Basic Theory, Development and Current Status of CBT

Introduction

In this chapter we want to introduce you to some of the essential background to cognitive behaviour therapy (CBT), including the basic theory and the development of the approach. We start here because CBT is sometimes criticised for being a rather simple-minded 'cookbook' approach to therapy: if the client has *this* problem then use *that* technique. However, the approach we take in this book is based not on the mechanical application of techniques but on *understanding*: understanding your patient, understanding CBT theory, and bringing the two together in a formulation (see Chapter 4). You should already have some ideas about understanding people, based on your clinical and personal experience. This chapter will start you on the road to understanding CBT theory.

One further clarification. Talking about CBT as if it were a single therapy is misleading. Modern CBT is not a monolithic structure, but a broad movement that is still developing, and full of controversies. The approach we take in this book is based on the 'Beckian' model, first formulated by A.T. Beck in the 1960s and 1970s (Beck, 1963, 1964; Beck et al., 1979). This model has been dominant in the UK for the past 25 years, and we would therefore see ourselves as being in the mainstream of CBT in this country. However, other CBT theorists and clinicians might differ, in major or minor ways, with some of the approaches expounded here. We should also say that although we think that some of the newer ideas in CBT, such as the 'Third Wave' therapies (Hayes, 2004), are exciting developments that have the potential to enrich CBT greatly, our aim here is primarily to provide a foundation for 'basic' CBT. We therefore restrict our consideration of those developments to a separate chapter (Chapter 17).

A brief history of CBT

Just as some knowledge of a client's background can be helpful in understanding his current state, an appreciation of how CBT developed can help us to understand its modern form. Modern CBT has two main influences: first, behaviour therapy as developed by Wolpe and others in the 1950s and 1960s (Wolpe, 1958); and second, the cognitive

therapy approach developed by A.T. Beck, beginning in the 1960s but becoming far more influential with the 'cognitive revolution' of the 1970s.

Behaviour therapy (BT) arose as a reaction against the Freudian psychodynamic paradigm that had dominated psychotherapy from the nineteenth century onwards. In the 1950s, Freudian psychoanalysis was questioned by scientific psychology because of the lack of empirical evidence to support either its theory or its effectiveness (Eysenck, 1952). BT was strongly influenced by the behaviourist movement in academic psychology, which took the view that what went on inside a person's mind was not directly observable and therefore not amenable to scientific study. Instead behaviourists looked for reproducible associations between observable events, particularly between *stimuli* (features or events in the environment) and *responses* (observable and measurable reactions from the people or animals being studied). Learning theory, a major model in psychology at that time, looked for general principles to explain how organisms learn new associations between stimuli and responses.

In this spirit, BT avoided speculations about unconscious processes, hidden motivations and unobservable structures of the mind, and instead used the principles of learning theory to modify unwanted behaviour and emotional reactions. For instance, instead of trying to probe the unconscious roots of an animal phobia, as Freud famously did with 'Little Hans' (a boy who had a fear of horses: Freud, 1909), behaviour therapists constructed procedures, based on learning theory, that they believed would help people learn new ways of responding. The BT view was that someone like Little Hans had learned an association between the stimulus of a horse and a fear response, and the task of therapy was therefore to establish a new, non-fearful, response to that stimulus. The resulting treatment for anxiety disorders, known as *systematic desensitization*, asked clients to repeatedly imagine the feared stimulus whilst practising relaxation, so that the fearful response would be replaced by a relaxed response. Later developments often replaced *imaginal* exposure (e.g. thinking about a mental picture of the horse) with *in vivo* exposure (approaching a real horse).

BT rapidly became successful, especially with anxiety disorders such as phobias and obsessive-compulsive disorder, for two main reasons. First, in keeping with its roots in scientific psychology, BT had always taken an empirical approach, which soon allowed it to provide solid evidence that it was effective in relieving anxiety problems. Second, BT was a far more economical treatment than traditional psychotherapy, typically taking 6 to 12 sessions.

