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4 Cognitive-Behavioural Therapy

In this chapter, the case of Molly is formulated within a cognitive-behavioural therapy (CBT) framework. CBT is a generic term, encompassing both: (1) approaches underpinned by an assumption that presenting emotional and behavioural difficulties are cognitively mediated (A. T. Beck, 2005) or moderated (Hofmann & Asmundson, 2008); and (2) atheoretical bricolages of cognitive and behavioural techniques (Fennell, 1989). This latter category may include *effective* therapeutic packages (perhaps acting through mechanisms articulated in the first category) but, when theory is tacit, it becomes harder to make analytical generalisations or to extrapolate principles that could guide idiographic formulation and intervention. In contrast, the first category of approaches posits that presenting difficulties may be formulated from an assessment of individual cognitive content (thought processes and underlying beliefs) and implies that we can bring about change in presenting difficulties through change in associated cognitions.

Within the expansive category of *theory-linked* CBT approaches, however, there remains a great deal of heterogeneity. Beyond a broadly shared assumption about the influential role of cognitions, we find that variants and developments of CBT place differential emphases on (for example): level of analysis (e.g., situational versus individual); levels of cognition (e.g., immediate thoughts versus underlying core beliefs); problem-specificity (e.g., trans-diagnostic versus disorder-specific); the relative contribution of 'non-cognitive' variables (e.g., overt behaviour, emotional experience, social context); and the particular *mechanism* of cognitive influence (e.g., mediational versus interactional), with some variants hypothesising complex interrelations, involving pathways between multiple cognitive 'systems'. Recent incarnations of CBT seem to place less emphasis on direct cognitive change (i.e., targeting the content, occurrence, and believability of thought processes) and greater emphasis on changing how people attend, relate, and respond to cognitions (i.e., second-order change; Hayes, Villatte, Levin, & Hildebrandt, 2011) – one such model is discussed in Chapter 5 of this volume.

Given the diversity of 'CBT' approaches, and the potentially divergent implications of selecting one model over another, it is important that we specify the particular framework that we will use for the purposes of this chapter. We primarily base our approach and formulation on the theoretical model articulated by A. T. Beck (1976). This model is internally coherent and led to the development of a cohesive system for case formulation (J. S. Beck, 1995; Kuyken, Fothergill, Musa, & Chadwick, 2005). Beck's theory seems to offer a broadly applicable and logical account of functioning, and therapy based specifically on this account has been effective (Knapp & Beck, 2008). Notwithstanding these strengths, we will go on to critique the model, and question some of its fundamental assumptions about mechanism of change and

'active ingredients' of intervention. Nonetheless, we will argue that the theory has a number of strengths that make it a *useful* model (in a pragmatic sense) for the purposes of formulation – particularly in view of the current state of evidence for psychological case conceptualisation.

4.1 Beckian CBT

Beck's CBT model distinguishes between cognition (thoughts, appraisals, and beliefs), emotional experience, and overt behaviour – and emphasises the primacy of cognition: suggesting that our feelings and actions are largely determined by our belief-based appraisals of events (A. T. Beck, 1976; A. T. Beck, Rush, Shaw, & Emery, 1979). A logical implication of this is that when people present with feelings of distress or problematic patterns of behaviour, we can target the way that they think about (appraise) events and other aspects of their life in order to effect therapeutic change. It should be stressed that Beck did not posit cognitions as ultimately causal or aetiological (exogenous) variables, but saw cognitions as a pragmatic point of entry for understanding and intervention. At the point at which a client may present clinically, we do not observe the origins of the problem; rather, we are working with a crosssection of current difficulties, which may be informative about proximate influences and maintaining factors without affording insight into ultimate or distal causes. Beck identified cognitions as the first amenable target within a logical sequence of situational responses (cognitions, emotions, and behaviours) that reflect and perpetuate presenting difficulties. This *logical* sequence supports practicable understanding of difficulties, although evidence for affective primacy and automaticity (Rachman, 1981; Storbeck & Clore, 2007) suggests that the actual sequence of responses to a given situation may be different, and difficult to discern. In essence, the disaggregation of cognitions, emotions, and behaviours into discrete analytical units is largely pragmatic rather than ontological.

As might be expected from the foregoing discussion, CBT treatment focuses on 'here and now' problems and the factors that maintain them; but, importantly, current difficulties are also typically understood to reflect broader, enduring belief systems with origins in earlier experiences. Beck's model posits that developmental experiences produce core beliefs, with contingent beliefs and assumptions that are compensated for by various behavioural and cognitive strategies. Crucially, even where developmental experiences are considered *negative* (e.g., being abused by others), and are seen to produce potentially *maladaptive* core beliefs and secondary assumptions (e.g., others cannot be trusted; to get by, I must depend on myself), we may not see any 'problem' as long as compensatory strategies (e.g., self-reliance, avoidance of others) are working. Difficulties are expected to emerge when *critical incidents* (stressful events or contexts) occur that 'activate' the maladaptive belief system, but also negate the effectiveness of previously engaged compensatory strategies; in our

parenthetical example above, this might be because the individual is forced into a position of dependence on others (e.g., due to a deterioration in health). Theoretically, once activated, maladaptive beliefs produce negative thoughts and appraisals - often inferences about a current situation, but also cued expectations about the future or remembrances of the past – with negative emotional and behavioural sequelae. Within the model, maladaptive beliefs are purported to bias attention and interpretations (e.g., selective focus on information that 'confirms' negative beliefs about others; discounting of contradictory information) and thus become somewhat self-sustaining and resistant to change.

The simplicity of the model belies its explanatory and therapeutic potential. The notion that people's experiences are shaped by idiographic and enduring beliefs allows us to account for differences between individuals (i.e., why two people may appraise and respond to a similar situation in starkly different ways) and consistencies within individuals (i.e., why a person may act in similar ways across different contexts and occasions). Furthermore, this notion highlights the possibility of achieving lasting, cross-situational changes if we can modify implicated beliefs.

Although Beck's model implies that we should target beliefs directly, it also supports the use of emotion-focussed or behavioural techniques to facilitate cognitive change. For example, preliminary work around emotional tolerance may be needed to enable engagement with cognitive techniques; and behavioural experiments – which proffer the opportunity for direct environmental feedback - may provide the most convincing evidence against irrational and maladaptive thoughts. Within Beck's CBT model, we would expect the most enduring change to arise from shifts in beliefs and thinking patterns, but these shifts may be contingent on changes in emotional or behavioural experiences.

