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Three ways to change your mind: an epistemic framework for cognitive interventions

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Abstract

Belief change is an important element of much CBT, yet very little consideration has been given to the theories of knowledge, the epistemology, which underlie this process. This article argues that understanding the epistemic basis of the techniques therapists use can help guide their choice of interventions. The empirical evidence for cognitive restructuring is considered, the importance of distancing and decentring noted, and three epistemic styles are identified: the rational-empiricist, pragmatist and 'constructivist' approaches. Different schools of CBT emphasise one or more of these. The article describes how these epistemes can be used to make decisions about which cognitive interventions to use, particularly when clients may be sceptical about reality testing because of entrenched beliefs or real-life adversity.

Keywords: cognitive behaviour therapy; cognitive restructuring; constructivist therapy; epistemology; empiricism

What is truth?

Helping people change their view of the world is a key component of cognitive behavioural therapies (CBT). Whether this is through addressing the *content* of their thoughts and beliefs or the *process* of thinking, the client in CBT needs to come to their own understanding that their cognitions are in some way untrue or unhelpful. A great deal has been written about engaging the client in the enterprise of facilitating cognitive change, whether it be through skilful questioning (Padesky, 1993), disputation (Ellis and MacLaren, 1998) or metaphors to promote cognitive defusion. A large number of methods has been described (see for instance Clark (2013) who identifies 12 verbal interventions as forms of cognitive restructuring). While the clinical literature on cognitive interventions is extensive, little attention has been given to the theories of knowledge and truth underpinning them. *Epistemology* is the philosophical study of knowledge and how we come to justify belief. Different 'schools' of CBT prioritise different epistemological perspectives in their criteria for judging cognitions as 'adaptive' or 'maladaptive'. For instance, in Ellis's rational emotive behaviour therapy (Ellis, 1962) it is the logical consistency of beliefs that is the standard; in Beck's cognitive therapy (Beck *et al.*, 1979) empirical validity is the touchstone; while in Wells' metacognitive therapy it is the practical utility of beliefs about cognitions (Wells, 2011). There has been some recent interest in the similarities and differences in the underlying philosophies of the cognitive behaviour therapies (Carona, 2022; Hofmann and Hayes, 2019; Murguia and Díaz, 2015).

This paper furthers this discussion and argues that understanding the epistemological basis of cognitive techniques can help guide therapists in their choice of interventions.

Epistemic styles

Royce (1964) proposed that there are three core ways of knowing (the rational, the empirical, and the metaphorical), which he termed *epistemic styles* – and that our epistemic style shapes our world view (Royce *et al*., 1978). The *rational epistemic style* involves relating to the world through one's rational/analytical skills: beliefs are evaluated according to their logical consistency. The *empirical epistemic style* involves relating to the world according to one's senses: beliefs are evaluated according to observable evidence. The *metaphorical style* involves relating to the world through symbolic experience. Rather than analytical or deductive reasoning, this style relies on symbolic experience and analogical reasoning to evaluate beliefs. It is concerned with the 'construction and transformation' of meanings (Lyddon, 1991; p. 589). These concepts are a useful categorisation of broad overlapping cognitive styles. Lyddon suggested these styles correspond to three types of cognitive therapy: the rational approach is epitomised by Ellis's rational emotional behaviour therapy (REBT), the empirical approach by Beck's cognitive therapy (CT), and the metaphorical by constructivist cognitive therapy.

Constructivist therapy, according to Michael Mahoney, one of its original advocates, adopts a more proactive (as opposed to traditional CBT's reactive) view of cognition and the organism, emphasises tacit (unconscious) over conscious core ordering processes, and 'promotes a complex systems model in which thought, feeling, and behaviour are interdependent expressions of a life span developmental unfolding of interactions between self and (primarily social) systems' (Mahoney, 1991; p. 8). Although less well known in the UK, constructivist therapies have taken root in Europe and South America. Constructivist psychotherapies are less structured, problem-focused or goal-directed than standard CBT. Their aim is to facilitate the co-construction of new meanings for the client, usually without pre-conceptions and with a particular interest in selfhood and identity (Mahoney, 1991; Guidano, 1995; Neimeyer, 2009). In keeping with the metaphorical episteme, methods to change perspective are more experiential and emotion-focused. In the wider psychotherapeutic sphere, psychoanalytical and post-structuralist therapies operate in this epistemological region (for instance psychoanalytical therapists use more symbolic and metaphorical thought processes, whereas CBT therapists rely more on reason and logic; Arthur, 2000). Within the broad church of contemporary CBT, the metaphorical episteme is dominant in third-wave approaches such as acceptance and commitment therapy (ACT: Hayes *et al*., 2003) and mindfulness based cognitive therapy (MBCT: Segal, 2001). In Barnard and Teasdale's interacting cognitive subsystems (ICS) model, on which MBCT is based, there are two routes into emotion, the *propositional* which involves explicit, conscious beliefs and statements about the world, and the *implicational* which involves more tacit, metaphorical cognitive processing (Barnard and Teasdale, 1991; Teasdale and Barnard, 1993). Standard CBT focuses on the propositional whereas third-wave CBT is seen to work through targeting the implicational mode.