Despite this early success, there was some dissatisfaction with the limitations of a purely behavioural approach. Mental processes such as thoughts, beliefs, interpretations, imagery and so on, are such an obvious part of life that it began to seem absurd for psychology not to deal with them. During the 1970s this dissatisfaction developed into what became known as the 'cognitive revolution', wherein ways were sought to bring cognitive phenomena into psychology and therapy, whilst still trying to maintain an empirical approach that would avoid ungrounded speculation. Beck and others had in fact begun to develop ideas about cognitive therapy (CT) during the 1950s and early 1960s, but their ideas became increasingly influential. The publication of Beck's book on cognitive therapy for depression (Beck et al., 1979), and research trials showing that CT was as effective a treatment for depression as anti-depressant medication (e.g. Rush et al., 1977), fuelled the revolution. Over the succeeding years, BT and

CT grew together and influenced each other to such an extent that the resulting amalgam is now most commonly known as cognitive behaviour therapy – CBT.

Some basic principles

So, what elements of BT and CT have emerged to form the foundation of modern CBT? Here we set out what we see as the most basic principles and beliefs on which our model of CBT is based, so that you can decide for yourself whether you think they make sense – or at least enough sense to be worth giving CBT a try. Below are what we consider to be the fundamental beliefs about people, problems and therapy that are central to CBT. We are not suggesting that these beliefs are necessarily unique to CBT – many of them may be shared by other approaches – but the combination of these principles goes some way towards characterising CBT.

The cognitive principle

The core idea of any therapy calling itself 'cognitive' is that people's emotional reactions and behaviour are strongly influenced by *cognitions* (in other words, their thoughts, beliefs and interpretations about themselves or the situations in which they find themselves – fundamentally the *meaning* they give to the events of their lives). What does this mean?

It may be easiest to start from a 'non-cognitive' perspective. In ordinary life, if we ask people what has made them sad (or happy, or angry, or whatever), they often give us accounts of *events* or *situations*: for example 'I am fed up because I have just had a row with my girlfriend'. However, it cannot be quite that simple. If an event automatically gave rise to an emotion in such a straightforward way, then it would follow that the same event would have to result in the same emotion for anyone who experienced that event. What we actually see is that to a greater or lesser degree, people react *differently* to similar events. Even events as obviously terrible as suffering a bereavement, or being diagnosed with a terminal illness, do not produce the same emotional state in everyone: some may be completely crushed by such events, whilst others cope reasonably well. So it is not just the event that determines emotion: there must be something else. CBT says that the 'something else' is cognition, i.e. the interpretations people make of the event. When two people react differently to an event it is because they are seeing it differently, and when one person reacts in what seems to be an unusual way, it is because he has unusual thoughts or beliefs about the event: it has an idiosyncratic *meaning* for him. Figure 1.1 illustrates this.

Let us look at a simple example of this process. Suppose you are walking down the street and you see someone you know coming the other way, but she does not seem to notice you. Below are a number of possible thoughts about this event, and some possible emotional responses arising from those interpretations.

- 'I can't think of anything to say to her, she'll think I'm really boring and stupid' (Leading to anxiety)
- 'Nobody would ever want to talk to me anyway, no one seems to like me' (Depression)
- 'She's got a nerve being so snooty, I've not done anything wrong' (Anger)
- 'She's probably still hung over from that party last night!' (Amusement)

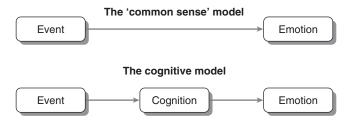


Figure 1.1 The basic cognitive principle

This illustrates the fundamental cognitive principle, that different cognitions give rise to different emotions. It also shows the association between certain kinds of cognition and corresponding emotional states: for instance that thoughts about others being unfair, or breaking rules that we hold dear, are likely to be associated with anger. We shall have more to say about this idea later.

There is of course nothing new about the idea that meaning is important. The ancient Greek stoic philosopher Epictetus said over 1,800 years ago that 'Men are disturbed, not by things, but by the principles and notions which they form concerning things.' Yet as we shall see in the rest of this book, the ramifications and elaborations of this simple idea have led to the development of a powerful approach to helping people in distress. By helping people to change their cognitions, we may be able to help them change the way they feel.