4.2 Historical Origins

Beck's seminal theory was primarily developed on the basis of clinical observations of depression, rather than from research evidence (A. T. Beck, 1976); and knowledge of this development may help us to understand both strengths and weaknesses of the model. The face validity and clinical practicability of CBT would seem to follow from its basis in clinical experience; conversely, there are limitations in the research bases for CBT – in particular, a lack of evidence in support of the central theorised mechanism (cognitive mediation) and separation from broader developments in cognitive science – which likely reflect the fact that research endeavours have been secondary to clinical insight and effectiveness. Empirical studies have provided support for some aspects of Beck's theory (e.g., identifying the presence of expected cognitive themes and biases in particular presentations; A. T. Beck, 2005), but further work is needed to test assumptions regarding the underlying model of change (discussed later).

In terms of wider influences, Beck drew on the proximal work of other cognitive theorists (including Albert Ellis and George Kelly), and was inspired by a (then) recent turn within behavioural psychology towards considering intra-organismic variables or private behaviours that might mediate or moderate responses to the environment (A. T. Beck, 2005; A. T. Beck et al., 1979). Philosophically, Beck linked the tenets of CBT to phenomenological interests in subjective experience and traced them back, for example, to the writings of Greek Stoic philosophers, such as Epictetus and (later) Marcus Aurelius, who observed that people (1) are disturbed by their judgements of events, rather than the events themselves, and (2) have the power to change these judgments and their responses to the events that befall them. Indeed, as Robertson (2010) has observed, the original Stoic writings have a practically instructive and therapeutic focus, which would readily fit with CBT and other modern psychotherapies (such as ACT; Chapter 5).

Beck led a shift away from a focus on behaviour change, which had characterised foregoing behavioural therapies, towards a focus on cognitive change (Hayes et al., 2011). Subsequent years have seen the emergence of a range of cognitive theories and therapies – some of which explicitly draw and develop upon Beck's model (Persons, 2008).

We choose to ground our approach to CBT in Beck's seminal cognitive therapy, and have focussed our account of historical origins accordingly. However, it should be acknowledged that the origins of CBT can be linked to the work of other theorists, and traced back empirically to foundational work in behavioural psychology (see Hawton, Salkovskis, Kirk, & Clark, 1989, for an informative overview). Moreover, CBT can be seen to have been conceptually and practically prefigured by 'rational' approaches to psychotherapy in the early twentieth century (which also took inspiration from Stoic philosophy; Robertson, 2010).

4.3 Defining Features

Both the theory and practice of CBT are typified by a focus on cognition (Longmore & Worrell, 2007). In a review of psychotherapy practices, Blagys and Hilsenroth (2002) identified that CBT treatment activities were distinctively characterised by efforts to identify and change problematic thinking. Other distinguishing features of CBT included: (1) provision of information about the treatment rationale and presenting difficulties (psychoeducation); (2) an emphasis on structured and methodical session activity; (3) an onus on the client completing tasks outside of sessions ('homework'); and (4) development of coping skills to support functioning, both now and in the future (Blagys & Hilsenroth, 2002). Taken together, these features seem consistent with early distinctions made by A. T. Beck et al. (1979), who identified CBT in terms of collaborative empiricism, working with mental processes, and orientating towards current and future experience. For example, the principle of collaborative empiricism

 working with the client to rationally and systematically investigate current difficulties – is evinced in the open sharing of information and psychoeducation, a structured and methodical approach to session activity, and the client's role in collecting evidence outside of sessions.

Notwithstanding the above, we should acknowledge here again that the proliferation of CBT approaches has resulted in diversity, such that it has become difficult to isolate defining features (Hayes et al., 2011) or to critique 'CBT' as a single, coherent approach. One symptom of this is the recent publication of a Delphi study (Morrison & Barratt, 2010) aiming to identify a consensual view of core CBT components (for a single treatment target). The identified need for consensus-building is indicative of the multiplicity of approaches and understandings that are collectively categorised as 'CBT'. Moreover, the study's reliance on practitioner agreement tells us something about the state of evidence for 'active ingredients' in CBT: If we had strong evidence that particular components were associated with therapeutic outcomes (efficacy), the need for a consensus-based method would be largely negated.

4.4 Empirical Evidence

The efficacy of CBT has been the subject of extensive investigation: A recent comprehensive review identified 269 meta-analytic studies of CBT (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012) encompassing a broad range of clinical presentations and populations. The review attested to a generally strong evidence-base for efficacy, but this summative conclusion is subject to various qualifications when disaggregated (i.e., specific applications of CBT differ in observed effect sizes or quality of evidence) and there are notable difficulties in pooling findings across a literature of such breadth and heterogeneity.

Further to variability in presentation and population, the magnitude of effects vary according to comparison condition – i.e., whether comparisons were treatmenttreatment or treatment-control, and whether controls were passive (e.g., waiting list) or active (e.g., treatment-as-usual) – and these were multifarious. Similarly, evidence was stronger for some presentations (e.g., anxiety disorders) than others (e.g., distress related to medical conditions).

We might be more confident in our ability to integrate the CBT evidence-base if we are assured that, at minimum, there is theoretical consistency across intervention studies – i.e., that we are accumulating evidence for the same *model* of therapeutic change (irrespective of superficial differences in techniques used to deliver, measure, or analyse the hypothesised processes of interest, or in the targeted problems or client groups). However, the heterogeneity of approaches categorised as CBT (beyond basic assumptions) makes it difficult to interpret such evidence as supportive of a singular and distinctive model (i.e., Beck's seminal theory).

4.5 Critique

Strikingly, there is (currently) limited evidence to suggest that findings favouring CBT efficacy are accounted for by putative mechanisms of change. In a comprehensive review of component studies, Longmore and Worrell (2007) identified a lack of empirical support for the central CBT assumption of cognitive primacy. Specifically, studies to date suggest that (1) cognitively-focussed strategies may not contribute to effectiveness over and above behavioural components of CBT (e.g., behavioural activation in depression; Jacobson et al., 1996) and (2) there is little evidence that therapeutic effects of CBT are mediated by cognitive changes. We might expect cognitive change to *accompany* broader therapeutic change, to the extent that cognitions are interdependent with other (e.g., behavioural and emotional) outcomes of interest (e.g., Persons, 2008). However, even if we assume interdependence (an assumption challenged by evidence for desynchrony between cognitive, emotional, and behavioural responses; Rachman, 1981) this broader conceptualisation potentially relegates cognitive change to an epiphenomenal (versus *influential*) role (see Chapter 3).

