

TWO CBT Theory

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Introduction

Does the Practitioner Need to Understand The Theory?

The assertion is sometimes made that the Cognitive Behaviour Therapy (CBT) practitioner does not really need to be familiar with the theoretical basis of CBT in order to practise. Some might argue that the theory may be important for the academic and researcher, but hardly for the therapist, who only needs to know what works (the evidence base) and how to work it (the procedures). Indeed a hard line empiricist might argue that theory is not needed at all – the famous behaviourist B.F. Skinner made such an argument (Skinner, 1950).

The view in, and rationale for, the present chapter is that it is indeed important, probably essential, for the CBT practitioner to understand CBT theory, for at least two reasons. One is that theory guides the therapist in the continuous creative process of assessing, formulating and treating clients. To misquote the philosopher Kant, empiricism without theory is blind – it is difficult to know where one is going without it (Kant, 1964/1787). The second point is that, as we shall show when discussing CBT in detail, the client's problems have a great deal to do with the client's own 'lay theories' about his plight, and part of the therapy will be to help the client understand his problem in a new

way that CBT theory provides. CBT theory should, after all, show the pathway to recovery.

Theoretical Confusion in CBT?

Having made a case for the importance of understanding CBT theory, we then need to ask: what is *the* CBT theory? Unfortunately there isn't an easy answer to this. As Mansell (2008) points out, CBT lacks clarity as a therapeutic system, with diverse and imprecise terminology and little agreement as to the features that would identify it and distinguish it from other therapies.

One of the problems relevant to this chapter is the lack of coherence to one theory. There appears to be little in common between classic behavioural approaches, early cognitive therapy and the more recent surge of multilevel, hierarchical models and variants which draw on an eclectic mix of theories: 'to our colleagues and clients, the arena of CBT can appear as a confusing mixture of ideas' (Mansell, 2008: 643). Mansell identifies the challenges of this 'family of related therapies' and calls for a number of improvements, one of which is the focus of this chapter, namely theoretical coherence.

Clarifying the Developmental Stages of CBT Theory

In order to attempt to bring some clarity to the theoretical coherence issue, this chapter will be structured around the developmental stages of CBT theory through one revolution (namely the cognitive revolution) from behaviour therapy and modification to CBT, and several evolutions from CBT to the more recently developed 'third wave' multilevel models and variants. Each development was spurred by dissatisfaction with the previous theory, so I will select and describe the key theories, the critiques of these theories, and the consequent new or modified theories, showing how the new differed from the old. The aim here is not to critically and endlessly review the validity of the theories, the critiques and the subsequent rejoinders and rebuttals, but to show the thinking that lay behind and spurred new thinking and theorising. Since the volume of theories, therapies, critiques and rebuttals is enormous, this chapter will not be a comprehensive but a selective review of developments that have most influenced CBT practice. Since most contemporary CBT practice is increasingly eclectic, the chapter will

conclude with a discussion of selected present and future trends that provide and promise to provide much needed theoretical integration.

The Behavioural Approach and its Critics

The application of learning theory to the development of behavioural therapies in the 1950s and 1960s was so successful that the approach became widely recognised as a major breakthrough in the psychological treatment of mental health problems. Yet within 20 years or so, these relatively new behavioural approaches were being rapidly overtaken in popularity by a cognitive approach which was so different in theory (though not in key aspects of methodology) that it was characterised as a revolution in terms of the Kuhnian concept of a paradigm shift (Kuhn, 1962; Mahoney, 1974). What was this difference? To understand CBT theory and its impact, it is helpful to look at the two theories and these fundamental differences.

Behavioural Science and the Behavioural Therapies

The behavioural therapies were based on the behavioural science paradigm which rejected 'mental events' as unscientific because unobservable, and asserted that cognitive constructs are epiphenomena that play no role in explaining, predicting, or describing human behaviour. They therefore looked for observable learned relationships between stimulus and response in classical conditioning, and between a behavioural 'operant' and a consequent reinforcement in operant conditioning.

