

Cognitive Therapy for Anxiety Disorders: Current Status and Future Challenges

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Abstract. This paper reviews recent theoretical, conceptual and practice developments in cognitive-behaviour therapy (CBT) for anxiety disorders. The empirical status of CBT for anxiety disorders is reviewed and recent advances in the field are outlined. Challenges for the future development of CBT for the anxiety disorders are examined in relation to the efficacy, effectiveness and cost-effectiveness of the approach. It is concluded that the major challenge currently facing CBT for anxiety disorders in the UK is how to meet the increased demand for provision whilst maintaining high levels of efficacy and effectiveness. It is suggested that the creation of an evidence base for the dissemination of CBT needs to become a priority for empirical investigation in order effectively to expand the provision of CBT for anxiety disorders.

Keywords: Anxiety disorders, cognitive-behaviour therapy, review.

Introduction

This paper reviews recent theoretical, conceptual and practice developments in cognitive-behaviour therapy (CBT) for anxiety disorders. We begin by recapping the development of the approach and examining the current empirical status of CBT for anxiety disorders. We then outline recent advances in the field and examine the challenges for the future development of CBT for the anxiety disorders.

The term “anxiety disorders” refers to a group of psychiatric disorders that is characterized by a disabling overestimation of threat and danger. *The Diagnostic and Statistical Manual*

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of *Mental Disorders* (DSM-IV; APA, 1994) specifies 12 different anxiety disorders. Lifetime and 12-month prevalence rates of anxiety disorders have been reported to be as high as almost 30% and 18% respectively (Kessler, Chiu, Demler and Walters, 2005) and anxiety disorders have been reported to be the most economically costly of all psychiatric disorders (Rice and Miller, 1998).

Development and current empirical status of CBT for anxiety disorders

Following the establishment of cognitive therapy as a successful treatment for depression, Beck, Emery and Greenberg (1985) outlined Beckian cognitive therapy for anxiety disorders. Through the 1980s and 1990s to the present day the development of CBT for anxiety disorders has progressed by a close link between theory, experimental studies, and therapy. An example of this process has been the development of CBT for panic disorder. From observations of patients in therapy sessions, Clark (1986) proposed a seminal paper outlining the cognitive model of panic disorder that specified the core feature as the catastrophic misinterpretation of body sensations. This was followed by experimental studies showing that panic patients were especially likely to catastrophically misinterpret bodily sensations and that this can be maintained by selective attention, avoidance and safety seeking behaviours (Ehlers, 1995; Salkovskis, Clark, Hackmann, Wells and Gelder, 1999). These theoretical developments and experimental studies fed into the development of a successful treatment protocol (Clark et al., 1994, 1999). Similar work has and is being carried out across the anxiety disorder diagnoses and has led to differing theoretical models and treatment techniques for particular anxiety disorders, as well as providing an overall strategy by which a clinician can conceptualize and treat anxiety.

There is good evidence that CBT for anxiety disorders is highly effective (Hofmann and Smits, in press). Several texts provide detailed theoretical analyses and treatment guidelines (e.g. Barlow, 2002; Wells, 1997). The recent National Institute for Health and Clinical Excellence (NICE) Guidelines for the National Health Service in the UK have recommended CBT as the treatment of choice for those anxiety disorders for which guidelines have been produced. These guidelines also provide helpful and thorough reviews of treatment outcome studies and meta-analyses. Most of the efficacy data for CBT for anxiety disorders focuses on the specific CBT protocols that have been evaluated with particular anxiety disorder diagnoses and this is outlined below.

Specific phobias

Behavioural treatments for specific phobias, with exposure to the feared situation or object, lead to clinically significant improvement in 70–85% of cases (Roth and Fonagy, 2005). Perhaps due to this very high success rate there has been little investigation of cognitive techniques in specific phobias, although these are often employed clinically, particularly to maximize the impact of exposure by putting it in the context of a behavioural experiment. For specific fears very brief treatments may be employed (i.e. one prolonged session for treating spider phobia) and therapist-directed exposure is more effective than self-directed exposure (e.g. Ost, Salkovskis and Hellstrom, 1991).

Panic disorder with or without agoraphobia

Clark et al.'s CT for panic disorder has been shown to be highly effective both over a 12-session protocol and in a briefer 4-session format with self-help materials (Clark et al., 1994, 1999) with 70–80% of patients remaining panic-free at 12-month follow-up. Other CBT treatments show similar results (e.g. Panic Control Treatment, see Barlow, 2002). The NICE guidelines state that CBT should be used as the treatment of choice for panic disorder (NICE, 2004).

