Cognitive behaviour therapy: a case study

Jessica Price describes how a client reduced symptoms of depression by learning to question thoughts, act assertively and manage lapses

Correspondence
jessica.price@solent.nhs.uk

Jessica Price is a psychological therapist with the Talking Change – Improving Access to Psychological Therapies service, Solent NHS Healthcare

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Abstract

People who are prone to depression have a tendency to hold negative core beliefs about themselves, others and the future. They may develop assumptions, rules and compensatory strategies to protect themselves from these difficult beliefs. When these no longer work, depression may occur. Cognitive behaviour therapy enables client and therapist to work on cycles of thought and behaviour that perpetuate low mood. This article illustrates how a client learned to question her thoughts, act assertively and manage lapses, which helped decrease her symptoms of depression.

Keywords
Cognitive behaviour therapy, depression, therapy

PEOPLE WHO experience depression acquire negative core beliefs about themselves, others and the future, early in life (Beck *et al* 1979). Underlying assumptions (UAs), rules and compensatory strategies evolve as a means of self-protection. If an event occurs where these strategies no longer 'work' for the individual, depression may result from the activation of painful core beliefs.

The client and therapist work together on the client's negative automatic thoughts (NATs) and UAs to find patterns of thinking and behaving – known as maintenance cycles – that inadvertently perpetuate difficulties. Analysis of activating events, beliefs and consequences (ABCs), both emotional and behavioural, help clients understand these cycles and question how they think and what they do. Working at the UA and NAT level can start a chain reaction of loosening core beliefs without the client experiencing the vulnerability of exposing these beliefs. This in turn helps to alleviate symptoms of depression.

This article focuses on using cognitive behaviour therapy (CBT) with a client experiencing depression. Therapy typically involves 16 to 20 sessions with a therapist competent in Beck's model of depression, as advocated by Roth and Pilling (2007) and the National Institute for Health and Clinical Excellence (NICE 2009).

Assessment practices

'Winnie' is a 52-year-old widow. Her husband died of a heart attack seven years ago and she has two adult daughters. She recently returned to her job as a nursery nurse, having previously been signed off work with depression. Her parents and siblings live 50 miles away, and her late husband's family live locally.

Winnie describes herself as 'always being extremely shy and anxious'. After her husband's death, Winnie coped emotionally and practically by increasing her workload but, because of organisational changes, this workload was reduced suddenly. When Winnie was accused of a work-related incident she became anxious and made negative predictions. Despite being cleared of the accusation, she did not receive an apology from her manager or from others involved.

After this incident, Winnie became increasingly tired and 'down'. She referred herself to the Improving Access to Psychological Therapies (IAPT) service. Her GP increased the dothiepin which had originally been prescribed by the pain clinic for unexplained pain because of its parallel antidepressant effect. I encouraged Winnie to discuss with her GP whether or not dothiepin was exacerbating her tiredness. At this stage, Winnie was

experiencing tearfulness, loss of interest, irritation, exhaustion, disrupted sleep, poor appetite and increased self-critical thoughts. She was finding it hard to manage daily tasks such as shopping, and had cut down on her social activities. Of difficulties reported, the most troublesome were poor memory, lack of concentration, confusion and slowness.

Winnie met the Diagnostic and Statistical Manual of Mental Disorders-IV (American Psychiatric Association 2000) diagnostic criteria for major depressive episode. She had one previous episode of depression following hysterectomy, had received antidepressants and wore patches to regulate hormones. Winnie said that when experiencing this episode of depression she found her mood improved when she 'got busy' because she was someone 'who was used to coping and juggling everything'. She had never received any form of talking therapy.

I initially used Talking Change's standard assessment form, asking Winnie questions to elicit background information. Winnie and I put together a life line which provided a detailed symptom history and an overall view of significant life events. A semi-structured interview with Winnie included use of: the 'Five Ws' – what, when, where, with and why questions encouraged Winnie to begin describing her problems in more detail, and the frequency, intensity, number, duration (FIND) method, which focuses on frequency, intensity, number, duration of depressive symptoms (Fox and Gamble 2006).

