Social Phobia (SP), also known as social anxiety disorder (SAD), is a widespread, impairing anxiety disorder. According to some accounts, SP is the fourth most common psychiatric disorder (1), with estimated lifetime prevalence rates of 7–13% in Western countries (2). The DSM-IV-TR (3) distinguishes between generalized (GSP) and non-generalized or specific (SSP) subtypes. GSP is characterized by fear of multiple social situations, whereas SSPs fears are circumscribed to a small number of situations. SP usually starts in childhood or adolescence and is typically comorbid with other Axis-I disorders, particularly anxiety and mood disorders (4). In the absence of treatment, SP is a chronic, lifelong condition with little spontaneous remission (5) which results in substantial impairment in social, educational, and employment functioning. Individuals suffering from SP rate their quality of life as low (6), report feelings of loneliness and suicidal ideation (7), and are at greater risk for suicide attempts (8). These clinical correlates of SP make the disorder severe and impairing.

CBT Model: Maintenance Factors in SP

Several cognitive-behavioral models of SP have been developed in recent years to explain the maintenance of SP (8–10). These models attempt to explain how SP persists despite repeated exposures to interpersonal interactions. As these models contain many similar features, we present an integrated account.

SP is maintained by virtue of two core beliefs: the malevolence of others and in the deficiency of the self and several processes that prevent these beliefs from being challenged. The malevolence assumption states that other people are critical, dominant, competitive, and adhere to high standards. The deficiency assumption holds that one is deficient in terms of personal qualities and abilities, and thus unable to meet strict standards. Combined, those beliefs result in the conjecture that social situations are inherently threatening, and that unless one makes a good impression, one’s social destiny is jeopardized. The perception of any social situation as involving an evaluation, combined with the malevolence assumption, generates anxiety, which leads to physical, behavioral and...
cognitive manifestations. Several processes inhibit the updating of these beliefs: (a) selective attention to one's anxiety symptoms when in social situations; (b) selective attention to evaluative, threatening, or critical cues from others, and negative interpretation of ambiguous cues; (c) enhanced elaboration of one's mental representation in the eyes of others; (d) the use of safety behaviors during stressful social situations; (e) engagement in negative post-event-processing. First, when individuals suffering from SP encounter social situations, their attention tends to focus on how they are coming across to others, rather than on the situation at hand. This self-focused attention prevents them from seeing potentially positive information that would serve to disconfirm their beliefs. The self-focused attention also contributes to focusing on symptoms of anxiety, which, in turn, are taken to support the belief that one is weak or strange, thus enhancing the belief in self's deficiency.

Second, individuals with SP tend to view interpersonal situations as inherently hierarchical or competitive (11), focus on the signs of disapproval from others (12) and interpret ambiguous cues as negative. Since most interpersonal situations are complex and ambiguous, this results in negative perceptions of others and of the self. In addition, updating of negative beliefs due to corrective information is also impaired if negative events receive much focus and ambiguous events are perceived as negative.

Third, selective elaboration of one's image in the eyes of others leads to the consolidation of a negative and distorted representation of the self which may be enhanced by selective attention to internal and external cues. Individuals with SP compare their negative self-representation to their appraisal of others' standards. The combination of perceiving others as critical and perceiving the self as lacking generates anxiety regarding any situation in which others may evaluate and criticize the individual. This tendency to focus on the hierarchical side of the human relationships may inhibit the ability to attend to cues of affiliation (see 11 for a more complete exposition of this point of view).

Fourth, individuals with SP typically engage in safety behaviors when in stressful social situations. Safety behaviors are aimed to reduce anxiety or the perceived probability of negative evaluation by others (9) and may take many forms (e.g., shortening speech, lowering gaze). These behaviors maintain social anxiety because patients often credit safety behaviors for their success but blame themselves for failure. This results in enhancing the negative view of the self. Safety behaviors also have the unintended effect of making one appear socially awkward and thus increase the likelihood of negative reactions from others, and thus the perception of one's self as socially incompetent.

