Cognitive behaviour therapy: theoretical origins, rationale, and techniques

Cognitive behaviour therapy (CBT) is a generic term used to describe a family of psychotherapeutic interventions that focus upon the relationship between cognitive, emotional, and behavioural processes. The overall aim of CBT is to facilitate an awareness of the important role of cognitions on emotions and behaviours (Hofmann, Sawyer, and Fang 2010). CBT therefore embraces the core elements of both cognitive and behavioural theories and has been defined by Kendall and Hollon (1979) as seeking to preserve the efficacy of behavioural techniques but within a less doctrinaire context that takes account of the child’s cognitive interpretations and attributions about events.

Cognitive Behaviour Therapy focuses upon the relationship between what we think (cognitions), how we feel (emotions), and what we do (behaviour).

The first randomised controlled trials demonstrating the effectiveness of CBT for children and adolescents emerged in the early 1900s (Lewinsohn et al. 1990; Kendall 1994). Numerous trials have since been reported resulting in CBT becoming established as the most extensively researched of all the child psychotherapies (Graham 2005). Reviews have found CBT to be an effective intervention for children and adolescents with a range of problems including anxiety (James et al. 2013; Reynolds et al. 2012; Fonagy et al. 2014), depression (Chorpita et al. 2011; Zhou et al. 2015; Thapar et al. 2012), post-traumatic stress disorder (Cary and McMillen 2012; Gillies et al. 2013), chronic pain (Palermo et al. 2010; Fisher et al. 2014), and obsessive compulsive disorder (Franklin et al. 2015). The substantial body of knowledge demonstrating effectiveness has resulted in CBT being recommended by expert groups such as the UK National Institute for Health and Clinical Excellence and the American Academy of Child and Adolescent Psychiatry for the treatment of young people with emotional disorders including depression, obsessive compulsive disorders, post-traumatic stress disorder, and anxiety. This growing evidence base has also prompted the development of a national training programme in the United Kingdom in CBT, Improving Access to Psychological Therapies (IAPT), which has now been extended to children and young people (Shafran et al. 2014).

CBT is an empirically supported psychological intervention.
The foundations of CBT

CBT describes a family of interventions that have evolved over time through three main phases or waves. The first wave was behaviour therapy which focused directly on the relationship between behaviour and emotions. Through the use of learning theory, new behaviours could be learned to replace those that are unhelpful. The second wave, cognitive therapy, built upon behavioural therapy by focusing on the subjective meanings and interpretations that are made about the events that occur. Directly challenging and testing the content of the biases that underpin these cognitions results in alternative, more helpful, balanced, and functional ways of thinking. Third wave CBT focuses on changing the nature of our relationship with our thoughts and emotions rather than actively attempting to change them. Thoughts and feelings are observed as inevitable mental and cognitive process rather than evidence of reality. Third wave models include Acceptance and Commitment Therapy (ACT), Compassion Focused Therapy (CFT), Dialectical Behaviour Therapy (DBT), and Mindfulness-based Cognitive Behaviour Therapy (MCBT).

First wave: behaviour therapy

One of the earliest influences on the development of CBT was that of Pavlov (1927) and classical conditioning. Pavlov highlighted how, with repeated pairings, naturally occurring responses (e.g. salivation) could become associated (i.e. conditioned) with specific stimuli (e.g. the sound of a bell). The work demonstrated that emotional responses, such as fear, could become conditioned with specific events and situations such as snakes or crowded places.

Emotional responses are associated with specific events.

Classical conditioning was extended to human behaviour and clinical problems by Wolpe (1958) who developed the procedure of systematic desensitisation. By pairing fear-inducing stimuli (e.g. watching a snake) with a second stimulus that produces an antagonistic response (i.e. relaxation) the fear response can be reciprocally inhibited. The procedure is now widely used in clinical practice and involves graded exposure, both in vivo and in imagination, to a hierarchy of feared situations whilst remaining relaxed.

Emotional responses can be changed.

The second major behavioural influence was the work of Skinner (1974) who highlighted the significant role of environmental influences upon behaviour. This became known as operant conditioning and focused upon the relationship between antecedents (setting conditions), consequences (reinforcement), and behaviour. In essence, if a particular behaviour increased in occurrence because it is followed by positive consequences, or is not followed by negative consequences, then the behaviour has been reinforced. Behaviour could therefore be changed by altering the consequences or the conditions that evoked them.