Behaviour Therapy (BT), for example, is based largely on the classical conditioning theory of fear acquisition, in which neutral stimuli that are associated with a fear-producing state of affairs develop fearful qualities and become conditioned fear stimuli, automatically producing a conditioned fear and avoidance response. Once established, these classically conditioned fear responses are maintained through operant conditioning (i.e. reinforcement) of avoidance behaviour (Mowrer, 1939). One approach to classical conditioning-based therapy then is to break this conditioned stimulus-response connection and to establish a new, nonfearful response to that stimulus. One of the main behaviour therapies designed to achieve this 'counter-conditioning' was systematic desensitisation (Wolpe, 1958).

Critiques of Behavioural Theories

Despite considerable successes, particularly in the anxiety disorders, a number of critiques were published during the 1970s, concerning various issues including empirical limitations shown in outcome studies, limited applicability to major areas of mental health such as depression, and the failure of the theory to explain key psychological phenomena (e.g. Rachman, 1977).

However Mahoney (1974) called for a more radical 'revolutionary' rather than evolutionary paradigm shift from behaviourism largely because it was a deterministic theory, with its model of the person as a 'passive organism' totally under the control of external causes, and this model did not fit or explain many of the key aspects of human functioning.

Beck (1976) similarly argued that behaviour therapy shared with neuropsychiatry and psychoanalysis an assumption 'that the emotionally disturbed person is victimised by concealed forces over which he has no control' (Beck, 1976: 2). Indeed there was a widely shared dissatisfaction among cognitive-oriented therapists with the notion that people were entirely at the mercy of their conditioning history and that individual differences in the interpretation of a feared situation, in perceived control, or in the ability to formulate plans and goals had no role to play either in generating the problems or on the outcome of treatment (Brewin et al., 1996).

The Cognitive Behavioural Approach and its Critiques

The Cognitive Revolution

Mahoney (1974) assembled convincing evidence that a 'cognitive revolution' based on a cognitive learning model was well under way in clinical psychology as well as psychology generally by the early 1970s. This model was 'revolutionary' rather than evolutionary because it placed cognitive mediation between the stimulus and the response, a radical switch from the person as a passive organism conditioned by external forces to an active agent who is goal-seeking, information-processing and problem-solving. The foremost CBT approaches at the time of Beck (later to be the most influential developer of CBT) and Ellis (the first developer of a CBT approach) fitted well into the new paradigm. For example Beck's Cognitive Therapy (CT) model emphasised

cognitive mediation in human learning, in which 'man has the key to understanding and solving his psychological disturbance within the scope of his own awareness' (Beck 1976: 3). A similar model of the person was expressed by Ellis (1962, 1994) in Rational Emotive Behaviour Therapy (REBT). He asserted that it was the person's irrational beliefs about adversities (stimuli) that mainly led to their emotional and behavioural reactions (responses) rather than the adversities directly. In each case the focus of CBT in mental health problems was primarily aimed at modifying the mediating belief system rather than the stimulus conditions or behavioural reinforcement contingencies.

CBT Theory, General Version

Even though the cognitive paradigm clearly places the 'causal' role mainly in the mediating cognitive process rather than environmental contingencies, is it possible to identify a clear and coherent CBT theory for the 'family of related therapies' that Mansell (2008) calls for? In other words can we identify a general version of CBT theory? Kazdin (1978) put forward a definition of cognitive behaviour modification as a set of treatments that 'attempt to change overt behaviour by altering thoughts, interpretations, assumptions, and strategies of responding' (p. 337). This definition has reasonably stood the test of time. A more elaborated definition of CBT theory has been proposed by Dobson and his colleagues (Dobson & Dozois, 2010) in the form of three fundamental propositions:

- 1 Cognitive activity affects behaviour
- 2 Cognitive activity may be monitored and altered
- 3 Desired behaviour change may be effected through cognitive change

1. Cognitive activity affects behaviour. This is a restatement of the basic mediational model (Mahoney, 1974). Dobson and Dozois (2010) report that there is now overwhelming evidence that cognitive appraisals of events can affect the response to those events, and that there is clinical value in modifying the content of these appraisals.