Rational-empiricist versus constructivist approaches

Mahoney (1991) collapsed the rationalist and empirical therapies into a single rationalist category; what research there has been in the area has tended to use this dichotomous distinction: rationalist *versus* constructivist. Therapist epistemic style distinguishes personal construct therapists from CBT therapists (Winter and Watson, 1999), predicts therapist allegiance to different models (Neimeyer and Morton, 1997) and is associated with clients' preference for particular types of counselling (Neimeyer, 1993). Of more interest to the purposes of this paper, epistemic style also seems to be associated with the type of techniques therapists employ: more rationalist therapists use techniques such as thought and belief challenging, whereas those with a more metaphorical style use more constructivist techniques (Lee *et al*., 2013; Toska *et al*., 2010).

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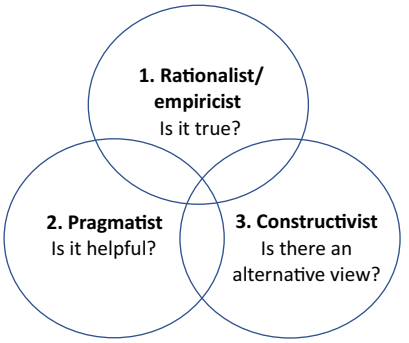

Figure 1. Three epistemic bases for changing beliefs.

Each epistemic style is a lay form of a more formal epistemology. Rationalist philosophy has its origins in Stoicism in the ancient world, and the writings of Descartes, Leibniz and Spinoza during the enlightenment. Murguia and Díaz identify the influence of Stoicism, Buddhism, Taoism and Existentialism on the writing of Albert Ellis, Beck and David Burns (Murguia and Díaz, 2015). Surprisingly, Murguia and Díaz do not acknowledge the English philosophers, Locke and Hume, who emphasised the senses as the source of acquisition of knowledge about the world, and so established Empiricism. Constructivism and CBT third-wave have their origins in a range of philosophical traditions both Eastern – (Buddhism) and Western (Kant and Schopenhauer) (Mahoney and Granvold, 2005). Although Stoicism is traditionally seen as underpinning second-wave CBT and Buddhism third-wave, Carona (2022) has noted similarities in the themes addressed by both philosophies.

Pragmatism

There is, however, another epistemological position that is not considered by Royce or Mahoney – pragmatism. Pragmatism is associated with the works of the American philosophers C.R. Pierce, William James and John Dewey. It is concerned with the way the individual engages with the world and considers truth as relevant in as much as it helps us to deal with the world. It rejects metaphysics and concepts of universal truths. In its most simplistic form, 'Truth is what works' (James, 2013). I would argue that much of our lay epistemology and indeed the 'clinical epistemology' of CBT therapists is pragmatic. Beliefs and behaviour change because we find they are no longer useful to us, and CBT very effectively demonstrates this through behavioural experiments. For instance, in CBT for body dysmorphic disorder, the therapist does not focus on proving the distorted beliefs about body image are untrue, but rather helps the client test the utility of their beliefs that certain behaviours (e.g. social avoidance, mirror gazing) are beneficial to them. Some techniques in CBT use a concept of objective truth as their touchstone, appealing to logic or evidence (e.g. disputation or reality testing); others are more pragmatic, presenting the utility of the belief as the criterion of 'truth' (e.g. evaluating costs and benefits); while others, from the more constructivist/metaphorical epistemic style, explore alternative perspectives without referring to an underlying reality base (e.g. asking 'What would you say to a friend?' does not directly challenge thoughts but opens possibilities for a new view to emerge). These three epistemic positions (rational-empiricist, pragmatist and constructivist; see Fig. 1) can provide a helpful frame for choosing cognitive interventions and we will consider their clinical applications later in the paper.