Altering antecedents and consequences can change behaviour.

Recognition of the mediating role of cognitive processes was noted by Bandura (1977) and the development of social learning theory. The role of the environment was recognised, but behaviour
therapy was extended to highlight the importance of the cognitions that intervene between stimuli and response. The theory demonstrated that learning could occur through watching someone else and proposed a model of self-control based upon self-observation, self-evaluation, and self-reinforcement.

**Second wave: cognitive therapy**

Behaviour therapy proved very effective, although it was criticised for failing to pay sufficient attention to the meanings and interpretations that are made about the events that occur. This stimulated interest in the development of cognitive therapy with a direct focus on the way individual’s process and interpret events and the effect of these on emotions and behaviour.

This phase was heavily influenced by the pioneering work of Ellis (1962) and Beck (1963, 1964). Ellis (1962) developed Rational Emotive Therapy which was based upon the central relationship between cognitions and emotions. The model proposed that emotion and behaviour arise from the way events are construed rather than by the event per se. Thus activating events (A), are assessed against beliefs (B) that result in emotional consequences (C). Beliefs can be either rational or irrational with negative emotional states tending to arise from, and be maintained by, irrational beliefs.

Cognitions and emotions are linked.

The role of maladaptive and distorted cognitions in the development and maintenance of depression was developed through the work of Beck culminating in the publication of *Cognitive Therapy for Depression* (Beck 1976; Beck et al. 1979). The model proposes that emotional problems arise through biased cognitive processing in which events are distorted in negative and unhelpful ways. Underlying these biased ways of thinking are core beliefs or schemas. These are global, fixed, and rigid ways of thinking that are assumed to develop during childhood. Beliefs are activated by events reminiscent of those that produced them, and once activated, attention, memory, and interpretation processing biases filter and select information to support them. Attention biases result in attention being focused upon information that confirms the belief, whilst neutral or contradictory information is overlooked. Memory biases result in the recall of information that is consistent with the belief, whilst interpretation biases serve to minimise any inconsistent information.

Biased and distorted cognitions generate unpleasant emotions.

Once activated, fixed beliefs produce a range of automatic thoughts, the most accessible level of cognitions. Automatic thoughts or ‘self-talk’ represent the involuntary stream of thoughts that race through our heads providing a continuous commentary about the events that occur. These automatic thoughts tend to be about the self, the world, and the future, commonly referred to as the cognitive triad.

Beliefs are functionally related to automatic thoughts, resulting in biased and distorted beliefs producing negative automatic thoughts. Negative automatic thoughts are very self-critical and generate unpleasant emotional states, e.g. anxiety, anger, unhappiness, and unhelpful behaviours such as social withdrawal or avoidance.

The unpleasant feelings and unhelpful behaviours associated with these dysfunctional cognitions and processing biases serve to reinforce and maintain the original beliefs as the individual becomes trapped in a self-perpetuating negative cycle. The relationship between cognitive processes and other emotional states and psychological problems has been well documented (Beck 2005).
Interventions aim to identify and challenge the specific content of biased cognitions and processes in order to develop more functional and balanced cognitions. These in turn improve mood and result in less avoidance and withdrawal.

Cognitive biases generate unpleasant emotions and affect how we behave.

**The cognitive model**

Based largely on the work of Beck, the way in which dysfunctional cognitive processes are acquired, activated, and affect behaviour and emotions is summarised diagrammatically in the model below.

Early experiences and parenting are hypothesised to lead to the development of fairly fixed and rigid ways of thinking, i.e. core beliefs/schemas. These beliefs/schemas are activated by events similar to the ones that established them and form a framework for perceiving the world. New information and experiences are assessed against these core beliefs/schemas and lead to predictions about what will happen (i.e. assumptions). For example, a core belief such as 'I am a failure' may be
activated by an important event such as ‘taking exams’. This may result in an assumption such as ‘No matter how hard I work I will never get a good mark’. Beliefs and assumptions produce a stream of automatic thoughts. These are related to the person (‘I must be stupid’), their performance (‘I can’t do this’), and the future (‘I’ll never pass these exams’). These automatic thoughts effect how we feel (e.g. anxious and unhappy) and what we do (e.g. stop revising and not motivated), and in turn strengthen the original belief that ‘I am a failure’.