2. Cognitive activity may be monitored and altered. The assumption is that cognitions are knowable and assessable, though there may be biases in cognitive reports, and further validation of cognitive reports is needed. Also most cognitive assessment has emphasised content rather than cognitive process, although this is rapidly changing with the influence of the third wave approaches.

3. Desired behaviour change may be effected through cognitive change. Dobson and Dozois (2010) state that though this proposition is

generally accepted, it is extremely difficult to document the further assumption that changes in cognition mediate behaviour change. Tests of cognitive mediation are often less than methodologically adequate, and many fail to produce compelling results.

CBT Theory, Standard Version

While the family of related CBT therapies may have in common the three fundamental propositions of the general theory, they are also each quite distinct from each other in most other respects. A review of the specific theories underpinning the whole range of cognitive-based therapies is beyond the remit of this chapter, but one of these has now become the standard approach, certainly in the United Kingdom, and has been adopted as the approach for the British Government's Improving Access to Psychological Therapies (IAPT) programme of training and service provision and the approach most recommended in the UK National Institute for Health and Clinical Excellence (NICE) guidelines. This is Beck's Cognitive Therapy (CT) (e.g. A.T. Beck, 1967, 1976; Beck et al., 1979; J. Beck, 1995) and the closely allied later developments (e.g. Clark et al., 1997), particularly in behavioural applications (Bennett-Levy et al., 2004), which are now generally referred to as CBT.

Beck's CT theory. In his 40-year retrospective since his first article on the cognitive approach (Beck, 1963) Beck (2005) states that the cognitive model of psychopathology stipulates that the processing of external events or internal stimuli is biased and therefore systematically distorts the individual's construction of his or her experiences, leading to a variety of cognitive errors, e.g. overgeneralisation, selective abstraction, and personalisation. Underlying these distorted interpretations, referred to as negative automatic thoughts (NATs) are dysfunctional assumptions (DAs) and core beliefs incorporated into relatively enduring cognitive structures or schemas. When these schemas are activated by external events, drugs, or endocrine factors, they tend to bias the information processing and produce the typical cognitive content of a specific disorder.

Cognitive specificity. A distinctive feature of Beck's CT theory is the cognitive specificity hypothesis, which proposes a distinct cognitive profile for each psychiatric disorder. Broadly speaking depression is characterised by beliefs concerned with loss and defeat. Anxiety disorders are characterised by danger-oriented beliefs. Specific cognitive profiles have been demonstrated in a wide variety of disorders, including anorexia nervosa, obsessive-compulsive disorder, panic disorder, generalised anxiety disorder, body dysmorphic disorder, social anxiety

disorder, post-traumatic stress disorder, and more recently schizophrenia and subtypes such as persecutory delusion. Each of the personality disorders has also been differentiated on the basis of its distinctive set of dysfunctional core beliefs.

Cognitive vulnerability. Another feature of the theory is the notion that certain beliefs constitute a vulnerability to a disorder (stress diathesis model). Beck proposed that the predisposing beliefs could be differentiated according to whether the patient's personality was primarily autonomous or sociotropic. Autonomous individuals were more likely to become depressed following an autonomous event (e.g. a failure) than following a sociotropic event (e.g. loss of a relationship), and the reverse was true of sociotropic individuals.

A number of cognitive vulnerabilities for the anxiety disorders have been proposed by other authors. For example McNally (2002) proposed that Anxiety Sensitivity is a dispositional variable marked by fears about the harmfulness of anxiety-related sensations, and is especially elevated in people with panic disorder.

