

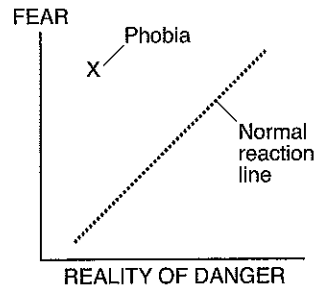
16.6 Anxiety disorders – symptoms and diagnosis

PHOBIAS

Diagnosis

The symptoms are unambiguous and diagnosis is easy:

- Persistent fear of a specific situation out of proportion to the reality of the danger.
- Compelling desire to avoid and escape the situation.
- Recognition that the fear is unreasonably excessive.
- Symptoms not due to another disorder, e.g. schizophrenia.



Although phobics perceive their disorder to be beyond their control and wish to be rid of it, with the exception of agoraphobics, the phobic's everyday functioning is unimpaired.

Symptoms of fear

There are various elements that make up the fear response:

- Cognitive elements – the expectation of impending harm.
- Somatic elements – the body's emergency reaction to danger and changes in appearance. The sympathetic nervous system is activated, releasing adrenaline.
- Emotional elements – the feelings of dread, terror, panic.
- Behaviour elements – usually fleeing or freezing.

Types of phobia

Most common phobias are found in the following 3 categories:

- **Agoraphobia** – involves fear of places of assembly, crowds and open spaces and is the most prevalent of all phobias. Occurring most often in women in early adulthood.
- **Social phobias** – involve fear of being observed doing something humiliating. Onset occurs most often in adolescence.
- **Specific phobias** – usually of three subtypes: **a** animals (e.g. spiders, snakes, rats), **b** inanimate objects (darkness, heights, enclosed spaces), **c** illness (injury, death, disease).

OBSESSIVE COMPULSIVE DISORDER

Diagnosis

According to the DSM IV, five criteria have to be met:

- Either obsession or compulsions must be experienced.
- The sufferer has to recognise that the obsessions or compulsions are excessive or unreasonable.
- The obsessions or compulsions are time consuming (taking over one hour a day), interfere with occupational or social functioning, and cause marked distress.
- The obsessions or compulsions are not confused with the preoccupations of other disorders, e.g. food with eating disorders, or drugs with substance abuse disorders.
- The obsessions or compulsions are not directly caused by medication or other known physical conditions.

Symptoms

- **Obsessions** – involve recurring and persistent thoughts, images or impulses that are experienced as inappropriate, intrusive and anxiety provoking, and are not just excessive worries about real life problems. The sufferer realises that these thoughts, etc. are the product of their own mind, and attempts to ignore or suppress them, often by thinking another thought or performing some action.
- **Compulsions** – involve repetitive and rule following behaviours (e.g. hand washing, checking) or mental acts (e.g. counting, praying) that the sufferer feels driven to perform (often in response to an obsession) to reduce distress or to avoid an imagined catastrophe. These acts are excessive and not realistically linked with what the sufferer is trying to avoid.

PANIC ATTACK

Diagnosis

According to the DSM IV a panic attack involves

- a discrete period of intense fear or discomfort, reaching a peak within 10 minutes.
- at least four (out of a list of 13) other symptoms occur very rapidly.

Symptoms

Somatic symptoms – such as sweating, trembling, palpitations, breathlessness, chest pain, nausea, dizziness, numbness, tingling or hot flushes.
Emotional symptoms – such as feelings of choking, smothering, derealization, depersonalisation, and fear of losing control, going mad or dying

GENERALISED ANXIETY DISORDER

Diagnosis

According to the DSM IV generalised anxiety disorder involves

- excessive, and difficult to control, worry and anxiety.
- significant distress and disruption to functioning.
- worry occurring more days than not for at least 6 months.
- worry not involving another disorder (e.g. depression).

Symptoms

Three additional symptoms must also be shown, e.g.

- restlessness and irritability,
- muscle tension, rapid physical fatigue, and sleep disturbance,
- concentration problems.