In addition to understanding the different levels of cognitions, CBT also pays attention to their specific content and the nature of the processing deficits and biases. There is an assumption of specificity, i.e. that specific processing deficits and biases are associated with particular emotional problems. However, they are not mutually exclusive, although there are some general trends (Garber and Weersing 2010). In general, young people who are anxious tend to have cognitions and biases towards the future and personal threat, danger, vulnerability, and inability to cope (Schniering and Rapee 2004; Muris and Field 2008). Depression tends to be related to cognitions concerning loss, deprivation, and personal failure with rumination increasing feelings of hopelessness (Kendall, Stark, and Adam 1990; Leitenberg, Yost, and Carroll-Wilson 1986; Rehm and Carter 1990). Aggressive young people tend to perceive more aggressive intent in ambiguous situations, selectively attend to fewer cues when making decisions about the intent of another person’s behaviour, and generate fewer verbal solutions to problems (Dodge 1985; Lochman, White, and Wayland 1991; Perry, Perry, and Rasmussen 1986).

Interventions addressing cognitive distortions are concerned with increasing the young person’s awareness of biased and unhelpful cognitions, beliefs, and schemas and, facilitating their understanding of the effects of these upon behaviour and emotions. Programmes typically involve some form of self-monitoring, identification of maladaptive cognitions, thought testing, and cognitive restructuring.

**Challenging and changing cognitions can improve mood.**

An extension of this work, Schema-Focused Therapy, was developed by Young (1994) for those who failed to respond or relapsed following traditional CBT. Schema-Focused Therapy was based on the recognition that some people seem to develop life-long self-defeating patterns of behaviour that are repeated throughout life. Young proposed that this was the result of early maladaptive schemas, strong and rigid ways of thinking that are formed during childhood and which are resistant to change. These are associated with particular trauma and parenting styles and develop if the basic emotional needs of the child are not met. Evidence to support the presence of 15 primary schemas has been reported (Schmidt et al. 1995) with subsequent research identifying the presence of cognitive schemas in adolescents and children as young as eight (Rijkeboer and Boo 2010; Stallard 2007; Stallard and Rayner 2005). Schema-Focused Therapy pays greater attention to the past and understanding these lifelong patterns rather than upon specific situations and events.

**Maladaptive cognitive schema/beliefs develop during childhood.**

### Third wave: acceptance, compassion, and mindfulness

Whilst the second wave Cognitive Therapies have proven very effective they do not work for everyone. Some people do not find the process of actively challenging and re-appraising specific cognitions easy or acceptable. Similarly, a number of studies have highlighted that changes in cognitions are not necessarily related to improved emotional well-being. Changes occur without directly and explicitly challenging the content of cognitions. This led to a third wave of CBTs...
which focus on changing the nature of the relationship between the individual and their own internal events rather than actively changing the content of their cognitions. This is achieved through the development and integration of skills that promote health and well-being into everyday life.

Grounded in an empirical, principle-focused approach, the third wave of behavioral and cognitive therapy is particularly sensitive to the context and functions of psychological phenomena, not just their form, and thus tends to emphasise contextual and experiential change strategies in addition to more direct and didactic ones. (Hayes 2004)

Thoughts and feelings are ongoing events, not expressions of reality.

ACT was developed by Stephen Hayes and uses acceptance and mindfulness strategies to confront, experience, and accept unpleasant thoughts and feelings (Hayes, Strosahl, and Wilson 1999; Hayes et al. 2006). Through this process young people learn to accept that they can live with and tolerate unpleasant experiences, emotions, and thoughts rather than viewing them as intolerable events and which they need to change.

ACT utilises six core psychological processes to develop psychological flexibility, i.e. the ability to connect with the present moment and inner experiences without defence. The first, acceptance, involves actively embracing inner experiences which are happening here and now as ongoing inner experiences. Cognitive defusion reduces the impact of these experiences by changing the context in which they occur. The natural tendency to rectify thoughts and emotions is countered by learning to accept them as simply thoughts and feelings. The third process promotes personal awareness of the here and now as attention is focused without judgement on internal and external events as they occur through the use of mindfulness-based techniques. Fourth, the individual is helped to develop their self-image with the fifth process focusing upon identifying those aspects of life which are personally important. These values provide an ongoing framework for motivating and guiding future behaviour. Finally, committed action is where the person pursues their values, whilst practicing acceptance, cognitive defusion, and being present.