Adaptations of Beck's theory. Later adaptations of Beck's basic theory by a number of researchers, particularly Clark and his colleagues (Clark, 2004), have added to the power and generalisability of the theory in explaining the maintenance of disorders. One of the first developments was a shift of emphasis from a linear to a circular model of causality, shown most clearly by Clark's seminal paper on the cognitive approach to panic disorder (Clark, 1986) (though circular causality was also previously proposed by both Beck and Ellis). In this model, bodily sensations initially trigger catastrophic misinterpretations (e.g. prediction of an imminent heart attack) which 'cause' feelings of panic and exacerbation of the initial sensations, which in turn trigger yet more catastrophic beliefs leading to yet more symptoms, in a continuing vicious cycle. In a second theoretical development that built on the circular model, Salkovskis et al. (1996) show that in order to prevent the predicted catastrophic outcome the person would employ in-situation safety-seeking behaviours, but in so doing would prevent disconfirmation of their groundless belief, thereby maintaining rather than resolving the problem. Exposure planned as a belief disconfirmation strategy accompanied by dropping of safety-seeking behaviours is significantly more effective than habituation based exposure therapy (Salkovskis et al., 2006). This development of the theory brought to greater prominence the importance of behavioural experiments of this kind – the B in CBT.

Other key adaptations, such as the work of Ann Hackmann and her colleagues on the role of distressing imagery and memories in emotional processing in anxiety and depression (e.g. Hackmann et al., 1998; Hackmann et al., 2011) are reviewed by Clark (2004).

Critiques of Cognitive Behavioural Theories

As with the critiques of behavioural approaches, there are numerous critiques of Beck's cognitive approach, and numerous rejoinders and rebuttals. However the focus here is on those critiques that represent the critical thinking that has mainly given rise to 'third wave' and multilevel approaches, to be discussed in the final section of the chapter.

Hayes' Critique. Hayes (2004) identifies three 'empirical anomalies' in the CBT outcome literature. First, he asserts that component analyses do not show that cognitive interventions provide added value to the therapy. Second, CBT treatment is often associated with a rapid, early improvement in symptoms that most likely occurs before the implementation of any distinctive cognitive techniques. Third, measured changes in cognitions do not seem to precede changes in symptoms.

In a review of component studies Longmore and Worrall (2007) find little evidence that specific cognitive interventions significantly increase the effectiveness of the therapy. There is little empirical support for the role of cognitive change as causal in the symptomatic improvements achieved in CBT. However Longmore and Worrell equate 'cognitive' with the specific features (e.g. negative automatic thoughts) and techniques (e.g. thought challenging) of CT; but in the wider scientific literature 'cognitive' has a much broader meaning, relating to how internal mental representations drive and mediate action. In this sense, the evidence is that psychological change is cognitively mediated.

Teasdale's Critique. Teasdale (1993) points out five problems with CT theory. First, a number of therapies (including antidepressant medication) that do not target negative thinking, nonetheless reduce most measures of negative thinking to an extent similar to CT. The changes in negative thinking may be a *consequence* of the reduction in depression rather than antecedent to it.

Second, the cognitive model suggests that vulnerability to depression depends on individuals possessing underlying dysfunctional assumptions and attitudes. There has been a conspicuous failure to demonstrate the predicted presence of these attitudes in vulnerable individuals once their depression has remitted; the evidence suggests such attitudes are often mood-state dependent, rather than enduring characteristics of vulnerable individuals.

Third, it is a common clinical observation that patients can experience emotional reactions without being able to identify negative automatic thoughts.

Fourth, 'rational' argument or 'corrective' information is frequently ineffective in changing emotional response, even when the client 'intellectually' the logical power of the evidence. Beck's cognitive model recognises only one level of meaning, and for that reason has considerable difficulties with the distinction between 'intellectual' and 'emotional' belief,

or, more generally, between 'cold' and 'hot' cognition. Many clinicians regard 'emotional' belief as qualitatively distinct from 'intellectual' belief, and functionally more important.

Finally, Teasdale observed that conventional cognitive therapy for depression focusing on negative automatic thoughts, is frequently ineffective. In response, treatment procedures have been imported wholesale on an ad hoc basis from other therapy traditions based on quite different underlying rationales.

