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# Childhood Anxiety Disorders and the Cognitive-Behavioral Approach

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Due to its prevalence and its pervasive effects on social functioning, childhood anxiety disorder treatment research has been gaining importance in the past decade. The disorder is characterized by intense anxiety and fear manifested in either cognitive distortions or somatic symptoms and is seen as a quantitative difference between the worrying beyond normal childhood fears and anxiety. According to Weems, *et al.*, the number of worrisome thoughts and the content of worries in children with clinical levels of anxiety are “remarkably similar” to those of a sample of normative children; health, school, disasters, and personal harm are the most common causes of anxiety. The difference, however, is in the intensity and persistence of their concerns, and its subsequent impairment on the child’s functioning. Because generalized anxiety has deleterious effects on social relations and can lead to school refusal, the child’s academic and social deficits can have lifelong effects.

Proper attention has traditionally not been paid to the efficacy of various treatments. Estimations for prevalence of childhood anxiety disorders in the population ranges from 1% to 21% (Flannery-Schroeder & Kendall, 2000). Child anxiety disorders were formerly believed to be less prevalent at the clinical level of impairment. Furthermore, they were believed to be unrelated to adulthood anxiety disorders and therefore were capable of being outgrown. However, the relation between childhood anxiety disorders and adult impairment is now widely accepted; for example, 54% of adults with a panic disorder had an anxiety disorder as a child (Pollock, *et al.*, 1996, as cited in Wenar & Kerig, 2000). In a study of 734 non-referred children with varying levels of anxiety, it was found that increased severity of the anxiety was correlated with increased persistence of the disorder (Bernstein & Kinlan, 1997), such that clinical-level anxiety disorders have a poor prognosis without treatment. Treatments emphasize cognitive-behavioral techniques. Whereas some treatments (including analytic or insight-oriented psychotherapies) have

not been empirically validated, cognitive-behavioral interventions have been shown to have long-term significant effects. In one study of anxiety manifested in school refusal, 85% of those treated with behavior therapy techniques were attending school regularly, compared to 31% of those hospitalized, and 0% of those receiving psychotherapy and home-schooling (Bernstein & Kinlan, 1997).

However, treatment of childhood anxiety disorders has suffered due to research with poor experimental methodology. In “Methodological Issues in Treatment Research for Anxiety Disorders in Youth,” Kendall and Flannery-Schroeder list over ten experimental design problems in the treatment evaluation research for childhood anxiety including the need for a manualization of treatment, ethnic diversity, a leveling in duration of treatment, the isolation of controls, and the purification of assessment techniques (Kendall & Flannery-Schroeder, 1998). Differing manifest symptomology throughout development as well as a high rate of comorbidity has added to the difficulty in study and problems with the generalizability of treatment results. (Wenar & Kerig (2000) reports the proportion of children with multiple diagnoses to be between 65 to 95 percent.) In addition, at least one third of children with anxiety disorders have more than one of the following types: separation anxiety disorder, generalized anxiety disorder, social phobia, and panic disorder (Bernstein & Kinlan, 1997).

The complexities in diagnosis beyond the frequent comorbidity must also be noted. The problem of children’s inability to accurately express subjective distress affects the diagnosis and accounts for an underdiagnosis of anxiety as an underlying cause of both internalizing and externalizing behaviors (Reiter, *et al.*, 1992). Therefore, a number of measuring devices are used to measure anxiety through children’s self-reporting, parental reports, teacher ratings, therapist interviews, and somatic signs, often in conjunction with each other. One problem with self-

report measures is that an inherent feature of a childhood anxiety disorder is an extreme desire to present him or herself in a socially desirable and acceptable way and attempt to please the experimenter (Kendall & Flannery-Schroeder, 1998). In addition, “parents often underreport the severity and prevalence of their children’s anxiety symptoms—both transitory subclinical anxiety symptomology and for anxiety disturbance at the syndromal level” (Reiter *et al.*, 1992). Also, any outside observer, including teachers, parents, or therapists, is unable to truly observe the child’s internal states and his or her perception of impairment and distress. For this reason, using a number of diagnostic tools in order to get diverse subjective views of the impairment is beneficial.

Because the cognitive-behavioral approach is usually only a part of a multimodal treatment strategy, the following is a quick summary of the family system, psychopharmacological, and psychodynamic perspectives. The family approach is important given the frequency of multiple family members with anxiety disorders. Studies correlating anxiety disorder in children and their first-degree relatives provide evidence of a genetic basis for this condition, but they also call into question the contribution of family dynamics in causing or promoting children’s anxiety.

There is evidence that parental overprotectiveness and maladaptive support “contributes to the maintenance of anxiety” (Wenar & Kerig, 2000). An untreated anxious parent decreases the child’s chances of overcoming his or her anxiety, and parents of children with anxiety disorders may perpetuate the disorder unknowingly. Family-based cognitive-behavioral treatment such as the intervention of Howard & Kendall (1996) combines the family therapy technique of observation of family dynamics, encouragement of family-based problem solving, and family participation in the intervention with the cognitive-behavioral strategies.

Psychopharmacological interventions include using tricyclic antidepressants, SSRIs, or benzodiazepines to treat anxiety. There is no clear chemical description of anxiety’s neurochemical basis. However, “some pharmacological agents which affect these neurotransmitter systems have demonstrated efficacy in treating anxiety disorders in adults” (Reiter, *et al.*, 1992), so different psychopharmacologic agents are still being

researched and tested for their effectiveness in children. Benzodiazepines are the most commonly prescribed medication to children (Reiter *et al.*, 1992), but are generally used only in short-term interventions in children because of their predisposition to tolerance and dependence; for example, they may be used to reduce anxiety related to a medical procedure (Bernstein & Kinlan, 1997).