Accept thoughts and feelings that occur rather than trying to change or eliminate them.

CFT attempts to understand how our minds work and arose from observations that people with high levels of self-criticism and shame find it hard to be kind to themselves. Gilbert (2014) suggested that this is caused by an imbalance in basic emotional evolutionary systems designed to protect, motivate, and sooth. These basic systems (old brain) hijack our more recently developed meta-cognitive systems (new brain) which allow us to imagine, reason, and ruminate. The old brain’s protection and drive systems dominate as our cognitive processes are drawn to, and increase our awareness of, threat. Our ability to soothe ourselves by suppressing unpleasant emotions or stimulating positive emotions is impaired, resulting in people finding it difficult to feel safe or content with themselves.

Compassion-focused therapy focuses on helping to feel safe, to develop self-soothing, and to replace self-criticism with self-kindness (Gilbert 2007). This is achieved through compassionate mind training which creates feelings of warmth and kindness as we develop a more soothing approach. Compassionate attention helps us to be mindful of our thoughts and emotions and to focus on our strengths, positive skills, and acts of kindness. Compassionate reasoning develops more balanced, kinder, alternative thinking where self-criticism is replaced with a compassionate approach. Compassionate behaviour encourages us to behave in helpful ways such as facing frightening events or being kind to ourselves. Compassionate imagery helps to create our positive
self-image and to promote the values that are important to us whilst compassionate feeling helps to notice and experience acts of kindness from others.

**Lean to look after yourself and to be kind and compassionate.**

Another recent development is Dialectical Behaviour Therapy (DBT). This was developed by Marsha Linehan to change patterns of behaviour that are unhelpful and destructive (Linehan 1993). It is based on the premise that psychological problems result from deficits in emotional regulation skills. This is addressed by increasing awareness of triggers that lead to states of high emotion and developing a range of skills to cope with stress, regulate emotions, and improve relationships.

Dialectics assumes that everything is composed of opposites and that both acceptance and change are necessary requirements to improve emotional regulation and distress tolerance. Thus, accepting that distressing events, thoughts, and feelings occur, but changing how these are responded to. To achieve this, DBT develops skills in the core areas of mindfulness, distress tolerance, emotion regulation, and interpersonal effectiveness (Koerner 2012). Mindfulness helps the individual to non-judgementally observe, accept, and tolerate powerful unpleasant emotions rather than being overwhelmed by them. This helps to make wise decisions about how to respond and tolerate distress through the use of a range of techniques including distraction and self-soothing. The idea is to learn to tolerate distress rather than trying to change situations or events that cause it. Emotional regulation is developed through promoting greater awareness of emotional signals, triggering events, and problems-solving. The final area is the developing of interpersonal effectiveness skills and strategies for being assertive and coping with interpersonal conflict.

**Accept and tolerate distress, manage emotions, and improve interpersonal effectiveness.**

Finally, mindfulness-based CBT (MBCT) was developed by Zindel Segal, Mark Williams, and John Teasdale and is based on work pioneered by Jon Kabat-Zinn. Buddhist meditation techniques are used to develop cognitive awareness by actively focusing attention on the present moment. It involves curious non-judgemental observation and acceptance of thoughts and feelings in which cognitions and emotions are experienced as ongoing and passing mental events. Through increased awareness, the individual is better able to deal with their thoughts and feelings. The focus is not on changing the content of the thoughts, but to experience them as internal events separated from the self and to accept them in a non-judgemental way (Segal, Williams, and Teasdale 2002).

**Focus attention on the present moment in a curious, non-judgemental way.**

### Core characteristics of CBT

Although CBT is an umbrella term to describe a family of different interventions, they nonetheless share a number of core features.

**CBT is theoretically determined**

CBT is based upon empirically testable models. Strong theoretical models provide the rationale for CBT, i.e. that cognitions are associated with emotional problems and inform the content of the intervention, i.e. change the nature of the cognitions or our relationship with them. CBT therefore provides a cohesive and rational intervention and is not simply a collection of disparate techniques.
**CBT is based on a collaborative model**

A key feature of CBT is the collaborative process by which it occurs. The young person has an active role with regard to identifying their goals, setting targets, experimenting, practicing, and monitoring their performance. The approach is designed to facilitate greater and more effective self-control, with the therapist providing a supportive framework within which this can occur. The role of the therapist is to develop a partnership in which the young person is empowered to develop a better understanding of their problems and to discover alternative ways of thinking and behaving.