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Is cognitive restructuring worth doing at all?

Before we look at the threefold categorisation of cognitive change strategies we need to address critiques of cognitive restructuring that argue it is not an essential component of CBT (e.g. Longmore and Worrell, 2006). Cognitive restructuring (CR) can be defined as:

> 'structured, goal-directed, and collaborative intervention strategies that focus on the exploration, evaluation, and substitution of the maladaptive thoughts, appraisals, and beliefs that maintain psychological disturbance.' (Clark, 2013; p. 2)

Longmore and Worrell challenge the cognitive model on theoretical grounds, citing Brewin's argument that many memory and knowledge stores are not open to introspection, and Teasdale's assertion that the sort of beliefs involved in generating emotion 'do not have a specific truth value that can be assessed' (Longmore and Worrell, 2006); they argue that 'logico-deductive' challenging will not be effective. However, Teasdale and Barnard's ICS model and Power and Dalgliesh's similar SPAARS model (Power and Dalgleish, 1999), both allow for propositional beliefs to affect emotion via their effect on implicational schemas. While experiential and behavioural techniques may have a more direct impact on the implicational mode this does not negate the value of cognitive techniques aimed at changing thoughts and beliefs. It can be argued that a combination of the two is highly effective, as when, for instance, an explicit hypothesis is set up that over-breathing may worsen rather than alleviate panic symptoms (propositional mode) and then tested by a behavioural experiment (implicational mode). Clark and Egan (2015) suggest certain cognitive reappraisal techniques may work in a way that is consistent with the ICS model.

Cognitive versus behavioural techniques

Cognitive techniques have also been criticised on the grounds that they are no more effective than simpler behavioural methods, and that cognitive change is not the mechanism for change in CBT. For instance, clinical improvement often occurs before cognitive change (see for instance Blease, 2015). A recent network meta-analysis of 45 studies of depression found that CR, behavioural activation (BA) and full CBT were equally effective and superior to waiting list and treatment as usual controls (Ciharova *et al.*, 2021) suggesting equivalence of techniques. For the anxiety disorders, there is evidence for the value of CR in combination with exposure for social phobia. Mattick and colleagues found that CR+exposure was more effective than exposure or CR alone (Mattick *et al.*, 1989). Cognitive restructuring and other techniques may produce change by working on different processes. For instance, imagery rescripting and CR are both effective in treating social anxiety, but CR may have a greater effect on fear of negative evaluation (Norton and Abbott, 2016). The evidence for cognitive restructuring compared with exposure in post-traumatic stress disorder (PTSD) is varied. Some studies have found an equivalence (Marks *et al.*, 1998); some have shown superiority of exposure (Foa *et al.*, 2005) and some superiority of combined CR and exposure (Bryant *et al.*, 2003; Bryant *et al.*, 2008). Grunert *et al.* reported the failure of prolonged exposure with two industrial injury victims (Grunert *et al.*, 2003). Rather than separate CR and exposure, the more sophisticated interplay of techniques as used in the Ehlers and Clark model (Ehlers and Clark, 2000) may be the most effective (Grey *et al.*, 2002). In this approach cognitive restructuring is incorporated into the exposure (reliving) itself (Ehlers and Clark, 2000; p. 338).

Cognitive restructuring versus cognitive defusion

Consistent with Brewin and Teasdale's criticisms that thought challenging does not really 'hit the spot' when it comes to changing emotion, studies have compared cognitive restructuring with

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cognitive defusion (CD) techniques as used in ACT. The latter focus on cognitive processes and support clients in accepting and decentring from thoughts instead of engaging with them. These studies have shown a degree of equivalence but also differential effects on various measures. For instance, in a non-clinical sample of people high in self-criticism, brief CR and CD interventions delivered though mobile apps are both more effective than waiting list in reducing self-criticism, distress and dysfunctional attitudes, and increasing decentring and self-compassion (Levin *et al.*, 2018). In another study, participants were asked to ruminate about a saddening autobiographical event and then taught a CR, CD or distraction technique to manage the ruminations (Yovel *et al.*, 2014). CR and CD both reduced distress. For the CR condition improvement was associated with change in appraisal but not acceptance, and vice versa for CD.

