The current status of research literature relevant to obsessive compulsive disorder (OCD) is reviewed. Models proposing the etiology and maintenance of OCD, empirically established treatments for OCD, and research supporting cognitive approaches to treatment are also included in the review. Until recently, most of the controlled research investigating treatments for OCD has focused on behavioral and pharmacological approaches. The models of Mowrer, Beck, Salkovskis, and Foa and Koza along with established treatments in behavioral therapy and pharmacotherapy are reviewed. Cognitive treatment techniques are discussed. The minimal amount of research investigating the efficacy of cognitive treatments for OCD, compared to the large amount of research investigating behavioral treatments, highlights the need for further research to establish the long-term effects of cognitive therapy. The review concludes with a summary of various treatment issues that future research must address to increase the understanding of the well-established behavioral and pharmacological treatments of OCD, and to further validate the cognitive approach to treatment. Contains 29 references. (Author/EMK)
Comparing Treatment Approaches for Obsessive Compulsive Disorder

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Abstract

This review examines the current status of research literature relevant to obsessive compulsive disorder (OCD). It also includes models proposing the etiology and maintenance of OCD, empirically established treatments for OCD, and research supporting cognitive approaches to treatment. The minimal amount of research investigating the efficacy of cognitive treatments for OCD, compared to the large amount of research investigating behavioral treatments, highlights the need for further research to establish the long-term effects of cognitive therapy. The review concludes with a summary of various treatment issues that future research must address to increase the understanding of the well-established behavioral and pharmacological treatments of OCD, and to further validate the cognitive approach to treatment.
Comparing Treatment Approaches for Obsessive Compulsive Disorder

Until recently, most of the controlled research investigating treatments for obsessive compulsive disorder (OCD) focused on behavioral and pharmacological approaches to treatment. Research supports that behavioral treatment (BT) and pharmacological treatment (PT) have clinically significant effects on OCD symptomatology (Jenike, Greist, & Hollander, 1996). However, some individuals with OCD do not respond to these treatments (Jenike et al., 1996). Recent research suggests that cognitive treatment (CT) may be a third option for effective treatment of OCD (Riggs & Foa, 1993). This review outlines conceptual models of OCD, research that supports the efficacy of behavioral and pharmacological approaches to treatment, and research that suggests that CT may become an empirically validated psychological treatment of OCD.

What is OCD?

Definition

According to Rasmussen and Eisen (1991), intrusive, unwanted, and uncontrollable cognitive phenomena in the form of thoughts, images, impulses, or urges characterize OCD. These thoughts, images, impulses, or urges form a complex clinical syndrome with severe and chronic symptoms that wax and wane (American Psychiatric Association (APA), 1994). James & Blackburn (1995) found that the mean age of onset for OCD is 20. Epidemiological data estimate the lifetime prevalence rate of OCD to be between 1.9 and 3.0 percent (Stanley & Turner, 1995).

Steketee (1994) proposes that one way to identify OCD is by the compulsive behavior that the individual utilizes to reduce their particular obsession. Individuals with OCD often have more than one type of compulsion; however, some have none at all (APA, 1994). Typical compulsive rituals include: (a) checking behaviors to prevent catastrophes such as burglary, fire, harming
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others, and social embarrassment; (b) washing and cleaning behaviors to remove and restore safety from germs, chemicals, and others sources of contamination; (c) repetitive actions to prevent imagined catastrophes; (d) ordering or arranging objects to reduce unpleasant feelings; and (e) saving or collecting objects for a perceived future need (APA, 1994).

Models

Many theorists propose models that explain the nature of OCD (Riggs & Foa, 1993). Each proposal adds to the understanding of OCD, however, no one model is able to fully explain its etiology and maintenance. One such model is Mowrer's (1960) two-stage theory which outlines the development and maintenance of the fear and avoidance associated with the general anxiety disorders. This theory contends that neutral objects or thoughts come to ilicit fear or anxiety by being paired with a traumatic stimulus that provokes discomfort. Thus, through a conditioning process, the neutral objects become associated with fear or anxiety. A reduction in negative feelings negatively reinforces escape and avoidance of these objects. When an individual is unable to avoid the focus of their obsession, they develop compulsions to reduce their negative feelings.

Mowrer's model accounts for the maintenance of OCD symptoms, but like many others, fails to account for the etiology of OCD (Steketee, 1994). Other theorists propose additions to Mowrer's model in an attempt to explain the etiology of OCD. For example, Foa and Kozak (1986) assert that individuals were often unable to recall specific events that led to the development of their disorder. Therefore, the etiology may involve other avenues of acquisition, such as observation or informational learning. Research supports that the onset of OCD usually follows stressful life events, however, rarely does it follow immediately as Mowrer's theory proposes (Steketee, 1994). Therefore, these stressful events may serve to sensitize the individual to cues that have a high
probability of eliciting fear.

