Aversion therapy involves modifying undesirable behaviour by the old-fashioned method of punishment. Probably the most commonly used aversive stimuli today are drugs that have noxious effects, such as Antabuse, which inducing nausea and vomiting when a person who has taken it ingests alcohol. For example, a person may volunteer for the therapy when or she realises that their drinking is out of control, they will take a drug everyday administered by the therapist. If they drink alcohol that day they will be immediately sick. Aversion therapy establishes the importance of congruity in its method of treatment. Therefore, the undesirable behaviour is likely to decrease as the person gradually associates the drinking with feeling nauseous.

Token economies are based on the principles of operant conditioning and are typically used in closed institutions such as prisons and hospitals, but are also used outside in the community, like for those on probation. Token economies are used to obtain desired/appropriate behaviour from mentally ill patients. When a patient behaved appropriately on the hospital ward, they would earn a token (secondary reinforcer) which could then be saved up and used in exchange for something the patient desired (primary reinforcer) such as chocolate, family visits etc. They have been used in hospitals to establish adaptive behaviours, and from elementary responses such as eating and making one’s bed to the daily performance of responsible hospital jobs. Token economies assume that the behaviour learned in the institutions will generalise to the behaviour performed in the outside world, once the patients have been released.

Cognitive and cognitive-behavioural therapy stem from both cognitive psychology (with its emphases in the effect of thoughts on behaviour) and behaviourism (with its rigorous methodology and performance-oriented focus).

Rational emotive behaviour therapy attempts to change a client’s maladaptive thought processes, on which maladaptive emotional responses, and thus behaviour, are presumed to depend. Albert Ellis posited that a well-functioning individual behaves rationally and in tune with empirical reality. Unfortunately, however, many of us have learned unrealistic beliefs and perfectionistic values that cause us to expect too much of ourselves, leading us to behave irrationally and then to feel that we are worthless failures. For example, a person
GENETIC FACTORS

It appears that certain types of phobia run in families, which suggest that either the phobia is transmitted directly or the temperament that is conductive to the development of certain phobias may be transmitted directly. For instance, as panic disorder with agoraphobia is concerned, Torgersen (1983) considered pairs of identical and fraternal twins, at least one of whom had panic disorder. The concordance rate was 31% for identical twins against 0% for fraternal twins. Harris et al (1983) found that close relatives of agoraphobic patients were most likely to be suffering from agoraphobia that was the close relatives of non-anxious individuals. These findings show that genetics play a part in the development of agoraphobia; however, the close relatives may tend to become agoraphobic because he or she imitates the behaviour displayed by the patient, rather than because of genetic inheritance.

PSYCHODYNAMIC VIEW

According to Freud, phobias are a defence against the anxiety that is produced when the impulses of the id or sexual instinct are repressed or forced into the unconscious. The anxiety is displaced from the id impulse to an object or situation with some symbolic significance. This theory developed out of Freud’s case study of Little Hans, who developed a phobia of horses. According to Freud, Little Hans was sexually attracted to his mother, but was very frightened that he would be punished for this by his father. Horses resembled his father in that their black muzzles and blinkers looked like his moustache and glasses, and so Little Hans transferred or displaced his fear of his father onto horses.

COGNITIVE APPROACH

According to cognitive therapists such as Beck & Emery (1985), anxious patients have various cognitive biases which cause them to exaggerate the threat of external and internal stimuli. There is good evidence for cognitive biases in phobics. So far as specific phobias are concerned, Tomarken et al. (1989) presented individuals high and low in fears of snakes or spiders with a series of fear-relevant and fear-irrelevant slides. Each slide was followed by electric shock, a tone, or nothing. The high-fear or phobic participants greatly overestimated the number of times fear-relevant slides were followed by shock. This is
Once a person takes the drug regularly enough for tolerance to occur, they will experience withdrawal symptoms when he/she stops taking the drug.

2. **Physical Dependence:** this occurs when the body needs the drug to function normally and there are severe withdrawal symptoms if the drug is no longer available.

3. **Psychological Dependence:** this occurs when the drug produces intense pleasure and the individual believes that he/she cannot go without the drug. Not taking the drug causes psychological withdrawal symptoms (i.e. cravings; insomnia; depression) in the absence of physical dependence.

4. **Withdrawal:** the effects experienced when the drug is no longer available. Withdrawal symptoms are primarily the opposite effects of the drug taken. There can be physical withdrawal symptoms (e.g. vomiting; uncontrollable shaking and sweating; diarrhoea) and psychological withdrawal symptoms (e.g. cravings; insomnia; depression; anorexia).

5. **Detoxification:** the process in which drugs are gradually withdrawn from addicts until they have no drugs in their bodies and experience no withdrawal symptoms.

**THE NEUROBIOLOGY OF ADDICTION**

Drugs differ in their biochemical properties as well as in how rapidly they enter the brain. There are several routes of administration – oral, nasal, and intravenous. Alcohol is usually drunk, the slowest route, whereas cocaine is often self-administered by injection or taken nasally. Central to the neurochemical process underlying addiction is the role the drug plays in activating the ‘pleasure pathway’.

The mesocorticolumbic dopamine pathway (MCLP) is the centre of psychoactive drug activation in the brain. The MCLP is made up of axons or neuronal cells in the middle portion of the brain known as the ‘ventral tegmental area’ and connects to other brain centres such as the nucleus accumbens and then to the frontal cortex. This neuronal system is involved in such functions as control of emotions, memory, and gratification. Alcohol produces euphoria by stimulating this area in the brain.