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# the Behavior Therapist

# **Contents**

President's Column Ray DiGiuseppe ABCT at 40: No Mid-Life Crisis 1

#### Letters to the Editor

Marvin R. Goldfried From ABCT to Evidence-Based Therapies: What's in a Name? 2

William M. Sherman Commentary on Lohr et al. (2006) 5

#### Innovations in CBT Interventions for Anxious Youth

- S • Phoebe S. Moore, Brian C. Chu, Jill T. Ehrenreich, and Abbe L. Garcia Introduction 6 Ρ
- Donna B. Pincus, Jill T. Ehrenreich, and Liza M. Suárez A Review of Current Research at the Center for Anxiety and С Related Disorders at Boston University 7
- Sandra L. Mendlowitz and Suneeta Monga Unlocking Speech Where There Is None: Practical Approaches L to Treatment of Selective Mutism 11
  - Mike Cunningham, Ronald Rapee, and Heidi Lyneham Overview of the Cool Teens CD-ROM for Anxiety Disorders in Adolescents 15
  - Kristen Grabill, Eric A. Storch, and Gary R. Geffken Intensive Cognitive-Behavioral Therapy for Pediatric OCD 19
- Muniya Khanna, Sasha G. Aschenbrand, and Philip C. Kendall New Frontiers: Computer Technology in the Treatment of Anxious Youth 19

#### **Lighter Side**

Е

T

A

S

Е

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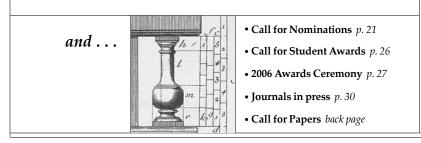
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Е

S

Elizabeth Moore "Psychogenic Fugue" 25

#### Classifieds 28



## President's Column

# ABCT at 40: No Mid-Life Crisis

Ray DiGiuseppe, St. John's University



he 40th Annual Convention was a great success, and we are now a mature middle-aged organization. Attending the various Board and committee meetings highlighted for me the successful milestones achieved by ABCT this year. If you attended the

convention, you might have noticed the new logo and color scheme that appeared on our banners. This redesign of our brand was part of the rollout of our new name that the Board worked on extensively last year. For those of you who were unable to attend the convention or were there and missed the Annual Meeting of Members, let me review some of these milestones.

Convention attendance set a new record this year in Chicago at more than 3,330 registrations. Our association usually has its largest attendance at conventions on the East Coast. Attendance is normally lower in the Midwest and West Coast. Reaching this milestone in the Midwest is a sign of our growth. The high quality of programs and the mix of science and practice drew all types of mental health practitioners to the meeting. The convention itself was bigger as well: more sessions were offered and more posters were presented at the Friday-night SIG Poster Exposition than ever before. Maureen Whittal, Convention Program Chair, and Cheryl Carmin, Convention and CE Coordinator, and all their committee chairs and committee members deserve congratulations for a job well done.

Membership in our organization is also at an all-time high. We are attracting and keeping more young members. This suggests that the organization is strong and has a bright future. Gayle Iwamasa, Membership Coordinator, and

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# Archives

Nathan H. Azrin interviewed by John R. Lutzker Albert Bandura interviewed by Antonette Zeiss Aaron T. Beck interviewed by Philip C. Kendall Sidney Bijou interviewed by Steven C. Hayes John Paul Brady interviewed by Arthur M. Nezu Order Joseph Cautela interviewed by David H. Barlow a video Gerald C. Davison interviewed by David A. F. Haaga today! Edward Dengrove interviewed by Christine M. Nezu Albert Ellis interviewed by Arthur Freeman Hans Eysenck interviewed by Philip C. Kendall Cyril M. Franks interviewed by G. Terence Wilson Steven C. Hayes interviewed by Victoria Follette Arnold A. Lazarus interviewed by G. Terence Wilson G. Alan Marlatt interviewed by Linda C. Sobell Donald Meichenbaum interviewed by Arthur Freeman Stanley Rachman interviewed by G. Terence Wilson Todd Risley interviewed by John Lutzker Andrew Salter interviewed by Gerald C. Davison Richard M. Suinn interviewed by Arthur M. Nezu Dorothy Susskind interviewed by Mary Jane Eimer Joseph Wolpe interviewed by Gerald C. Davison of the Association for Behavioral and Cognitive Therapies

#### INSTRUCTIONS FOR AUTHORS

The Association for Behavioral and Cognitive Therapy (formerly known as Association for Advancement of Behavior Therapy) publishes the Behavior Therapist as a service to its membership. Eight issues are published annually. The purpose is to provide a vehicle for the rapid dissemination of news, recent advances, and innovative applications in behavior therapy.

 Feature articles that are approximately 16 double-spaced manuscript pages may be submitted.

Brief articles, approximately 6 to 12 double-spaced manuscript pages, are preferred.

Feature articles and brief articles should be accompanied by a 75- to 100-word abstract.

Letters to the Editor may be used to respond to articles published in the Behavior Therapist or to voice a professional opinion. Letters should be limited to approximately 3 double-spaced manuscript pages.

Prior to publication authors will be asked to submit a final electronic version of their manuscript and complete a copyright transfer form. Authors submitting materials to tBT do so with the understanding that the copyright of the published materials shall be assigned exclusively to ABCT. Electronic submissions are preferred and should be directed to reitmand@nova.edu. Please include the phrase tBT submission in the subject line of your e-mail. Include the first author's e-mail address on the cover page of the manuscript attachment. By conventional mail, please send manuscripts to:

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her committees deserve much of the credit for this growth.

