could be criticised for overemphasising cognitions and underestimating the importance of the patients personal circumstances (e.g. if they are in poverty or suffering abuse). It may be that the patients circumstances need to change and focussing on the mind rather than the environment could prevent this.

The Biological Approach to Explaining OCD

Genetics

Genetic explanations focus on whether individuals inherit a genetic pre-disposition to developing OCD.

Family and twin studies:

Family studies have shown that relatives of OCD are more vulnerable to developing OCD. For example, **Nestadt et al (2000)** found that first-degree relatives (i.e. parents, siblings) of OCD sufferers had an 11.7% chance of developing the disorder compared to a 2.7% risk in first-degree relatives of control patients without OCD.

Twin studies have also been used to investigate the role genetics play in developing OCD. They involve a comparison between identical twins (monozygotic – MZ) and non-identical twins (dizygotic – DZ). MZ twins share 100% of their genes and DZ share only 50% of their genes so if genes do play a role in developing OCD we would expect to find a higher concordance rate for MZ than DZ. For example, **Carey and Gottesman (1981)** found MZ twins has a concordance rate of 87% for obsessive symptoms and features compared to 47% in DZ twins.

> *Concordance rate:*
>
> *The probability that a pair of individuals will both have a certain characteristic, given that one of the pair has the characteristic.*

Candidate genes:

The **COMT gene** regulates the neurotransmitter dopamine. One variation of the COMT gene results in higher levels of dopamine and this variation has been found to be more common in patients with OCD, in comparison to people without OCD.

The **SERT gene** (also known as the 5-HTT gene) is linked to the neurotransmitter serotonin and affects the transport of the serotonin (hence Serotonin Transporter), causing lower levels of serotonin which is also associated with OCD (and depression)

However, OCD seems to be polygenic. This means that OCD is not caused by one single gene but that several genes are involved. Taylor (2003) suggests that as many as 230 genes may be involved and different genetic variations contribute to the different types of OCD.

Evaluation of genetic explanations

Supporting evidence from twin and family studies	There is a large amount of consistent evidence from twin and family studies which show that genetic factors are important in developing OCD. For example, **Nestadt et al (2010)** reviewed previous twin studies and found that 68% of identical twins shared OCD as opposed to 31% of non-identical twins. This study supports the link between genetics and OCD as MZ twins share 100% of their genes whereas DZ twins only share 50% therefore as the concordance rates and percentages are higher for MZ twins this shows that genetics must play a role in developing OCD.
Issue with the research investigating the role of genetics	Although twin studies strongly suggest OCD is largely under genetic control, psychologists have not yet pinned down all the genes involved. One reason for this is because it appears that several genes are involved and that each genetic variation only increases the risk of OCD by a fraction. The consequence of this is that a genetic explanation is unlikely to ever be very useful because it provides little predictive value.
Diathesis-stress	Evidence for the genetic explanation suggests that some people may be more susceptible to OCD however it does not suggest that genes are the sole cause of OCD. It seems that environmental factors also trigger or increase the risk of developing OCD. For example, **Cromer et al (2007)** found over half the OCD patients in their sample had a traumatic event in their past, and that OCD was more severe in those with more than one trauma. This suggests that an interactionist approach to explaining OCD would be more appropriate.

Extended evaluation:

Our genetic coding is complex and as genome research has developed there has been some suggestion that MZ twins may have similar genes but are not completely identical. If this is the case this we would have to seriously consider the extent to which twin studies can be used to investigate the role of genes as an explanation of OCD.

Neural explanations

The neural explanations for OCD include biochemical causes (e.g. the role of neurotransmitters) and neurophysiological causes (certain areas of the brain e.g. the orbitofrontal cortex).

Biochemical causes (neurotransmitters): Neurotransmitters, in particular serotonin and dopamine, have been found to play a role in OCD.

Serotonin: If a person has low levels of serotonin then normal transmission of mood-relevant information does not take place which means mood, and sometimes other mental processes, are affected. For example, when low serotonin levels are experienced by someone with OCD, it can make them edgier and more hyperaware of their environments than usual, resulting in increased OCD-related behaviours such as obsessive hand-washing, counting or organizing.

Piggott et al (1990) found that drugs which increase the level of serotonin in the synaptic gap are effective in treating patients with OCD, suggesting that serotonin is a contributory factor.

Dopamine: High levels of dopamine have been linked to OCD. This may be because dopamine is thought to influence concentration which could explain why OCD individuals experience an inability to stop focussing on obsessive thoughts and repetitive behaviours.