POST-TRAUMATIC STRESS DISORDER

Diagnosis

According to the DSM IV, post-traumatic stress disorder (PTSD) involves exposure to a traumatic event that was responded to with fear, helplessness or horror, plus the presence of the following symptoms for more than 1 month:

- The traumatic event is persistently re-experienced, e.g. as recurrent and intrusive recollections, flashbacks or dreams.
- Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness.
- Persistent symptoms of increased arousal, e.g. sleep difficulty, anger outbursts, exaggerated startle response, concentration difficulty.

16.6 Explanatory theories of anxiety disorders

BIOLOGICAL THEORIES

Genetics

The usual methods have been employed to assess the genetic causes of anxiety disorders:

- **Twin studies** – anxiety disorder concordance rates for monozygotic twins are fairly high, especially in comparison with dizygotic twin rates (Carey & Gottesman, 1981).
- **Relative studies** – some studies have shown that people with first degree relatives (e.g. mother, brother) who have experienced panic attacks are 10 times more likely than controls to also have them. Relatives of obsessive compulsives, however, are not more likely to develop obsessive compulsive disorder itself, but are more likely to suffer from some kind of anxiety disorder.

It appears that agoraphobia and panic disorder have the most **specific** genetic transmission, whereas other disorders seem to transmit a general tendency to inherit some kind of anxiety.

The genes for anxiety disorders have proven difficult to isolate however, and their method of action is unknown.

Evolutionary reasons for phobias

Seligman has talked of the 'biological preparedness' of phobias – that we are instinctively biased to acquire certain phobias because they have good evolutionary survival functions. Evidence for this comes from analysing the survival functions of the most common phobias (which usually involve dangerous stimuli, e.g. heights, snakes, the dark, etc.) and conditioning experiments, for example on monkeys which can be conditioned to fear snakes but not leaves or flowers. This also accounts for why modern dangerous objects, such as guns and cars, are rarely involved in human phobias – they have no evolutionary history.

Marks & Nesse argue that anxiety has evolved as 'a normal defence mechanism... People who are afraid of heights, for example, may "freeze" when confronted by a sudden drop, thereby reducing the chances of a fall'.

This does not explain why some people develop a particular phobic response compared to others.

Immediate biological causes

An excess of sodium lactate has been proposed as an explanation of panic attacks – infusions of this substance will provoke panic attacks in susceptible subjects significantly more than in controls. The same substance could be involved in phobias. Lactate may work by increasing blood carbon dioxide levels, thereby increasing respiration rates and provoking panic, or it may reduce serotonin, thereby reducing this neurotransmitter's calming effects. Evidence comes from the fact that anti-anxiety drugs block lactate effects.

PTSD may disrupt the locus coeruleus – the brain's alarm and arousal centre in the brain stem. This may be responsible for the PTSD symptoms of hyperalertness, difficulties in concentration and sleep, and exaggerated startle response. Biological theories on their own can not provide a complete explanation – bodily effects still need to be cognitively interpreted, and an explanation of why certain people develop certain anxiety disorders needs to be provided.

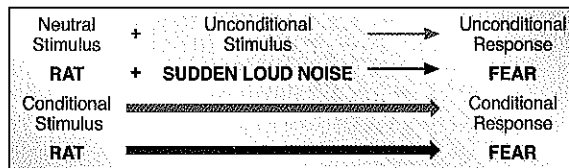
PSYCHOLOGICAL THEORIES

Psychoanalytic theory

Freud proposed that phobias are caused by the displacement of unconscious anxiety onto harmless external objects. The anxiety stems from unconscious conflict, which has to be resolved before the phobia can be dealt with – even if one phobia goes, another will take its place until the underlying disorder is treated. The classic evidence that Freud provided was the case study of 'Little Hans' (1909), where Hans's unconscious fear of castration was displaced onto a fear of being bitten by white horses (which symbolised the father). Freud would have attributed PTSD to repressed traumatic events. There are many criticisms of this approach and therapy.