Critique of the Disorder Specific Approach

One of the key features of Beck's cognitive therapy is the specificity hypothesis and the diagnosis-specific approach that this generated with considerable success. However, as a number of authors point out (e.g. Taylor and Clark, 2009; Harvey et al., 2004), there are a number of difficulties with this approach. A theoretical problem is that patients commonly present with two or more disorders. Such comorbidity is typically not explained by disorder-specific theories. Comorbidity also implies that many disorders may have etiologic factors in common.

As Harvey et al. (2004) point out, the DSM (Diagnostic and Statistical Manual of Mental Disorders) syndromal approach is a key driving force to the 'disorder-focus' that characterises CT and most CBT. This is a categorical rather than a dimensional system that defines each disorder as a distinct entity, distinct not only from other disorders but from normal behaviour. This does not reflect clinical reality, often minimises the complexity of the clinical picture and thereby misses important information, but can lead to patients feeling stigmatised as 'mentally ill', which in itself can cause further anxiety and depression (Birchwood et al., 2006).

Third Wave Theories and Alternative Approaches

Decentring

Beck (1976) described decentring as the ability of a person to examine his automatic thoughts as psychological phenomena rather than as identical to reality. Decentring involves being able to make the distinction between 'I believe' and 'I know'. 'The ability to make this distinction is of critical importance in modifying those sectors of the patient's reactions that are subject to distortion' (Beck, 1976: 243).

Despite their criticism of Beck's Cognitive Therapy, John Teasdale and colleagues and Steven Hayes and colleagues, and other theorists identified as 'third wave' nonetheless recognise the concept of decentring as key to the third wave approach. Indeed, although emerging from different theoretical frameworks, the third wave therapies tend to follow a final common pathway, of which decentring is a key concept and the first step in the process. But after this essential first step, these approaches depart markedly from the traditional Beckian approach.

Interacting Cognitive Subsystems (ICS) and Mindfulness

Segal et al. (2002) point out that the traditional cognitive therapy approach to depression had its effects through changing the *content* of depressive thinking, but 'we realised that it was equally possible that when successful, this treatment led implicitly to changes in patients' *relationships* to their negative thoughts and feelings' (Segal et al., 2002: 38). They noticed patients switched to a perspective within which thoughts and feelings could be seen as passing events in the mind. This insight led to a fundamental shift in approach. Rather than seeing decentring as one of a number of things going on in cognitive therapy, it was now seen as central. This shift could protect people with a history of depressive relapse from future depression.

The theoretical explanation for the importance of this fundamental shift is provided by the Interacting Cognitive Subsystems (ICS) model (Teasdale and Barnard, 1993). In this model the mind is composed of information processing subsystems, one of which represents propositional meaning, as in verbal concepts, another of which represents a higher order implicational level of meaning, which includes intuitive, holistic, 'felt senses'. Only implicational meaning has the capacity to generate emotion. It is the continued interaction between propositional and implicational meanings related to the self that maintain depressive disorders.

Central to this account is the notion of depressive interlock, which is that information processing of depressogenic themes in these two subsystems becomes 'stuck' in continuous ruminative cycles. Prevention of this depressive interlock can be achieved by teaching 'mind management' skills that enable the person to disengage from 'central engine' modes that support depressive interlock. This model led to the development of mindfulness-based cognitive therapy (MBCT; Segal et al., 2002). It was adopted from a method developed by Kabat-Zinn (1990) as the method by which patients would be taught how to decentre from their

negative thoughts, to see them simply as just thoughts, freeing them from the distorted reality they created and which led to depressive relapse.

But how do people with recurrent depression get cognitively stuck in the first place? The theory that explains this aspect is Teasdale's Differential Activation Hypothesis (DAH; Teasdale, 1988). Teasdale asserts that firstly depressed mood negatively biases information processing, thereby increasing the accessibility of depressogenic interpretations of experience. Secondly, as a result of these mood effects on cognitive processing, increased negative interpretations of events produces further depression. Therefore, if a depressive state activates negatively biased interpretations of experience, this can precipitate further negatively biased, self-referent information processing which leads to a downward spiral of depression. MBCT enables the individual to radically change the relationship with, rather than content of, negative thoughts and feelings. The nonjudgmental, present moment, focus of mindfulness enables disengagement from dysfunctional mind states.