The behavioural principle

Part of the inheritance from BT is that CBT considers behaviour (what we *do*) as crucial in maintaining – or in changing – psychological states. Consider the above example again. If you had either the first or second cognition, then your subsequent behaviour might have a significant effect on whether your anxiety or depression persisted. If you approached your acquaintance and chatted, you might discover that she was actually friendly towards you. As a result you might be less inclined to think negatively in future. On the other hand if you pretended not to see her, you would not have a chance to find out that your thoughts were inaccurate, and negative thoughts and associated emotions might persist. Thus, CBT believes that behaviour can have a strong impact on thought and emotion, and, in particular, that changing what you do is often a powerful way of changing thoughts and emotions.

The 'continuum' principle

In contrast to some more traditional medical approaches, CBT believes that it is usually more helpful to see mental health problems as arising from exaggerated or extreme versions of normal processes, rather than as pathological states that are qualitatively different from, and inexplicable by, normal states and processes. In other words, psychological problems are at one end of a continuum, not in a different dimension altogether. Related to this belief are the further ideas that (a) psychological problems can happen to anyone, rather

than being some freakish oddity; and (b) that CBT theory applies to therapists as much as to clients.

The 'here and now' principle

Traditional psychodynamic therapy took the view that looking at the symptoms of a problem – for example the anxiety of a phobic person – was superficial, and that successful treatment must uncover the developmental processes, hidden motivations and unconscious conflicts that were supposed to lie at the root of a problem. BT took the view that the main target of treatment was the symptoms themselves and that one could tackle the anxiety (or whatever) directly, by looking at what processes currently maintained it and then changing those processes. Psychoanalysis argued that treating symptoms rather than the supposed 'root causes' would result in *symptom substitution*, i.e. the unresolved unconscious conflict would result in the client's developing new symptoms. In fact a wealth of research in BT showed that such an outcome, although possible, was rare: more commonly, tackling symptoms directly actually resulted in more global improvement.

Modern CBT has inherited BT's approach. The main focus of therapy, at least most of the time, is on what is happening in the present, and our main concerns are the processes currently maintaining the problem, rather than the processes that might have led to its development many years ago. Chapter 4 on assessment and formulation discusses this further.

The 'interacting systems' principle

This is the view that problems should be thought of as interactions between various 'systems' within the person and in their environment, and is another legacy from BT (Lang, 1968). Modern CBT commonly identifies four such systems:

- Cognition
- · Affect, or emotion
- Behaviour
- Physiology

These systems interact with each other in complex feedback processes, and also interact with the environment – where 'environment' is to be understood in the widest possible sense, including not just the obvious physical environment but also the social, family, cultural and economic environment. Figure 1.2, based on the 'hot cross bun' model (Padesky & Greenberger, 1995), illustrates these interactions.

This kind of analysis helps us to describe problems in more detail, to target specific aspects of a problem, and also to consider times when one or more systems are not correlated with the others. For example, 'courage' could be said to describe a state where a person's behaviour is not correlated with her emotional state: although she is feeling fearful, her behaviour is not fearful.

The empirical principle

CBT believes we should evaluate theories and treatments as rigorously as possible, using scientific evidence rather than just clinical anecdote. This is important for several reasons:

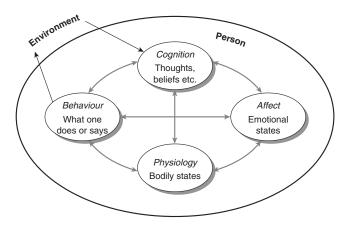


Figure 1.2 Interacting systems

- Scientifically, so that our treatments can be founded on sound, well-established theories.
 One of the characteristic features of CBT is that, in contrast to some schools of therapy that have remained little changed since they were first devised, it has developed and made steady advances into new areas through the use of scientific research.
- Ethically, so that we can have confidence in telling people who are receiving and/or purchasing our treatments that they are likely to be effective.
- Economically, so that we can make sure that limited mental health resources are used in the way that will bring most benefit.

Summary

These then are we what we would take as the basic principles at the heart of CBT. To summarise:

- The cognitive principle: it is interpretations of events, not events themselves, which are
- The behavioural principle: what we do has a powerful influence on our thoughts and emotions.
- The continuum principle: mental health problems are best conceptualised as exaggerations of normal processes.
- The here and now principle: it is usually more fruitful to focus on current processes rather than the past.
- The interacting systems principle: it is helpful to look at problems as interactions between thoughts, emotions, behaviour and physiology, and the environment in which the person operates.
- The empirical principle: it is important to evaluate both out theories and our therapy empirically.

