Flight distances the organism or individual from danger, while fight would seek to nullify or reduce the threat to life. It is thus that the brain utilises anxiety to enact what must be the first law governing behaviour, which is self-preservation.

The thalamus, hippocampus and amygdala are all structures that respond to the perception of danger stimuli. To a varying degree they will induce a state of autonomic arousal, primarily through the activation of the adrenal gland that automatically prepares the body for an effective flight or fight response. Given the complexity of modern societies it is understandable that the functioning of these primitive areas could become coupled to innocuous stimulus situations. In clinical terms these responses would be classified as anxiety disorders. These include the various forms of phobia, post-traumatic stress disorder, obsessive compulsive disorder and generalised anxiety disorder. The Diagnostic and Statistical Manual of Mental Disorders – IV Text Revision (DSM IV-TR) presents panic attack as a common factor in all these disorders. The central feature of panic is an overwhelming and powerful element in all these disorders.

There is strong evidence to support the view that the frontal or thinking and planning areas of the brain are significantly excluded in the presence of the arousal process triggered by anxiety, as their functioning could delay and interfere with a speedy response to danger. This clearly has therapeutic implications, as dealing with a person who is in a state of arousal precludes the immediate use of the frontal lobes as a self-mediating tool. It also explains why injunctions such as ‘Pull yourself together’ or ‘Don’t be silly’ will be counterproductive in the treatment of individuals with this disorder. Likewise, reference to safety statistics and the correlating safety of airline travel does little to reduce the anxiety of people who have a flying phobia. The power of anxiety will overwhelm any rational thought that might have been lodged in the frontal areas.

Our understanding of the neuroanatomy and neurophysiology of the brain and its functioning in the generating of anxiety responses has, together with the advent of cognitive behaviour therapy, provided treatment modalities to ameliorate these disorders.

Since the early 1960s it has been recognised that antidepressant medications tended to block panic responses even in the absence of a major depressive disorder. The majority of all classes of antidepressant have these panic-blocking properties, the mode of action being very poorly understood.

Cognitive behaviour therapeutic intervention is directed towards better anxiety management rather than towards original causes or putative precipitating events. The functioning of the frontal lobes, although excluded in acute situations, can be instrumental in maintaining an anxiety such as a phobia in the non-phobic situation. The frontal lobes can be perceived as constituting the managerial part of the brain and therefore the functioning of the frontal lobes can, in behavioural terms, be seen as taking the individual into the future. It follows therefore that...
Flight responses are replaced by avoidance behaviours, thereby reinforcing a stimulus-response coupling in the brain. It is therefore not surprising that much of behaviour therapy is based on Pavlovian principles.

Consistent with the central feature of cure being better than anxiety management, cognitive therapies are directed towards altering an individual’s perception of their anxiety or panic in anticipation of an anxiety situation or the management in such a stimulus situation.

Outcomes studies in the treatment of anxiety disorders demonstrate that combined therapy in the form of antidepressant medication and cognitive behaviour therapy has the best outcome. As cognitive behaviour therapy is directed at better anxiety management, it is usual to identify a hierarchy of fears that ultimately constitute the disorder and to initiate anxiety management in situations that are manageable for that individual. This is usually done in the form of ‘homework’ or, in particularly severe or refractory conditions, therapist-aided exposure usually overcomes these difficulties.

Whereas anxiety forces an individual to monitor the danger in the external environment, cognitive behaviour therapy redirects the individual to monitor and manage their internal environment in situations of varying anxiety intensity. For example, a person who is a lift phobic will be taught to ignore the external stimuli such as monitoring the lights indicating the floor levels or the sounds that the lift might be making and concentrate on regulating their muscle tension, breathing and thought processes.

It is therefore imperative that persons with anxiety disorders are reassured that they are not ‘mad’, they do not have ‘weak personalities’, they are not stupid and that with the correct treatment they will be able to manage their fears and ultimately diminish or extinguish their anxiety disorder.

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**IN A NUTSHELL**

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