The semi-structured interview also involved finding out about the impact and consequences on everyday life, such as behavioural excesses, deficits, modifiers, onset, fluctuations, past treatment and motivation (Fox and Gamble 2006). The aim was to discover more about Winnie's low mood. On various rating scales (Table 1), at self-referral Winnie scored herself as follows:

- Patient health questionnaire (PHQ-9) for depression (Spitzer *et al* 1999): 20, which indicated severe depression.
- Generalised anxiety disorder (GAD-7) scale (Spitzer *et al* 2006): 11, suggesting moderate anxiety.
- Clinical outcomes to routine evaluation scale (CORE 34) where 0 indicates fewest symptoms and 4 indicates most symptoms. Winnie achieved a mean score of 3.5 for wellbeing; 3 for problems and symptoms; 2.25 for functioning and 0.17 for risk (Barkham *et al* 2005),
- Work and social adjustment scale (WSAS) (Mundt *et al* 2002): Winnie scored 25 out of 40 which indicated definite impairment in carrying out activities.

At assessment Winnie completed the Beck's depression inventory (BDI-II) (Beck *et al* 1996) which highlighted problem areas and helped her to set goals, such as to increase understanding of why her depression developed and what keeps it going, increase assertive behaviour and reduce avoidance of social situations (Table 2), page 28. In this measure, Winnie scored highest on experience of sadness, pessimism, past failure, loss of pleasure, feelings of guilt, dislike of self, crying,

Table 1 Winnie's rating scores

Measurement scale	At self-referral	At assessment	At session 8
Patient health questionnaire (PHQ9)	20	21	12
General anxiety disorder (GAD7)	11	13	7
Clinical outcomes to routine evaluation scale (Core 34)	Risk=0.17 Wellbeing=3.5, Functioning=2.25 Problems and symptoms=3.0 (Total=2.23 out of 4)		
Clinical outcomes to routine evaluation scale (Core 10)	N/A	27	23
Work and social adjustment scale	25	28	25
Beck's Depression Inventory (BDI II)	N/A	47	32

Key

PHQ9:
nil=0.9
mild=10-14
moderate=15-19
severe=20+
	GAD7:
	nil=0-4
	mild=5-9
	moderate=10-14;
	severe=15+
		CORE 34:
		0=not at all;
		4=all the time
			CORE 10 (shorter version of CORE 34)
			mild=10-15;
			moderate=16-20;
			moderate-severe = 20-25;
			severe=26+

Work and social adjustment scale: Five sections, each measuring 0 (no impairment) to 8 (severely impaired)	Beck's Depression Inventory II: 0-13=minimal; 14-19=mild; 20-28=moderate; 29-63=severe		

Table 2 Winnie's self-rating of goals*

Defined goal	Rating at assessment	Rating at session 8
Increase understanding of why depression developed and what keeps it going	2	8
Increase ability to question negative thoughts about myself	3	6
Increase assertive behaviour	3	5
Increase frequency of scheduling in 'wants'	2	6
Reduce avoidance of social situations	2	6
Reduce avoidance of household tasks	3	7
Reduce frequency and intensity of negative thoughts that go round and round in my head	2	5

Key
0 = No improvement 10 = Total improvement

*Progress towards goals was rated on a Likert scale

Table 3 Winnie's self rating of beliefs*

Assumption/rule	Rating at assessment (%)	Rating at session 8 (%)
I am selfish	99	96
I should be a sounding post and always put others first	99	89
If I am not sympathetic and giving, then others will reject me (so I am, at the expense of my needs)	100	92
I must be perfect (perform well, interesting to others, always nice, and strong)	100	100
If I am in control, then I will not be a nuisance so people will not hurt me	100	99

Key
0% = No belief 100% = Total belief

*Core beliefs were rated on a Likert scale

loss of interest, feelings of worthlessness, loss of energy, difficulty, concentrating and fatigue.

In particular, thoughts of not coping, tiredness and rumination contributed to her mood. Although her score in this inventory (47 out of 63, see Table 1, page 27) put her in the severe depression range, the results on the CORE34 scale indicated low risk because thinking of her daughters prevented her from harming herself. We revisited these rating scales (PHQ-9, GAD-7, WSAS, CORE 10, BDI-II) at the start of every session. They were completed by Winnie when she arrived for her appointment and we would discuss them as part of the therapy.

Winnie was introduced to the five systems model (Wright *et al* 2002) which considers how thoughts, feelings, physiology, behaviour and environment are related by analysing situations where Winnie experienced a significant shift in emotion. This demonstrated that symptoms are interconnected, helped her to notice how specific thoughts and behaviours perpetuated a low mood, and provided a means for her to familiarise herself with the CBT approach. Activity monitoring diary sheets were used to establish a baseline of functioning in daily activities. The monitoring sheets incorporated ratings of pleasure and mastery in activities but showed that few activities gave Winnie any pleasure because most were carried out in response to her sense of duty.