S-Ref Theory and Metacognitive Therapy (MCT)

Like MBCT, Metacognitive Therapy (MCT; Wells, 2009) does not advocate challenging the content of negative automatic thoughts or traditional schemas. In contrast, the metacognitive approach, focuses on mental processes of thinking style, attending and controlling cognition. Adrian Wells, the founder of MCT states 'in CBT disorder is caused by the content of cognition but in MCT disorder is caused by the way thinking processes are controlled and the style they take. Content is important in MCT but it is the content of metacognition rather than the content of cognition that counts' (Wells, 2000: 651).

The theoretical grounding of MCT is the Self-Regulatory Executive Function model (S-REF: Wells & Matthews, 1994). The authors propose that a thinking style called the Cognitive Attentional Syndrome (CAS) is a universal feature of disorder and is responsible for prolonging and intensifying distressing emotions. The CAS consists of: (1) worry and rumination; (2) threat monitoring; and (3) coping behaviours that are maladaptive because they impair flexible self-control or prevent corrective learning experiences.

Treatment is focused at the metacognitive level without the need to challenge the content of negative automatic thoughts or schemas. Patients are helped to know both what to do in response to threat and negative thoughts (i.e. reduce the CAS); and also how best to do it. Metacognitive programs or 'how-to' knowledge are shaped through

experiencing different types of relationships with cognition and through manipulating cognitive processes such as the control of attention and worry. MCT therefore incorporates techniques such as attention training, which is one type of detached and situational attentional refocusing to modify and develop the necessary procedural or 'how to' (i.e. experiential) metacognitions (Wells & Matthews, 1994; Wells, 2009)

Relational Frame Theory (RFT) and Acceptance and Commitment Therapy (ACT)

Acceptance and Commitment Therapy (ACT; Hayes et al., 1999) follows a similar final common pathway to the others, particularly the employment of mindful acceptance. However ACT is derived from a fundamentally different and earlier heritage than the other third wave therapies, namely radical behaviourism.

According to Relational Frame Theory all language and thought are dependent on deriving relations among events, namely relational frames. The environment will seemingly 'contain' stimulus functions that are dependent on relational frames, such that, for example, the fearful person who constructs a fearful environment will act as if that fearsomeness has been discovered, not constructed. RFT provides a third-wave alternative to CBT, based on changing the contexts that support a thought ~ action or emotion ~ action relation.

ACT (derived from RFT) therefore differs from traditional CBT in that rather than trying to teach people to control their thoughts, feelings, sensations, memories and other private events, people are taught to 'just notice', accept, and embrace their private events, especially previously unwanted ones. ACT helps the individual get in contact with a transcendent sense of self known as 'self-as-context' or the conceptual 'I' — the 'I' that is always there observing and experiencing and yet distinct from one's thoughts, feelings, sensations, and memories. ACT commonly employs six core principles to help clients develop psychological flexibility:

- 1 Cognitive defusion: Learning to perceive thoughts, images, emotions, and memories as what they are, not what they appear to be.
- 2 Acceptance: Allowing them to come and go without struggling with them.
- 3 Contact with the present moment: Awareness of the here and now, experienced with openness, interest, and receptiveness.
- 4 Observing the self: Accessing a transcendent sense of self, a continuity of consciousness which is changing.

- 5 Values: Discovering what is most important to one's true self.
- 6 Committed action: Setting goals according to values and carrying them out responsibly.