Learning theory

Learning theorists propose that phobias come about as an originally neutral stimulus becomes associated with an unpleasant or traumatic experience and so becomes a fear-eliciting conditional stimulus. The classic example is the case of 'Little Albert' demonstrated by Watson & Rayner (1920).



The persistence of phobias (i.e. why they do not extinguish easily) is explained by Mowrer's (1960) 'Two-factor' theory. It suggests that phobias are acquired through classical conditioning (as above) but are maintained through negative reinforcement – as the avoidance of unpleasant phobic situations is reinforced.

The degree of PTSD suffering is related to the severity of the trauma experienced, perhaps indicating a strong form of classical conditioning is involved.

Behaviourist views of phobia learning have to compromise with:

- biological preparedness (not all fears are equally easy to learn)
- vicarious learning of fear responses via social learning theory.

Cognitive theory

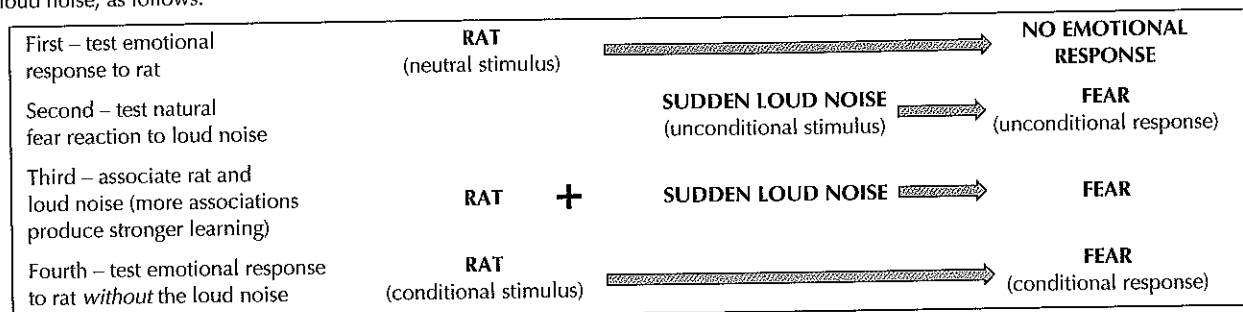
Clark (1986) proposes that faulty cognitive processes (thinking) are to blame for panic attacks. The sufferers tend to focus their attention internally, so are more aware of bodily sensations, and are more likely to misinterpret those sensations as catastrophic. This thinking can lead to a vicious circle as an increased heart rate is misinterpreted as a sign of impending harm – this leads to anxiety – which in turn leads to increased heart rate! People suffering from generalised anxiety disorder show the attentional problem of over-vigilance – they are extremely sensitive to even minor danger cues.

Expectancies are important in determining whether traumatic events will cause PTSD. If people in the emergency services are not prepared for traumatic events, they are likely to suffer PTSD. Obsessive compulsives appear to use their obsessive thoughts and compulsive actions as a way of **suppressing** or controlling some underlying anxiety or worry. These thoughts and actions may be negatively reinforced by providing momentary escape from the underlying anxiety.

16.8 Classical conditioning and phobias

PHOBIAS AS CONDITIONED EMOTIONAL RESPONSES

Behaviourist learning theorists such as Watson suggested that phobias were conditioned emotional responses. Certain stimuli, such as sudden loud noises, naturally cause fear reactions, and stimuli that become associated with them will acquire the same emotional response. In classical conditioning terms, if a rat does not originally produce fear, it can be made to do so by being associated with a loud noise, as follows.