Let us now turn to an elaboration of the fundamental cognitive principles.

'Levels' of cognition

So far we have talked about 'cognition' as if it were a single concept. In fact CBT usually distinguishes between different kinds or 'levels' of cognition. The following account of levels of cognition is based on what has been found clinically useful; a later section will briefly consider the scientific evidence for some of these ideas. Note that different CBT practitioners might categorise cognitions differently, and although the following classification is commonly used, it is not the only one.

Negative Automatic Thoughts (NATs)

Negative Automatic Thoughts (NATs),¹ as first described by Beck, are fundamental to CBT. This term is used to describe a stream of thoughts that almost all of us can notice if we try to pay attention to them. They are negatively tinged appraisals or interpretations – *meanings* we take from what happens around us or within us.

Think of a recent time when you became upset: anxious, annoyed, fed up or whatever. Put yourself back in that situation and remember what was going through your mind. Most people can fairly easily pick out NATs. For example, if you were anxious, you might have had thoughts about the threat of something bad happening to you or people you care about; if you were annoyed, you might have had thoughts about others being unfair, or not following rules you consider important; if you were fed up there might have been thoughts about loss or defeat, or negative views of yourself.

NATs are thought to exert a direct influence over mood from moment to moment, and they are therefore of central importance to any CBT therapy. They have several common characteristics:

- As the name suggests, one does not have to try to think NATs they just happen, automatically and without effort (although it may take effort to pay attention to them and notice them).
- stereotyped, particularly in chronic problems, they may also vary a great deal from time to time and situation to situation.
- They are, or can easily become, conscious. Most people are either aware of this kind of thought, or can soon learn to be aware of them with some practice in monitoring them.
- They may be so brief and frequent, and so habitual, that they are not 'heard'. They are so
 much a part of our ordinary mental environment that unless we focus on them we may
 not notice them, any more than we notice breathing most of the time.
- They are often plausible and taken as obviously true, especially when emotions are strong. Most of the time we do not question them, but simply swallow them whole. If I think'l am useless' when I am feeling fed up about something's having gone wrong, it seems a simple statement of the truth. One of the crucial steps in therapy is to help clients stop swallowing their NATs in this way, so that they can step back and consider their accuracy. As a common CBT motto has it,'Thoughts are opinions not facts' and like all opinions they may or may not be accurate.

- Although we usually talk about NATs as if they were verbal constructs e.g. 'I am useless' –
 it is important to be aware that they may also take the form of images. For example, in
 social phobia, rather than thinking in words 'Other people think I'm peculiar', a person may
 get a mental image of himself looking red-faced, sweaty and incoherent.
- Because of their immediate effect on emotional states, and their accessibility, NATs are usually tackled early on in therapy.

Core beliefs

At the other end of the scale from NATs, core beliefs represent a person's 'bottom line', their fundamental beliefs about themselves, other people, or the world in general. Characteristics of core beliefs are:

- Most of the time they are not immediately accessible to consciousness. They may have to be inferred by observation of one's characteristic thoughts and behaviours in many different situations.
- They manifest as general and absolute statements, e.g. 'I am bad', or 'Others are not to be trusted'. Unlike NATs they do not typically vary much across times or situations, but are seen by the person as fundamental truths that apply in all situations.
- They are usually learned early on in life as a result of childhood experiences, but they may sometimes develop or change later in life, e.g. as a result of severe trauma.
- They are generally not tackled directly in short-term therapy for focal problems such as anxiety disorders or major depression (although they may change anyway). Tackling them directly may be more important in therapy for chronic problems like personality disorders (see Chapter 17).