Obsessive compulsive disorder

The NICE guidelines present a clear stepped care model for the treatment of OCD, which includes CBT (including exposure and response prevention) as a recommended treatment option at each step (NICE, 2005a). Cognitive models for OCD (e.g. Salkovskis, 1985) highlight that it is the appraisal of intrusions as meaning that the person may be responsible for harm unless they take action to prevent it, rather than the content of the intrusion itself, that leads to distress. Currently the evidence for the additional efficacy of cognitive techniques over that of exposure and response prevention alone is mixed. The addition of cognitive techniques may be associated with lower drop-out rates and may be particularly indicated for those who have not previously responded to treatment, or those with forms of OCD where exposure and response prevention is not possible (e.g. mental rituals) (Roth and Fonagy, 2005). Severe, chronic OCD remains a clinical challenge.

Generalized anxiety disorder

Although NICE guidelines recommend CBT as the treatment of choice for GAD (NICE, 2004) there remains more variation within cognitive models of GAD than in cognitive models of other anxiety disorders. Models of GAD focus on themes including worry as a process of cognitive avoidance (e.g. Sibrava and Borkovec, 2006), the role of metacognitive beliefs (e.g. Wells, 1997), and emotion dysregulation (e.g. Mennin, Heimberg, Turk and Fresco, 2005). Perhaps the best-established and supported model is Borkovec's avoidance theory, which proposes that worry allows individuals to approach emotional topics at an abstract level and hence avoid aversive images, autonomic arousal, and negative emotions in the short-term (Sibrava and Borkovec, 2006).

Post-traumatic stress disorder

Trauma-focused CBT is a recommended treatment for PTSD (NICE, 2005b). Predominantly behavioural treatments that focus on imaginal and in vivo exposure in imagery have been shown to be highly effective (e.g. Foa et al., 2005). The more recent Ehlers and Clark (2000) cognitive conceptualization of PTSD suggests that a wider range of cognitive behavioural strategies can be employed in order to reduce the sense of *current* threat experienced by people with PTSD (Ehlers et al., 2008). This treatment has among the highest effect sizes ($d = 2.4$ – 2.8 , and 64%–75% high end state functioning) and the lowest drop-out rates (0%) seen in the literature (Ehlers et al., 2003; Ehlers, Clark, Hackmann, McManus and Fennell, 2005).

Social phobia

Cognitive models of social phobia highlight the role of increased self-focused attention and the subsequent use of misleading internal information to make excessively negative inferences about how one appears to others (e.g. Clark and Wells, 1995). Currently no NICE guidelines exist for social phobia but meta-analyses attest to the efficacy of CBT (e.g. Fedoroff and Taylor, 2001). Although previously provided in group format, the largest effect sizes currently reported in the literature are for individual CBT ($d = 2.1-2.6$, 76% clinically significant improvement; Clark et al., 2003, 2006) and direct comparisons indicate that a group format is not advantageous (e.g. Mortberg, Clark, Sundin and Wistedt, 2006).

Future challenges for CBT for anxiety disorders

The challenges for the future development of CBT for anxiety disorders relate to the efficacy, the effectiveness and the cost-effectiveness of the treatment. The issues in these three areas will be considered in turn.

Efficacy

While current CBT treatments for anxiety disorders have demonstrated efficacy, there remains room for improvement as many patients do not achieve high end state functioning, particularly at longer term follow-up. An important conceptual advance in CBT for anxiety disorders has resulted from the identification of “safety-seeking behaviours” (Salkovskis, 1991). These are behavioural and mental strategies the person uses in order to prevent a feared outcome (e.g. sitting down and trying to relax to prevent a heart attack in panic disorder). Several experimental studies have demonstrated the role of safety behaviours in maintaining anxiety (e.g. McManus, Sacadura and Clark, in press), and have shown that dropping safety behaviours enhances the effectiveness of CBT for anxiety (e.g. Salkovskis, Hackmann, Wells, Gelder and Clark, 2007). This identification of the role of safety behaviours in preventing disconfirmation of feared predictions has led to much more extensive use of behavioural experiments in CBT for anxiety disorders.

