

# Anxiety Disorders: An Introduction to Phobias & Explanations

## BIOLOGICAL APPROACH

### Genetic Factors

Some people acquire phobias whilst others do not, even if they have the same opportunities for learning. Suggests biology/genetics may play a role. The main evidence on genetic factors in the development of phobias comes from twin studies, although some family studies have also been carried out.

- **Twin studies** (attempt to separate genetic factors from environmental factors). They examine the 'rate' of concordance of a disorder (i.e. whether both twins are affected). A comparison is made between monozygotic (MZ) twins, who have identical genetic make-up, and dizygotic (DZ) twins, who are no more genetically alike than any other siblings)

- **Family studies** examine the occurrence of the disorder with first degree relatives (parents, children, siblings)

### Panic Disorder with agoraphobia

**Torgersen (1983)** looked at pairs of MZ & DZ twins, at least one of who had panic disorder. The concordance rate was 31% for MZs against 0% for DZs.

**Noydret et al (1986)** found that 12% of the first-degree relatives of agoraphobics also had agoraphobia, & 17% suffered from panic disorder. Both of these figures are greater than controls.

**Harris et al (1983)** found that close relatives of agoraphobic patients were more likely to be suffering from agoraphobia than were the close relatives of non-agoraphobic individuals

These findings are consistent with the view that genetic factors play a part in the development of agoraphobia. However, they cannot eliminate the effects of the environment. It might be that the individuals learnt their phobias through imitation. As although close relatives share genes, they also have considerable opportunity to observe & influence one another. Therefore, although genetics

factors may be involved in the cause of phobias, the degree to which they are important remains inconclusive.

### **Specific Phobia**

**Fyer et al (1990)** studied 49 first-degree relatives of people with a specific phobia & found that 31% of relatives were also diagnosed with phobias, but only two people had the same type

**Ost (1989)** found that 64% of those with blood phobia had at least one close relative who also suffered from blood phobia. Again, the results of the above studies are consistent with the notion of the involvement of genetic factors, but the role of imitation cannot be ignored.

### **Social Phobia**

**Fyer et al (1993)** discovered that 16% of the close relatives of social phobics developed the same disorder, against only 5% of the relatives without social phobia. However, **Skre et al (1993)** found that the concordance rate for social phobia was similar in MZ & DZ twins, leading them to conclude that social phobia is caused mainly by environmental influences.

### **Biological 'Preparedness'**

**Seligman (1971)** proposed the concept of biological preparedness. This suggests that all species are innately 'prepared' to fear & avoid certain natural stimuli because they are potentially dangerous. We have evolved a predisposition (preparedness) to fear certain stimuli because such fears had survival value for our ancestors.

According to this idea, each species finds some kinds of learning much easier than others because of their biological predispositions. **Garcia & Koelling (1966)** showed that rats could be conditioned easily to avoid life-threatening situations (such as shocks or poisonous liquids), but not to stimuli which carried no nasty consequences such as flashing lights. Therefore, they were 'prepared' to fear dangerous stimuli.

### **Neurological Explanations**

Based on the functioning of the autonomic nervous system (sustains basic life processes of which we

are not consciously aware, e.g. respiration, heart rate, 'fight or flight' reaction to emergency situations -i.e. physiological arousal). **Lader and St Matthews (1968)** found that people who develop social phobia or panic disorder with agoraphobia have high levels of arousal. However, this begs the question of whether high arousal levels are the cause of, or the consequence of the phobia.

### BEHAVIOURAL APPROACH

#### Classical Conditioning

A person can come to fear a neutral/harmless stimulus if it is paired with a frightening/painful stimulus on numerous occasions.

**Watson & Rayner (1920)** conditioned '**Little Albert**' to be afraid of rats. Every time he played with his white rat, he was startled by a sudden loud noise caused by striking a steel bar. Very quickly he began to show fear of the rat & other similar objects.

Some phobias fit this model quite well. **Barlow & Durand (1995)** report that 50% of those with specific fear of driving remember a traumatic experience while driving (e.g. an accident) as having caused the onset of the phobia, e.g. some people become intensely afraid of driving a car after a serious accident (associate car with accident)

However, not all phobias can be acquired in this manner. **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.

**Menzies & Clark (1993)** carried out a study on children suffering from water phobia. Only 2% of them reported a frightening encounter (conditioning experience) with water.

Furthermore, Watson & Rayner's findings have proved difficult to replicate. Most laboratory studies have obtained little or no evidence that individuals can be conditioned to fear neutral stimuli by pairing them with unpleasant ones (**Davison & Neale, 1996**)

#### Modelling/Observational Learning.

**Bandura (1986)** developed conditioning theory by showing the importance of modelling/observational learning. Phobic responses may be learned through imitating the reactions of others.

**Bandura & Rosenthal (1966)** arranged for subjects to watch a model (a confederate of the experimenter) in a painful conditioning situation. The model was wired up to electrical apparatus & each time a buzzer sounded, the model was seen to rapidly remove his/her hand. The physiological responses of the subjects watching were recorded.

After the subjects had seen the model 'suffer' a number of times, they showed stronger emotional responses when the buzzer sounded - began to react emotionally to a harmless stimulus just through observing others' reactions.

**Mineka (1984)** reared adolescent monkeys with parents who were terrified of snakes. During observational learning sessions, the adolescent monkeys saw their parents interact fearfully with real & toy snakes & non-fearfully with neutral objects. After six sessions, the fear of the adolescent monkeys was identical to that of the parents.

**Merckelbach et al (1996)** argue that some phobias can be acquired through modelling (e.g. small-animal phobias & blood-injection-injury phobias), but that claustrophobia rarely develops as a result of modelling.

## **COGNITIVE APPROACH**

Extends the behavioural view to incorporate thinking. **Beck (1963)** suggests that irrational beliefs & catastrophic thoughts contribute to the development of a phobia.

For example, an experience of feeling 'hemmed in' in a crowded lift might be maintained later on by thoughts & beliefs such as "I might suffocate if I were trapped in a lift". This then turns into a fear of lifts, which is then generalised to other situations, resulting in the onset of claustrophobia.

Therefore, it is not only an initial exposure to a fearful situation, which initiates the phobia (Conditioning theory). It is also the person's irrational thoughts about the future possibility of a fearful situation.

However, we cannot state that the irrational beliefs/faulty cognitions play a part in causing phobias. They may be simply a result of having a phobia.

## **PSYCHODYNAMIC APPROACH**

According to Freud, phobias are a defence against the anxiety that is produced when the needs of the id (sexual instinct) are forced into the unconscious through the defence mechanism of repression. The original source of the fear is repressed into the unconscious & the fear is then displaced onto some other person, object or situation. Thus the fear appears to be irrational because there is no conscious explanation for it.

Freud's theory of phobias rests on his 1909 case study of a boy named **Little Hans** who developed a fear of horses. Freud believed that the boy's phobia was directly related to his unconscious fear of his father, associated with the Oedipal complex (sexually desiring his mother, identification etc.). He therefore displaced his fear of his father on to horses.

Hans therefore should have showed a phobic reaction every time he saw a horse. In fact he only showed his phobia when he saw a horse pulling a cart at high speed. Hans' horse phobia originally developed after he had seen a serious accident involving such a horse & cart travelling fast. Therefore, conditioning may have caused the phobia.