**CBT is time-limited**

It is often brief and usually time-limited, consisting of no more than 16 sessions, and in many cases, far fewer than this. The brief nature of the intervention promotes independence and encourages self-help. This model is readily applicable to work with young people, for whom the typical period of intervention is considerably shorter than that with adults.

**CBT is objective and structured**

It is a structured and objective approach that guides the young person through a process of assessment, problem formulation, intervention, monitoring, and evaluation. The goals and targets of the intervention are explicitly defined and regularly reviewed. There is an emphasis on quantification and the use of ratings (e.g. the frequency of inappropriate behaviour, strength of belief in thoughts, or degree of distress experienced). Regular monitoring and reviewing provide a way of assessing progress by comparing current performance against baseline assessments.

**CBT has a here-and-now focus**

CBT interventions focus upon the present, dealing with current problems and difficulties. They do not seek to ‘uncover unconscious early trauma or biological, neurological, and genetic contributions to psychological dysfunction, but instead strives to build a new, more adaptive way to process the world’ (Kendall and Panichelli-Mindel 1995). This approach has high-face validity for young people, who may be more interested in and motivated to address real time, here-and-now issues, rather than understanding their origins.

**CBT is based on a process of guided self-discovery and experimentation**

It is an active process that encourages self-questioning and the development and practice of new skills. Young people are not simply passive recipients of therapist’s advice or observations but are encouraged to observe and learn through a process of experimentation. The link between thoughts and feelings is investigated and alternative ways of changing the content or nature of our relationship with our thoughts explored.

**CBT is a skill-based approach**

CBT provides a practical, skills-based approach to learn alternative patterns of thinking and behaviour. Young people are encouraged to practice skills and ideas that are discussed during therapy sessions in their everyday life, with home practice tasks being a core element of many programmes. These provide opportunities to identify what is helpful and how potential problems can be resolved.
CBT is theoretically determined.

It is based on a model of active collaboration.

It is brief and time limited.

It is objective and structured.

It focuses on current problems.

It encourages self-discovery and experimentation.

It advocates a skills-based learning approach.

The overall purpose of CBT is to improve current well-being, resilience, and future coping. This is achieved through developing increased self-awareness, improved self-control, and enhancing personal efficacy through the promotion of helpful cognitive and behavioural skills. The process of CBT moves the young person from a dysfunctional to a more functional cycle as illustrated below.

CBT helps to reduce the negative effect of what people think (cognitions) on how they feel (emotions), and what they do (behaviour). This is achieved by either actively focusing on the content of the young person’s cognitions or by changing the nature of their relationship with them.

- If focusing on content, the young person is encouraged to observe and identify common dysfunctional thoughts and beliefs that are predominantly negative, biased, and self-critical. Through a process of self-monitoring, education, and experimentation, these are tested and replaced by more balanced and functional cognitions that acknowledge strengths and success.

- If focusing on their relationship with their cognitions, the young person is encouraged to stand back from their thoughts and to observe them in a curious, non-judgemental way as passing cognitive activity. Mindfulness maintains attention on the here and now with the young person being encouraged to accept themselves and the events that occur.

CBT includes a range of techniques and strategies that can be used in different sequences and permutations. This flexibility allows interventions to be tailored towards particular problems and the
needs of the young person rather than being delivered in a standardised cook book approach. Similarly, the wealth of techniques means that CBT can be used for prevention to enhance coping and resilience as well as an intervention to reduce psychological distress.

Although the primary focus of second wave (i.e. test and challenge the content of cognitions and processes) and third wave (i.e. change the nature of the relationship with our thoughts) CBT differ, embedded within these approaches are a number of different skills and techniques.

**Psycho-education**

A basic component of all cognitive behavioural programmes involves education about CBT and the link between thoughts, feelings, and behaviour. The process involves developing a clear and shared understanding of the relationship between how people think, how they feel, and what they do. In addition, the collaborative process of CBT and the active role of practice and experimentation are stressed.