In practice, component and mediational research may be limited by, for example: (1) the extent to which important cognitive changes are measurable (e.g., accessible to self-report) and the quality of available measures (Jacobson et al., 1996); (2) the extent to which cognitive changes are separable from other changes; and (3) the extent to which CBT can be dismantled into separate components (e.g., purely cognitive versus behavioural strategies) without losing important synergies of the 'whole' approach.

Caveats aside, the recurrent finding of equivalence between various intervention-strategies – within CBT (Longmore & Worrell, 2007) and across psychotherapies more broadly (e.g., Ahn & Wampold, 2001) – may be taken to support the argument that clinical improvements are chiefly accounted for by 'common factors'. If we proceed with this in mind, we may still consider CBT formulation *useful* in so far as it provides a plausible basis for the development of these non-specific components – i.e., formulation may support improvements through facilitation of (for example): client expectancy, therapist confidence and perceived self-efficacy, and an alliance built on shared understanding and goals. At minimum, it would seem important for there to be a clear and credible rationale for engagement in the tasks of therapy, and we would argue that CBT formulation may have particular (potential) strengths here in terms of comprehensibility, simplicity, and face validity.

Our suggestion above is that, in the context of limited evidence for mechanisms hypothesised by the CBT model, the case for *formulating* on the basis of this model may depend on more pragmatic and consequentialist arguments. However, there is a surprising paucity of empirical research examining whether the process of formulation relates to outcomes in CBT. Here again research is limited by complications in measurement and design. It is likely difficult to capture the relationship between formulation and outcome whilst accounting for the myriad variables that may be implicated in intermediary or confounding roles. Efforts to implement more controlled

designs have restricted some of the dynamics of formulation in practice (e.g., collaborative development over time, hypothesis testing and reformulation in response to refutational feedback, etc.; Kuyken, Padesky, & Dudley, 2008) and may consequently afford restricted understanding.

4.6 Formulation in Action

Working within the Beckian CBT framework, our approach to formulation is guided by the basic logic of cognitive mediation. At the *situational* level, this suggests that we can understand emotional and behavioural responses to a given event by identifying the individual's thoughts about the event, and inferring its personal meaning (in terms of the individual's underlying assumptions and beliefs). Thus, we might start by identifying an emotionally salient incident for Molly (beginning with either the emotion or the eliciting situation) and then seek to understand the emotional salience of that situation (i.e., bridge from situation to response) by identifying the interceding thoughts and associated ('activated') beliefs. We would normally accomplish this through discussion with Molly, using inference chaining to move from initial thoughts about the situation to underlying meanings and more fundamental beliefs: Here, we are looking to identify beliefs commensurate in content and power to the form and intensity of the emotional responses displayed or reported by the client, and would continue to 'ladder down' until we see a 'good fit' between cognitive and emotional components. This process (in itself) should help to engage Molly with the tenets of the model. For example, by encouraging Molly to discriminate inferences and evaluations about an event from the event itself; and to consider how her responses to a situation reflect her particular interpretations, with the implication that a shift in perspective might lead her to feel and act differently. To foster recognition of this latter implication, we may begin to explore how different interpretations of the same event might have produced quite different reactions. Interactive formulation and guided discovery around implications of the model are consistent with the core CBT principle of collaborative empiricism: intended to inculcate client ownership and self-efficacy, and thereby potentiate other processes of therapy (although the model-specific rationale for this 'motivational' component is not well-specified; Ryan, Lynch, Vansteenkiste, & Deci, 2011).

A parallel process occurs at the developmental level. Again, we are attempting to explain a process in terms of interceding cognitive variables; in this case, we wish to understand how an individual's current problems might be linked to earlier experiences, in terms of the particular beliefs that have been formed from these experiences. In cases where there is a clear 'critical incident' leading to referral, we would seek to comprehend the 'critical' nature of the precipitating incident through our developmental understanding of the beliefs that it may have activated: We would expect to find that the critical incident is analogous, in terms of meaning, to earlier belief-formative experiences. We would normally identify implicated core beliefs at the situational level of formulation (as described above); clients may find it difficult to report on core beliefs (Lemmens et al., 2014) and situational analyses may enable collaborative discovery of these by grounding the inferential process in data from specific experiences. However, it is possible (and sometimes necessary, as here) to identify recurrent patterns of thinking in clients' accounts of their broader history and general in-session talk. We might begin to infer beliefs on this basis, later checking inferences for resonance with clients, and testing for triangulation in subsequent situational analyses.

In Molly's case, we are unable to build our formulation directly with her, and the following initial formulation is predicated on the material available in Chapter 2. With limited situational detail to draw upon, and given the historical narrative of Molly's case, we place greater emphasis here on the developmental aspect of formulation. We use Judith Beck's (1995) case conceptualisation diagram for developmental formulation as it provides a clear, understandable account of case presentations (Kuyken et al., 2005) based on the Beckian model. Molly's beliefs and strategies are inferred from the documented developmental history and analysis of described problem situations/critical events, with attention to Molly's own words where available. At the situational level, our approach to formulation is adapted from Ellis' ABC (Activating event, Beliefs, Consequences) model (Chadwick, Birchwood, & Trower, 1996; Ellis, 2004). Working within the CBT model, we are sensitive to our own susceptibility to bias and how this may influence formulation: Through a collaborative empirical approach, we would remain open to disconfirmation of initial hypotheses and revisit/ revise formulation in response to on-going information-gathering.