General developments in the theory and practice of CBT have impacted on the efficacy of CBT for anxiety disorders. There is an emerging consensus that fear-related information is multiply represented; in both a more sensory/experiential system as well as in a verbal system (e.g. Wells and Matthews, 1994). This has led to the explicit activation of the more sensory, experiential level in current CBT treatments for anxiety, such as using imagery re-scripting techniques (Wild, Hackmann and Clark, 2007) or transforming the meaning of traumatic memory hotspots within imaginal exposure (Grey, Young and Holmes, 2002). Both of these techniques have been shown to produce belief change and alleviate emotional distress in the short-term but their longer term impact remains to be evaluated.

A further influence has come from the self-proclaimed “third wave” cognitive-behavioural approaches that suggest that emotion regulation may be better achieved by counteracting maladaptive response-focused emotion regulation strategies (e.g. discouraging emotional suppression) than by the traditional CBT approach that focuses on promoting adaptive antecedent-focused emotion regulation strategies (e.g. reappraisal of the emotional stimuli) (Hofmann and Asmundson, in press). In other words, such approaches focus on changing

the patient's relationship with and response to their thoughts (metacognitive processes) rather than on evaluating the content of their thoughts (e.g. Acceptance and Commitment Therapy; Hayes, Strosahl and Wilson (1999) and Mindfulness-based Cognitive Therapy; Teasdale, Segal and Williams (1995)). This raises interesting questions about the theoretical mechanisms that underlie change in CBT. Case series data suggest that such approaches may have benefits for anxious patients that are maintained at 3-year follow-up (Miller, Fletcher and Kabat-Zinn, 1995). Whether the incorporation or adoption of such developments increases the overall efficacy of treatments remains to be seen. Because CBT develops from the interplay of theory, experimental studies, clinical practice and outcome research it is able to incorporate developments from other fields, such as experimental and cognitive psychology, in order to further increase its efficacy.

Effectiveness

It has been estimated that fewer than 30% of patients treated in routine clinical settings currently receive evidence-based treatments (Goisman, Warsaw and Keller, 1999). Furthermore, even when evidence-based treatments are applied the reported effect sizes and drop-out rates are often less favourable than those reported in the original research trials (e.g. Addis et al., 2004). Hence, a future challenge for CBT for the anxiety disorders is its successful dissemination. Two issues to be tackled in disseminating CBT for anxiety disorders into routine clinical practice are, first, whether CBT protocols delivered in RCTs can generalize to the patients seen in routine clinical practice and, second, whether it is possible to train therapists to the standards necessary to achieve the same effects as seen in clinical trials.

A common criticism of CBT for anxiety disorders is that the effects seen in RCTs do not generalize to routine clinical settings, because the patients in RCTs are a highly selected, more treatment-responsive group. There is some evidence to support this claim, with dissemination studies carried out in clinical settings often reporting smaller effect sizes and/or higher drop out rates. There are also instances where the effect sizes and drop out rates seen in RCTs are replicated in routine clinical services (e.g. Foa et al., 2005). In addition, the most common reason for excluding patients from RCTs is in fact failing to meet a minimum severity or duration criteria (Stirman, DeRubeis, Crits-Christoph and Rothman, 2005). However, there may be some important differences between the populations studied in academic and clinical settings. Most treatment trials focus on patients with one main anxiety disorder and exclude those with co-morbid anxiety disorder diagnoses of equal severity or with the diagnosis of ADNOS. This may present a problem for the dissemination of CBT for anxiety disorders as co-morbidity is the norm rather than the exception in anxiety disorders (Brown, Campbell, Lehman, Grisham and Mancill, 2001), and a significant proportion of those with clinical anxiety problems meet criteria only for ADNOS (Zimmerman, McDermut and Mattia, 2000). There is very little data on how to treat either ADNOS or co-morbid anxiety disorders, with some studies showing counter intuitive results. For example, the study by Craske et al. (2007) on patients with panic disorder and a co-morbid disorder reported that CBT, which focused only on panic disorder, rather than CBT that focused on the panic but also attempted to address the most severe co-morbid disorder, had more benefits both for the panic disorder and for the co-morbid disorder. The challenge of conceptualizing and effectively treating co-morbidity and ADNOS has led to calls for the development of a transdiagnostic approach to treating anxiety disorders (e.g. Barlow, Allen and Choate, 2004). Such transdiagnostic approaches attempt

to identify the common maintaining mechanisms across the different anxiety disorders and may have the potential to strike the balance between completely idiosyncratic formulations and rigid diagnostic models. However, more research is needed to establish the efficacy, and especially the comparative efficacy of transdiagnostic approaches to treating anxiety disorders.

