

## Evolution of Cognitive Behaviour Therapy And its Current Status

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**Abstract:** Cognitive Behaviour therapy has been hailed as one of the most evidence based therapeutic option in mental health care particularly in treatment of Depressive disorder and Anxiety disorders. This article discusses both the traditional approach in Cognitive behaviour therapy and the newer generation Cognitive therapies with remarks about the need for new wave CBT techniques.

**Manuscript:** Cognitive behaviour therapy is one of the most researched and most evidence based psychotherapeutic intervention. It is an active, directive, time-limited and structured approach to treat a variety of emotional problems. (Beck 1979, Andrew C. Butler et al., 2006),

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### I. History Of Cbt Evolution

The clinical model of Cognitive therapy for Depression was first delivered by Aaron T. Beck in his influential book in 1979. It is being adapted for a wide range of disorders and changes have been accomplished accordingly. Moving a step further Beck and Emery (1985) described Anxiety disorders from a cognitive perspective. Clark published his landmark cognitive theory of Panic in 1986, Fairburn gave a detailed cognitive work on Eating disorders in 1997, Salkovskis (1998) matched the cognitive disturbances in Obsessions with other anxiety disorders. Also there has been a greater development in the original conceptualisation of the therapy system. A New wave of therapy was advocated by Adrian Wells (Metacognitive therapy), Steven Hayes (Acceptance and commitment therapy), Marsha Linehan (Dialectical behaviour therapy) and Jon Kabat-zinn (Mindfulness based cognitive therapy). These new wave therapies have Mindfulness technique as their core domain. Mindfulness refers to a practice that leads to a state of mind characterized by awareness of the present moment experience in a non-judgmental way, including one's thoughts, sensations, bodily states, consciousness, and the environment as a whole, while maintaining openness, acceptance and curiosity. The basic premise underlying mindfulness practices is that approaching the present moment openly and nonjudgmentally can effectively counter the effects of stressors, because excessive orientation toward the past or future when dealing with stressors can be related to feelings of Depression and Anxiety (Stefan G. Hofmann et al., 2010)

### II. Cbt For Depression

#### 2.1, Traditional CBT:

##### 2.1.1, The vicious cycle:

The vicious cycle addressed here is Thought-Emotion cycle. The cognitive theory posits a two way process in therapeutics, i.e. ways of thinking influences emotional state and the emotions in turn affect the thinking style.

Cognitive therapy therefore attempts to modify the thinking process in an empirical way. The cognitive processes are more emphasised because they provide the direct and practical way to reach emotions. (Sanders & Wills 2005) The cognitive theory of depression is based essentially on an information processing model. (Aaron T. Beck, 2002) It is founded on the rationale that a person's emotional experiences and behaviour are determined by his/ her cognitions. The maladaptive cognitive processes are based on assumptions or attitudes developed from previous experiences. (Aaron T. Beck, et al., 1979) A pronounced and prolonged negative biasing of the information process is manifest in the characteristic thinking disorder in depression (Selective abstraction, overgeneralization, negative self-attributions). (Aaron T. Beck, 2002) The Behavioural component in therapy is particularly utilised in individuals with severe depression. (Aaron T. Beck, et al., 1979) The Behavioural strategies include Activity scheduling, Mastery/Pleasure ratings, and Graded task assignments. (Christopher et al., 2010)

#### 2.2, Advances in CBT:

Mindfulness based Cognitive therapy [MBCT] combines the Mindfulness techniques (which involve training in voluntary deployment of attention, based on mindfulness practice) with the more traditional techniques of Cognitive therapy advocated by Beck et al. MBCT for Depression was initially advocated as a

relapse prevention program.( John Teasdale et al.,1995) MBCT draws momentum from the fact that individuals who suffered Depressive relapses have cognitive vulnerability i.e. they have a pattern of negative thinking that gets easily activated even during mildly depressed mood. MBCT aims at developing awareness and a new relationship to distorted thoughts so that patient's automatic mode of reacting to thoughts is turned off and skillful usage of the MBCT technique ensues. (S. Helen Ma and John Teasdale 2004) The different therapeutic mechanisms between past and present approaches in CBT is that the traditional CBT teaches alternative corrective schemas whereas Mindfulness based therapy alters access to schemas by teaching alternative system of responding.( John Teasdale 1999)

### **III. Cbt for anxiety disorders**

Anxiety disorder individuals exaggerate both the likelihood of occurrence of an event and the awfulness of the event. They also underestimate their ability to cope and the availability of the rescue factors.