A question that arises when applying CBT formulation with a particular case is whether to use a problem-specific model. It may be possible to identify that the client presents with a particular clinical problem or 'disorder' (e.g., depression) and select a template approach that is specific to that problem/disorder. Such templates typically adapt the generic Beckian model to identify problem-specific cognitive profiles and other characteristics. Problem-specific models have been used to develop manualised CBT treatments, which have demonstrated efficacy (Dudley, Kuyken, & Padesky, 2011), and some have argued that the most defensible approach to case formulation is to apply a problem-specific template (Grant, Townend, Mills, & Cockx, 2008) - if one is available and has been used in an empirically-supported treatment protocol. Against this, as discussed above, we lack evidence that treatments work because of their problem-specific components, or that template-based formulations contribute to efficacy. As clinicians, we also consider it problematic to make assumptions based on topography (apparently similar presentations may have divergent causes/underlying cognitions) and 'fitting' clients to prototypic formulations may lose the potentially idiographic and cross-diagnostic strengths of the broader model (and potentially undermine 'collaborative' principles). Moreover, in practice we commonly see mixed presentations that may be ill-served by a problem-specific framework.

4.6.1 Initial Formulation

4.6.1.1 Early Life

Theoretically, early experiences shape core beliefs that may be activated by analogous experiences in later life (A. T. Beck et al., 1979); thus, examination of childhood and other historical data may facilitate a developmental understanding of current problems.

Molly described her home life as lacking 'warmth': She experienced her parents as distant (from her and from each other) yet controlling, and strived to attain their affection (reduce this distance) by meeting perceived demands (e.g., in terms of attainment and self-reliance). However, Molly's salient recollections are of times when she seemed to fall short of (her mother's) standards and a sense of being unfavourably compared to her sister Ella. Of particular significance for Molly's development, we would hypothesise, was learning that emotions should not be expressed or dealt with directly. Molly's parents were seemingly critical and invalidating of her feelings (conveying that she was "overly emotional" and "dramatic") and modelled emotional avoidance in their own behaviour. Further to suppression of negative emotions, there is a notable absence of *positive* emotion in Molly's account of her early life.

Compounding learning from home, Molly experiences difficulties in forming/ maintaining relationships at school, and again understands this as a rejection of her "emotionally demanding" behaviour.

Molly's experience of sexual abuse may have influenced conceptions of self (as vulnerable and shameful/"dirty") and others (threatening/untrustworthy; e.g., Rieckert & Möller, 2000). Her tacit, isolative response to the abuse likely reflects early familial emphases on self-reliance and emotional inhibition/non-confrontation – and may have contributed to the formation of compensatory strategies that would later prove problematic (e.g., attempts to control, escape, or avoid emotions). However, we would be cautious about over-interpreting the role of the abuse experience at this stage: There is considerable correlational evidence for links between childhood abuse, dysfunctional cognitive development, and psychological difficulties in adulthood (Trickett & McBride-Chang, 1995), but a cognition-predicated formulation should place abuse (and any other potentially salient experience) within a broader (idiographic) developmental perspective, and prioritise the personal meaning/implications of the experience for the client, rather than the a priori assumptions of the therapist.

4.6.1.2 Core Beliefs

It is possible to infer fundamental beliefs emergent from Molly's early life experiences.

My feelings are unacceptable and dangerous. Such a belief may develop from Molly's early experiences of expressed feelings being invalidated (chiefly by her parents) and the perceived isolative consequences of being "overly emotional" (i.e., the impression that others withdrew from her because she was too "emotionally demanding"). The notion of feelings as dangerous may have subsequently been strengthened by adult experiences of coping difficulties – e.g., Molly's overdose and self-cutting may have been attempts to escape from overwhelming feelings of distress. This inferred belief reflects cognitive themes of both responsibility (there is something in me that is 'faulty') and vulnerability (sharing my feelings and showing my 'faults' is unsafe).

I am "weak and useless". Molly's early experiences may have contributed to self-perceptions of vulnerability and ineffectualness, reflected in Molly's description of herself as "weak and useless". Molly perceived that she was expected (by her mother) to do well without support (i.e., to function with high self-efficacy); thus, any difficulties/failures experienced may have been interpreted by Molly as personal weakness (here, weakness includes a sense of the self as lacking competence or, in Molly's words, "useless"). Molly's perceived inability to control her emotions may also support a belief in the self as weak. In this way, failure to compensate for one belief (unacceptability of emotions) may have strengthened the development of another belief (I am weak and vulnerable to my emotions). Molly's experience of being abused may have further contributed to a belief in the self as weak/vulnerable to exploitation by others.

I don't deserve love. Molly described her childhood home as lacking "warmth" and had a strong sense that she was less loved than her sister. Evidence suggests that children are less able to modify/correct egocentric interpretations of experiences than adults (Epley, Morewedge, & Keysar, 2004). It follows that Molly may have taken personal responsibility for her parents' cold distancing: parsing these experiences as indicative of the self as undeserving of love or affection. Molly's difficulties in forming friendships at school may have served to strengthen the development of this belief.

Others are critical, rejecting, and unsafe. Molly perceived her parents to be critical and rejecting (a perception recurrent in other close relationships with friends and partners) and alleges sexual abuse: The people she depended on hurt her/failed to protect her as a child, and this may have shaped a view of the world/others as cruel and unsafe – closely linked to a belief in the self as vulnerable.

4.6.1.3 Conditional Assumptions

Theoretically, conditional assumptions may facilitate coping with painful core beliefs, but the rules and compensatory strategies that they prompt often prove maladaptive (J. S. Beck, 1995). A number of conditional assumptions (or subsidiary beliefs) may arise from the core beliefs posited for Molly; some possible conditional assumptions are described below:

If I depend on myself, I won't be able to cope AND If I depend on others, then I will be taken advantage of and/or abandoned. The putative core beliefs held by Molly may produce conflicting assumptions around dependency/relating to others. A belief in the self as weak/useless may undermine self-efficacy and suggest

the need to rely on others. However, Molly has other beliefs – others are dangerous and she is unlovable – suggesting that she cannot afford to trust or depend on others (given her inherent vulnerability): people will take advantage of her (they are unsafe) and/or they will eventually reject her (she is undeserving of love). Another assumption relating to a belief in the self as weak/incompetent is:

If I cannot function alone, then I am weak and useless. Molly learned from her mother that she should succeed independently, such that struggles and failures may be assumed to confirm perceived weakness.

If I express/have emotions, I am weak. Given a belief in emotions as unacceptable, failure to suppress/avoid emotions (i.e., to uphold personal rules) may be interpreted as personal weakness, and strengthen the core belief 'I am weak'. More simply, each emotional episode appears to confirm beliefs that emotions are dangerous (uncontrollable) and that Molly is vulnerable.