Our Publications Committee, led by Judith Favell, also reported several achievements this past year. Our journals are now highly accessible because they are available on-line. This was a difficult and important milestone for the association. In addition, *Behavior Therapy*, our prime scientific journal, has had another increase in its impact rating. This is the second year in a row that the journal has improved its citation index—and this occurred before the journal became available on-line. The search engine MEDLINE now includes *Behavior Therapy* in its database—a major accomplishment for the association.

Cognitive and Behavioral Practice has also had a significant increase in its impact rating. For a young journal with a focus on professional practice, Cognitive and Behavioral Practice is becoming a very respectable scholarly journal. We need to thank Judith Favell, Publications Coordinator; Rick Heimberg, editor of Behavior Therapy; and Stefan Hofmann, editor of Cognitive and Behavioral Practice, for their outstanding service. David Reitman, the editor of the Behavior Therapist, has also done a wonderful job embracing the Board's vision of tBTas an accessible, informative outlet of news concerning the organization and its functions. Because of the many excellent articles

that have appeared in tBT, the Board has decided to make recent back issues available as PDF files on our Web site.

This past year our association has made tremendous strides in electronic communication. Our new listserve is in operation, and all of you who participate know that Laura Dreer has become the most recognized name in CBT because of her coordination of the listserve. Behind the scenes, Lisa Yarde, ABCT's Membership Manager, has made all this technology work. Our Web page sports a totally new look with a lot of exciting content. We were fortunate to have such strong backing by the Board in this area. Immediate Past President Otto asked a group of dedicated leaders to work for several days at the central office designing the pages and writing content for the new Web site. I want to thank Anne Marie Albano, Michael Otto, Sue Orsillo, and David Teisler for helping me with this task. We look forward to expanding our Web presence and for new and exciting on-line activity. The Web is now our public face and will influence the size of our membership, our clinical practices, and the dissemination of our research.

Our association is fiscally sound and has increased the percentage of the operating budget that is held in reserve. Frank Andrasik, Secretary-Treasurer, and his Finance Committee have carefully guarded your dues dollars and ensured that they are spent wisely. Along with steadily increasing convention, membership, and journal revenues, our excellent and expanding educational resources are in high demand: the central office is continuously fulfilling orders for Clinical Grand Rounds and Archives videotapes, fact sheets, and career pamphlets.

As I take on the position of President I am in awe of the strength and health of this organization. We have many active committees and strong committee chairs. We are growing in every way. I want to thank Michael Otto, the immediate Past President; Gayle Beck, 2004–2005 President; and all the committees for building such a strong organization.

Two last things remain for all of you to do. Become active in the association. We are only as strong as the members who participate. Join a committee, chair a committee, or run for office. Nominations for President-Elect and Representative-at-Large are due February 1. Please nominate people for these positions. After that, please vote.

#### Letter to the Editor

# From ABCT to Evidence-Based Therapies: What's in a Name?

Marvin R. Goldfried, SUNY, Stony Brook

BCT had a landmark convention this past November in Chicago, celebrating its 40th anniversary. This was a special treat for me, as I have been with AABT/ABCT from the very beginning, and have witnessed its growth and evolution over the years. Not surprisingly, I particularly enjoyed those panel discussions that placed the current state of the art into historical perspective. Among them was a particularly interesting panel made up of past presidents discussing the evolution of behavior therapy and its relationship to evidence-based practice. I had wanted to raise an issue at the end of the presentations, but time ran out and I was unable to do sowhich is what prompted me to write this brief note. However, before getting to the issue, I'd like to start with a comment on our organization's historical context.

It was in the 1950s when a number of empirically oriented therapists and researchers voiced their increasing discontent with psychoanalytic practice, proposing that "modern learning theory" might provide a firmer basis from which to develop effective therapeutic interventions. With its growth in the 1960s, what was called "behavior therapy" took findings from laboratory studies of classical and operant conditioning and extrapolated them to the clinic. In this regard, the new emphasis on "translational research" is not so new.

Embracing this radical and exciting development to clinical work, some behavior therapists maintained that using learning as a point of departure was insufficient, and that any basic research findings might prove useful for clinical innovations. Carrying this further, Jerry Davison and I (Goldfried & Davison, 1976) argued that it was a mistake to consider behavior therapy as a "school" of therapy, and maintained that it instead could more appropriately be thought of as

reflecting a general orientation to clinical work that aligns itself philosophically with an experimental approach to the study of human behavior. The assumption basic to this particular orientation is that the problematic behavior seen within the clinical setting can best be understood in light of those principles derived from a wide variety of psychological experimentation, and that these principles have implications for behavior change within the clinical setting. (pp. 3-4)

The field of cognitive psychology was very much in its formative stages during the

1960s, and the incorporation of cognition into behavior therapy was based primarily on clinical need (operant and classical conditioning had little to say to the clinician about how to deal with clients' distorted thinking), as well as the seminal contributions of Bandura (1969), Mischel (1968) and Peterson (1968). Soon thereafter, cognitive-behavior therapists made use of the information processing model that developed in cognitive science, recognizing the clinical value of viewing clients' distorted thinking as manifestations of schematic processing.