Dysfunctional assumptions

Dysfunctional assumptions (DAs) can be considered as bridging the gap between core beliefs and NATs. They provide the 'soil' from which NATs sprout. DAs can be thought of as 'rules for living', more specific in their applicability than core beliefs, but more general than NATs. They often take the form of conditional 'If... then...' propositions, or are framed as 'Should' or 'Must' statements. They often represent attempts to live with negative core beliefs. For example, if I believe that I am fundamentally unlovable, I may develop the assumption 'If I always try to please other people then they will tolerate me, but if I stand up for my own needs I will be rejected' or 'I must always put other's needs first, otherwise they will reject me'. Such a DA offers me a guide to how to live my life so as to overcome some of the effects of the core belief, but it is always a fragile truce: if I fail to please someone, then I am in trouble. When one of my DAs is violated, then NATs and strong emotions are likely to be triggered. Characteristics of DAs are:

- Like core beliefs, they are not as obvious as NATs, and may not be easily verbalised. They
 often have to be inferred from actions or from patterns of common NATs.
- They are usually conditional statements, taking the form of 'If ... then ...', or 'Should/must ...
 otherwise ...' statements.
- Some may be culturally reinforced: for example, beliefs about putting others first, or the importance of success, may be approved of in some cultures.

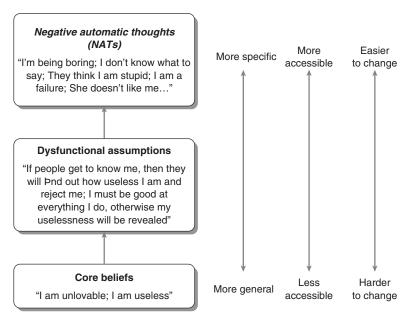


Figure 1.3 Illustration of levels of cognition

- What makes them dysfunctional is that they are too rigid and over-generalised, not flexible enough to cope with the inevitable complications and setbacks of life.
- They are usually tackled later on in therapy, after the client has developed some ability to
 work with challenging NATs. It is thought that modifying DAs may be helpful in making
 clients more resistant to future relapse (Beck et al., 1979).

Figure 1.3 illustrates these levels of cognitions for one kind of belief, and also shows some of the dimensions along which the levels vary.

It is easy to assume that core beliefs are 'at the root' of the problem, or are the 'underlying' cause, and that therefore they must be tackled directly for therapy to be effective. We would question this assumption. Core beliefs are certainly more *general* than NATs, but that does not necessarily mean they are more important. Most successful CBT research to date targets NATs, but that does not make the therapy ineffective or short-lived. This is probably because people with common mental health problems such as anxiety or depression have a *range* of core beliefs, not just negative and unhelpful ones. Through the process of therapy they can bring their more positive beliefs back into operation. Although there is not yet much research evidence, working with core beliefs may be more important in lifelong problems such as personality disorders, where clients may never have formed much in the way of positive beliefs.

Characteristic cognitions in different problems

We mentioned earlier that modern CBT theories see characteristic forms of cognition associated with particular kinds of problem. These characteristic patterns involve both the

content of cognitions and the process of cognition. If we take depression as an example, then the thoughts of depressed people are likely to contain characteristic contents, e.g. negative thoughts about themselves or others. Depressed people are also likely to show characteristic general biases in the way that they think, e.g. towards perceiving and remembering negative events more than positive ones; or tending to see anything that goes wrong as being their fault; or over-generalising from one small negative event to a broad negative conclusion. Here we briefly consider some examples. (See also later chapters on specific problems.)

Depression

As first described by Beck, the characteristic cognitions in depression are the *negative cognitive triad*, namely negatively biased views of *oneself*, of the *world in general* and of the *future*. In other words, the typical depressed view is that I am bad (useless, unlovable, incompetent, worthless, a failure, etc.); the world is bad (nothing good happens, life is just a series of trials); and the future is also bad (not only are myself and the world bad, but it will always be like this and nothing I can do will make any difference).

Anxiety

The general process here is a bias towards the over-estimation of threat, i.e. perceiving a high risk of some unwanted outcome. The exact nature of the threat, and therefore the content of cognitions, is different in different disorders. For example:

- In *panic*, there is catastrophic misinterpretation of harmless anxiety symptoms as indicating some imminent disaster, e.g. dying or 'going mad'.
- In health anxiety, there is a similar misinterpretation of harmless symptoms as indicating illness, but on a longer time scale: e.g. I might have a disease that will make me die sometime in the future.
- In *social anxiety*, thoughts are about being negatively evaluated by others, e.g. 'They will think I am stupid (or boring, or peculiar, or ...).'
- In *obsessive-compulsive disorder*, thoughts are about being responsible for, and/or needing to prevent, some harm to oneself or others.