Neurophysiological causes (areas of the brain):
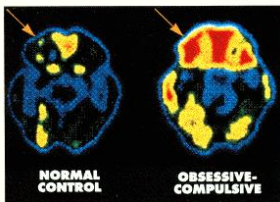
Research has found sufferers of OCD have **elevated levels of activity in the orbitofrontal cortex and the caudate nucleus** (located in the basal ganglia).
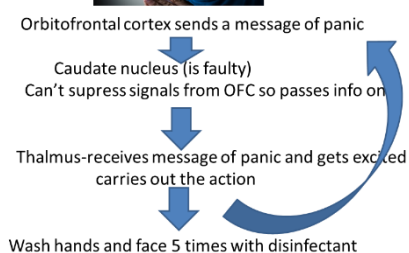PET scans of patients with OCD have shown higher levels of activity in the OFC. The orbitofrontal cortex is part of a brain circuit; one of the functions of this circuit appears to be turning sensory information into thoughts and actions. Primitive impulses, for example to check and clean, arise from the orbitofrontal cortex in response to sensory inputs.
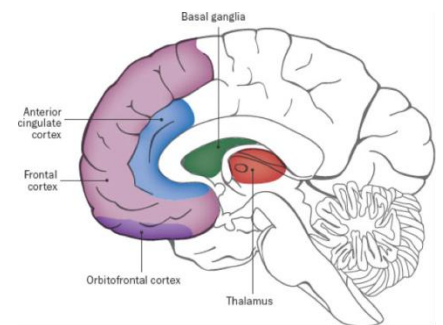
Here is a description of how the circuit relates to OCD:

The orbital frontal cortex sends a message of panic to the caudate nucleus. A normal brain would decide whether or not this issue is important and if it is, it would get passed on to the thalamus to take action. If the message isn't important or has already been dealt with it will filter out ending the circuit. However in a brain of an OCD sufferer, the caudate nucleus does not work correctly and sends the potentially faulty message of panic to the thalamus which then sends strong signals back to the OFC which carries out the

Orbitofrontal cortex sends a message of panic

Caudate nucleus (is faulty)
Can't supress signals from OFC so passes info on

Thalmus-receives message of panic and gets excited
carries out the action

Wash hands and face 5 times with disinfectant

action e.g. washing hands. This will keep repeating on a loop which is why someone with OCD performs compulsions which are repetitive rituals.
For example, a non-suffer of OCD may have an impulse to wash dirt from their hands; once this is done the impulse to perform the activity stops and so does the behaviour. It may be that the brains of those with OCD have difficulty switching off these impulses so that they turn into obsessions, resulting in compulsive behaviour.

Evaluation of neural explanations

|	
Supporting evidence	**Hu (2006)** compared serotonin activity in 169 OCD sufferers and 253 non-sufferers, finding serotonin levels to be lower in the OCD patients therefore supporting the link between low levels of serotonin and OCD. A review of brain-imaging research shows elevated activity in the orbital region and the caudate nucleus has been found consistently in OCD patients compared to healthy controls. After treatment, activity in these brain areas reduces to a level comparable to that of controls as found by **Saxena and Rauch (2000).** This supports the neurophysiological explanation as it shows that these areas of the brain are linked to OCD.
Issue with causation	An issue with the biochemical explanation is that it is difficult to establish whether low levels of serotonin actually cause OCD, are an effect of having the disorder or are merely associated with the disorder. Causation cannot be inferred as only associations have been identified from the research conducted. Therefore, the biochemical explanation is limited as no firm conclusions can be made as to whether it does cause OCD.
Issue with research into brain structures and OCD	In relation to the neurophysiological explanations, the relationship between OCD and the functions of the basal ganglia is not straightforward. Neuroimaging studies have so far failed to identify the basal ganglia impairments in all OCD sufferers, and some people with brain impairments involving the basal ganglia show no signs of OCD (**Ring and Serra-Mestres, 2002**). This suggests that perhaps further research needs to be done in order for us to fully understand the exact role that the basil ganglia plays in the development of OCD.

Evaluation related to both biological explanations

Biological reductionism	Biological explanations for OCD have been criticised for reducing a complex human behaviour, OCD, to a single gene or brain chemical and so is considered biologically reductionist. This is problematic because the biological explanations do not consider the role of cognitions (thinking) or learning in the development or maintenance of OCD and is therefore seen as an overly simplistic explanation.