If I feel strong emotions, then I must do something to get rid of them. Such an assumption derives directly from a belief in the unacceptability and dangerousness of feelings (and prior learning, from her parents, that emotions are unacceptable). This assumption might be implicated in Molly's overdose and self-cutting behaviours, which could be understood to function as attempts to escape overwhelming feelings of distress.

If I cannot meet others' standards, then I don't deserve love. A core belief in the self as undeserving of affection may establish and augment monitoring of acceptability to others, with each perceived slight or rejection processed as confirmatory evidence for this belief. Potentially, such a conditional principle could support selfworth: If Molly perceived that she was meeting others' standards she might challenge the core belief that she does not deserve love. In reality, the condition is too stringent (and Molly's other rules and beliefs likely bias her perceptions of attainment and what is expected of her), such that the core belief will be strengthened – and Molly may become increasingly vigilant/frantic in efforts to gauge and modulate her relationships with others.

4.6.1.4 Compensatory Strategies, Presentation, and Maintenance

Molly appears to use various cognitive and behavioural strategies to manage stressors that relate to, or activate, her beliefs. These strategies may have served to trigger her presenting problems and represent important maintaining factors for her distress (preventing disconfirmation of dysfunctional beliefs). The cumulative ineffectiveness of these strategies may contribute to a general sense of hopelessness (supporting Molly's depressive presentation) and related tension.

Attempts to control, avoid, or escape emotions. Molly uses a number of extreme strategies to manage her emotions (Coggins & Fox, 2009). These strategies likely developed in response to a core belief that emotions are endangering and unacceptable, and subsidiary beliefs that showing emotion is a weakness and feelings cannot be tolerated.

Molly attempts to control or inhibit her emotions; however, this strategy may have paradoxical outcomes (rebound effects) and ultimately reinforce Molly's belief that her emotions are dangerous and unacceptable. Molly likely finds that her emotions 'build' – efforts to suppress emotions and associated thoughts may ironically increase salience/preoccupation and amplify emotional intensity - and (eventually) overwhelm her control. When emotions surface after suppression, they tend to be expressed explosively (as observed within the first therapy session) – alarming and embarrassing Molly, and provoking negative reactions in those who experience her outbursts (evident in accounts of Molly as "histrionic", "overly emotional", and "attention-seeking"). The apparent unpredictability of such expressions and the interpersonal difficulties they generate motivates Molly to try harder to control her emotions, increasing her frustration and maintaining the cycle. Molly attempted to use emotional control strategies as a child, learning that emotional expression at home would not be tolerated. Although the strategy may have temporarily helped her to cope in that context (and was an understandable response to invalidation and apparent abuse), it meant that Molly did not learn how to safely experience and express emotion. From early experiences (e.g., at school) to now, this strategy of overcontrol appears to contribute to interpersonal difficulties and unstable relationships - a presenting issue of concern for Molly.

Molly may also compensate for her beliefs around emotion in an avoidant manner. We see this, for example, in her tendency to evade communication with others when this may involve contact with difficult feelings or emotional confrontation. Relatedly, recently developed habits (e.g., cleaning, TV watching, and snacking) may also function to avoid and distract from emotional experiences. We would be interested in exploring Molly's help-seeking for medical complaints and wonder whether this has been compensatory: Enabling Molly to attain *some* support whilst avoiding implications of acknowledging emotional needs.

Molly's overdose may also be understandable as an attempt to escape from emotional pain; similarly, her self-cutting behaviour whilst in hospital may have enabled respite from contact with distress (by changing her interoceptive focus to physical pain). Recent fasting behaviour could serve an analogue function, in that physical discomfort replaces psychological discomfort, but may also be understandable as a means of attaining perceived standards of others (Molly seems to consider herself too "frumpy" to deserve a partner).

Attempts to control, avoid, and escape emotions should therefore be understood as a linked repertoire of compensatory strategies for emotional regulation. Unfortunately, the self-invalidating nature of this repertoire functions to increase her emotional dysregulation, making it harder for Molly to recognise/track her feelings and modulate her behavioural responses to them.

Depending on others/Mistrust and isolation. Molly uses conflicting strategies in relating to others: she is dependent on others but also mistrusts them. These strategies likely developed in response to beliefs around personal weakness/incompetence (dependence) and others as unsafe and rejecting (mistrust; augmented by intermediate rules and assumptions about the value of self-reliance and being "able to get on with things").

Being dependent on others is understandable as a strategy to compensate for perceived vulnerability, but also limits the ability of an individual to develop personal strength or self-efficacy (i.e., challenge personal perceptions of weakness). This might not be too damaging if Molly could consistently rely on others to protect her, but the dependent strategy is undermined by another strategy: mistrust and isolation. Again, this may have been functional in protecting against perceived external dangers (established by early experiences of criticism, rejection, and abuse – in a context where caregivers were "not really there" for her), but it undermines the possibility of developing genuine reciprocal relationships. Molly's relationships are destabilised by the push and pull of contradictory compensatory strategies: We can see how strategies adopted to aid coping have broken down and may now contribute to/ perpetuate presenting difficulties.

Vigilance for, and efforts to avoid, rejection. In response to perceived threats (others as unsafe), and a sense of self as weak and unlovable, Molly seems to be hyper-vigilant for signs of danger. This strategy closely relates to mistrusting others and is, again, understandable in the context of Molly's early experiences and emergent beliefs. However, the negative expectations that drive this strategy are likely to become self-fulfilling: Either because Molly is overly sensitive in her interpretations finding 'proof' of her beliefs in ambiguous experiences – or because her guarded/ withdrawn behaviour provokes negative responses in others ('confirming' her concerns – a pattern observed in her experiences at university and as a classroom assistant). Molly expects to be rejected (undeserving), and is sensitive to any cue that she is not fully acceptable to others – often withdrawing pre-emptively in a manner that prevents disconfirmation. It is possible to see that Molly's threat-focused strategy/ bias feeds itself and ultimately isolates her from others, with likely consequences for reinforcing negative core beliefs and the manifestation of anxiety and depression.

Further to pre-emptive withdrawal, Molly sometimes strives to avoid rejection through efforts to appease others (a strategy evident from childhood) – compensating for notions of the self as undeserving of affection, and others as critical and rejecting, by attempting to meet perceived conditions for affection. It is notable that many of her concerns and goals are expressed in other-directed terms – she worries that she has "let everyone down" and wants to "make everyone proud" – and that she subjugates her own suffering (experiences of abuse and hospitalisation) to concerns that she will "wreck the family". Currently, Molly performs errands and chores for her parents in an apparent attempt to atone for her 'failure' to uphold their expected standards.