Anger

In anger, the thoughts are usually about others' behaviour being *unfair*, breaking some implicit or explicit *rule*, or having hostile intent: 'They ought not to do that, it's not fair, they're trying to put me down.'

Generic CBT model of problem development

We shall finally put together the ideas introduced so far to develop a broad picture of how CBT sees the development of problems (see Figure 1.4). It proposes that through experience (most commonly childhood experience, but sometimes later experience), we develop core beliefs and assumptions that are to a greater or lesser extent functional and which allow us to make sense of our world and find a way through it. Most of us have a mixture of functional and dysfunctional beliefs, with the functional ones allowing us to cope

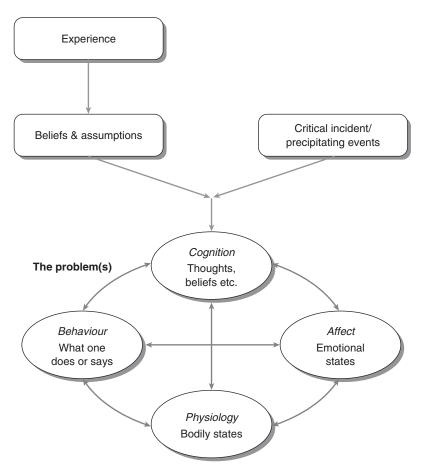


Figure 1.4 Generic problem development model

reasonably well most of the time. Even quite dysfunctional beliefs may not cause any particular problems for many years. However if we encounter an event or series of events that violates a core belief or assumption and cannot be handled by our more positive beliefs (sometimes called a *critical incident*), then dysfunctional assumptions become more active, negative thoughts are evoked, and unpleasant emotional states such as anxiety or depression result. Interactions between negative thoughts, emotions, behaviour and physiological changes may then result in persisting dysfunctional patterns and we get locked into vicious cycles or feedback loops that serve to maintain the problem.

The current status of CBT

Finally, since we have talked about CBT's commitment to empiricism, we should consider the empirical status of CBT. What is the evidence that CBT is effective? And what is the evidence that CBT theory is an accurate model of human functioning?

	Cognitive/ behaviour therapies	Interpersonal therapy	Family interventions	Psychodynamic psychotherapy
Depression	✓	✓	0	?
Panic / agoraphobia	✓	0	0	0
Generalised anxiety disorder	✓	0	0	0
Specific phobias	✓	0	0	0
Social phobia Obsessive-compulsive	✓	0	0	0
disorder	✓	0	0	0
Post-traumatic stress disorder	✓	0	0	?
Anorexia	?	0	?	?
BulimSia	✓	✓	0	0
(Some) personality disorders	✓	0	0	✓
Schizophrenia	?	0	✓	0
Bipolar disorder	?	0	0	0

Key to summary:

- √ = Clear evidence of efficacy
- ? = Some limited support for efficacy
- O = Not currently well validated (NB this indicates a lack of sufficient evidence to support efficacy; it does not necessarily imply that there is good evidence of *ineffectiveness*)

Figure 1.5 Summary by the current authors, adapted from Roth & Fonagy (2005), Chapter 17

Evidence regarding CBT treatment

Roth and Fonagy (2005), in the recent update of *What works for whom?* (their landmark summary of psychotherapy efficacy), report evidence showing that CBT is strongly supported as a therapy for most of the psychological disorders in adults that they studied, and has more support in more kinds of problem than any other therapy. Figure 1.5 summarises this.

In addition to this evidence of CBT's *efficacy* (i.e. that it works in tightly controlled research trials), there is also some useful evidence demonstrating its *effectiveness* (i.e. that it can also work well in ordinary clinical practice, outside specialist research centres). See for example Merrill, Tolbert and Wade (2000); Stuart, Treat and Wade (2000); and Westbrook and Kirk (2005).