Focusing on cognitive content as well as cognitive process and behaviour is still a valuable skill in CBT and should not be abandoned for a number of reasons:

(1) Cognitive restructuring is a key component of evidence-based CBT approaches and has equivalence to other techniques.
(2) Cognitive restructuring may work through different mechanisms and may produce different outcomes compared with other techniques (see above).
(3) There may be individual differences (as yet little studied) in preference and response to cognitive interventions.
(4) Cognitive restructuring probably works best when woven into formulation-based treatments where the sequence of identifying beliefs, questioning them through verbal discussion, testing them through behavioural experiments and reviewing the outcome, is a core feature (Grey *et al.*, 2002).
(5) In order to persuade a client to engage in a behavioural task or experiential technique we are inevitably inviting then to consider a new way of relating to the world. Whether it is through psychoeducation or a thought experiment, this involves a conversation that questions their beliefs.

Setting the scene for cognitive restructuring – distancing and decentring

Cognitive restructuring can be both formal and informal. Formal CR involves using tools like the Dysfunctional Thought Record to systematically examine negative thoughts and beliefs and replace them with more adaptive ones. Informal CR is any questioning and discussion which helps to loosen interpretations and evaluations that may be contributing to the client's distress. To facilitate questioning there needs to be some degree of therapeutic alliance and socialisation to the model. In particular, the client must feel understood and respected, so empathy is a pre-requisite for cognitive restructuring (Moorey and Lavender, 2019 (pp. 3–15); Padesky, 1993). Another requirement, is that there needs to be some distance from cognitions so that they are not perceived as absolute reality. Within the Beck approach the therapist helps the client turn apparent facts into beliefs and then into hypotheses; this requires an initial stepping back – *distancing* – to 'examine … thoughts as psychological phenomena rather than as identical to reality' (Beck, 1976, p. 243) while *decentring* helps them to no longer see themselves as the centre of events. Within third-wave therapies like ACT this is the process of defusion. There are several ways in which CBT helps the client distance and decentre. The formulation of the problem, particularly using diagrammatic models like the five areas model or social phobia diagram (Clark and Wells, 1995) helps the person stand back from the problem. The developmental formulation furthers this distancing by creating a narrative of how past experiences shaped beliefs: the message is that these ideas were learned in a particular context and so may not be absolute and may be unlearned. Psychoeducation about the cognitive model in general and the specific disorder being treated also introduce the

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idea that there may be an alternative explanation for what seems to be reality, e.g. fatigue and low motivation may be symptoms of depression rather than signs of laziness. Specific techniques like thought monitoring (Cohen *et al*., 2013) or labelling cognitive biases promote the observer perspective, while the metaphors and defusion techniques used in ACT have a similar function. There needs to be an optimal level of affective arousal and identification with thoughts for restructuring to be effective (Blackburn *et al*., 2001; Greenberg and Safran, 1989). The decentring techniques help to lower the emotional temperature so the client is not overwhelmed, but in certain disorders (e.g. panic) emotion induction will be needed for cognitive interventions to work.

The rational-empiricist episteme – 'the truth is out there'

Rational and empirically based interventions use logic and evidence as the touchstone for reality and are the core component of REBT and Beck's cognitive therapy. To help people change their minds through logical argument or examination of evidence it is usually thought best to approach this using guided discovery rather than direct challenging – the *Socratic Method*. Therapist and client work together as a team to identify and evaluate thoughts and beliefs (Beck, 1985; pp. 174–177), a process known as *collaborative empiricism* (Tee and Kazantzis, 2011). Questioning is employed to draw out the idiosyncratic meaning of a situation and to examine the evidence for and against the thought or belief (Padesky, 1993). Despite its status as the cornerstone of CBT, relatively little evidence exists to demonstrate the superiority of the Socratic Method over a more didactic style (Clark and Egan, 2015). For the most recent review of the academic and clinical status of guided discovery see Padesky and Kennerley (in press). 'What is the evidence?' (Beck, 1995; p. 109) is the key question in this empirical approach. Therapist and client collaboratively examine the evidence supporting the thought or belief and then the evidence against it. The client is then asked to come to a decision about which side wins the argument – sometimes this is presented as 'taking the thought to court' – and to reframe the thought. If the evidence against the negative thought wins this reframing is termed a 'rational response' (Beck *et al*., 1979; p. 288). Padesky uses the terms 'alternative thoughts' if the negative thought is seen to be invalid and 'balanced thought' if it is found to have some elements of truth for the client. Informal questioning of cognitions can occur at any stage of therapy. The formal approach to cognitive restructuring using the Dysfunctional Thought Record (DTR) begins with a description of the upsetting situation, the emotional response and the automatic thoughts, followed by a re-evaluation and reframing which are all written in separate columns. Rating the strength of the emotion and degree of belief in the negative automatic thoughts before and after the intervention helps to reinforce the cognitive change. Padesky's 7-column thought record contains two extra columns for the evidence for and against the thought (Greenberger and Padesky, 2015), which works as a worksheet to facilitate the skill of weighing up the evidence.