Transdiagnostic Approach

In contrast to Beck's disorder-specific approach, Harvey et al. (2004) identify empirically five cognitive and behavioural domains of processes, present across a wide range of disorders, in other words are 'transdiagnostic' rather than specific to any one disorder. They provide a detailed review of the psychological literature of each process and evaluate whether the process is significant across a wide range of axis 1 disorders specified in DSM-IV. For example, they take one of these disorders, social phobia, and show that there is a role for all five of these processes. The processes they identify, and apply in social phobia, are:

- attentional processes, particularly self focused attention;
- memory processes, including selective retrieval of past failures;
- reasoning processes, such as the interpretative bias evident on leaving a social situation;
- thought processes, particularly rumination;
- behavioural processes, in the form of avoidance and safety behaviours.

Mansell et al. (2009) identify several advantages to the transdiagnostic approach, including less time spent on selecting the right therapy, no problem with comorbidity in an individual, avoidance of the stigma attached to a diagnostic label like 'schizophrenia' or 'personality disorder', and fosters a more idiographic approach to treatment. The authors do point out, however, that the transdiagnostic approach can complement, rather than compete with, a disorder-specific approach, in any one service.

Rational Emotive Behaviour Therapy (REBT) Theoretical Concepts

Although not a third wave theory - indeed it is the original CBT - Rational Emotive Behaviour Therapy contains several of the concepts prominent in these developments. First, Ellis (1962) proposed a metacognitive explanation for disturbance, namely the idea that clients had a 'demanding' as opposed to a 'preferential' philosophy which was largely out of conscious awareness, but from which they derived their

self-condemning and other irrational evaluative beliefs. Secondly, he proposed that it was only these 'hot' evaluative beliefs and not the inferences that they drew about events that led to emotional disturbance – a precursor of emotional processing. Thirdly, Ellis proposed discomfort tolerance (as opposed to discomfort intolerance) as an evaluative belief clients could develop in response to adversities – a precursor of mindful acceptance. However Harrington and Pickles (2009) argue that pure nonjudgmental mindful acceptance of adversity is unrealistic compared to an attitude of tolerance in which the adversity is fully evaluated. Fourthly, Ellis advocated a concept of self as 'unrateable', as having no essence but only existence as alive and fallibly human – arguably a precursor of Hayes's 'contextual self'. Fifthly, as Taylor and Clark (2009) point out, Ellis (1962) was among the earliest CBT practitioners to develop transdiagnostic theory and treatment. 'Ellis's CBT, particularly his group treatment, was truly transdiagnostic; group members could have any of a variety of emotional problems and were all treated in much the same way with Ellis's form of CBT' (Taylor & Clark, 2009: 4).

Theoretical Integration

The initial 'revolution' and subsequent evolution of theory, critique, new theory, further critique, and further new theory would be straightforward if only each new theory had neatly superseded the previous one, which could then be discarded, as characterises genuine scientific revolutions and paradigm shifts, conceptualised so famously by Kuhn (1962). However the continuing cycle of theory-building, critique, rejoinder and reassertion of the validity of the earlier theories means we still have today adherents to each and all of them, from the early behavioural to the latest third wave models, if modified in the process. This adds up to a confusing picture as Mansell (2008) points out. Should we draw the Dodo Bird verdict that they are all winners and all shall win prizes? Or is the more accurate picture the ancient parable of the Blind Men and the Elephant, namely that people tend to understand only a portion of Reality and then extrapolate from that to the whole, each claiming *his* is the only correct version?

The more complex multilevel theories, including the third wave models, are reaching for an emergent if slightly fuzzy picture of the whole elephant – or most of it. In addition to ICS (Teasdale & Barnard, 1993), MCT (Wells, 2009) and ACT (Hayes et al., 1999) just described, there is the Schematic, Propositional, Associative, and Analogical Representation Systems (SPAARS) model (Power & Dalglish, 1997); Dual Representation Theory (Brewin, 1989; Brewin et al., 1996), Schema Therapy (Young et al.,

2003), the evolutionary psychology-based Social Mentality Theory and Compassion-Focused Therapy derived from it (Gilbert, 1989, 2005) and most recently the resurgence of Perceptual Control Theory Approach and the Method of Levels therapy (Powers, 1973; Higginson, 2011).