A second useful source of evidence is the UK National Institute for Clinical Excellence (NICE). This is an agency charged by the government with the task of surveying the

evidence for the effectiveness of different treatments and making recommendations about which treatments ought therefore to be made available in the National Health Service. In the past three years NICE has produced guidelines on several major mental health problems, which include the following recommendations:

- Schizophrenia (NICE, 2002): 'Cognitive behavioural therapy (CBT) should be available as a treatment option for people with schizophrenia ... ' (p. 13);
- Depression (NICE, 2004a): For patients with mild depression, healthcare professionals should consider recommending a guided self-help programme based on cognitive behavioural therapy (CBT) ... '(p.5); When considering individual psychological treatments for moderate, severe and treatment-resistant depression, the treatment of choice is CBT ... ' (p. 27);
- Eating disorders (NICE, 2004b): 'Cognitive behaviour therapy for bulimia nervosa ... should be offered to adults with bulimia nervosa ... ' (p. 4); 'Cognitive behaviour therapy for binge eating disorder ... should be offered to adults with binge eating disorder ... ' (p. 5);
- Generalised anxiety and panic (NICE, 2004c): 'The interventions that have evidence for the longest duration of effect, in descending order, are: [first] cognitive behavioural therapy ...' (p. 6);
- Post-traumatic stress disorder (NICE, 2005): 'All people with PTSD should be offered a course of trauma-focused psychological treatment (trauma-focused cognitive behavioural therapy [CBT] or eye movement desensitisation and reprocessing [EMDR]) ... ' (p. 4).

In summary then, at the time of writing, CBT is the psychological therapy with the most solid and wide evidence base for efficacy and effectiveness.

Evidence regarding CBT theory

It is a fallacy to think that demonstrating the efficacy of a treatment proves the truth of the theory on which that treatment is based. The treatment's efficacy could be due to some combination of factors not imagined in the theory. Thus for most of us, even a randomised controlled trial showing that a treatment based on traditional witchcraft was effective for depression would not necessarily convince us that depression was in fact caused by evil spirits; instead we might investigate whether there was a powerful placebo effect, or perhaps whether the herbal potions used in the treatment contained a psychoactive substance. In the same way, the efficacy of CBT as a treatment does not show that CBT theory is true. In fact, the evidence for some of the fundamental theoretical ideas of CBT is more patchy than the evidence for the treatment's efficacy. Clark, Beck and Alford (1999) present a detailed consideration of the balance of scientific evidence in the case of the cognitive theory of depression. In summary, they conclude that regarding the supposed patterns of negative thinking in depression, there is evidence that:

- There is an increase in negative thinking about oneself, the future and (less clearly) the world.
- There is a reduction in positive thinking about the self, but this change is less marked and may be less specific to depression (in other words, the same thing also happens in other problems).
- There is a specific increase in thoughts and beliefs about loss and failure (more so than people who suffer from anxiety problems).

Regarding the proposed *causal* role of negative thoughts, i.e. the suggestion that negative thinking can provoke low mood, they conclude that there is some experimental evidence that negative self-referent thinking can indeed induce subjective, behavioural, motivational and physiological features similar to mild-moderate depression. If we experimentally provoke negative thoughts about themselves in non-depressed people, we can produce temporary states quite similar to depression.

There is also some evidence that the proposed cognitive processing biases can be identified in experiments, with evidence that in depressed people there is:

- A bias towards processing negative information relevant to themselves (but no such bias for neutral or impersonal information).
- Enhanced recall of negative events, and increased negative beliefs.

Furthermore there is evidence that these changes in processing can occur at an automatic, pre-conscious level.

The least well-supported part of the theory is the suggestion that people are vulnerable to depression because of negative beliefs that are still present in 'latent' form even when they are not depressed. Clark et al. suggest that there is a little supportive evidence for this idea, but that it has proved difficult to get clear evidence (perhaps not surprisingly, when one considers the difficulties of identifying such 'latent' beliefs experimentally).

A similar picture is found for specific CBT models for other disorders: in some areas there is good solid research support and in others the evidence is equivocal. Overall then the evidence is

- (a) that CBT is undoubtedly an effective treatment for many problems; and
- (b) that there is support for CBT theory but that there is still room for exploring and developing this approach further in some areas.

Note

1. Note that there can also be positive automatic thoughts, or indeed neutral ones; but clients do not tend to want help with those, so we will not consider them further here.