Relevant childhood data Molly experiences: Criticism / invalidation of emotions and emotional avoidance within family Emphasis on standards of attainment and self-reliance Difficulty meeting standards and unfavourable comparisons with her sister Ella Abuse from within family Core beliefs I am "weak and useless" Others are critical, rejecting, and unsafe I don't deserve love My feelings are unacceptable and dangerous **Conditional assumptions** If I depend on myself, I won't be able to cope If I depend on others, I will be taken advantage of and/or rejected If I cannot function alone, I am weak and useless If I cannot meet others' standards, I don't deserve love If I express / have emotions, it means that I am weak If I feel strong emotions, I must do something to get rid of them **Compensatory strategies** Depending on others / Mistrust and isolation Anticipation of, and efforts to avoid, rejection

Figure 4.1: Developmental CBT formulation

Attempts to control, avoid, or escape emotions

4.6.2 Situational Formulation

It should be possible to analyse a number of situations in Molly's current/recent experience and find evidence of the maintaining factors and underlying beliefs

responsible for her on-going distress. One specific situation is examined here, on the basis of information available.

As previously stated, situational formulation follows a basic ABC structure (Chadwick et al., 1996), with consequences explicitly sub-divided into emotions and behavioural/other outcomes (so as to foster the client's ability to discriminate these, functionally related but discrete, sequelae; Trower, Jones, Dryden, & Casey, 2011). To make the distinction clear, we implement an extended ABCO sequence: Specifying the Activating event, Beliefs (about A), emotional Consequences (of B), and ensuing behavioural or other Outcomes.

A recent critical incident for Molly is the event that precipitated her withdrawal from Amy and her work colleagues – analogous to earlier relationship patterns (shifting from dependence to avoidance). Figure 4.2 presents an ABCO analysis of this incident.

<u>A</u> ctivating event	B eliefs (thoughts and images about 'A')	Emotional <u>C</u> onsequence of 'B'	Behavioural or other O utcomes
Distant laughter and conversa- tion between friend (Amy) and another colleague	<i>Inferences</i> They are laughing at me	Shame Anxiety	Withdrawal (protective but isolative)
	They don't really like me Evaluation I am not acceptable I cannot trust others		Increased opportu- nity for rumination (rehearsing and strengthening beliefs)
	Core beliefs (activated) I don't deserve love Others are critical, rejecting, and unsafe		Decreased opportunity for disconfirmation of beliefs

Figure 4.2: Situational ABCO formulation

Within the cognitive model, problematic consequences (shame and isolative withdrawal) are seen to arise from beliefs about the activating event rather than the event itself. In this case (A), Molly's interpretation that her colleagues are ridiculing her (B) evokes shame (C), and motivates withdrawal (O) as a protective response. It's not clear that Molly's interpretation of the distant conversation and laughter is accurate; it may reflect a personalisation or self-referential bias – relating external events to the self without basis (A. T. Beck et al., 1979) – potentiated by vigilance for rejection. Whether accurate or not, Molly's subsequent behaviour suggests overgeneralisation from this incident to conclude that her colleagues don't really like her (regardless of her heretofore close relationship with Amy and other colleagues). Her evaluations are likely to be totalising negative judgements of herself and others, rather than appraisals of the specific experience.In Figure 4.2, we contend that feelings of shame and anxiety could arise from appraisals of the same situation. However, we would help Molly to see these as different emotions associated with different beliefs: Shame pertains to the perceived exposure of personal inadequacy (self as undeserving/"an embarrassment"), whereas anxiety relates to the impression that others are colluding against her (i.e., interpersonal threat/vulnerability – others as critical, rejecting, and unsafe). It may be preferable to present these as separate sequences for Molly: Indeed, we would generally limit the use of formulations that list multiple problem emotions (Cs) as these are generally not helpful in *discriminating* emotional experiences, or making logical sense of how different emotions might arise (i.e., understanding consistency between B-C connections).

Although withdrawal is protective in the short-term, it leaves Molly isolated and thereby reinforces her negative beliefs about self and others. By considering the repercussions of her response to the situation (under O) we can see how Moly's problems may perpetuate – for example, withdrawal reduces opportunities to contact external events (e.g., positive feedback from colleagues) that might disconfirm negative thoughts arising from this incident and provide experiential evidence against broader beliefs.

4.6.3 Intervention Objectives and Evaluation

Intervention would be directed towards Molly's goals, but these are currently quite vague and (as discussed above) framed in terms of others' needs – we would wish to explore these further as stated goals may reflect, among other phenomena, conditional beliefs about meeting others' standards. We expect that collaborative goal-setting may be initially difficult (given Molly's history of subjugating personal needs) and may need to be revisited and revised as therapy proceeds and changes open up different ways of thinking about herself, others, and her future. To enable us to specify and prioritise Molly's presenting concerns, and monitor progress towards addressing these concerns (in a manner consistent with our collaboratively empirical approach), we might use an idiographic weekly measure like the Simplified Personal Questionnaire (Elliott, 2002).

Further to idiographic monitoring and on-going qualitative feedback, we would likely use validated outcome scales pertaining to presenting difficulties (e.g., measures of emotional distress – providing that these captured outcomes relevant to Molly). An advantage of implementing such measures is that we can then use reference data on measurement reliability and population norms to evaluate the statistical reliability and 'clinical significance' of any changes that Molly reports over the course of therapy (i.e., whether changes are beyond what could be attributable to chance or measurement error, and whether change constitutes a shift from clinical to normative levels of distress; Jacobson & Truax, 1991).

If we wish to evaluate whether any observed changes are attributable to theorised mechanisms, we need to measure hypothesised mediating variables. Within CBT, we might thus focus on monitoring change in targeted cognitions (e.g., believability of problem beliefs identified in Molly's formulation). By repeatedly measuring both the proposed mediator (belief in targeted cognitions) and outcome (problem severity) over the course of therapy we can potentially evaluate formulated mediational hypotheses by establishing whether: (1) believability is related to problem severity, (2) our intervention changes believability, and (3) changes in believability precede changes in problem severity (Kazdin, 2009; Mumma, 2004).