Formal and informal cognitive restructuring is often followed by a behavioural experiment to test the new thought or belief, e.g. a therapist might help a depressed person to question his negative automatic thought that he is boring and no-one wants to know him, and then set up an experiment to test this by telephoning a friend and asking them for a drink. Behavioural experiments reinforce the belief change achieved with cognitive techniques and, because of their experiential component, are often more compelling than verbal techniques (Bennett-Levy, 2003; Bennett-Levy *et al*., 2004).

There are some techniques that do not directly examine evidence but rather question the logic of the automatic thoughts, for instance, identification of thinking errors or cognitive biases (see for instance Beck, 1995 (p. 119); Burns, 2020 (p. 82)). Cognitive biases include concepts like all-or-nothing thinking, over-generalisation, magnification and minimisation, jumping to conclusions, etc. Many clients find these useful as ways to quickly catch themselves when they fall into a

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Box 1. Rational-empiricist techniques

- Identifying cognitive biases
- Examining the evidence for and against a thought or belief ('Taking the thought to court')
- Dysfunctional thought records
- Behavioural experiments to test the validity of the thought or belief

familiar thinking trap. Similarly, once the client is socialised into the model the therapist may be able to point out the use of global statements ('everyone', 'I always') and the way that irrational, over-generalised thinking can subtly influence our emotional state.

The pragmatist episteme – 'the truth is what works'

When we ask, 'What is the effect of my believing the automatic thought?' (Beck, 1995; p. 109) we are not referring to a standard of validity but one of usefulness. This is a pragmatist episteme. Some negative automatic thoughts may be true, but they may not be useful. As Beck observed, a tightrope walker in the circus may think 'If I fall I will die' – this is a realistic thought but not a helpful one! (A.T. Beck, personal communication). A realistic negative thought can be particularly pernicious when it leads to ruminations and a proliferation of negative speculation (see Moorey, 1997) and Moorey (in press) for a discussion of working with realistic negative automatic thoughts). Looking at the advantages and disadvantages of thoughts is a more systematic method for evaluating their helpfulness. At the beliefs level, this can be especially important to employ before or instead of challenging the validity of a belief. Strongly held rules about the way things *should* be are difficult to shift and questioning them too early can bring resistance. Even clients with personality disorder or psychosis, however, while reluctant to consider their beliefs irrational, will often recognise that they have not helped them achieve their life goals. Identifying the strategies that arise from the beliefs allows for a discussion of how useful the strategies have been. A narcissistic person will not be prepared to let go of the idea that they are special and that others are holding them back, but may be able to concede that their arrogance and dismissiveness have caused others to reject them, so there might be alternative ways of behaving that will allow them to meet their goals.

The pragmatic approach lends itself well to the collaborative creation of behavioural experiments (Bennett-Levy *et al.*, 2004). This is particularly relevant in CBT for anxiety disorders such as health anxiety or obsessive-compulsive disorder (OCD) where disconfirmation of fears is often not an option because the fears relate to something that may happen in the distant future (Salkovskis, 1996). An initial intervention is to set up experiments to test whether safety-seeking behaviours such as avoidance, checking, reassurance seeking, etc. are actually helpful in reducing fearful pre-occupation. In both health anxiety and OCD the maintenance formulation is important in offering alternative explanations (constructivist episteme), e.g. in OCD 'I am not a dangerous person who can contaminate others. I have a worry that I might be a dangerous person' (Bream *et al.*, 2017). Behavioural experiments can move on from testing whether safety behaviours are useful (pragmatic episteme) to gathering evidence for the new formulation and against the old model (empirical episteme).