In his presidential address to AABT in the 1980s, Wilson (1982) reviewed the evolution of behavior therapy, with its original focus on overt behavior and subsequent inclusion of cognitive variables, and predicted a greater emphasis on "affect in the eighties." A comprehensive review of the research literature by Singer and Salovey (1988) supported Bower's (1981) network theory of affect, which indicated that learning and retrieval of what has been learned was associated with and dependent upon the emotional state of the individual. With this in mind, Kennedy-Moore and Watson (1999) have suggested a combination of specific therapeutic techniques to enhance clients' emotional processing skills in CBT. Supporting their recommendations, Castonguay, Goldfried, and Hayes (1996) found that greater emotional experiencing during cognitive therapy sessions was more likely to result in the reduction of depressive symptoms. Similarly, Hayes and Strauss (1998) found that an increase in emotional distress during cognitive therapy was positively related to the reduction of depression. The relationship between the emotional arousal during cognitive-behavior therapy sessions and symptom reduction has also been found for such diverse problems as eating disorders (Castonguay, Pincus, Agras, & Hines, 1998) and posttraumatic stress disorder (Foa & Kozak, 1986). Consistent with these findings is the increasing body of research by Greenberg and colleagues (e.g., Greenberg & Paivio, 1997) on the efficacy of experiential therapy, as well as the advances in neuroscience that support the importance of emotional arousal as part of the therapeutic change process (LeDoux, 1996).

There is also a growing body of literature to indicate that interpersonal processes are an important focus in therapeutic interventions. Difficulties in close relationships have been found to be positively associated with depression (Davila & Steinberg, 2006), depressive symptomatology has been found to be reduced through cognitive-behavioral marital therapy (Beach & O'Leary, 1986), and a behavioral intervention that incorporates relational factors into the therapy has shown impressive promise (McCullough, 2000). Evidence also exists for the efficacy of interpersonal therapy for the treatment of eating disorders (Wilfley et al., 2002). Moreover, the original depiction in behavior therapy of the therapeutic relationship as being "nonspecific" is a thing of the past, as it now plays a central role in behaviorally oriented treatments (e.g., Kohlenberg & Tsai, 1991; Linehan, 1993).

In short, although behavior therapy had its foundation in the predominant basic research of its time-classical and operant conditioning-the availability of both basic and applied research findings now supports the clinical relevance of cognition, affect, neuroscience, and interpersonal relationships as well. We are a very different organization now than we were in the past. It should be noted, however, that raising the issue of who we are and how we identify ourselves is not that novel. Indeed, two prominent members of ABCT raised similar questions some three decades ago, when our organization was only in its 10th year. Arnold Lazarus (1977) highlighted the broadening scope of behavior therapy in a provocative article in the American Psychologist, entitled "Has Behavior Therapy Outlived Its Usefulness?" In the article, he quoted a recent personal communication by Cyril Franks-one of the founders of AABT-who suggested: "Are we not at this stage in our development basically an Association for Advancement of the Scientific Study of Human Interaction-in all its ramifications?" (Lazarus, 1977, p. 550).

All of this leads to the issue I never had the opportunity to raise, namely, whether it is meaningful for our organization to call itself "Behavioral" and "Cognitive" when research findings from so many other areas are relevant to the therapeutic change process. Although the recent name change from AABT to ABCT was a step in the right direction, it may not have gone far enough, as it does not include many of the other relevant evidence-based variables. Perhaps it is time to reaffirm our original identity as an organization that values empirically based interventions. Perhaps the time may have come to take an even bolder step and change our name to the Association for Empirically Based Therapies—AEBT.

#### References

- Bandura, A. (1969). Principles of behavior modification. New York: Holt, Rinehart, & Winston.
- Beach, S. H., & O'Leary, K. D. (1986). The treatment of depression occurring in the context of marital discord. *Behavior Therapy*, 17, 43-49.
- Bower, G. H. (1981). Mood and memory. American Psychologist, 36, 129-148.
- Castonguay, L. G., Goldfried, M. R., & Hayes, A. M. (1996). Predicting the effect of cognitive therapy for depression: A study of unique and common factors. *Journal of Consulting and Clinical Psychology*, 64, 497-504.
- Castonguay, L. G., Pincus, A. L., Agras, W. S., & Hines, C. E. (1998). The role of emotion in group cognitive-behavioral therapy for binge eating disorder: When things have to feel worse before they get better. *Psychotherapy Research*, 8, 225-238.
- Davila, J., & Steinberg, S. J. (2006). Depression and romantic dysfunction during adolescence. In T. E. Joiner, J. S. Brown, & J. Kistner (Eds.), *The interpersonal, cognitive, and social nature of depression* (pp. 23-41). Mahwah, NJ: Erlbaum.
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin*, 99, 20-35.
- Goldfried, M. R., & Davison, G. C. (1976). *Clinical behavior therapy*. New York: Holt, Rinehart & Winston.
- Greenberg, L. S., & Paivio, S. (1997). Working with emotions: Changing core schemes. New York: The Guilford Press.
- Hayes, A. M., & Strauss, J. L. (1998). Dynamic systems theory as a paradigm for the study of change in psychotherapy: An application of cognitive therapy for depression. *Journal of Consulting and Clinical Psychology*, 66, 939-947
- Kennedy-Moore, E., & Watson, J. C. (1999). The expression and nonexpression of emotion. New York: The Guilford Press.
- Kohlenberg, R. J., & Tsai, M. (1991). Functional analytic psychotherapy: Creating intense and curative therapeutic relationships. New York: Plenum Press.
- Lazarus, A. A. (1977). Has behavior therapy outlived its usefulness? *American Psychologist*, 32, 550-554.
- LeDoux, J. E. (1996). *The emotional brain: The mysterious underpinnings of emotional life*. New York: Simon and Schuster.
- Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder. New York: The Guilford Press.
- McCullough, J. P., Jr. (2000). Treatment for chronic depression: Cognitive behavioral analysis system of psychotherapy. New York: The Guilford Press.
- Mischel, W. (1968). *Personality and assessment*. New York: Wiley.