#### **3.1, Traditional CBT:**

##### **3.1.1, Panic Disorder:**

A typical CBT for Panic disorder consists of parts of psychoeducation, cognitive restructuring, and behavioral strategies. The typical duration of CBT treatment is 12-15 sessions. Similar to the evidence for other anxiety disorders, CBT for Panic disorder has demonstrated efficacy in acute state and strong maintenance of treatment gains over time (e.g., 2 years post treatment). In addition to relief from Panic symptoms CBT also provides improvement in Global quality of life and co-morbid depressive and anxiety states. CBT has demonstrated high remission rates approaching 70% to 80%<sup>5</sup> and maintenance of gains. CBT is a particularly cost-effective modality, in part because of the strong maintenance of treatment gains for this short-term treatment. High acceptability and durability of CBT for Panic disorder was demonstrated in several studies. (R. Kathryn McHugh et al., 2009)

##### **3.1.2, Generalised Anxiety Disorder:**

The basis of CBT for GAD lies on the fact that Pathological worries are shaped by cognitive distortions which arise from the maladaptive schemas about danger. Patients with GAD have difficulty in normal problem solving in everyday situations because of impedance from ruminations and attention disturbances. For the patient, worry represents an inefficient way to control possible negative events in future. In Cognitive therapy, patients are instructed to consider their catastrophic view up to its ultimate consequences. At this point the technique of Socratic questioning will help them to substitute more probabilistic views instead. Treatment with CBT was associated with significantly lower overall severity of symptoms and less interim treatment in GAD individuals. (Jean Cottraux 2004)

##### **3.1.3, Social Anxiety Disorder:**

Cognitive behavioural therapy (CBT) has been established as an efficacious intervention for Social Anxiety Disorder (Hofmann & Smits, 2008). With the backup of Cognitive restructuring, patients expose themselves to feared cues repeatedly. The final goal is to help patients to obtain a safety feeling in social interactions and performance situations. CBT has been shown to outperform both pill and psychological placebo treatment. CBT also provides moderate to larger reductions in symptom severity. (Jasper Smits et al., 2013)

##### **3.1.4, Obsessive Compulsive Disorder:**

Cognitive model of OCD states that Obsessive symptoms emerge from Cognitive misappraisals (e.g. cognitive distortions and dysfunctional schema) that in turn leads to inaccurate evaluations of intrusive thoughts (e.g. touching a door knob after a person coughed or it will lead to illness and even death). As a result of these misappraisals the individual experiences increased distress and anxiety (e.g. worries about death after exposure to a door handle). The individual tends to avoid these situations which in turn blocks the opportunity for new learning that may weaken or invalidate the cognitive errors. In addition to avoidance the individuals start to perform ritualistic behaviors (eg, ritualized hand washing) in an attempt to neutralize feared outcomes. These ritualized behaviours are negatively reinforced and this leads to symptom persistence. CBT for OCD typically includes the following core therapeutic elements: ERP (Exposure and Response Prevention) and Cognitive training.

Typical ERP sessions follow graduated exposures based on Stimulus hierarchy, beginning with less distressing exposures and progressing toward exposures to situations/ stimuli associated with greater levels of distress/avoidance. Through ERP, the patient experiences the obsessional cues and feared situations while refraining from engaging in rituals. Mechanisms underlying recovery process are: the conditioned fear linked to obsessions is extinguished and the need for rituals does not arise, the self-efficacy is improved by stopping reliance on maladaptive behaviors such as avoidance. Depending on the content of the obsession,

implementation of exposures can be in vivo or imaginal. Exposures such as touching a contaminated doorknob and refraining from excessive hand washing can be completed in vivo within the treatment session but some symptoms necessitate imaginal exposures (eg, vividly envisioning violent imagery stabbing a family member while refraining from compensatory ritualized praying). The frequency and intensity of obsessions decrease over repeated ERP.

During cognitive training, patients learn cognitive techniques for resisting OCD (eg, identifying dysfunctional cognitions, evaluation of thoughts, cognitive restructuring). Cognitive-based intervention focuses on modifying core OCD-related domains such as responsibility, threat estimation, tolerance for ambiguity, over importance of thoughts, perfectionism and control over thoughts. ( Adam Lewin et al. 2014)

### **3.2, Advances in CBT:**

#### **3.2.1, Panic Disorder:**

As a way of improving treatment effectiveness for Panic Disorder, it may be helpful to explore treatments that targets on reducing the prime dysfunctionalelements of the disorder, namely experiential avoidance and excessive attempts to control thoughts and feelings. Building on the experiential avoidance conceptualization of the etiology and maintenance of psychopathology in Panic disorder, Hayes et al. (1999) have designed a therapeutic procedure entitled “acceptance and commitment therapy” (ACT), which is based on the idea that acceptance of internal experiences is an effective alternative way to coping with thoughts and feelings. In contrast to Traditional CBT, Acceptance and mindfulness-based approaches suggests that attempts at control of internal experiences may be the problem, rather than the solution. The future-oriented nature of anxiety and the fear of impending danger that characterizes Panic Disorder both inform that training in present-focused mindful awareness may provide a useful alternative way of responding.