These accounts provide a rich variety of frameworks for an integration of the apparently disparate earlier theories. These approaches have core principles in common but also important differences. Rather than attempt a review of these models, I will select one that specifically integrates the behavioural and cognitive approaches, is currently widely accepted and has been and remains influential in generating CBT interventions. This is Brewin's Dual Representation Theory.

Dual Representation Theory – A Current Integrative Theory

Despite the cognitive revolution, the behavioural approach, with its exposure based treatments and the conditioning mechanisms of behaviour change, remains a lively and fertile area of scientific development (Moscovitch et al. (2009). Current empirical studies continue to show conditioning effects in a variety of psychological problems, but mostly alongside, rather than instead of, cognitive change.

Brewin et al. (1996) observed that the lack of theoretical overlap between the two approaches (i.e. the absence of an explicit role for conditioning in cognitive therapies and the absence of a role for verbal mediation in behaviour therapies) led to a prolonged period of mutual denunciation and largely fruitless argument between the two groups of practitioners.

Cognitive and social psychologists have long proposed the existence of two cognitive systems with different functions and properties, one that is automatic and outside of awareness and involves large-scale parallel information processing, and one that is more effortful and involves conscious experience.

Most automatic processing has the potential to include a large amount of information and takes place rapidly and outside of awareness, although we can become aware of its products, for example, in the forms of thoughts and images. This kind of processing is influenced by previous learning, and new stimuli tend to elicit routinised responses in a relatively inflexible way. In contrast, conscious processing is slow and deliberate, operates on a fraction of the information available but is highly adaptable and responsive to new information, which allows for great flexibility in behaviour. These two types of processing are represented in separate memory systems, one

nondeclarative (implicit), the other declarative (explicit), the former not consciously accessible.

Brewin (1989) and Brewin et al. (1996) proposed dual representations in memory of emotional experiences as the minimum cognitive architecture within which the complex relationship between emotion and cognition could be understood. One was knowledge gained through the unconscious parallel processing of their responses to aversive situations, stored in situationally accessible memories SAMs, the other knowledge is gained through the more limited conscious experience of such situations, and stored in verbally accessible memories SAMs. Whereas verbally accessible knowledge can in principle be deliberately interrogated and retrieved, situationally accessible knowledge can only be retrieved automatically when environmental input matches features of the stored memories. In this dual representation theory, both kinds of knowledge can give rise to maladaptive emotions and behaviour.

Dual representation theory and the other multilevel theories of this type (e.g. SPAARS, ICS) have been influential in *integrating* conditioning-based approaches to learning and therapy (as in flashbacks in PTSD) and cognitive-based approaches (as in cognitive restructuring of 'hotspots' in flashbacks in PTSD), in the conduct of CBT interventions. Trauma and trauma-type images encoded in SAMs are accessed via re-experiencing and then modified by and re-introduced following conventional cognitive therapy. This approach, first developed for PTSD and generally referred to as imagery rescripting, is now being widely applied to other anxiety disorders and depression and is one of the most vigorous growth areas of CBT currently (e.g. Butler et al., 2008; Grey, 2009; Hackmann et al, 2011), Stopa, 2009).

Concluding Question

Although the third wave and multilevel theories have important commonalities that have the potential to facilitate integration, they also have substantial differences and incompatibilities, strengths and weakness, but tend to be promoted as complete and comprehensive therapeutic systems for purposes of research evaluation, therapy and training. The problem is there is theoretical coherence within but not between the theories, and from an integration perspective, confusion remains. Perhaps what is still required for future developments is not so much an evolution of yet new theories but the development of a metatheory – a true further paradigm shift, just as behaviourism and cognitivism were paradigm shifts in their time. One such proposed

metatheory has already existed alongside the others, though has been further developed recently. This is Perceptual Control Theory, which is a model of general functioning and therefore is not only transdiagnostic but also in a sense 'trans-theoretical'. Perceptual Control Theory is fully explained, and the case made for its adoption as a truly integrative metatheory, in Chapter 8 Could this theory be a candidate for the integrative model that we seek?

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