Expectations and beliefs

Early experience contributed to Winnie's belief that there was something wrong with her; she was the 'odd one out' at home, a shy child in an energetic, sporty family. Being the eldest child, her parents had expectations that she would be the 'leader' among her siblings but she was uncomfortable with this expectation.

Family members and her peers teased her for being 'different' and she developed a sense of being odd and unacceptable. Continued sexual abuse by her father compounded these beliefs. When she tried to say no, he told her she was selfish for depriving him. She described her father as 'critical and demeaning' and her mother as 'giving and spiritual'. Winnie craved approval and, because a family motto was 'keeping up appearances', she never told anyone about the abuse. This persisted until she married her husband and left home.

These experiences contributed to the development of negative core beliefs, for example, believing that she should always put others first, that she must be sympathetic or others will reject her, and that she should always be in control (Table 3). Core beliefs were rated on a Likert scale of 0-100%, where 0% represents no belief and 100% represents that the

client sees this as a fact about his or herself. Winnie internalised parental patterns of being giving towards others like her mother but critical of herself, like her father was of her. Life was only bearable if she lived according to her rules and assumptions but, when they ceased to protect her during a trigger event, her core beliefs were activated. She became more vulnerable when her workload decreased because she used work to define her sense of worth and bury her grief.

Winnie's day-to-day difficulties are illustrated in the following example. While walking with a friend on what had been Winnie's wedding anniversary, Winnie learned that her friend's partner had been diagnosed with cancer three months previously. This information elicited overwhelming assumptions: 'I should have known what was going on, I should have been there for her... I should be a sounding post and always put others first' and the core belief or assumption 'I am selfish' (99 per cent believability), which in turn elicited guilt. She shut down emotionally, cut the walk short, went home, ruminated and slept. This avoidance behaviour reinforced beliefs of her own selfishness and decreased opportunities for positive input, serving to maintain the cycle of depression. Winnie became self-critical for experiencing depression.