A second model of OCD by Beck (1976) characterizes the obsessions of OCD, as doubts surrounding actions individuals believe they should or should not have taken. Consequently, compulsions are attempts to decrease these excessive doubts. According to Beck (1976), the anxiety arises from the consequences of thinking a particular thought, rather than from the particular thought itself.

Another model of OCD by Salkovskis (1985) proposes that obsessions stem from normal intrusive thoughts which individuals perceive as potentially harmful, and then assume responsibility for causing this potential harm. This perception leads to an increase in anxiety (which the individual neutralizes with various compulsive rituals.)

In a similar vein, Foa and Kozak (1986) contend that OCD is a specific impairment in affective memory networks. Overestimates of threat, a high negative valence for threatening events, and excessive responses to perceived threats characterize this memory impairment.

Steketee (1994) views the above cognitive models of OCD, which Beck, Salkovskis, and Foa and Kozak propose, as evidence for assessments and interventions that address individuals': (a) attitudes and beliefs that are associated with traits such as perfectionism, responsibility, and risk; (b) judgements about intruding thoughts, images, or impulses; and (c) efforts at suppression. All three of these suggestions involve cognitive components underlying OCD, which can be the targets of CT.

Established Treatments

Twenty-five years ago, individuals diagnosed with OCD had little or no hope for treatment. In 1966, this hopeless prognosis brightened with the introduction of BTs and the selective serotonin
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reuptake inhibitors (SSRIs), specifically clomipramine (Greist, 1992). These two major advances are now regarded as efficacious treatments for OCD, and are supported by robust empirical evidence (Stanley and Turner, 1995). Most BTs consist of exposure and response prevention, and PTs usually include the SSRIs.

Behavioral Therapy

The first breakthrough in the treatment of OCD began with the work of Meyer and colleagues who introduced BTs in 1966 (Meyer, 1966). Foa, Steketee, & Ozarow (1985) overviewed outcome studies and found that 51% of individuals were virtually symptom-free or much improved following exposure and response prevention treatment. In addition, another 39% were at least moderately improved by this treatment. More recent reports of outcome studies revealed similar results, with approximately 80% of individuals being classified as improved following treatment (Stanley & Turner, 1995).

Pharmacotherapy

The majority of PTs utilize various SSRIs because they have a preferential effect on the symptoms, and the proposed underlying serotenergic mechanisms of this disorder (Stanley & Turner, 1995). Of the SSRIs, evidence supports clomipramine as the most potent pharmacological agent in the treatment of OCD (Greist, Jefferson, Kobak, Katzelnick, & Serlin, 1995).

Despite evidence that medication provides a 50-79% short-term reduction of both obsessive-compulsive symptoms and secondary symptoms such as anxiety and depression, there is little evidence to support the long-term efficacy of pharmacotherapy (Marks & O'Sullivan, 1988). Further, studies that examine the effects of SSRIs in comparison to, or in combination with BT, report no advantage of drugs over BT, and minimal additive effects (Steketee, 1994). Due to these
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results, research suggests that SSRIs be reserved for individuals unable to tolerate treatment with exposure and response prevention. In addition, if PT is used, individuals need to remain on medication for several months following BT, stopping medication in a slow manner.

Currently, the two most widely accepted treatments for OCD are clomipramine and behavioral techniques such as modeling and exposure and response prevention (James and Blackburn, 1995). Exposure and response prevention has a relatively good long-term outcome ranging from two years (Kasviskis & Marks, 1988) to three and a half years follow-up (Visser, Hoekstra & Emmelkamp, 1991). However, approximately 25% of individuals with OCD refuse behavior therapy (Greist, 1992), and some 10% fail to benefit from treatment (Foa et al, 1985).

According to Foa, Steketee, Grayson, and Doppelt (1983), the presence of either severe depression or over-valued ideation predicts poor prognosis with behavioral techniques. Likewise, posttreatment evaluations indicate that approximately 30 to 40% of individuals respond to clomipramine, but the majority of individuals experience relatively rapid relapse when medication is discontinued (Stanley and Turner, 1995). Due to the high relapse rate of individuals receiving PT, along with those that refuse BT or fail to respond to it, there is a clear need for a third effective treatment alternative.