**Values, goals, and targets**

CBT may involve identifying important personal values. These help to maintain focus on the future and act as a framework for motivating and guiding behaviour towards their achievement.

Goal setting is an inherent part of all cognitive behaviour programmes. The overall goals of therapy are mutually agreed and defined in ways that can be objectively assessed. The transfer of skills from therapy sessions to everyday life is encouraged by the systematic use of assignment tasks where new skills are practiced in real-life settings. The achievement of specific targets is regularly reviewed and provides an overview of progress.

**Acceptance and acknowledgement of strengths**

CBT helps the individual to see the complete picture so that their strengths and achievements are recognised and acknowledged. Personal strengths can be empowering and can be used to cope with future challenges and problems. Acceptance is also emphasised so that rather than constantly trying to change things which are beyond their control these are accepted for what they are.

**Thought monitoring**

A key task is to develop a better understanding of common cognitions which is achieved through observing and monitoring cognitions and patterns of thinking. Thought monitoring could focus on the specific content of core beliefs, negative automatic thoughts, or dysfunctional assumptions to identify those that produce strong emotional reactions or are overly negative or self-critical. Alternatively, observation could be encouraged whereby the young person is helped to develop an understanding of the effect of their cognitions on their emotions.

**Identification of cognitive distortions and deficits**

The process of thought monitoring provides an opportunity to identify common negative or unhelpful cognitions, beliefs, or assumptions. In turn this results in increased awareness of the nature and type of cognitive distortions (e.g. magnification and focusing upon the negative), cognitive deficits (e.g. misinterpretation of others cues as negative and limited range of problem-solving skills) and the effect of these upon mood and behaviour.

**Thought evaluation and developing alternative cognitive processes**

The identification of dysfunctional cognitive processes leads to the systematic testing and evaluating of these assumptions and beliefs and the learning of alternative cognitive skills. The development of a process of
balanced thinking or cognitive restructuring is encouraged. This may involve a process of looking for new information, thinking from another persons’ perspective, or looking for contradictory evidence, which may result in dysfunctional cognitions, being revised.

The evaluation provides an opportunity to develop alternative, more balanced and functional cognitions, which recognise difficulties but acknowledge strengths and success.

**Development of new cognitive skills**

CBT involves the development of new cognitive skills such as distraction where attention is focused away from anxiety-increasing stimuli towards more neutral tasks. Cognitive coping can be enhanced through the use of positive self-talk and self-instructional training with consequential thinking and problem-solving skills helping to develop alternative ways of thinking through challenges.

**Mindfulness**

In addition, CBT may develop cognitive skills such as mindfulness where attention is focused non-judgementally on the present moment. Rather than reacting to or attempting to change what we think or how we feel mindfulness helps to develop curious observation of our internal processes. This in turn reduces negative cognitive rehearsal of future events and rumination about past events.

**Affective education**

Many programmes involve emotional education designed to identify and distinguish core emotions such as anger, anxiety, or unhappiness. Programmes may focus upon the physiological changes associated with these emotions (e.g. dry mouth, sweaty hands, and increased heart rate) in order to facilitate a greater awareness of the young person’s unique expression of each core emotion.

**Affective monitoring**

The monitoring of strong or dominant emotions can help identify times, places, activities, or thoughts that are associated with both pleasant and unpleasant feelings. Scales are used to rate the intensity of emotion both during real-life situations and treatment sessions and provide an objective way of monitoring performance and assessing change.

**Affective management**

New emotional management skills are developed to help tolerate distress and/or manage emotions more effectively. This may involve techniques such as progressive muscle relaxation, controlled breathing, calming imagery, self-soothing, or distraction.

Greater awareness of the individual’s unique emotional pattern can lead to the development of preventative strategies. An awareness of the anger build up may, for example, enable a young person to stop the emotional progression at an earlier stage and prevent aggressive outbursts. Similarly the adoption of helpful habits throughout everyday life can help to prevent future problems occurring.

**Activity monitoring**

This can be used to promote awareness of the link between what we do and how we feel and behave. This helps to develop a better understanding of what we do and how some activities or events are associated with different feelings and ways of thinking.
**Behaviour activation**

Activity monitoring can lead to **behavioural activation** whereby the individual is encouraged to become more active. This may involve increasing activities that create enjoyment, involve others, produce a sense of achievement or encourage physical activity. Activity can have a positive effect upon mood.