- Peterson, D. R. (1968). The clinical study of social behavior. New York: Appleton-Century-Crofts.
- Singer, J. L., & Salovey, P. (1988). Mood and memory: Evaluating the network theory of affect. *Clinical Psychology Review*, 8, 211-251.
- Wilfley, D. E., Welch, R. R., Stein, R. I., Spurrell, E. B., Cohen, L. R., Saelens, B. E., Dounchis, J. Z., Frank, M. A., Wiseman, C. V., & Matt, G. E. (2002). A randomized comparison of group cognitive-behavioral therapy and group interpersonal psychotherapy for the

treatment of overweight individuals with binge-eating disorder. *Archives of General Psychiatry*, 59, 713-721.

Wilson, G. T. (1982). Psychotherapy process and procedure: The behavioral mandate. *Bebavior Therapy*, 13, 291-312.

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# Letter to the Editor

# Commentary on Lohr et al. (2006)

William M. Sherman, Southern Connecticut State University

was intrigued by-and very much benefited from reading-Lohr, Devilly, Lilienfeld, and Olatunji's (2006) "First Do No Harm, and Then Do Some Good: Science and Professional Responsibility in the Response to Disaster and Trauma." I was especially interested in their definitions, examples, and very excellent treatment of "pseudoscience" and "junk science" as I teach units of these topics in so many of my courses (Seminar in Applied Behavior Analysis, Experimental Research Methods, Health Psychology, and Abnormal Psychology). Although I have collected many examples and illustrations over the years to share with my students, three stand out as best illustrating the worst of what's often passed off as legitimate therapy or practice.

1. The Connecticut Self-Health Networker published an interview some years ago (Grasso, 1996) with Rabia Clark, Ph.D., a certified past-life therapist who was on the Board of Directors of the Association of Past-Life Research and Therapies (APRT). In the interview she noted that, for example, if a person fears cats, "they might go back to the coliseum in Rome during the time of the persecution of the Christians, and find themselves being attacked by a lion. This scene is repeated by the client several times, until the emotional charge and fear are dissipated. Coming back to the present, they may find they are no longer afraid of cats" (p. 1). Evidence-based practice? I think not. While this certainly gives the appearance of being some form of behavioral therapy involving, perhaps, imaginal exposure and/or desensitization, dare I ask for the operationally defined, multiple group, statistically analyzed, double-blind, placebo-controlled, peer-reviewed published research? According to Lohr et al. (2006), this is certainly "the trappings but not the substance of scientific inquiry" (p. 131). Moreover, and perhaps even more importantly, where's the empirical data supporting the basic underlying assumption: past lives?

2. A 1995 issue of the APA Monitor ran a paid advertisement by an organization called the Academy of Clinical Close Encounter Therapists (ACCET). For annual dues of only \$20, they were offering workshops, networking, support for clinicians, and patient referrals. Just in case you don't understand what the term "close encounters" refers to, this is an organization and referral service for therapists and/or patients who have had direct contact with space aliens. Again according to Lohr et al. (2006), there's no apparent "skeptical inquiry" and certainly no "rigorous test of claims" (p.131). Interesting, maybe, but certainly not science.

**3.** The "Star\*Life Institute of Cosmic Activation," founded in 1990, "promotes personal and planetary empowerment through private and group initiations called 'Cosmic Activations'" (1995, p. 2). Located in Hawaii, however, they fully realize how expensive it might be for a student to travel to their center and study with them in person (for example, \$9,328 for the "5 element and 12 planet activations"). Therefore, they offer a substantial discount for students interested in and willing to study with them via telepathy (\$7,361, for the same course). That's right, you can obtain your



"Telepathic Cosmic Activation" in the comfort of your own living room! Lohr et al. (2006) discuss "promotion of a product" and this is without doubt the absolute epitome of this concept.

Pseudoscience and junk science are all around us. As professional therapists and educators, as scientist-practitioners, we need to remain observant, vigilant, skeptical, and ever-questioning. I hope these more frivolous illustrations serve to reinforce the very serious points made by Lohr et al. (2006).

#### References

- Academy of Clinical Close Encounter Therapists. (1995, September). [Classified advertisement]. Monitor on Psychology.
- Grasso, L. (1996, January). Into the future with past-life therapy? An interview with Rabia Clark, Ph.D. *The Connecticut Self-Health Networker*, p. 1.
- Lohr, J. M., Devilly, G. J., Lilienfeld, S. O., & Olatunji, B. O. (2006). First do no harm, and then do some good: Science and professional responsibility in the response to disaster and trauma. *the Behavior Therapist*, 29, 131-135.
- Star\*Life Institute of Cosmic Activation. (1995). [Brochure]. Kihei, HI: Author.