The second challenge for the successful dissemination of CBT for anxiety disorders is whether it is possible to train therapists in clinical settings to a similar standard and to achieve similar effects as achieved in RCTs. Historically, the dissemination of therapy skills literature has highlighted the difficulty in achieving change in therapists' clinical skills, let alone their patients' outcomes, by providing training (King et al., 2002; Walters, Matson, Baer and Ziedonis, 2005). However, four recent studies have demonstrated that it is possible to impact both CBT skills (Mannix et al., 2006; Sholomskas et al., 2005) and patient outcomes with relatively brief training programs (Grey, Salkovskis, Quigley, Ehlers and Clark, 2006; Westbrook, Sedgwick-Taylor, Bennett-Levy, Butler and McManus, 2008). One common factor to these four studies reporting successful dissemination of CBT skills is the use of ongoing case supervision following workshop based training.

Whilst some progress has been made in generalizing CBT for anxiety disorders into clinical settings and in implementing CBT protocols in routine clinical practice, further dissemination and generalization research is needed in order to determine how best to disseminate CBT for anxiety disorders from academic to clinical settings, on the scale required.

Cost-effectiveness

A final challenge for the future of CBT relates to its cost-effectiveness. If, as recommended by Lord Layard (Layard, 2006), CBT is to be delivered to the majority of patients with anxiety disorders who may benefit from it, it will be necessary to take a stepped care approach, working up from the lower intensity interventions to higher intensity treatments. At the lowest level of intervention, there are a vast number of self-help books for anxiety disorders. While such popular texts are seen as helpful by therapists and clients alike, there is little evidence for their efficacy as a stand-alone treatment for any anxiety disorder. Similarly, there have been a number of computer programs developed to provide CBT for anxiety. A NICE technology appraisal reports that only "Fearfighter" has sufficient evidence to support its recommendation for the treatment of panic and phobias (NICE, 2006). It should be used in a stepped care manner, and therapist provided CBT remains a more efficacious treatment. Similarly, studies evaluating other forms of CBT self-help for anxiety disorders suggest that "augmented self-help" with some therapist contact is more effective than pure self-help (e.g. Rapee, Abbott, Baillie and Gaston, 2007). There have also been successful attempts to deliver CBT protocols in large scale group formats (e.g. White, 1998) or in briefer formats with more homework (Clark et al., 1999) and to deliver full CBT protocols in more flexible formats to suit patients (Ehlers, 2006).

Conclusions

As discussed above, there is a great deal of evidence that CBT is an efficacious treatment for anxiety disorders. CBT's empirical stance means that it is well placed to continue to incorporate theoretical and practical developments (both from within and outside CBT) to

continue to increase its efficacy. The biggest challenge currently facing CBT for anxiety disorders is how best to achieve the increase in provision that is needed to meet current demand for CBT, whilst retaining high levels of efficacy and effectiveness. This gives rise to two particular issues: (i) what do we train people in? and (ii) how do we do it? In relation to the former, there is debate about the best model for providing larger scale CBT services, for example, low intensity interventions with case managers or training a larger number of therapists to a high level, training in specific CBT protocols or training all CBT competencies simultaneously. The eventual balance of low and high intensity approaches is likely to be influenced by political and funding issues, much as we would suggest that empirical evidence should be the deciding factor.

The second question is how to most effectively and efficiently train the increased number of therapists required to provide CBT for anxiety disorders. There is very little research on the training of therapists' skills generally and even less on how best to improve therapists' CBT skills. There is some preliminary evidence to show that patients seen by therapists with specialist training in CBT for anxiety required fewer sessions, had better end of treatment outcomes, and lower relapse rates than those patients seen by non-specialists (Howard, 1999). In addition, for the effects of training to be maintained, it must be followed by ongoing supervision to help the trainees implement the skills in their routine practice (Mannix et al., 2006). However, in the future it will be important to collect data not only on the efficacy and effectiveness of CBT treatments, but also on the methods used to train therapists in providing CBT.