Fifth, individuals with SP engage in post-event-processing following stressful social events. Post-event-processing refers to the tendency to mentally review the social event many times while focusing mainly on negative aspects. Thus, even if an event contained positive aspects, engaging in post-event-processing will lead to a focus on the negative aspects, which in turn lead to consolidation of negative beliefs about the self and the world.

**CBT for Social Phobia**

Randomized controlled trials have repeatedly demonstrated that SP can be successfully treated with either pharmacotherapy or CBT (13, 14). Recently (15) 30 psychological interventions for SP were examined and the authors concluded that CBT was the psychological intervention of choice. One of the most widely studied variants of CBT – group CBT (CBGT) – has received robust empirical support (8). There are also data regarding the benefit of CBT in children and adolescents with SP (16). Effect sizes (ES) for CBT are typically large, ranging from 0.7–1.1 (14), and one recent study has reported an ES of 2.6 (17). Overall, CBT results in maintenance of gains or modest further improvements at 1-year follow-up (18).

In this review, we use the term CBT as a generic term, including a number of different techniques that are employed in various combinations. Cognitive-behavioral interventions for SP frequently involve several components such as psychological education, exposure to social situations, cognitive restructuring, and social skills (8). The treatments are time limited, typically involving between 12 and 18 weekly sessions. The two main procedures that constitute the core of all treatments for SP are:
(a) helping patients enter social situations that are feared or avoided, (b) helping patients re-examine thinking patterns and correct faulty cognitions. CBGT has been a popular treatment for SP as group format provides patients with the opportunity to engage in various social interactions and get feedback from others in a safe environment. We now turn to a brief description of the elements of CBT for SP which can be found in the majority of treatments.

**Psychoeducation**

The aim of psychoeducation is to provide basic knowledge regarding the clinical picture and prevalence of SP, and communicate the treatment rationale to the patients. Exposure and cognitive restructuring are presented and their relevance to the treatment of SP is explained. Exposure is described as providing the person with the opportunity to: (a) experience the natural reduction in anxiety, (b) test dysfunctional beliefs, and seek new, more realistic ones, and (c) practice social skills that have been avoided, such as small talk (19).

Cognitive restructuring is described as helping the patients treat their thoughts as hypotheses that require testing rather than as self-evident truths. Patients are encouraged to explore more helpful and realistic ways to view themselves and the world which reduces anxiety during stressful situations (19). During stressful situations, cognitive restructuring can free resources that have been devoted to negative dysfunctional thoughts and thus help to focus on the task at hand (19).

**Exposure**

Exposure, in which a patient enters and remains in a feared situation despite distress, is a key ingredient of most CBT treatments for anxiety. Exposure is partially based on the assumption that the patient needs to fully experience the feared situation in order for a change in affective and behavioral symptoms to occur (20). Exposure typically begins with creation of a fear and avoidance hierarchy. In such a hierarchy, a patient lists situations that are typically avoided and that elicit anxiety if they are experienced. The hierarchy begins with situations that elicit slight anxiety and gradually moves on to situations that elicit more severe anxiety. During exposure, the patient is encouraged to remain in the feared situation, to allow learning – change in the fear structure – to occur. Exposures are typically performed both in and out of session (8).

The use of safety behaviors interferes with successful exposure. These behaviors prevent the modification of negative beliefs, because the patient never considers the feared consequence as likely to occur so long as he uses the safety behaviors. Thus anxiety during exposure is reduced and exposure becomes less effective. Indeed, there is evidence that halting safety behaviors enhances the efficacy of exposure (21). During treatment, patients are taught to identify their safety behaviors and gradually to drop them.