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#### SPECIAL SERIES Innovations in CBT Interventions for Anxious Youth

## Introduction

Phoebe S. Moore, *Duke University*, Brian C. Chu, *Rutgers University*, Jill T. Ehrenreich, *Boston University*, and Abbe L. Garcia, *Brown University* 

ecently, federal agencies such as the National Institute of Mental Health have reemphasized the importance of translational research—i.e., research that takes existing knowledge from the bench to the bedside, or from the lab to the clinic. This emphasis may be particularly relevant for current research efforts in cognitive behavioral therapy (CBT) for children and adolescents where issues of effectiveness and dissemination are taking center stage. These treatments hold great promise but currently are neither uniformly effective nor readily available to a substantial proportion of the population in need. Research efforts aimed at more effective and efficient delivery of these treatment models have great promise for stepping the field forward as they provide enhanced patient care.

A clear target for advancing this research agenda is the field of CBT for youth anxiety, which has established a substantial evidence base for its efficacy (e.g., Barrett, Dadds, & Rapee, 1996; Cobham, Dadds, & Spence, 1998; Kendall et al., 1997; Manassis et al., 2002). However, these primarily lab-developed treatments require further research to ensure the continued dissemination of CBT to broad clinical populations. As part of an effort to share the work of members of ABCT's Child and Adolescent Anxiety Special Interest Group (SIG), this special series presents ongoing translational research and innovations in CBT for youth anxiety disorders. The series highlights new approaches to treatment with understudied populations as well as advances in treatment format or delivery that aim to improve the efficacy, efficiency, or transportability of CBT.

Two papers in this special series describe the use of basic research on clinical phenomenology to refine and enhance existing treatment models. Mendlowitz and Monga conceptualize selective mutism integratively, viewing the disorders as an outcome not only of social anxiety but also of vocal cord tension, thus requiring multimodal treatment. The approach to treatment is interdisciplinary, incorporating specialists from psychology, speech therapy, psychiatry, and school settings. Their treatment can be seen as a refinement of currently existing models, employing behavioral principles that gradually expose and shape youth to speech behaviors. Pincus, Ehrenreich, and Suárez also present sophisticated adaptations of traditional behavioral treatments for use with panic and separation anxiety in younger children. These adaptations incorporate the current state-of-the-art knowledge about the etiology and process of these subtypes of pediatric anxiety.

Innovations in treatment delivery and dissemination are highlighted in several of the papers in this issue. Pincus, Ehrenreich, and Suárez present a series of projects that describe innovations in an intensive treatment program for adolescents with panic disorder that modifies traditional rates of service delivery, a unified treatment protocol for anxiety and depression that makes use of research on basic processes and common mechanisms, and a multicenter collaboration that employs a community-based approach toward treatment development and dissemination. Grabill, Storch, and Geffken describe similar efforts to develop an intensive treatment program for pediatric obsessive-compulsive disorder that provides the traditional number of treatment sessions over a briefer period of time (14 sessions over 3 weeks). The intensive format potentially allows families to travel from a distance and receive expert care over a relatively brief period of time. Client attendance and adherence to treatment may also be improved by reducing the length of treatment. These format adaptations serve to provide effective treatment strategies to greater numbers of patients in need with greater efficiency.

Two of the papers describe efforts to develop interactive computer programs to address issues of wide dissemination. Khanna, Aschenbrand, and Kendall describe the Coping Cat CD and Cunningham, Rapee, and Lynehan describe the Cool Teens CD-ROM, both of which are intended to teach cognitive-behavioral principles within userfriendly, engaging formats. Both are designed to be used either alone or in conjunction with face-to-face therapy. Used alone, such computer programs promise to increase cost-efficiency of treatment and may increase accessibility for those far away from CBT experts. Used in conjunction with in-person therapy, the programs may provide additional in-home practice and reinforce lessons learned in session. Initial pilot testing reported in the Cunningham et al. paper suggests that overall opinions of the program were very positive, but there were differences among youth who preferred to use the CD alone or in conjunction with in-person therapy. This reminds us that acceptability and effectiveness of treatment formats may vary across individuals.

Several trends in the clinical research of youth anxiety are represented by this special series. The first is the continued adaptation of CBT protocols to more diverse clinical populations. Although the principles of CBT would suggest that the effectiveness of this model would generalize across disorders, we can only know this to be true by continuing to develop adapted protocols and subjecting them to controlled tests. The work by Mendlowitz and Monga and Pincus and colleagues describe efforts to develop treatment protocols tailored to the specific nature of less common anxiety disorders. The second trend is the focus on improving the structure of service delivery. Intensive treatment programs as described by Grabill and colleagues and Pincus and colleagues may improve efficiency and maximize outcomes by increasing availability, attendance and feasibility for some clients. The momentum built in an intensive program has the potential for deeply processed and long-lasting change. The third trend is innovative developments in treatment format. As technology improves and as more households have access to computers and the Internet, computer-based treatment aids and programs may increase accessibility to many who live in areas where the necessary expertise is not available. The interactive computer format may be more acceptable to some child and adolescent clients than traditional in-person formats, or may augment the effectiveness of traditional individual CBT by enhancing homework compliance. Together, these papers reflect much hoped for progress in our efforts to improve established treatments and provide directions for future innovations: translational research in action.