Useful or helpful?

Figure 2 depicts the validity-helpfulness matrix. Thoughts and beliefs that are unrealistic and unhelpful can be questioned directly using reality testing. Cognitions that are realistic but

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Box 2. Pragmatist techniques

- Advantages and disadvantages of thoughts, beliefs or behaviours (cost–benefit analysis)
- Exploring the effects and consequences of thinking this way
- Behavioural experiments to test the effects of the beliefs

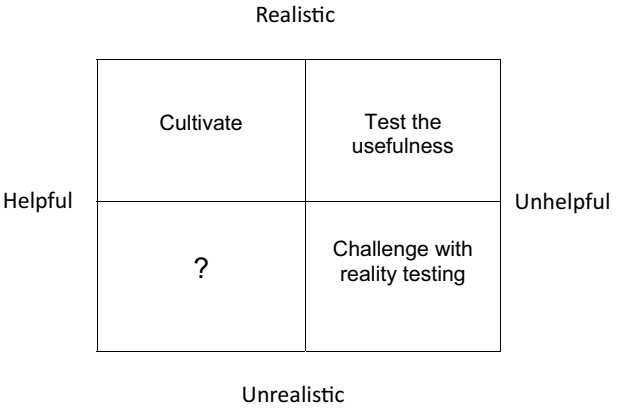

Figure 2. Realistic *vs* helpful beliefs.

unhelpful are best addressed using the pragmatic method, while thoughts and beliefs that are realistic and helpful can be recognised and supported. In the fourth quadrant, beliefs are unrealistic but seem to be helpful. For instance, someone with multiple sclerosis may hold an optimistic belief that a cure could be found for their condition in their lifetime, or someone living in poverty might speak of how they might win the lottery. These beliefs may help people to carry on the struggle. Rather than being rigidly rational, the therapist needs to be compassionate and flexible in their approach. The costs and benefits of wishful thinking can be taken into account: is the positive thinking helping them cope or hindering? The patient with multiple sclerosis may say that this hope allows them to get up every morning, but on the other hand they may be spending so much time researching cures that it has a negative effect on their family. The person longing for a lottery win may spend so much time dreaming of the magic solution they do not plan how to manage their debt. These strategies may be helpful in the short term but deleterious in the long term.

The constructivist episteme – 'the truth is what I make it'

When the CBT therapist uses questions like 'Is there an alternative explanation?' or 'What would I tell . . . ?' (Beck, 1995; p. 109) they are not referring to evidence or utility but inviting the client to adopt a new perspective. This is consistent with a more constructivist or metaphorical episteme – truth depends on the place from where I view the world. These types of questions have similarity with solution-focused approaches which allow clients to explore and create solutions rather than focus on problems (De Shazer, 1985). Within CBT this is the distinction Padesky makes between 'changing minds' and 'guiding discovery' (Padesky, 1993). While Teasdale is critical of the rational-empirical techniques used in cognitive therapy, which mainly change at the propositional level, he sees cognitive interventions which create a broader perspective as 'creating whole, coherent, alternative views at a schematic level' via the implicational system

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(Teasdale, 1996; p. 44). According to this view the cognitive therapies for anxiety disorders like panic, social phobia and health anxiety also work more on the implicational level than, for instance, Beck's cognitive therapy for depression, because they effect change by 'creating whole alternative views or models ... rather than by serially invalidating specific negative beliefs' (Teasdale, 1996; p. 44). Any form of formulation-based CBT facilitates a new way for the person to see their problems, and in ICS terminology works on the implicational level. The Theory A/Theory B technique employed in OCD (Bream *et al*., 2017; pp. 87–94) is an example of a constructivist paradigm. It creates two alternative explanations – Theory A = 'Because I have images of hurting my child I am a dangerous person'; Theory B = 'Because the safety of my child is the most important thing in the world to me I worry that I might hurt her'. Behavioural experiments are then conducted on the pragmatic paradigm to assess the helpfulness of safety behaviours, and on the empirical paradigm to test the validity of the new perspective.

Interventions that explore new ways of seeing can be particularly helpful for people who are facing real-life adversity, because they completely bypass the need to identify negative automatic thoughts which is an area where objections can arise – 'You don't understand these thoughts aren't distorted they are real'.

There are several different perspectives that can be explored, as follows.