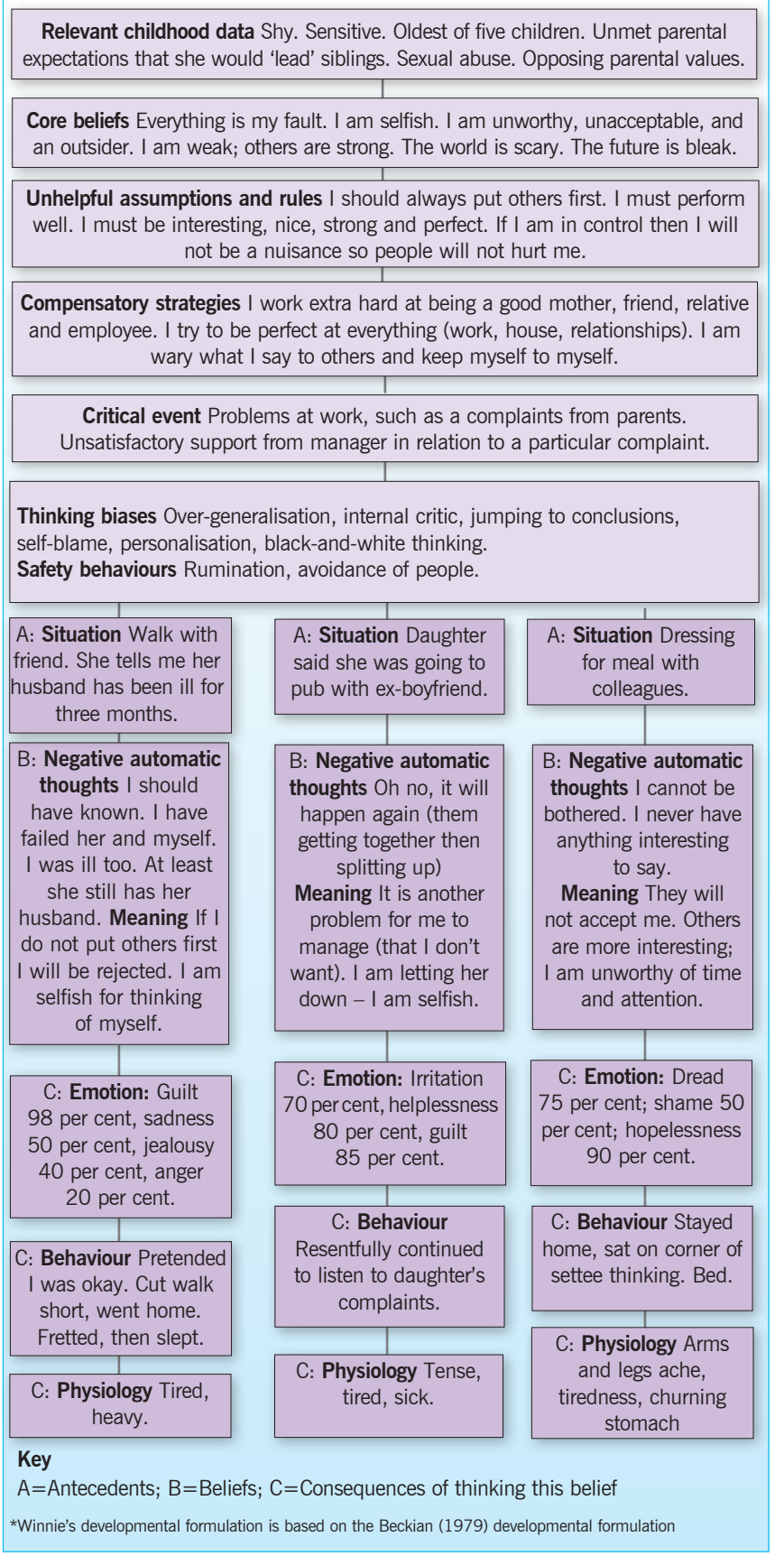
Beckian formulation

A Beckian (1979) developmental formulation and Moorey's (2010) diagrammatic maintenance model of depression helped make sense of Winnie's difficulties and acted as a roadmap for therapy. Her Beckian formulation is shown in Figure 1.

Winnie's Beckian formulation helped Winnie and myself to develop her treatment plan together. The plan consisted of:

- Establishing therapeutic rapport, reviewing symptoms and providing psycho-education.
- Discussing the influence of thinking on behaviour, physiology and feelings to help Winnie notice relationships between thinking, behaviour and feelings by examining specific experiences.
- Identifying and discriminating emotions, and rating intensity (0-100 per cent).
- Monitoring activity level using diary sheets; noticing links between behaviour and mood, withdrawal and avoidance, and balance of pleasurable or achievement-orientated activities.
- Continuing activity monitoring and scheduling using diary sheets.
- Discussing specific thoughts leading to unpleasant emotion. Identifying recurrent or common themes that contribute to formulation.
- Rating NATs and their believability

Figure 1 Winnie's developmental formulation*



Key
A=Antecedents; B=Beliefs; C=Consequences of thinking this belief

*Winnie's developmental formulation is based on the Beckian (1979) developmental formulation

'Winnie's vulnerabilty triggers me to work hard but my response could inadvertently reinforce and maintain Winnie's helplessness'

(0-100 per cent) by recording thoughts. Focusing on validity of thoughts, for example do they reflect facts and reality? What is the evidence for and against the validity of these thoughts?

- Continuing to elicit negative thoughts and record more helpful ways of thinking about situations, self and others to influence emotion positively.
- Reviewing thoughts, particularly expectations for self and 'shoulds' rather than 'wants'. Identifying rules for living and examining their helpfulness.
- Identifying unhelpful thinking styles that lower mood. Encouraging the client to analyse her thoughts and then step back from them.
- Reviewing alternative explanations for NATs.
- Conducting behavioural experiments to help increase believability of alternative thoughts.
- Considering personal wants or needs rather than thinking in terms of should.
- Analysing self-criticisms with focus on UAs.
- Listing goals with an emphasis on own needs and expectations.
- Preventing and managing relapses.

Winnie was hesitant to engage in therapy. Her ambivalence was made explicit in sessions and we looked at advantages and disadvantages of repeating the same patterns of behaviour versus doing things differently. Once we uncovered her 'rules' – such as she had to be giving to others or face rejection, and had to be in control or be hurt – we could use our therapeutic relationship to test these rules.