#### References

- Barrett, P., Dadds, M., & Rapee, R. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, 64, 333-342.
- Cobham, V. E., Dadds, M. R., & Spence, S. H. (1998). The role of parental anxiety in the treatment of childhood anxiety. *Journal of Consulting and Clinical Psychology*, 66, 893-905.
- Kendall, P. C., Flannery-Schroeder, E., Panichelli-Mindel, S. M., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 65, 366-380.
- Manassis, K., Mendlowitz, S. L., Scapillato, D., Avery, D., Fiksenbaum, L., Freire, M., Monga, S., & Owens, M. (2002). Group and individual cognitive-behavioral therapy for childhood anxiety disorders: A randomized trial. *Journal of the American Academy of Child Adolescent Psychiatry*, 41, 1423-1430.

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# A Review of Current Research at the Center for Anxiety and Related Disorders at Boston University

Donna B. Pincus, Jill T. Ehrenreich, and Liza M. Suárez, Boston University

ver the past 15 or 20 years, a number of efficacious psychotherapies have been developed for children and adolescents with anxiety disorders (e.g., Kendall, 1990), and several other cognitive-behavioral therapies (CBTs) for youth have achieved "probably efficacious" status. However, evidence shows that most children and adolescents are still unlikely to receive empirically supported treatments outside of university or research-based settings (i.e., Schoenwald & Hoagwood, 2001; Street, Niederehe, & Lebowitz, 2000). Therefore, efforts to "bridge the gap" between research and practice for children and adolescents with anxiety disorders continue in earnest. At the Child and Adolescent Fear and Anxiety Disorders Treatment Program within the Center for Anxiety and Related Disorders (CARD) at Boston University, we are closely examining ways to help bridge this gap and improve the effectivness of everyday treatments for anxiety and related difficulties in youth. Our mission is currently being implemented through a variety of innovative and complimentary programs of child and adolescent clinical research examining issues such as the rate of service deliv-(through an intensive treatment ery program for adolescents with panic disorder), the treatment of understudied populations (utilizing a modification of Parent-Child Interaction Therapy for young children with separation anxiety disorder), the fundamental treatment targets typically identified in such research (within a program of research

to develop and evaluate a "unified" treatment for anxiety and/or depressive disorders in youth), and the *methodology used for treatment development and resultant dissemination to the community* (via a collaboration with the National Child Traumatic Stress Network to develop and disseminate a treatment for adolescents with traumatic stress and substance abuse). This article briefly outlines each of these research programs, attending to the theoretical base for each investigation, describing preliminary findings, and, where relevant, how each research program relates to the NIH road map for intervention development and dissemination.

#### Targeting the Rate of Service Delivery: A Randomized Clinical Trial of an Intensive Treatment of Adolescent Panic and Agoraphobia

#### Introduction

A randomized clinical trial has recently begun at CARD evaluating the efficacy of an 8-day, developmentally tailored, intensive treatment for adolescents aged 12 to 17 with panic disorder with agoraphobia (PDA) and also examining the relative advantage of involving parents in treatment. Adolescents are randomly assigned to (a) an intensive panic treatment condition that has no parent involvement, (b) an intensive panic treatment condition with parent involvement, or (c) a 6-week, no-contact wait-list.

#### Clinical Need

Given that the initial peak for onset of PDA occurs in adolescence, and that PDA in adolescence is linked to numerous behavioral and emotional problems in adulthood, empirically supported interventions for PDA during development are needed. Based on our experiences in piloting this intervention, it seems that this brief treatment may be particularly helpful for adolescents who have limited access to therapy, have not succeeded with other therapies, have moderate to severe agoraphobia, or have special circumstances necessitating brief therapy.

Existing research highlights the importance of incorporating parents into the treatment of youth anxiety disorders (Barrett, Rapee, & Dadds, 1996), yet no controlled studies have examined the addition of parent training or parent anxiety management skills to the treatment of panic disorder. Involving parents is hypothesized to be important because parental overcontrol and intrusiveness, parental anxiety, and parental reinforcement of avoidance have been implicated in the development and maintenance of anxiety in youth (e.g., Chorpita & Barlow, 1998), although the influence of such variables on the course of treatment for adolescents with panic disorder remains largely unknown. Thus, it appeared relevant to also examine the relative advantages of involving parents in this adolescent treatment approach.

#### Mechanisms of Action

Investigating potential mechanisms of action in treatment is an important aim of the present study. Currently, we have limited knowledge about the possible mechanisms of therapeutic action in interventions for youth, and thus, the investigation of this issue in a randomized clinical trial is an important one. In order to better assess whether changes in the hypothesized mediators cause changes in outcome, adolescents and their families will be assessed at several points during the course of the intensive treatment program. These additional assessment points will allow for an assessment of change of hypothesized mediators during family treatment. Intensive treatment including parents is expected to reduce level of parenting stress, increase parent locus of control, and increase the frequency of positive parent-child interactions. For example, as parent locus of control becomes more internal, parental anxiety may also decrease, which may mediate parental intrusiveness in the child's own coping with challenges. These factors will be measured as possible mechanisms of action in treatment.