Time perspective

Here the therapist asks the patient to imagine themselves at a different period in their lives. For someone with depression this may be a time when they were well. When asked a question like, 'What would you have said to me about this situation when you were well?', the depressed person is often able to say that they would have seen their situation more positively, would have felt able to cope and would not have felt that it indicated something was wrong with them. This shift of perspective can engender hope that things can be different. It also activates memory networks of times when things were better, and so may help move the person from the depressive mode into the euthymic mode (Beck, 1996). Questions can be asked about how the person coped in the past with challenges, what strengths and resources did they bring to bear on the situation? We can also ask questions about the future such as 'What will life be like in 1 year, 5 years' time?'. For suicidal patients or patients with PTSD the future is foreshortened and hopeless. Imagining future scenarios can help generate the idea that a future is possible (Williams, 2003; see for instance pp. 220–223).

Others perspective

This is one of the commonest questions after the question 'What's the evidence?'. Here we ask the client to move position so they imagine someone else in their situation – 'What would you say to a friend?'. They are usually able to be much more compassionate when they think of someone else in their situation. This allows for discussion of the double standards we apply, as well as possibly acting at the more experiential, implicational level. The feelings of empathy, compassion and warmth felt towards a friend in need may induce a felt sense that can be directed towards the self. 'What would a friend say to you?' offers a similar alternative compassionate perspective.

Changing focus

Shifting attentional focus is a key technique in the treatment of anxiety disorders, e.g. moving from an internal focus to an external focus in social anxiety. It can be helpful for people facing adversity in two ways. Firstly, it is possible to become stuck in one mode of coping. A patient with cancer may spend so much time worrying about their illness, searching for cures, etc. that they do not live their life. Alternatively, they may put all their attention on everyday life as a way of distracting

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Box 3. Constructivist techniques

Time perspective

- What will life be like in 1 year, 5 years' time?
- Remember past strengths, coping and resilience

Others perspective

- What would you say to a friend?
- What would a friend say to you?

Focus

- Focus on what you can control in your life
- Focus on present moment experience

Values

- Find alternative ways to follow values and work towards goals

themselves from the emotional impact of the disease. Balancing coping is a way of refocusing. Secondly, we have a tendency to try to use coping strategies that have worked for us in the past even if they are not applicable in the present. We can find ourselves trying to control what we can no longer control, e.g. a patient with an incurable illness may want to plan the future for their partner; or a recently disabled person may focus on all the things she can no longer do and ignore what they still can do.

The perspective of values

ACT's emphasis on helping people move in the direction of their values clearly fits into the constructivist paradigm. Some of these interventions can be used within mainstream CBT. Again, in the area of adversity, people may genuinely no longer be able to do some of the things they used to do. Identifying what was valuable about the activity and finding alternative ways to follow values and work towards goals can open up new possibilities.

Conclusions

When we use guided discovery to help someone evaluate their thoughts, we are inviting them to change their perspective. We rarely think about the criterion we are asking them to apply for the validity of the thoughts. Cognitive change will be more likely if there is agreement on the criterion. Some cognitive techniques are explicitly empiricist or rational in their assumptions about truth – logic and evidence are the touchstone. Others are more pragmatic and reference the utility of the thoughts or behaviours. Finally, others work more from an assumption that knowledge is dependent on the position we are in and the perspective we take. Being aware of these three ways of inviting change can give flexibility in our choice of interventions. We can ask ourselves which of the three approaches to cognitive change we are applying in a given situation. If standard thought challenging does not work, exploring the benefits of the thoughts or a more open style of guided discovery may work better. Hopefully this may help novice therapists escape from the straitjacket of thinking that 'taking a thought to court' is the only form of cognitive restructuring. The evidence base for the cognitive techniques we use and for the use of Socratic questioning is very limited so there is great scope for research in this area. Research has been done on the therapist's epistemic style but virtually none on the client's. One reason that some people do not respond to particular techniques may be that

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they do not buy into the empiricist model and may have a more metaphorical epistemic style. Knowing this may allow us to tailor the interventions to the individual client.

'What is truth said jesting Pilate, and would not stay for an answer' (Bacon, 1908). Perhaps this brief pause to consider the 'clinical epistemology' of cognitive restructuring may encourage us to not take our truths for granted.

Data availability statement. As this is a clinical-theoretical article, there are no data.

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