

# CBT Can Yield Lasting Improvements in Anxiety

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HONOLULU — Anxious children who participated in a 9-week course of cognitive-behavioral therapy maintained improvements for at least 4 years, especially if their parents also received training, according to a randomized, placebo-controlled trial.

This is the longest follow-up study of cognitive-behavioral therapy (CBT) for anxious children in which comparison with a control group was possible, wrote Dr. Gail A. Bernstein of the University of Minnesota, Minneapolis. Dr. Bernstein was the lead author of the study, which was presented during a poster session at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

The study involved 61 children, aged 7-11 years, all of whom had features of separation anxiety disorder, generalized anxiety disorder, and/or social phobia. Investigators randomized the children by school into one of three treatment

conditions. In one group, the children received a 9-week manual- and workbook-based CBT intervention using the FRIENDS for Life, a school-based anxiety prevention program. In the second arm, the children received the CBT intervention and, in addition, their parents participated in a 9-week concurrent training group based on the FRIENDS program. Children in the third arm received no treatment.

Six months after the treatment phase of the study, the 24 control families were offered treatment. Five of these families were randomly assigned to the CBT group, 7 were randomly assigned to CBT plus parent training, and 12 families declined treatment. Of those 12 families, 8 continued to participate in the assessments at years 2, 3, and 4.

All groups—including the controls—showed improvement in anxiety symptoms. However, at the 4-year follow-up, 43% of children in the control group showed remission of their primary anxiety diagnoses, a significantly smaller proportion than the children in the CBT group (75%) or the children in the CBT plus parent training group (76%).

**At the 4-year follow-up, 43% of children in the control group, 75% in the CBT group, and 76% in the CBT plus parent training group showed remission.**

Also at 4 years, only 29% of the children in the CBT plus parent training group qualified for an anxiety diagnosis. This is significantly lower than those in the CBT group (67%) or the control group (57%).

The child-plus-parent group also had significantly better scores at 4 years on the clinician severity rating (CSR) of the Anxiety Disorders Interview Schedule. At baseline the mean composite CSR

scores for the three groups ranged between 2.4 and 3.9 on a scale from 0 to 8. At the 4-year follow-up the mean composite CSR score for the child-plus-parent training group had declined to 0.76. This was a significantly lower than the CBT alone group (2.25) and the control group (1.86).

Other studies have conducted long-term follow-up of CBT in anxious children, but the investigators wrote that this was the first in which comparison with a control group was possible in the 4 years after treatment. Of six other follow-up studies, only one maintained the control group, and that was for only 2 years. The other studies provided CBT to the control participants during or shortly after the intervention phase.

Dr. Bernstein reported no conflicts of interest related to her presentation. Her research was funded by the National Institute of Mental Health, the University of Minnesota Academic Health Center, and the Minnesota Medical Foundation. ■

## Death of Parent Associated With Separation Anxiety, Conduct Disorder

HONOLULU — Children who experience bereavement, especially the loss of a parent, are significantly more likely to exhibit symptoms of separation anxiety and conduct disorder than those who have not experienced such a loss, a large longitudinal study shows.

In addition, bereavement is associated with a great risk of developing substance abuse problems, Julie B. Kaplow, Ph.D., and her colleagues wrote for a poster presentation at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

The data came from the Great Smoky Mountains Study of Youth, a longitudinal study of a representative sample of children from 11 counties in western North Carolina. Children were aged 9, 11, and 13 years at the time of enrollment, and investigators interviewed them annually for 14 years using the Life Events and Psychiatric Disorders sections of the Child and Adolescent Psychiatric Assessment.

For the purposes of the bereavement study, the investigators compared 172 children who had lost a parent (biological, foster/adoptive, or other parental figure), 815 who had lost a relative other than a parent (grand-

parent, aunt, or uncle), and 235 who had experienced no loss.

Investigators focused on the interview during which the loss was reported, as well as the interviews immediately before and after the index interview, wrote Dr. Kaplow, of the department of psychology at the University of Michigan, Ann Arbor.

**The data came from the Great Smoky Mountains Study of Youth, a longitudinal study of children from 11 counties in western North Carolina.**

There were some baseline differences among the groups. Children in the parent-bereaved group were significantly more likely to live in poverty (42% vs. 22% in the other-bereaved group and 23% in the nonbereaved group).

Before the loss, children in the parent-bereaved group also were significantly more likely to report substance abuse (14% vs. 4% in the other two groups). In addition, children in the parent-bereaved group had significantly lower global functioning scores.

After controlling for sex, age, race/ethnicity, poverty, and previous psychiatric symptoms, the investigators found that children in both of the bereaved groups were significantly more

likely to report symptoms of separation anxiety than were children in the nonbereaved group. Children in the parent-bereaved group were twice as likely to show symptoms of conduct disorder than were those in the nonbereaved group, and children in the other-bereaved group were twice as likely to show symptoms of depression than either those in the parent-bereaved or nonbereaved groups.

Even after controlling for their higher rates of substance abuse at baseline, children in the parent-bereaved and other-bereaved groups showed a significantly higher risk of developing substance abuse after the loss than were nonbereaved children. The investigators speculated that this may be attributable to the bereaved individuals' poor coping skills and desire to self-medicate.

The investigators said the higher risk of conduct disorder symptoms after the loss could be tied to secondary stressors. "Parental discipline has been shown to suffer following the death of the other parent and is likely to be associated with new-onset behavioral problems in bereaved children," they wrote.

The investigators stated that they had no conflicts of interest related to their presentation. ■

## College Students Cite Stress as Key Factor in Academic Performance

HONOLULU — Stress was the most frequently cited psychological factor adversely affecting the academic performance of college students, according to a survey conducted in spring 2008 by the American College Health Association.

Almost 34% of students cited stress as a factor affecting academic performance, up from 29% in spring 2000, Dr. Adele L. Martel said at the annual meeting of the American Academy of Child and Adolescent Psychiatry.

Sleep was the second most common psychological factor cited by the students, rising from 21% in 2000 to 26% in 2008.

Relationship difficulties, holding steady at about 15% between 2000 and 2008, have recently been overtaken by the Internet in their impact on academic performance, said Dr. Martel, who is affiliated with Children's Memorial Hospital in Chicago.

Cited by only 9% of college students in 2000, the Internet affected the academic performance of nearly 17% in 2008, according to data from the National College Health Assessment, which surveyed more than 80,000 students on 106 campuses.

In 2008, 7% of students cit-

ed attention-deficit disorder, more than double the 3% who mentioned that as a factor in 2000.

A greater proportion of students also cited learning disabilities as affecting their academic performance, the rate nearly doubling between 2000 and 2008.

Alcohol use has remained steady at about 8%, except for a temporary increase to 10% in spring 2002. Dr. Martel noted that the terrorist attacks of Sept. 11, 2001, occurred within that school year, but she said she had no way of knowing whether that was a reason for the 1-year increase.

Even when the proportion of students citing a certain factor remains about the same from 1 year to the next, the need for mental health services for college students might be increasing.

"The percentages are staying the same, but we know we have more college students, so the numbers are higher," Dr. Martel said.

In 2000, the total undergraduate fall enrollment in degree-granting institutions was 13.2 million, and this rose to approximately 15.5 million individuals in 2008.

Dr. Martel said she had no conflicts of interest related to her presentation. ■