**Activity rescheduling**

Engagement in activities that create more pleasant emotions can also be encouraged by activity rescheduling. This involves rescheduling positive mood-lifting activities to occur at those days or times that are currently associated with strong unpleasant emotions.

**Skills development**

A structured problem-solving process can provide a useful framework for confronting and dealing with challenges rather than putting decisions off or avoiding them. A number of CBT interventions also focus on the development of interpersonal effectiveness by enhancing skills such as conflict resolution, assertiveness, and developing and maintaining friendships.

**Behavioural experiments**

CBT is based upon a process of guided discovery during which assumptions and thoughts are challenged and tested. A powerful way to do this is to objectively check things out by setting up **behavioural experiments**. These can help to test whether predictions and thoughts are always right, to discover alternative explanations for events, or what might happen if things were done differently.

**Fear hierarchy and exposure**

A core aim of CBT programmes is to encourage the young person to face and learn to cope with challenging situations or events. This can be achieved through a process of graduated exposure where problems are defined, the overall task broken into smaller steps, and then each is ranked in a hierarchy of ascending difficulty. Starting with the least difficult, the young person is exposed to each step of the hierarchy, either in vivo or imagination. Once successfully completed, they move to the next step, progressing through the hierarchy until the problem has been mastered.

**Role play, modelling, exposure, and rehearsal**

The learning of new skills and behaviours can be achieved in a variety of ways. **Role-play** provides an opportunity to practice dealing with difficult or challenging situations such as coping with teasing. Role-play enables positive skills to be identified and alternative solutions or new skills highlighted. A process of skills enhancement can facilitate the process of acquiring new skills and behaviours. Observing others model appropriate behaviour or skills can then result in new behaviour being rehearsed in imagination before being practiced in real life through exposure tasks.

**Self-reinforcement and reward**

A cornerstone of all CBT programmes is positive reinforcement and acknowledgement of effort. We need to care for ourselves and to value what we do. This could take the form of self-reinforcement, for example, cognitively (e.g. ‘Well done, I coped well with that situation’), materially (e.g. purchasing a special CD), or by activities (e.g. special relaxing bath). Reinforcement should be based on effort and attempting to do things rather than upon the achievement of a successful outcome.

The above provides the clinician with a rich tool box of CBT techniques that can be used flexibly with young people. These are summarised in The clinician’s toolbox.
CBT provides a rich toolbox of techniques and ideas that can be flexibly used to increase self-awareness, improve self-control, and enhance personal efficacy through the promotion of helpful cognitive, emotional, and behavioural skills.

The clinician’s toolbox

**Psycho-education**
Understand the link between thoughts, feelings, and behaviour

**Values, goals, and targets**
Identify personal values, agree goals, and targets

**Acceptance and acknowledgement of strengths**
Recognise positives and strengths and accepting who you are

**Cognitions**

- **Thought monitoring**
  - Negative automatic thoughts
  - Core beliefs/schema
  - Dysfunctional assumptions

- **Identification of cognitive distortions and deficits**
  - Common dysfunctional cognitions, assumptions and beliefs
  - Patterns of cognitive distortions
  - Cognitive deficits

- **Thought evaluation**
  - Testing and evaluating cognitions
  - Cognitive restructuring
  - Development of alternative, balanced thinking

- **Development of new cognitive skills**
  - Distraction, positive and coping self-talk
  - Self-instructional training, consequential thinking

- **Mindfulness**
  - Curious and non-judgemental observation

**Behaviour**

- **Activity monitoring**
  - Link activity, thoughts and feelings

- **Behavioural activation**
  - Increase mood lifting activity

- **Activity rescheduling**
  - Timetable activities

- **Skills development**
  - Problem solving and interpersonal effectiveness

- **Behavioural experiments**
  - Test predictions/assumptions
  - Discover new meanings

- **Fear hierarchy and exposure**
  - Face challenges in a graded way

**Emotions**

- **Affective education**
  - Distinguish between core emotions
  - Identify physiological bodily symptoms

- **Affective monitoring**
  - Link feelings with thoughts and behaviour
  - Scales to rate intensity

- **Affective management**
  - Relaxation, self-soothing, mind games, imagery, controlled breathing

- **Self-reinforcement**
  - Take care of yourself and reward yourself