Cognitive Treatment

McFall & Wollersheim (1979) suggested that treatment of OCD must consider the role of cognitive factors given that most obsessive-compulsive behavior is evoked by thoughts. Early research with CTs using self-instructional training and rational emotive therapy alone or in combination with BT, failed to provide promise for cognitive approaches as an effective treatment approach (Emmelkamp, van der Helm, van Zanten, & Plochg, 1980). However, in recent years, a substantial number of studies demonstrated the effectiveness of CTs for the general anxiety
disorders (van Oppen, Haan, Balkom, Spinhoven, Hoogduin, and Dyck, 1995). These studies may be the prelude to a wave of research demonstrating the effectiveness of CT with OCD.

Salkovskis and Warwick (1985) also proposed that CT could be effective for those who fail to respond to behavioral techniques. In their research, they utilized Beck's (1976) treatment model, which corrects dysfunctional beliefs and underlying schema, as a precursor to BT. Results from their case study provided evidence that CT may be effective for OCD with individuals who suffer from depression and over-valued ideations. However, it must be noted that the individual in this case study had received BT before the introduction of CT, which complicated drawing any empirically sound conclusions.

### Techniques of Cognitive Treatment

James and Blackburn (1995) outlined three cognitive techniques used in the treatment of OCD. These techniques include: (a) challenging obsessional thoughts, (b) thought stopping, and (c) challenging negative automatic thoughts. Challenging obsessional thoughts and thought stopping focus on the obsessional thoughts directly whereas, challenging negative automatic thoughts focuses on the negative automatic thoughts associated with the obsessional thoughts.

According to James and Blackburn (1995), the first technique, challenging obsessional thoughts, commonly involves either self-instructional training or rational emotive therapy. Self-instructional training teaches individuals to determine their level of anxiety, observe and record their obsessional thoughts, and then replace their thoughts with productive self-statements (Meichenbaum, 1975). Rational emotive therapy challenges the beliefs in obsessional thoughts through rational disputations (Ellis, 1962).

The second technique, thought stopping, consists of interrupting obsessional thought...
processes by using cue words. Individuals interrupt their obsessional thought processes after a rumination is triggered by using cue words such as "Stop!" then imagining pleasant thoughts (James and Blackburn, 1995).

A third cognitive technique, challenging negative automatic thoughts, involves confronting the negative automatic thoughts rather than the obsessional thoughts (Salkovskis & Warwick, 1985). This technique utilizes Beckian principles to challenge the negative automatic thoughts, which stem from the obsessional thoughts.

Research and CT

From the current authors' review, there are few research studies that examine the efficacy of CT with obsessive-compulsives, as compared to the many studies that examine and subsequently establish the efficacy of exposure and response prevention. The Emmelkamp et al. (1980) study was the first controlled attempt to investigate whether modifying cognitions via self-instructional training would enhance the effectiveness of exposure and response prevention.

In this study, eight subjects received exposure and response prevention, and the other seven subjects received a CT condition, which consisted of exposure and response prevention plus self-instructional training. In this particular CT condition, participants were trained to become conscious of their negative self-statements, and then to substitute positive coping self-statements for their anxiety-provoking self-statements. Assessments of anxiety, depression and obsessional characteristics were done before and after the treatments and at follow-ups one and six months later.

Results of the Emmelkamp et al. (1980) study failed to provide evidence that self-instructional training enhances the effectiveness of exposure and response prevention. However, Kendall (1983) questioned whether self-instructional training was the most appropriate cognitive
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technique to treat obsessive-compulsive individuals who already engaged in excessive self-talk, rumination, and doubting. McFall and Wollersheim (1979) suggested that cognitive approaches, which aimed at the irrational beliefs, might be more effective.

Emmelkamp, Visser, and Hoekstra (1988) conducted a second controlled study. This study compared rational emotive therapy and exposure and response prevention. The rational emotive therapy condition involved training participants to record and then rationally dispute their irrational beliefs. Behavioral experiments were not included in the rational emotive therapy group. Results demonstrated that rational emotive therapy was as effective as exposure and response prevention on obsessive compulsive symptoms and social anxiety. This suggests that changes in irrational beliefs may partly account for the improvements on compulsive targets. Further, results suggested that rational emotive therapy was more effective than exposure and response prevention at reducing depression. However, this study fails to reveal that rational emotive therapy improves overall treatment efficacy. This is the first controlled study to demonstrate that CT has clinically beneficial effects on OCD. Despite these results, James and Blackburn (1995) criticized this study because its participants were primarily young, well-educated, and non-chronic cases.