References

- American Psychiatric Association** (2004). *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV)*. Washington, DC: APA.
- Addis, M. E., Hatgis, C., Krasnow, A. D., Jacob, K., Bourne, L. and Mansfield, A.** (2004). Effectiveness of cognitive-behavioural treatment for panic disorder versus treatment as usual in a managed care setting. *Journal of Consulting and Clinical Psychology, 72*, 625–635.
- Barlow, D. H.** (2002). *Anxiety and its Disorders: the nature and treatment of anxiety and panic (2nd ed.)*. New York: Guilford Press.
- Barlow, D. H., Allen, L. B. and Choate, M. L.** (2004). Towards a unified treatment for emotional disorders. *Behaviour Therapy, 35*, 205–230.
- Beck, A. T., Emery, G. and Greenberg, R. L.** (1985). *Anxiety Disorders and Phobias: a cognitive perspective*. New York: Basic Books.
- Brown, T. A., Campbell, L. A., Lehman, C. L., Grisham, J. and Mancill, R. B.** (2001). Current and lifetime co-morbidity of the DSM-IV anxiety and mood disorders in a large clinical sample. *Journal of Abnormal Psychology, 110*, 585–599.
- Clark, D. M.** (1986). A cognitive model of panic. *Behaviour Research and Therapy, 24*, 461–470.
- Clark, D. M., Ehlers, A., McManus, F., Hackmann, A., Fennell, M., Campbell, H., Flower, T., Davenport, C. and Louis, B.** (2003). Cognitive therapy versus fluoxetine in generalized social phobia: a randomized placebo-controlled trial. *Journal of Consulting and Clinical Psychology, 71*, 1058–1067.
- Clark, D. M., Ehlers, A., Hackmann, A., McManus, F., Fennell, M., Grey, N., Waddington, L. and Wild, J.** (2006). Cognitive therapy versus exposure and applied relaxation in social phobia: a randomized controlled trial. *Journal of Consulting and Clinical Psychology, 74*, 568–578.

- Clark, D. M., Salkovskis, P. M., Hackmann, A., Middleton, H., Anastasiades, P. and Gelder, M.** (1994). A comparison of cognitive therapy, applied relaxation and imipramine in treatment of panic disorder. *British Journal of Psychiatry*, *164*, 759–769.
- Clark, D. M., Salkovskis, P. M., Hackmann, A., Wells, A., Ludgate, J. and Gelder, M.** (1999). Brief cognitive therapy for panic disorder: a randomized controlled trial. *Journal of Consulting and Clinical Psychology*, *67*, 583–589.
- Clark, D. M. and Wells, A.** (1995). A cognitive model of social phobia. In R. Heimberg, M. Leibowitz, D. A. Hope, and F. R. Schneier (Eds.), *Social Phobia: diagnosis, assessment and treatment*. New York: Guilford Press.
- Craske, M. G., Farchione, T. J., Allen, L. B., Barrios, V., Stoyanova, M. and Rose, R.** (2007). Cognitive behaviour therapy for panic disorder and co-morbidity: more of the same or less of more? *Behaviour Research and Therapy*, *45*, 1095–1109.
- Ehlers, A.** (1995). A 1-year prospective study of panic attacks: clinical course and factors associated with maintenance. *Journal of Abnormal Psychology*, *104*, 164–172.
- Ehlers, A.** (2006). *A Cognitive Model of Post-Traumatic Stress Disorder: theory and therapy*. Keynote address presented at BABCP Conference, Warwick, 19–21 July.
- Ehlers, A. and Clark, D. M.** (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy*, *38*, 319–345.
- Ehlers, A., Clark, D. M., Hackmann, A., McManus, F. and Fennell, M.** (2005). Cognitive therapy for PTSD: development and evaluation. *Behaviour Research and Therapy*, *43*, 413–431.
- Ehlers, A., Clark, D. M., Hackmann, A., McManus, F., Fennell, M. and Grey, N.** (2008). *Cognitive Therapy for PTSD: a therapist's guide*. In preparation.
- Ehlers, A., Clark, D. M., Hackmann, A., McManus, F., Fennell, M., Herbert, C. and Mayou, R.** (2003). A randomised controlled trial of cognitive therapy, self-help booklet, and repeated early assessment as early interventions for PTSD. *Archives of General Psychiatry*, *60*, 1024–1032.
- Fedoroff, I. C. and Taylor, S.** (2001). Psychological and pharmacological treatments of social phobia: a meta-analysis. *Journal of Clinical Psychopharmacology*, *21*, 311–324.
- Foa, E. B., Hembree, E. A., Cahill, S. P., Rauch, S. A. M., Riggs, D. S., Feeny, N. C. and Yadin, E.** (2005). Randomized trial of prolonged exposure for post-traumatic stress disorder with and without cognitive restructuring: outcome at academic and community clinics. *Journal of Consulting and Clinical Psychology*, *73*, 953–964.
- Goisman, R. M., Warsaw, M. G. and Keller, M. B.** (1999). Psychosocial treatment prescriptions for generalized anxiety disorder, panic disorder and social phobia, 1991–1996. *American Journal of Psychiatry*, *156*, 1819–1821.
- Grey, N., Young, K. and Holmes, E.** (2002). Cognitive therapy within reliving: a treatment for peritraumatic emotional “hotspots” in posttraumatic stress disorder. *Behavioural and Cognitive Psychotherapy*, *30*, 63–82.
- Grey, N., Salkovskis, P., Quigley, A., Ehlers, A. and Clark, D. M.** (2006). *Dissemination of Cognitive Therapy for Panic Disorder in Primary Care*. Paper presented at BABCP conference, Warwick, 19–21 July.
- Hayes, S. C., Strosahl, K. D. and Wilson, K. G.** (1999). *Acceptance and Commitment Therapy*. New York: Guilford Press.
- Hofmann, S. G. and Asmundson, G. J. G.** (in press). Acceptance and mindfulness-based therapy: new wave or old hat? *Clinical Psychology Review*.
- Hofmann, S. G. and Smits, J. A.** (in press). Cognitive-behaviour therapy for adult anxiety disorders: a meta-analysis of randomised placebo-controlled trials. *Journal of Clinical Psychiatry*.
- Howard, R. C.** (1999). Treatment of anxiety disorders: does specialty training help? *Professional Psychology: Research and Practice*, *30*, 470–473.