The Acceptance mentioned here is about using Mindfulness, (the “art of conscious living,”) to facilitate awareness, rather than avoidance. Instead of attempting to modify thoughts and feelings, in ACT, patients are taught to feel emotions and bodily sensations in mindful state and without avoidance, and thebehaviour change will occur in valued direction. (Jill Levitt & Maria Karekla 2005)

#### **3.2.2, Generalised Anxiety Disorder:**

The reason for requirement of advances in traditional CBT forGeneralised Anxiety Disorder is that, GAD involves high levels of verbal, rule-governed behaviour that perseveres even after disconfirming evidence is provided. GAD patients negate the validity of alternative explanations provided in CBT, preferring to rely on rigid verbal rules because of self-doubt and perceived incompetence in their own judgementsof prevailing situations. Hence presentation of disconfirming evidence and logical empiricism (the backbone of traditional CBT) gives less than optimal relief to patients suffering from GAD. When compared to the advanced techniques of Acceptance and Mindfulness based therapies, traditional CBT offers modest degree of success.

In Mindfulness based approaches the attentional processes that tries to control the internal aversive experience is targeted and it seems more appropriate for GAD. The primary therapeutic goal of Mindfulness based therapy is not intended to distract from acute distress but rather it is a competing state of awareness intended to replace the state of attempting to control or diminish internal distressful experience. Mindfulness and Acceptance can be fully implemented in the absence of initial attempts to actively correct misperceptions (followed in traditional CBT). (Michelle Craske, Holly Hazlett- Stevens 2002)

#### **3.2.3, Social Anxiety Disorder:**

A significant process targeted by Mindfulness and Acceptance based therapy is Experiential avoidance, “the phenomenon that occurs when an individual is not willing to remain in contact with particular private experiences (e.g., Emotions, Thoughts, Bodily sensations, Memories, Behavioral predispositions) and does certain activities to alter the form or frequency of these events. In Social Anxiety Disorder, experiential avoidance is thought to manifest in overt and subtle avoidance behaviors that interfere in values-based behavior.

Mindfulness based therapies which explicitly targets experiential avoidance is particularly helpful in the treatment of Social Anxiety Disorder. (Nancy Kocovski et al., 2013) Mindfulness and Acceptance based techniques strategies would focus onincreasing levels of nonjudgmental acceptance of one’s own experience. If the patient is able to embrace fully his/her experience without defence, there is no need to involve in control efforts, and all of his efforts can therefore be redirected to the task at hand, rather than fighting to control thoughts and feelings.

By adopting a stance of nonjudgmental acceptance, the content of one’s experience becomes irrelevant; one is willing to experience whatever occurs. (James Herbert & LeeAnnCardaciotto 2005)

**3.2.4, Obsessive Compulsive Disorder:**

There is increasing empirical support for the role of metacognition in OCD which is the focus in advanced CBT techniques. Metacognition is most typically understood as knowledge, or cognition about cognition. (Steven Hayes et al., 2004) Metacognitive model of OCD proposed by Wells and Mathews specifies two subcategories of belief that are fundamental to the maintenance of O-C symptoms. First, metacognitive beliefs about the meaning and consequences of intrusive thoughts and feelings and Second is metacognitive beliefs about the necessity of performing rituals and the negative consequences of failing to do so. In this model, metacognitive beliefs about intrusions contain themes of thought action fusion (TAF), thought event fusion (TEF) and thought object fusion (TOF) which is cognitive distortions pertinent to OCD. There are a lot of fundamental differences between the metacognitive model and other cognitive models which leads to significant differences in treatment procedure. First, the metacognitive model states that beliefs about thought processes are fundamental which accounts for negative appraisal of intrusive thoughts.