#### Treatment Implementation

Given the range of cognitive, social, and physical changes associated with adolescence, it is important to tailor treatments to address the developmental needs of this period. Thus, rather than creating a downward extension of adult treatment, we designed this treatment to be sensitive to the issues and challenges of adolescence. To briefly review the treatment structure, Sessions 1 to 3 last approximately 2 hours each, during which adolescents receive education about the nature and physiology of anxiety and panic, and learn skills such as cognitive restructuring and interoceptive exposure. Sessions 4 and 5 are 5 to 6 hours long and are spent conducting in vivo situational and interoceptive exposure exercises with the therapist. During Sessions 6 and 7, adolescents conduct independent in vivo situational exposures, as planned by their therapist, in the hopes of teaching them to take control of their progress and preparing them for life after treatment. Session 8 lasts 2 hours and covers treatment review, relapse prevention, and maintenance of gains.

The two treatment conditions are similar in structure and content, and are conducted with a patient workbook and therapist guide. However, in the treatment condition that includes family involvement, parents participate in the last 30 minutes of each of the didactic teaching sessions, are involved in some of the exposure practices in Sessions 4 through 7, and complete the same homework assignments as their teen. Parents learn both to become "coaches" for their child and how to conduct exposure exercises; for example, parents accompany therapists on selected exposures so therapists can model how to work supportively with the adolescent without becoming overly involved or intrusive. Parents are further

taught how to be supportive of adolescents' successes and how to encourage adolescents to enter previously avoided situations without being critical or overly controlling.

#### Preliminary Results

Results of a pilot study of intensive treatment for adolescent PDA (Pincus et al., 2003) provided promising initial data. In the pilot study, the mean clinical severity ratings of PDA significantly decreased from pre- to posttreatment, with most adolescents displaying nonclinical levels of PDA by posttreatment. Frequency of panic attacks also decreased significantly. Numerous collateral changes were also reported, including improvements in academic performance and social and family functioning, as well as decreased avoidance.

A randomized clinical trial of intensive treatment for adolescent PDA, sponsored by NIMH, will be conducted over the next 5 years. In the pilot investigation, adolescents and their families found this brief intensive approach appealing. We hypothesize that intensive approaches may appeal most to certain adolescents (i.e., those with increased severity, comorbidity, or associated school refusal). The current study will continue to explore issues related to the selection of intensive treatment and its acceptability to adolescents with PDA and their families.

The Treatment of Understudied Populations: A Randomized Clinical Trial for Treatment of Separation Anxiety Disorder in Young Children

#### Introduction

A randomized clinical trial, funded by NIMH (PI: Pincus), investigating the efficacy of a treatment for separation anxiety disorder (SAD) in young children is currently under way at our site. This study uses a tailored and modified version of Parent-Child Interaction Therapy (PCIT; Pincus, Eyberg, & Choate, 2005) to treat young children (ages 4 to 8) who have a primary diagnosis of SAD. The goals of this project are: (a) to evaluate the efficacy of PCIT for reducing children's separation-anxious behaviors, (b) to assess the long-term maintenance of children's changes, and (c) to investigate potential mechanisms of action in treatment. This research project has the potential to fill in a significant gap in our knowledge of efficacious treatments for young separation-anxious children. In this study, 58 children with a principal diagnosis

of SAD will be randomly assigned to one of two conditions: (a) immediate treatment, or (b) wait-list (attentional control) condition. After the wait-list, all patients receive a full course of PCIT treatment.

#### Clinical Need

Of the anxiety disorders experienced by children, SAD is the most prevalent, accounting for approximately one-half of the children seen for mental health treatment of anxiety disorders. Despite the frequent early onset of SAD, there have been very few reported studies investigating interventions for SAD in very young children. Although some separation anxiety is part of normal early development, if the symptoms of separation anxiety begin to exacerbate and interfere with daily functioning, significant social, familial, and academic dysfunction may occur. Children with SAD are at risk for school avoidance, somatic complaints, and are likely to elicit immediate care and attention from parents, which can result in positive reinforcement and secondary gain that may further perpetuate the problem. Young children with SAD often display disruptive, oppositional behaviors as well as avoidance behaviors, all of which may cause significant interference in child and family functioning. The development of an intervention that targets SAD in the preschool and early childhood years seems critical to promoting young children's healthy functioning and positive developmental trajectories.

#### Theoretical Background

Parents of separation-anxious children may inadvertently facilitate anxious responses in children by modeling fear or avoidance, attempting to control the child's behavior in a way that limits psychological autonomy, overprotecting the child, or facilitating avoidant coping responses. Parents may also affect children's development of healthy emotion-focused coping strategies by trying to manage their child's anxiety or reinforcing their child's anxious responding. Some parents may even find it difficult to tolerate their own emotions as they relate to their child experiencing distress during separation. Aversive parentchild interactions may develop if parents become critical of their child's inability to separate, resulting in children crying; any attention to the child's distress can lead it to escalate, thereby reinforcing the cycle of aversive parent-child interactions. Many studies also show that parents of anxious children tend to grant less psychological autonomy, evidence less warmth and acceptance, and are more critical of their children than parents of children without psychiatric diagnosis. Thus, there is growing evidence that a parent training approach may be especially useful when treating young children with SAD. For the period of early childhood, it has been suggested that a successful parent treatment component should involve rearranging dyadic caregiving interactions or family interactions to promote secure, healthy attachment between parents and children (e.g., Schuhmann et al., 1998).