Emmelkamp and Beens (1991) conducted the third controlled study of CT and OCD. This study investigated whether rational emotive therapy was as effective as exposure and response prevention, and whether a combined package of rational emotive therapy followed by exposure and response prevention enhanced the effects of exposure and response prevention. In addition, this study utilized a more general pool of participants than the participants in the Emmelkamp et al. (1988) study did. The participants were less educated and their symptoms were more severe, most of them having had previous treatment for OCD. Based on previous studies, which indicated that
exposure and response prevention may be carried out by the individual him/herself, this study utilized exposure that was self-controlled. The elements of rational emotive therapy consisted of determining the irrational thoughts that mediated negative feelings, and then modifying these thoughts so that discomfort dissipated. The reasoning behind this procedure was that once the negative feelings were reduced, compulsions would no longer be needed. Ten subjects were placed in the rational emotive therapy condition, and eleven in the exposure and response prevention condition.

As in 1988, the Emmelkamp and Beens (1991) study found that rational emotive therapy was as effective as exposure and response prevention. Results also revealed that adding rational emotive therapy to exposure and response prevention did not improve treatment efficacy.

Recently, van Oppen et al., (1995) conducted the first controlled study that evaluated the effects of CT from the along the lines of Beck (1976) and Salkovskis (1985), a type of CT specifically developed for OCD (van Oppen & Arntz, 1994). Prior to this study, only one single case study (Salkovskis & Warwick, 1985) had investigated CT from the standpoint of Beck and Salkovskis. In contrast to this study, the three controlled studies prior to this one evaluated CT along the lines of Ellis (1962) and Meichenbaum (1975).

In the van Oppen et al. (1995) study, the effects of CT were compared with those of self-controlled exposure and response prevention on obsessive compulsive targets and on more generalized measures of associated psychopathology. The study involved 71 participants who were randomly assigned to either CT or treatment with exposure and response prevention. The CT condition focused on modifying overestimation of danger and responsibility.

Results of the van Oppen et al. (1995) study revealed that CT and exposure and response
prevention both led to statistically, as well as clinically, significant improvement in individuals with OCD. Multivariate significant differences between the two conditions suggested a superior efficacy of CT in comparison to exposure and response prevention on measures of obsessive compulsive targets and associated psychopathology, but these same results failed to stand up in a separate univariate analysis. However, results indicated that significantly more patients "recovered" in the CT group. These results supported CT along the lines of Beck and Salkovskis as an effective treatment for OCD. Differences in effect size and in percentage of recovered participants suggested that CT might be even more effective than treatment with exposure and response prevention.

Despite the impressive results of the van Oppen et al. (1995) study, James and Blackburn (1995) reported in their overview of 15 studies investigating CT and OCD, that only five were controlled studies and eleven were single case studies. Likewise, prior to van Oppen et al. (1995), only three controlled studies, which were not case studies, had investigated the effectiveness of CT with OCD. Therefore, the true value of CT for OCD is still largely under investigated, as most of the few studies to date fail to provide conclusive answers due to inadequate control in design and methodology.

The more controlled studies, which investigate the efficacy of CTs with OCD, provide important first steps in the direction of empirically sound research. However, James and Blackburn (1995) criticized these studies for their application of very specific techniques that were not conducive to drawing conclusions regarding the effectiveness of CTs in general. Hopefully, the future will include better-designed studies that allow more general, empirically sound conclusions to be drawn regarding the usefulness of CTs.

The Future Outlook
Despite the milestone achievements in the treatment of OCD over the past 25 years, future research needs to address several issues to improve the treatment of this chronic disorder. The long-term effects of exposure and response prevention are well established (Steketee, 1994), whereas further studies are needed to establish the long-term effects of CTs with OCD (Emmelkamp & Beens, 1991). Further, research needs to identify the thoughts, beliefs, and assumptions underlying obsessive fears that constitute appropriate targets for CTs, and to determine whether these cognitions change during treatment with exposure and response prevention without deliberate cognitive interventions (Steketee, 1994).

Even though behavioral and pharmacological approaches are accepted as efficacious treatments for OCD (Stanley & Turner, 1995), additional research with these two treatments is needed as well as research with CTs. Research needs to discover the impact of procedural variations in BTs with regard to outcome, maintenance, and therapist time. In addition, investigation into different strategies of withdrawing medication to circumvent relapse would enhance the feasibility of PT. Research also needs to investigate the effects of comorbid conditions such as panic disorder, on treatment response to CT, BT, and PT, as well as the additive or synergistic benefits of adding or combining interventions with specific comorbid conditions. Future advancements in these two psychological treatments, may discover ways to circumvent relapse and improve the long-term efficacy of pharmacotherapies.
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References


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