In the metacognitive model, it is not necessary to change lower order appraisals such as inflated responsibility about harm. Instead, therapy should attempt to modify higher order metacognitive processes such as beliefs about the power and importance of thoughts. Greater therapeutic success can be achieved if these beliefs are explicitly targeted. The second important difference arises in the area of rituals done in response to obsessions. Metacognitive model places emphasis on the internal dysfunctional criteria that OCD patients use to guide their rituals. This aspect has not been focused in other cognitive models as a specific factor that needs to be addressed and modified in treatment. An experimental study by Fisher & Wells found that modifying metacognitive beliefs resulted in significantly greater reductions in anxiety/distress and the urge to neutralize, than brief ERP which is accompanied by a habituation rationale. (Fisher & Wells 2005a)

Metacognitive therapy (MCT) differs from Traditional CBT or ERP by its exclusive focus on metacognitive beliefs about obsessions and compulsions. Unlike other cognitive models and regardless of the content of the obsession, MCT focuses only on metacognitive beliefs and never attempts to modify other belief domains such as intolerance of uncertainty, inflated responsibility, or perfectionism. Indeed, these types of belief are considered to be a product of maladaptive metacognitive beliefs. In contrast to ERP, MCT does not require extensive within session exposure to obsessions and does not utilize habituation strategies. The central aim of MCT for OCD is to enable the patient to develop an adaptive plan for processing obsessional stimuli and appropriate behavior ensues. The first step in MCT for OCD is to create awareness in patients about the role of metacognition in maintenance of obsessive symptoms. The goal is to help patients to move from perceiving their thoughts about their obsessions and compulsions as facts to being able to evaluate their obsessions as merely mental events thereby bringing objectivity into the phenomenon. Patients were helped to experience that if they no longer held metacognitive beliefs regarding obsessions then they would be able to handle their obsessional thoughts as harmless and benign mental events. As a part of the program patients were trained to respond to their obsessions with ‘detached mindfulness’. This strategy aims to increase awareness of the maintaining role of metacognitive beliefs in OCD. (Peter Fisher & Adrian Wells 2008)

**3.3 Traditional Cbt Vs Mindfulness Based Therapies In Anxiety Disorders:**

The above discussed advances in CBT such as Metacognitive therapy, Acceptance and Commitment therapy and Mindfulness based cognitive therapy uses Mindfulness practice as their core domain. Directly comparing Mindfulness Based Therapies and CBT provides an opportunity to investigate different approaches to anxiety-related thoughts and emotions (Joanna Arch et al 2013)

Mindfulness based Therapies	CBT
1, Mindfully observing and accepting thoughts	1, Reappraising and modifying thought content.
2, Mindfulness observing and making space for emotions.	2, Controlling and reducing emotions
3, Encourages moving toward uncomfortable internal experiences by promoting a stance of curiosity, openness and acceptance, and does not utilize formal Behavioural exposure procedures.	3, Uses formalised Behavioural exposure procedures.
4, Focuses more broadly on redirecting participants’ attention toward the present moment and shifting their overarching relationship with thoughts, feelings, and current experience. Thus, MBSR represents a broader set of strategies for dealing with internal	4, Focuses only on treating anxiety disorder Symptoms.

experience that might ultimately impact broader symptom outcomes (beyond anxiety).	
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### References