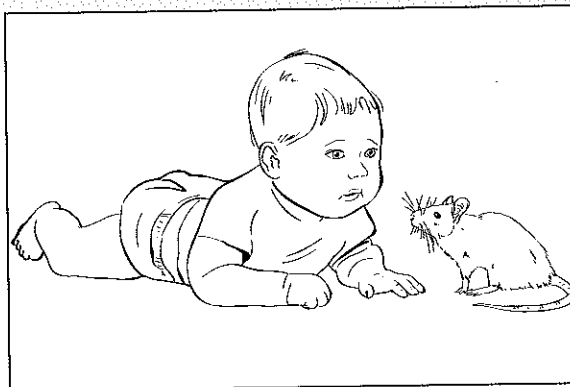
THE CASE OF LITTLE ALBERT – WATSON & RAYNER (1920)

Watson and Rayner aimed to provide experimental support for the conditioning of emotional responses such as phobias using a 'stolid and unemotional' young infant, Albert B, to test four questions:

- Can a fear of an animal e.g. a white rat be conditioned by visually presenting it and simultaneously striking a steel bar to create fear?**
 - At approx. 9 months Albert, who had been reared almost from birth in a hospital environment, was suddenly presented with stimuli such as a white rat, a rabbit, a dog, a monkey, masks (with and without hair), cotton wool and burning newspapers. Albert showed no fear reaction at any time – a typical response since he practically never cried and had never been seen to show either fear or rage before.
 - Two stimuli were used to try and produce a fear response in Albert – the sudden removal of support (dropping and jerking the blanket he was lying on) and sharply striking a suspended steel bar with a hammer behind his head. The first stimuli was tried exhaustively but was not effective in producing a fear response, while the second stimuli caused Albert to start violently, catch his breath and raise his arms on the first blow, do the same but pucker and tremble his lips on the second blow, and burst into tears on the third blow.
 - At 11 months and 3 days of age the bar was struck behind Albert's head as he began touching the white rat that had been suddenly presented to him. He jumped violently and fell forward, burying his face in the mattress. When he touched the rat with his other hand, the steel bar was struck a second time – having the same effect and causing him to whimper.
 - At 11 months and 10 days of age, Albert was presented with the rat and appeared apprehensive about touching it. After five further joint presentations of the rat and the noise, the rat was again presented alone. The instant he saw it he began to cry, fell over, and then crawled away so fast that he was caught with difficulty before reaching the edge of the table.
- Is there transfer (stimulus generalisation) of the conditioned emotional response to other objects?**
 - At 11 months and 15 days of age, Albert was presented with a variety of stimuli. He reacted with most fear to the rat and rabbit, slightly less fear to the dog and a seal fur coat and showed avoidance towards cotton wool, Watson's hair and a Santa Claus mask. He played happily with his blocks (smiling and gurgling) and with the hair of other people however.
 - At 11 months and 20 days the reactions to the rat and rabbit were not as violent so the bar was struck again with the rat, rabbit and dog to strengthen the response before Albert was moved to a different room. The fear did transfer to this new location, but with less intensity.
- What is the effect of time upon conditioned emotional responses?**

Since Albert was due to leave the hospital, only a one-month delay could be left before further testing. At 1 year and 21 days of age Albert showed avoidance of the Santa Claus mask, fur coat, rat, rabbit and dog. He cried on contact with the coat, rabbit and dog, but not the rat (he just covered his eyes with both his hands).
- Can conditioned emotional responses be removed?**

Albert was removed from the hospital on the day the above tests were made and so the authors stated 'the opportunity to build up an experimental technique by means of which we could remove the conditioned emotional responses was denied us'. They suggested they might have tried continually presenting the fearful stimuli to encourage fatigue of the fear response, associating the fearful stimuli with pleasant stimuli, e.g. stimulation of the erogenous zones or food, and encouraging imitation of non-fearful responses.



EVALUATION

Methodological The study has serious ethical problems. Watson and Rayner reported that they hesitated about proceeding with the experiment but comforted themselves that Albert would encounter such traumatic associations when he left the sheltered environment of the nursery anyway. This is not a very good ethical defence, especially since they believed such associations might persist indefinitely and did not leave sufficient time to remove them afterwards, despite knowing Albert was due to leave.

Theoretical The authors claim the study supports the conditioning of emotional responses and point out that their ideas contradict Freudian theories on the primacy of the emotion of love/sex and the origin of phobias. Nevertheless Albert did show a good deal of resistance to the conditioning process and did not show a fear reaction if he was allowed to suck his thumb.