The Biological Approach to Treating OCD

Drug therapy

Drugs aim to increase or decrease the level of neurotransmitters in the brain. In relation to OCD, drug therapy consists of **drugs that increase levels of the neurotransmitter serotonin.**

SSRIs (selective serotonin reuptake inhibitor) are a type of antidepressant drug which prevent the re-absorption and breakdown of serotonin. This results in more serotonin being made available in the synapse. Increasing levels of serotonin can result in improved symptoms for the sufferer.
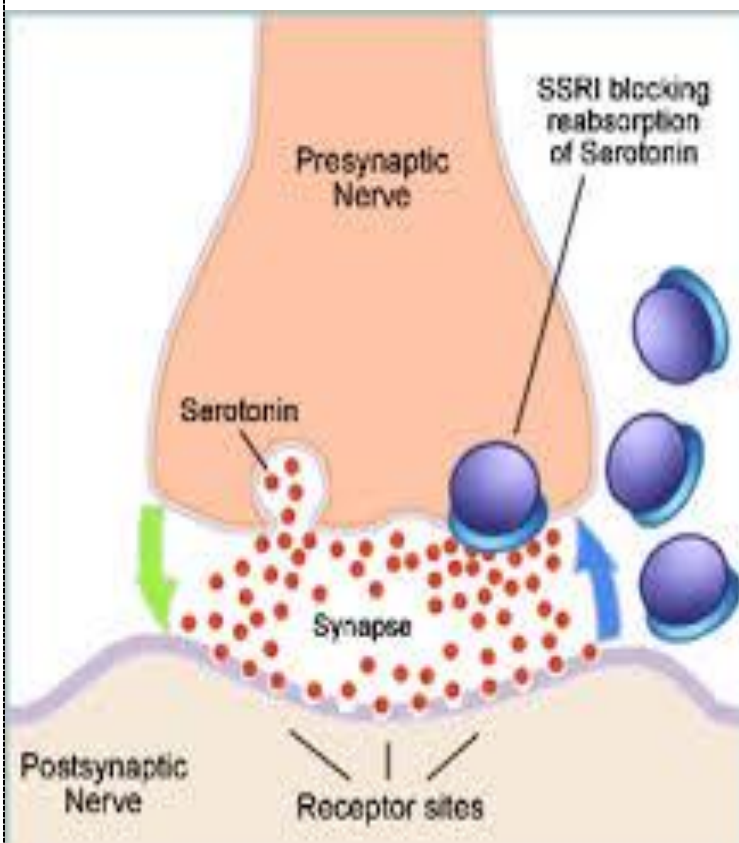
How SSRI's work: (links to synaptic transmission from Biopsychology topic)

- When serotonin is released from the **pre-synaptic neuron** into the **synapse**, it travels, and **binds**, to the **receptors** on the **post-synaptic neuron**.
- Serotonin which is not absorbed into the post-synaptic neuron is reabsorbed into the pre-synaptic neuron.
- **SSRIs increase the level of serotonin available in the synapse** by **preventing it from being reabsorbed** into the pre-synaptic neuron cell.
- This results in **more serotonin** being **received** by the **post-synaptic neuron**.

One type of SSRI is Fluoxetine. If SSRIs prove ineffective then the dose can be increased or it can be combined with other drugs. Sometimes alternative drugs are given as patients can respond differently to different drugs. Two other examples of drug treatments are; Tricyclics, which have the same effect as SSRI's (however these are generally only used when patients do not respond to SSRIs as the side effects are more severe) and SNRIs, which are newly developed anti-depressants that increase the level of serotonin and noradrenaline.

As a treatment for OCD, it is common for drugs to be used alongside other treatments, such as CBT.

Evaluation of the biological treatments

Effectiveness of drug therapies in treating OCD	There are a number of research studies that have investigated the effectiveness biological treatments of OCD. For example: **Julien (2007)** reported that studies of SSRIs show that although the symptoms do not fully disappear between 50% and 80% of OCD patients improve, allowing them to live a fairly normal lifestyle, which they wouldn't be able to do without the treatment. Furthermore, **Soomro et al (2009)** reviewed studies comparing SSRIs to placebos in the treatment of OCD and concluded that all 17 studies reviewed showed significantly better results for SSRIs than for placebo conditions. These studies suggest that altering serotonin levels in OCD patients often helps to reduce the symptoms and that despite drug treatments not always being completely effective, they should still be considered as a possible treatment option for people who suffer from OCD.
Appropriateness of drug therapies as a treatment for OCD	Patients can experience a number of side effects with drug treatments. For example, loss of appetite, loss of sex drive, irritability, sleep pattern disturbance and headaches are all common side effects. This could mean that it may not always be an appropriate treatment for all OCD sufferers plus if the side effects are severe enough, it could actually lead to the patient stopping the treatment all together.
Effectiveness and appropriateness of drug therapies as a treatment for OCD	Drug treatments reduce obsessive thoughts and compulsive behaviour to such a level that a normal lifestyle can be achieved however they do not 'cure' OCD. They may be an appropriate and effective short term treatment however if medication is stopped patients suffer relapse of their symptoms. Therefore drug treatments could be seen as less appropriate, in contrast to psychological treatments, as they do not allow the sufferer to actually overcome their obsessive thoughts and compulsive behaviours.