During her fifth session, Winnie divulged that she had been sexually abused by her father. We considered where responsibility and blame lay for this abuse. When we imagined her daughter experiencing such abuse at the same age, Winnie's prejudice toward herself was elicited and she cried for the first time in years. We focused on ways for her to tolerate her distress and unhelpful thinking styles, and scheduled activities that she found soothing (McKay *et al* 2007). She found a bucket analogy helpful; emotions can brim over like water filling a bucket. I suggested we try to open the taps at the bottom so we could siphon off water, rather than allowing her beliefs to tighten the taps.

We discussed how she thought motivation develops in people and what might energise her. Winnie had no idea what would happen if she acted in a different way toward herself. We therefore carried out an experiment: on certain days she did not do anything different, and on others she practised self-compassion. For example, in response to Winnie's critical automatic thoughts, we practised Winnie responding in a different way to them. New responses were elicited by asking questions such as: 'What would I say to my best friend if this were her?' or 'How would my husband have responded to me if he were here?' and then we practised responses to them. She observed that on days where she would question what her husband would say, when she spoke to herself in a compassionate way and allowed herself to do things that gave her a sense of pleasure and accomplishment, she self-rated her mood as better than on days when she did not practise such self-compassion. She also experimented with not working in her free time, hence challenging her belief that 'if I am not giving then I will be rejected'.

Testing beliefs

Despite eliciting evidence against the core belief 'I am selfish' and examining the validity, authority and use of assumptions stemming from the belief, Winnie continued to be 99 per cent convinced that she was selfish (Table 3, page 28). Winnie and I constructed a survey based on the belief that a person should always put others first. However, Winnie was reluctant to distribute it to others because it meant asking for help. We examined her predictions and whether or not it could potentially help to break maintenance cycles and reduce distress if I distributed the survey among my colleagues (I left them in the office where any member of staff could pick them up) and Winnie managed to distribute a couple of surveys to friends. Winnie's belief that she should always put others first fell to 96 per cent once we had explored subsequent feedback from the survey. Change has not been as straightforward as Winnie had hoped. Goals were reassessed at the beginning of sessions to measure subjective change and we have found these scores are moving in a positive direction. By questioning thoughts, not avoiding or ruminating and by acting assertively and scheduling 'wants' into daily activities, Winnie is helping to decrease her symptoms of depression (Table 1, page 27 and Table 2, page 28).

The shift in beliefs is positive and is being used to progress therapy. More experiments may help loosen long-term beliefs and close the gap between 'knowing something logically' and 'not feeling it'. However Winnie is going to find it hard to let go of beliefs that she has had for a long time.

Conclusion

Winnie and I have to continue to review thoughts, particularly for example the things she believes she should be thinking or doing rather than the things she wants to think or do, and beliefs around perfectionism. Winnie has to be encouraged to challenge her behaviours with pleasurable and soothing activities, apply everything she has learned in therapy, and consider relapse prevention and management.

Winnie's prognosis deemed her suitable for cognitive therapy (Safran and Segal 1990). She might have been more able to use CBT effectively had she been stabilised on a selective serotonin reuptake inhibitor, as NICE (2009) guidelines recommend. The NICE guidelines also advise two sessions of CBT a week; a clinical case could have been made for this to increase momentum and exposure to help the recovery process because being in therapy works against Winnie's beliefs. However, she has managed to stay in therapy and is tolerating the role reversal of being supported rather than being the supporter. It may be that this work will be a useful platform should she need further CBT.

Winnie has taught me how prejudiced clients can be toward themselves and how opposing evidence and activity can be moulded by clients to fit their existing beliefs. This can contribute to interpersonal issues in the therapeutic relationship. For example, Winnie's vulnerability triggers me to work hard but my response could inadvertently reinforce and maintain Winnie's helplessness. I am learning to become more adept at labelling what is happening in sessions and stepping back. This is also helpful when falling into a persuasive rather than collaborative stance. Guarding against personalisation is also important. The fact that Winnie's scores have not changed significantly does not necessarily mean a lack of skill on my part. The temporary increase in scores in session five may be linked to disclosure of abuse.

Winnie finds it hard to set an agenda of items she wishes to discuss at each session. She is quiet at the beginning of sessions and is adverse to putting her items on the agenda because in doing this she is expressing a need. I am trying to encourage her to think of agenda items during the week and write them down to bring to appointments.

Our sessions have highlighted the most important maintenance factors in relation to Winnie's difficulties and we continue to work toward her targets for change.

Online archive

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Conflict of interest
None declared

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