Lastly, the psychodynamic perspective maintains that themes of separation, autonomy, self-esteem, and age-appropriate behavior are very important for children with anxiety disorders (Bernstein & Kinlan, 1997). Parents can be included in psychodynamic interventions to educate them in their own anxiety-producing effects on their children, as well as the importance of fostering the child’s independence.

The cognitive-behavioral approach is based on the conceptualization of anxiety as a manifestation of dysfunctional cognitions and misinterpretation and catastrophication of somatic anxiety symptoms. Chorpita *et al.* (1996, cited in Bogels & Zigterman, 2000) studied the threat bias of normal children in interpreting “what is happening” in story scripts, and found that their dispositional ratings of anxiety were correlated with their interpretation of ambiguous situations as “threatening.” Bogels and Zigterman found in closed questioning-type interviews that children with clinical anxiety disorders rate situations as more dangerous and themselves as less “influential,” thus underestimating their ability to cope with the threatening situation. In order to combat these self-defeating cognitions, numerous strategies are used.

The basic goals of cognitive-behavioral interventions are some variation of the following: recognition of anxiety in thoughts and feelings, recognition and correction of anxious self-talk, the institution of a coping strategy, and evaluation and reward based on contingency (Flannery-Schroeder & Kendall, 2000). Acronyms can be used to make these steps easier for the children to remember. For example, Kendall and Southam-Gerow (1996) teach children the FEAR plan—Feeling frightened, Expecting bad things to happen, Actions and Attitudes to take, Results and Rewards. Cognitive-behavioral techniques taught during interventions include learning to recognize anxious feelings and somatic reactions,

self-talk, modeling of coping strategies, problem solving skills, role playing, relaxation training, contingent reinforcement, *in vivo* exposures, and homework.

While the efficacy of these techniques has been empirically supported, the differential prescription of contingency plans based on the content of the disorder has also been studied. For example, Eisen and Silverman (1998) compared cognitive and somatic response class treatments for kids with generalized anxiety disorder whose main complaint was either worry or somatic complaints. It was found that specifically pairing kids who primarily worry excessively with a plan designed to modify thoughts (through cognitive therapy and self-control training against cognitive distortion) and pairing children with primarily somatic complaints with relaxation training was the most effective. Studies such as these show that cognitive-behavioral interventions must be paired with effective contingency plans, based on thoughtful and specific diagnoses.

Individual and group cognitive-behavioral treatment has also been studied in its long-term differential effects on childhood anxiety disorders. Flannery-Schroeder & Kendall (2000) studied the difference between individual and group cognitive therapy patients compared to waiting-list patients. Whereas only 4% of the waiting list patients did not meet the criteria for a generalized anxiety disorder after the eighteen week intervention, 44% of children in the individual cognitive-behavioral therapy and 46% in group cognitive-behavioral therapy no longer fit the anxiety diagnostic criteria after the intervention. At the three-month follow-up, 79% of the children who had been treated individually and 53% of the group therapy children were no longer within the criteria of their primary-rated anxiety disorder. However, there were no significant differences between the groups at the last follow-up aside from the individual group children were "better at recalling what they learned during treatment." Kendall (1982) in his one-year follow-up study of cognitive-behavioral treatment found children treated in individual therapy are more likely to remember what they learned and use it than those treated in group therapy. Other studies have shown that the gains in treatment are able to persist beyond the 3 or 6 months of typical follow-up. Kendall and Southam-Gerow

(1996) conducted a two- to five- year follow-up of cognitive-behavioral treatment, averaging 3.35 years, resulting in a general maintenance of the effects documented directly after treatment. Because it would be unethical to keep children on a waiting list for this amount of time, it was impossible to compare these gains to an untreated control. However, because the base rate for anxiety disorders should increase with age and children with anxiety disorders often have anxiety disorders as adults, it can be inferred that the maintenance of positive treatment gains over time was the result of the treatment rather than just maturation.

The social functioning of children is also a problem to be addressed by cognitive-behavioral interventions. Strauss, Frame, and Forehand (cited in Ginsburg, *et al.*, 1998) found "children in the second through fifth grades who were rated by their teachers as highly anxious were less liked and more actively disliked by their classmates than were their nonanxious counterparts." Ginsburg, *et al.* reported that higher levels of generalized anxiety was correlated with more significant impairments in social functioning. These two studies suggest that there is a cycle of hypersensitive anxiety (and therefore perception of rejection) and maladaptive social behavior. In addition, Flannery-Schroeder & Kendall (2000) found no gains in social functioning in either individual or group treatment when social skills are not focused on specifically. However, Kendall and Southam-Gerow (1996) found that 94% of participants reported an increase in self-confidence (with the other 6% remaining stable) with their relationship with their therapist as their most important aspect of treatment. This should be another dimension on which to judge whether the patient would benefit more from group or individual cognitive-behavioral therapy.

In conclusion, the research shows that while a multimodal approach including cognitive-behavioral techniques is the most effective treatment of childhood anxiety disorders, individual differences affect the suitability of the strategy. The primary complaint (somatic or cognitive), need for social skills, and the need for personal attention from the therapist all need to be taken into account when choosing the contingency programs for the childhood anxiety disorder treatment.

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