- [1]. Aaron T. Beck, A. John Rush, Brian F. Shaw, and Gary Emery (1979) *Cognitive therapy of Depression*, 3 – 6, The Guilford Press, New York
- [2]. Aaron T. Beck, (2002) *Cognitive Models of Depression*. In Robert L. Leahy, E.
- [3]. Thomas Dowd (Eds) *Clinical Advances in Cognitive Psychotherapy Theory and Application*, 29-62, New York , Springer publishing company Adam B. Lewin, Monica S. Wu, Joseph F. McGuire, Eric A. Storch (2014)
- [4]. *Cognitive Behavior Therapy for Obsessive-Compulsive and Related Disorders*, Psychiatric clinics of North America, Elsevier
- [5]. Andrew C. Butler, Jason E. Chapman, Evan M. Forman, Aaron T. Beck (2006), *The empirical status of cognitive-behavioral therapy: A review of meta-analyses*, *Clinical Psychology Review*, 26, 17– 31
- [6]. 5, Christopher R. Martell, Sona Dimidjian, Ruth Herman-Dunn (2010)
- [7]. *Behavioural Activation for Depression a Clinician’s Guide*, 4 , The Guilford Press, New York
- [8]. 6, David. H. Barlow, Jack. M Gorman, M. Katherine Shear, Scott. W. Woods
- [9]. (2000) *Cognitive-Behavioral Therapy, Imipramine, or their combination for Panic disorder A Randomized Controlled Trial*, *Journal of American Medical Association*, 283, 2529 – 2536
- [10]. Fisher, P. L., & Wells, A. (2005a). *Experimental modification of beliefs in obsessive–compulsive disorder: A test of the metacognitive model*. *Behaviour Research and Therapy*, 43, 821–829.
- [11]. James D. Herbert and LeeAnn Cardaciotto. (2005) *An Acceptance and Mindfulness-based perspective on Social Anxiety Disorder*, In Susan M. Orsillo and Lizabeth Roemer , eds *Acceptance and Mindfulness-Based Approaches to Anxiety: Conceptualization and Treatment*, 189 – 212 Springer, New York
- [12]. 9, Jasper A. J. Smits, Stefan G. Hofmann, David Rosenfield and Lindsey B. DeBoer, Paul T. Costa, Naomi M. Simon and Conal O’Cleirigh, Alicia E. Meuret, Luana Marques, Michael W. Otto (2013) *D-Cycloserine Augmentation of Cognitive Behavioral Group Therapy of Social Anxiety Disorder: Prognostic and Prescriptive Variables* *Journal of Consulting and Clinical Psychology*, 81, 1100–1112
- [13]. Jean Cottraux (2004) *Recent developments in the research on generalized anxiety disorder*, *Current Opinion in Psychiatry*, 17, 49-52
- [14]. Jill T. Levitt and Maria Karekla. (2005) *Integrating Acceptance and Mindfulness with Cognitive Behavioral Treatment for Panic Disorder*, In Susan M. Orsillo and Lizabeth Roemer, eds *Acceptance and Mindfulness-Based Approaches to Anxiety: Conceptualization and Treatment*, 165-188, Springer, New York
- [15]. Joanna J. Arch, Catherine R. Ayers, Aaron Baker, Erin Almklov, Derek J. Dean, Michelle G. Craske (2013), *Randomized clinical trial of adapted mindfulness-based stress reduction versus group cognitive behavioral therapy for heterogeneous anxiety disorders*, *Behaviour Research and Therapy*, 51, 185-196
- [16]. John D. Teasdale (1999) *Emotional processing, three modes of mind and the prevention of relapse in depression*, *Behaviour Research and Therapy*, 37, S53 - S77
- [17]. 14, John D. Teasdale, Zindel Segal, J. Mark G. Williams (1995) *How does Cognitive therapy prevent depressive relapse and why should attentional control (Mindfulness) training help?* *Behaviour research and Therapy*, 33, 25-39
- [18]. 15, Michelle. G. Craske, Holly Hazlett-Stevens (2002) *Facilitating symptom reduction and behaviour change in GAD: The issue of control*, *Clinical Psychology: Science and Practice*, 9, 69-75
- [19]. Nancy L. Kocovski , Jan E. Fleming, Lance L. Hawley, Veronika Huta, Martin M. Antony (2013), *Mindfulness and acceptance-based group therapy versus traditional cognitive behavioral group therapy for social anxiety disorder: A randomized controlled trial*, *Behaviour Research and Therapy*, 51, 889 – 898
- [20]. Peter L. Fisher, Adrian Wells (2008), *Metacognitive therapy for obsessive compulsive disorder: A case series*, *Journal of Behavior Therapy and Experimental Psychiatry*, 39, 117–132
- [21]. R. Kathryn McHugh, Jasper A. J. Smits, Michael W. Otto (2009) *Empirically Supported Treatments for Panic Disorder*, *Psychiatric Clinics of North America*, 32, 593–610
- [22]. S. Helen Ma and John D. Teasdale (2004) *Mindfulness-Based Cognitive Therapy for Depression: Replication and Exploration of Differential Relapse Prevention Effects*, *Journal of Consulting and Clinical Psychology*, 72, 31–40
- [23]. Sanders, D., & Wills, F. (2005) *Cognitive therapy: An introduction* (2nd Ed.) (pp 3-4) London: Sage Publications Ltd.
- [24]. Stefan G. Hofmann, Alice T. Sawyer, Ashley A. Witt, and Diana Oh (2010) *The Effect of Mindfulness-Based Therapy on Anxiety and Depression: A Meta-Analytic Review*, *Journal of Consulting and Clinical Psychology*, Vol. 78, 169–183
- [25]. Steven C. Hayes, Victoria M. Follette, Marsha M. Linehan (2004), *Mindfulness and Acceptance Expanding the Cognitive-Behavioral Tradition*, 264, The Guilford Press, New York, London.