Notwithstanding the above, we would be cautious about drawing conclusions based on self-report alone; we would be mindful of the function of Molly's self-report, and would explore her presentation accordingly. Essentially, Molly's responses may be subject to various biases (e.g., minimising difficulties and over-reporting therapy benefits, in accordance with a tendency to please others - or maximising difficulties, to avoid termination of therapy, in accordance with dependent strategies) and we would look for evidence of improved functional outcomes and social validation of change (i.e., triangulation with external observations) where possible.

4.6.4 Intervention Plan

Initial efforts would focus on forming therapeutic engagement – through discussion of expectations of the therapy process, formulation sharing, goal-setting, and intervention planning - interpolating experience-normalising psychoeducation around the CBT model, and establishing a collaborative relationship from the outset.

Central to intervention would be modification of the beliefs implicated in Molly's presenting difficulties. We would agree on initial targets here and might use a range of strategies to facilitate a change in perspective (e.g., Trower et al., 2011):

- (1) Verbal methods, including targeted Socratic, leading, and assumptive questioning to engage Molly in generating alternative ways of thinking. For example, we might explore the truth of her absolute (negative) evaluations of self and others in the light of exceptions (e.g., her longstanding relationship with Eve). It is notable that our initial formulation focuses on problems and perhaps neglects areas of extant strength (Kuyken et al., 2008). We think it is important to firstly understand (and validate) the difficulties that Molly has experienced, and expect that Molly would initially be dismissive of a 'strengths-focussed' formulation, but would also want to harness existing assets to enable Molly to dispute problem beliefs – attention to positives, disconfirmations, and exceptions becomes crucial here.
- (2) Behavioural methods, encouraging Molly to test targeted beliefs by acting in ways that contradict negative thinking, and assessing the outcomes of this. For example, Molly might be asked to approach situations that could lead to rejection or shaming (e.g., initiating conversation with colleagues), as opportunities to learn

that expected consequences may not occur, or (if they do occur), can be tolerated and do not have to be interpreted as totalising (i.e., having internal, global, and stable implications).

(3) Imagery-based methods, including practicing of alternative thinking to imagined situations. For example, Molly may not find alternative ways of thinking convincing when generated in the abstract, but may find behavioural tests too daunting (at first). Imaginal techniques could help Molly to make vivid contact with problem situations and sequelae, eliciting associated thoughts and feelings 'in the room' (experiential versus intellectual insight), before rehearsing alternative thought processes and observing any change in feelings. Imaginal practice may help to catalyse cognitive methods and prepare engagement in behavioural methods.

Although intervention strategies may be discussed, modelled, and practiced within sessions, CBT places an onus on application outside of therapy such that Molly's learning and alternative ways of thinking generalise beyond the therapy context.

Supplementary to strategies focussed on changing beliefs (i.e., the B in the ABCO sequence above) we may also attempt to modulate the occurrence of activating events (A). In terms of activating events, we expect that Molly's behaviour (e.g., social withdrawal) may increase the occurrence of events (being disregarded or criticised by others) that trigger negative beliefs (self as undeserving, others as rejecting/critical) and consequent distress. A focus here might be the development of behavioural skills for effective emotional expression: Molly has not had opportunity to learn how to communicate her needs directly, and we would hypothesise that this potentiates activating events. Development of skills around emotional communication and asserting personal needs should also help to challenge Molly's beliefs about herself as ineffectual and the unacceptability of emotions.

4.6.4.1 Potential Difficulties

We would need to be considerate of how Molly's beliefs may influence her responses to therapy, and would explicitly tackle her thoughts in relation to the therapy process (with potential for more general impact). In this way, in-therapy problems can become important learning opportunities.

Molly may vacillate between dependence and distancing in her relationship with the therapist and, given previous patterns, there is a risk that she could withdraw from therapy in response to perceived ruptures (she is likely to anticipate abandonment and be vigilant for signs of rejection) or experiences of being "exposed" within therapy (activating beliefs about being undeserving and unacceptable, with concomitant shame and avoidance). Molly's rules around self-reliance might potentiate any impulse to withdraw: She already evinces ambivalence around therapy and hates "being so needy".

CBT would place an onus on Molly to complete inter-sessional tasks and be an active collaborator in therapy: There is potential for this to prompt concerns around self-efficacy and ability to meet others' standards, presenting both opportunities (to expose to and challenge such concerns) and threats (for consolidation of beliefs and disengagement). Given a putative belief around the unacceptability of her own emotions (and related avoidant strategies), our primary concern would be with Molly's ability to engage with and tolerate the emotional focus of therapy. It may be important to do some initial work around emotion regulation and distress tolerance: Over time, we might enable Molly to manage her emotions through cognitive reappraisal, but we may initially need to rely on more 'response-focussed' strategies – i.e., changing behavioural outcomes (Os) of emotions when activated, through relaxation or response prevention – which would secondarily help Molly to challenge beliefs around the unacceptability and dangerousness of her feelings.

David M Gresswell

4.7 CBT Formulation: Critical Commentary

The authors offer a succinct review of the principles of CBT, along with a critical overview – stressing, in effect, that a CBT formulation is not a literal formulation of how the client functions, but a way of ordering information that helps the client gain access to their experiences. Although not the fault of Beck, the cognitive model seems to have taken on a life of its own in recent years, and it is not uncommon to see it being used as if it represents a coherent model of human action. In this chapter, the authors make the point that the evidence for the primacy of cognition (a central principle of CBT theory) is weak, and that what is helpful in CBT is the attempt to make sense of how certain events have acquired specific meanings – in specific contexts – and how those meanings affect emotional experience.

The ABCO model used by the authors for "the situational formulation" (Molly observing her colleagues laughing – Fig. 4.2) has the advantage over a conventional ABC approach in that it provides two triangulation points with respect to the internal validity of the formulation. Although the components of an emotional experience (private events, physiology, overt behaviours) are not always synchronised, they should be consistent in an ABCO analysis: the 'B' should match not only the 'C' (the emotion) but also the 'O' (the behavioural or other outcome arising from the emotion) in terms of both content and intensity. If the components do not match - e.g., the 'B' seems more consistent with an angry response than an anxious one, but the 'C' is anxiety and the 'O' involves a range of depressive behaviours – then this may indicate that the formulation should be revisited. Despite its advantages, the ABCO approach compounds the criticism that CBT awards spurious primacy to cognition, by additionally giving primacy to emotion over behaviour. Indeed, in the example given in Figure 4.2, the authors appear to ignore the contextual consequences of Molly's behaviours - clearly, as set out here, this model does not provide a coherent and holistic formulation of Molly's problems that matches with what we know about the reality of human experience.