**Training the Focus of Attention**

Individuals with SP often focus attention inwardly, attending to physiological symptoms of anxiety or their own experiences, rather than the situation (12). As stated earlier, this focus of attention maintains anxiety symptoms. In treatment, individuals practice focusing attention on external, rather than internal, stimuli during social interactions. It is believed that such deployment of attention increases the efficacy of exposures.

**Cognitive Restructuring (CR)**

CR consists of identifying and questioning automatic thoughts, which may then be modified to more helpful and realistic cognitions. Automatic thoughts are defined as habitual and rapid cognitions that, when negative, produce distress (8). The therapist models questioning of automatic thoughts, and helps identify cognitive distortions. The patient then practices identifying and disputing such thoughts whenever an emotionally laden social situation arises. In this framework, exposure is viewed as an opportunity to challenge automatic thoughts and beliefs rather than simply a process of habituation. Using CR, patients learn to treat their anxiety provoking thoughts as hypotheses and to explore more helpful ways of viewing the situation and themselves. In addition, CR may help patients to take credits for success and cope with
disappointment. Finally, when the evaluation of the situation becomes more realistic physiological symptoms diminish as well (19).

Social Skills (SS) Training

SS training involves coaching individuals to engage in social interactions in a fluent, competent way. The training includes teaching and practicing SS by modeling behavioral rehearsal, corrective feedback, and positive reinforcement (22). Some studies found that individuals with SP have impaired SS (12) whereas others did not (23). It is possible that patients with SP possess adequate SS but fail to enact them due to anxiety or negative beliefs about the behaviors, while other actually lack these skills. Although there are good reasons to believe that SS training may be helpful, at least for some patients, evidence regarding SS in SP remains controversial. However, many treatments incorporate SS as an integral part of the intervention (10).

Individual CBT vs. CBGT

Many CBT programs use a group format (typically 4–8 members), and it has often been suggested that CBGT may be particularly helpful for SP. However, no significant difference was found between group and individual formats in several meta-analyses (14). It is important to note that one recent study found a negative correlation between number of participants in a group and outcome of SP at the end of therapy (24). Moreover, recent data suggest that individual (based on the model of 17) may be superior to group treatment (25, 26).

CBT and Pharmacotherapy

The relative efficacy of CBT and pharmacological treatments for SP has important implications for providing patients with best treatments, although only a few studies have directly compared the efficacy of these treatments. Comparison of drug treatments and CBT for SP suggests that drugs can have faster effects. However, some studies have found that relapse rates are higher for the pharmacological treatments than for psychological treatments (27). In a meta-analysis, selective serotonin reuptake had an ES of 1.5, and CBT had an ES of 1.8 on clinician-rated scales (14). Since both medication and CBT appear to improve SP, it appears interesting to test the efficacy of combining these treatments. At present, though, there is no evidence to suggest that combined pharmacological and CBT is more effective than single modality treatment (28). Treatment guidelines often suggest that either pharmacotherapy or CBT are acceptable first-line interventions for SP (29).

Future Directions

In spite of its ample empirical support and widespread use, an important limitation of existing treatments is that a substantial proportion of patients continue to experience significant distress at the end of a well-conducted course of therapy (28). Future research should focus on enhancing understanding of principal treatment mechanisms. Several directions appear promising: First, the emergence of more effective treatments (e.g., 17) may suggest further venues for improvement of existing therapies. Second, recent studies found that the administration of D-cycloserine before exposure enhances treatment outcome in SP possibly by speeding fear extinction (30). Third, virtual reality therapy is emerging as a promising tool to carry out exposure treatment for SP (31). Finally, more research is needed to establish the efficacy of CBT in naturalistic settings (e.g., 18).

Since SP begins in childhood, early detection of the disorder and appropriate treatments should be further advanced for children and adolescents to prevent the detrimental effect of SP. In light of the high prevalence of SP and low identification rate (32), enhanced detection and public awareness of treatment availability is recommended. Finally, more sophisticated models of SP’s etiology may enhance the construction of treatment models and improve the understanding of the factors that maintain treatment gains.

References