- Kessler, R. C., Chiu, W. T., Demler, O. and Walters, E. (2005). Prevalence, severity, and comorbidity of 12-month DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 617–627.
- King, M., Davidson, O., Taylor, F., Haines, A., Sharp, D. and Turner, R. (2002). Effectiveness of teaching general practitioners skills in brief CBT to treat patients with depression: randomised controlled trial. *British Medical Journal*, 324, 947.
- Layard, R. (2006). *The Depression Report: a new deal for depression and anxiety disorders*. London: Mental Health Policy Group of the Centre for Economic Performance, London School of Economics.
- Mannix, K., Blackburn, I-M., Garland, A., Gracie, J., Moorey, S., Reid, B., Standart, S. and Scott, J. (2006). Effectiveness of brief training in cognitive behaviour therapy techniques for palliative care practitioners. *Palliative Medicine*, 20, 579–584.
- McManus, F., Sacadura, C. and Clark, D. M. (in press). Why social anxiety persists: an experimental manipulation of the role of safety behaviours as a possible maintaining factor. *Journal of Behaviour Therapy and Experimental Psychiatry*.
- Mennin, D. S., Heimberg, R. G., Turk, C. L. and Fresco, D. M. (2005). Preliminary evidence for an emotion dysregulation model of generalized anxiety disorder. *Behaviour Research and Therapy*, 43, 1281–1310.
- Miller, J. J., Fletcher, K. and Kabat-Zinn, J. (1995). Three-year follow-up and clinical implications of a mindfulness-based stress reduction intervention in the treatment of anxiety disorders. *General Hospital Psychiatry*, 17, 192–200.
- Mortberg, E., Clark, D. M., Sundin, O. and Wistedt, A. (2006). Intensive group cognitive therapy and individual cognitive therapy versus treatment as usual in social phobia: a randomized controlled trial. *Acta Psychiatrica Scandinavica*. 115, 142–154.
- National Institute for Health and Clinical Excellence (NICE) (2004). *Anxiety: management of anxiety (panic disorder, with or without agoraphobia, and generalised anxiety disorder) in adults in primary, secondary and community care*. London: NICE.
- National Institute for Health and Clinical Excellence (NICE) (2005a). *Obsessive-compulsive disorder: core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder*. London: NICE.
- National Institute for Health and Clinical Excellence (NICE) (2005b). *Post-traumatic stress disorder: the management of PTSD in adults and children in primary and secondary care*. London: Gaskell and the British Psychological Society.
- National Institute for Health and Clinical Excellence (NICE) (2006). *Computerised Cognitive Behaviour Therapy for Depression and Anxiety*. www.nice.org.uk/TA097.
- Ost, L. G., Salkovskis, P. and Hellstrom, K. (1991). One session therapist directed exposure vs. self-exposure in the treatment of spider phobia. *Behavior Therapy*, 22, 407–422.
- Rapee, R., Abbott, M. J., Baillie, A. and Gaston, J. E. (2007). Treatment of social phobia through pure self-help and therapist-augmented self help. *British Journal of Psychiatry*, 191, 246–252.
- Rice, D. P. and Miller, L. S. (1998). Health economics and cost implications of anxiety and other mental health disorders in the United States. *British Journal of Psychiatry, Suppl.* 34, 4–9.
- Roth, A. and Fonagy, P. (2005). *What Works for Whom? (2nd Ed.)*. London: Guilford Press.
- Salkovskis, P. M. (1985). Obsessional-compulsive problems: a cognitive-behavioural analysis. *Behaviour Research and Therapy*, 23, 571–583.
- Salkovskis, P. M. (1991). The importance of behaviour in the maintenance of anxiety and panic: a cognitive account. *Behavioural Psychotherapy*, 19, 6–19.
- Salkovskis, P. M., Clark, D. M., Hackmann, A., Wells, A. and Gelder, M. (1999). An experimental investigation of the role of safety-seeking behaviours in the maintenance of panic disorder with agoraphobia. *Behaviour, Research and Therapy*, 37, 559–574.