The authors also make the fundamental mistake of including two emotional experiences (shame and anxiety) in the 'C' column - neither of which is clearly predicted by the 'Bs' that are hypothesised to precede them. The authors have not pursued inference chaining to a logical conclusion: why should "they are laughing at me" be linked to the core belief of "I don't deserve love" or to the behavioural outcome (e.g. withdrawal) specified? The authors have not used the triangulation checks available: best practice in CBT is to follow one emotion at a time (rather than the purported core belief), and to be clear about whether inductive or deductive reasoning is being assumed. However, irrespective of whether inductive or deductive reasoning is assumed, it is not obvious why - if Molly believes she "doesn't deserve love" and that "others are critical, rejecting and unsafe" – she should be prone to interpreting the laughter of others as being directed at her, or to reacting with shame or anxiety rather than with anger or depression. Something is missing from this analysis.

A related critique can also be levied at the developmental formulation described in Figure 4.1. The model follows a linear progression from childhood "data" (a misleading use of the term "data" if ever there was one) leading to the formation of core beliefs, then to the extrapolation of conditional assumptions, and finally to the development of compensatory strategies. In reality, when working with Molly, what we are most likely to see first are the "compensatory strategies", then to hear Molly's description of her childhood. In this model, there appears to be a real danger of the core beliefs becoming evidence to support Molly's account of her childhood and vice-versa - this is all very circular and not very testable. We cannot observe Molly's childhood and indeed there is some contrary evidence that her sister came out of virtually the same context psychologically intact.

Nevertheless, given their observations, the authors then set out to fill the gap between Molly's account of her childhood and her current presentation – this endeavour produces some rather incoherent results. For example, if Molly actually fully endorsed the core belief "I don't deserve love" then she could not also assume (conditionally or otherwise) "if I cannot meet others' standards then I don't deserve love". She either deserves love or she does not, and the corollary of this conditional assumption is surely: "if I can meet others' standards then I do deserve love". Indeed, this corollary statement would seem far more consistent with Molly's behaviour and her frustrations than the original statement. A similar critique can be applied to the other core beliefs and conditional assumptions - and, as phrased here, it would seem more likely that the "conditional assumptions" lead to the formation of the "core beliefs" than vice-versa – but perhaps the issue is one of nuance?

In summary, it can be seen that both the approaches to CBT formulation expounded here are flawed - the models offered are internally inconsistent; they lack coherence with both mainstream psychology, human experience, and are largely untestable. The use of the construct "core belief" leads to the production of statements that lack nuance and which appear incompatible with the conditional assumptions they allegedly produce. Finally, and perhaps most fatally, the interaction of the client with the outside world is largely ignored. Indeed, irrespective of what a few ancient Greeks had to say on the subject, some situations are intolerable and thinking about them differently won't fix that – sometimes a little behaviour change is required and, that being the case, we need to pay more attention to context and observable behaviours in our formulations and less to hypothetical private events.

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4.8 Author Response

We stated our openness to additional information and feedback, whether corrective of the data or our interpretations. However, we were not convinced that the offered critique had implications for refining our initial hypotheses. The commentary appeared to focus on details taken out of context of the broader formulation (selective abstraction?) and to make some arbitrary inferences that were contrary to available evidence (perhaps more reflective of the commentator's preconceptions about the case material and formulation model?).

Fragmentary reading of the formulation is suggested by the manner in which the 'situational' and 'developmental' aspects of the broader formulation are critiqued separately, without consideration of their inter-connectedness. The commentator states that we have "not used the triangulation checks available", but neglects that the situational and developmental levels of analysis are points of triangulation for each other, providing complementary insights.

For example, the commentator takes issue with the inference chain in Figure 4.2 (questioning how laughter from others might connect to an underlying sense of the self as undeserving) but we would suggest that the linkage here is elaborated at length (and connected to earlier experiences) within the broader formulation and developmental narrative (over-vigilance for rejection, and a conditional belief that rejection from others means she is underserving). Similarly, the commentator appears to read the figures as independent from the broader analytic narrative: the two are interdependent, and the textual description should help to expound links within the (necessarily reductive) figures – just as, in practice, we would not share a diagrammatic formulation without elaborative discussion. For example, within the text accompanying Figure 4.2, we do acknowledge potential confusion that can arise from considering two emotional experiences together - and explicitly discriminate these in terms of their phenomenological correlates.

In challenging our analysis, the commentator appears to draw less on the information available than on expectations about how people 'should' respond in Molly's situation. Returning to Figure 4.2: We might ask *why* Molly did not express anger or confront her colleagues, but the material tells us that she responded with withdrawal and worry, and that such responses are part of a consistent pattern of self-blaming/tendencies towards shame and wariness of others. Of course, questions of external correspondence remain (and would be examined in therapy with Molly) but we argue that the formulation is grounded in currently available data – and is internally consistent.

Putting aside our own reservations about the utility of core belief constructs², the critique here seems to misrepresent their theorised role: To reiterate, negative core beliefs are not consistently active/manifest (or "fully endorsed") and conditional assumptions or rules are developed to protect against their activation. The suggestion that external context is 'largely ignored' also seems misrepresentative: Analysis in CBT encompasses interactions with the outside world but deliberately focusses on how these come to shape and be understood through individual appraisals (Beck, 1976). The commentator's definition of 'context' appears somewhat constricted here – e.g., the suggestion that Molly and her ("psychologically intact") sister emerged from "virtually the same context" seems to ignore salient differences in environmental feedback/relational context.

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² We do wonder whether inclusion of core belief constructs may 'over fit' the model. For understanding Molly's day-to-day experiences and behaviour, her conditional assumptions and related strategies are likely to be much more informative than constructs that are (by definition) latent and non-specific. Indeed, there is perhaps a danger of losing important information about an individual's experiences – and consequently, about the particular intermediate beliefs and assumptions that the individual might develop – when these experiences are reduced into generic absolute statements (core beliefs).

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