- Salkovskis, P. M., Hackmann, A., Wells, A., Gelder, M. and Clark, D.** (2007). Belief disconfirmation versus habituation approaches to situational exposure in panic disorder with agoraphobia: a pilot study. *Behaviour, Research and Therapy*, 45, 877–885.
- Sholomskas, D. E., Syracuse-Siewert, G., Rounsaville, B. J., Ball, S. A., Nuro, K. F. and Carroll, K. M.** (2005). We don't train in vain: a dissemination trial of three strategies of training clinicians in cognitive-behavioural therapy. *Journal of Consulting and Clinical Psychology*, 73, 106–115.
- Sibrava, N. and Borkovec, T. D.** (2006). Worry and cognitive avoidance. In G. Davey and A. Wells (Eds.). *Worry and Psychological Disorders: theory, assessment, and treatment* (pp. 239–258). West Sussex, UK: Wiley and Sons.
- Stirman, S. W., DeRubeis, R. J., Crits-Christoph, P. and Rothman, A.** (2005). Can the randomized controlled trial literature generalize to nonrandomized patients? *Journal of Consulting and Clinical Psychology*, 73, 127–135.
- Teasdale, J. D., Segal, Z. and Williams, J. M.** (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy*, 33, 25–39.
- Walters, S. T., Matson, S. A., Baer, J. S. and Ziedonis, D. M.** (2005). Effectiveness of workshop training for psychosocial addiction treatments: a systematic review. *Journal of Substance Abuse Treatment*, 29, 283–293.
- Wells, A.** (1997). *Cognitive Therapy of Anxiety Disorders: a practice manual and conceptual guide*. Chichester: Wiley.
- Wells, A. and Matthews, G.** (1994). *Attention and Emotion: a clinical perspective*. Hove, UK: Erlbaum.
- White, J.** (1998). “Stresspac”: three year follow-up of a controlled trial of a self-help package for the anxiety disorders. *Behavioural and Cognitive Psychotherapy*, 26, 133–141.
- Wild, J., Hackmann, A. and Clark, D. M.** (2007). When the present visits the past: updating traumatic memories in social phobia. *Journal of Behaviour Therapy and Experimental Psychiatry*, 38, 386–401.
- Westbrook, D., Sedgwick-Taylor, A., Bennett-Levy, J., Butler, G. and McManus, F.** (2008). A pilot evaluation of a brief CBT training course: impact on trainees' satisfaction, clinical skills and patient outcomes. *Behavioural and Cognitive Psychotherapy*, 36, 000–000.
- Zimmermann, M., McDermut, W. and Mattia, J. I.** (2000). Frequency of anxiety disorders in psychiatric outpatients with major depressive disorder. *American Journal of Psychiatry*, 157, 1337–1340.