PCIT (Eyberg, 1988) is an empirically supported treatment designed to treat children with disruptive behavior disorders and their families. The treatment is designed to help parents build a warm and responsive relationship with their child and to manage their child's behavior more effectively. PCIT draws on both attachment and social learning theories in training parents to interact in attentive, responsive, and nurturant ways with their child. The improved attachment that develops during PCIT is expected to strengthen the child's sense of security at separation. Moreover, other skills taught through PCIT, such as enhancing parent attention, shaping children's behavior with differential reinforcement, and providing clear direction to children, are all expected to be effective in reducing children's separation-fearful behaviors.

#### Implementing PCIT for Treatment of SAD in Young Children

PCIT has been tailored and adapted specifically for the family with a young child with SAD. There are three components in this adapted version of PCIT for SAD. The first component, the Child Directed Interaction (CDI) phase of treatment, focuses on changing the quality of the parentchild relationship. Parents are taught nondirective interaction skills and how to increase their warmth, responsiveness, attention, and praise during play times with their child. Therapists shape parents' use of these skills by coaching them as they play with their child. The second phase of treatment is the new component, called Bravery Directed Interaction (BDI). In this phase, therapists provide parents with anxiety education and teach parents how to successfully coach their child in entering avoided separation situations. In the final phase of treatment, Parent Directed Interaction (PDI), parents are taught methods of incorporating clearly communicated and age-appropriate instructions to the child. Using techniques based directly on operant principles of behavior change, parents are taught to provide consistent positive and negative consequences following the child's obedience and disobedience. In PCIT for SAD, progress is performance based and treatment does not end until the parents have demonstrated mastery of the skills; on average, families complete treatment in approximately nine sessions, with three sessions devoted to each of the three phases of treatment.

#### Preliminary Data

Preliminary data analysis from this randomized clinical trial demonstrates significant reduction in the severity of separation anxiety disorder from pre- to posttreatment. Clinician severity ratings (CSR; measured on a 0-to-8 scale) of participating children's separation anxiety symptoms decreased markedly after treatment, from a mean SAD CSR of 6.2 at pretreatment to a mean SAD CSR of 2.8 at posttreatment. Ninety-three percent of children reached nonclinical levels of SAD by either posttreatment or 3-month follow-up. The frequency of children's separation anxiety incidents also decreased significantly after treatment, and has continued to improve at follow-up points. Numerous concomitant changes have also been noted by parents (child's academic improvements, behavioral improvements at home, improvement in siblings' behavior, and decreased reported parenting stress). Several parents stated that their acquisition of new parenting skills helped them to feel more confident as parents, and helped them to feel improved attachment and warmth in their parent-child relationships. This 5-year study is still in progress; data collection will continue for the next year.

#### Reevaluating Basic Treatment Targets: The Development and Evaluation of a Unified Treatment for Emotional Disorders in Adolescence

#### Clinical Need

It is clear that specific anxiety and depressive disorders commonly co-occur throughout adolescence and may even be varying components of an overarching construct (e.g., negative affect; Clark & Watson, 1991). Despite this overlap between anxiety and depression in youth, there are no validated treatments to address these emotional disorders with a singular treatment protocol.

Moreover, despite the positive state of affairs in the CBT literature for emotional

disorders, a number of significant caveats can be identified that might point us toward areas of potential innovation regarding treatment of the emotional disorders. As noted previously, it is clear that not all patients respond to cognitive-behavioral treatment, leaving room for improvement to such approaches. Since most researchers manualize their cognitive-behavioral approaches to the treatment of very specific problems or disorders, the resultant state is one in which multiple manuals, workbooks, and protocols coexist, including many for the same disorder (Barlow, Allen, & Choate, 2004). While this situation is marginally better in the child and adolescent anxiety literature, where protocols, such as those by Kendall (1990), target a slightly larger cluster of anxiety disorders, including GAD, social phobia, and SAD, additional manuals and workbooks still exist to treat both this same cluster of anxiety disorders and related emotional disorders in youth. Finally, because these manuals are often complex, their dissemination to community treatment providers is a large obstacle. Recently, NIMH asked a task force to specifically address this issue in the area of depression, specifying a priority for treatment development of more "user-friendly" protocols to treat depressive disorders. One way to conceptualize an increase in such "user friendliness" might be through the development of a more integrated treatment protocol that is inherently responsive to the commonly cooccurring variations in emotional and behavioral symptoms often seen in more naturalistic treatment settings, particularly amongst children and adolescents.

# Theoretical Basis for a Unified Approach to the Treatment of Emotional Disorders

After considering the shared etiologic pathways, structural commonalities, and treatment response to similar psychological and pharmacologic interventions across anxiety and depressive disorders, Barlow and colleagues (2004) reviewed emerging science in the areas of learning, emotional development and regulation, and cognitive science, suggesting that research in these domains added to and coalesced particularly well with existing knowledge of treatment techniques that reliably produce symptom relief across emotional disorders. Based on this theory and associated research (reviewed in extensive detail in Campbell-Sills and Barlow, in press), a common set of therapeutic change elements with potential applicability across the emotional disorders was proposed. These techniques include antecedent cognitive reappraisal, which posits that reappraisals of threat and negativity made prior to engagement in a situation can reduce the degree of negative affect ultimately produced; the prevention of emotional avoidance; and the modification of behavioral action tendencies associated with dysregulated emotions, targeting what we refer to as emotionally driven behaviors. From these elements, the authors formulated a pragmatic approach to the amelioration of these emotional disorders: "Unified Protocol for the Treatment of Emotional Disorders" (UP; Barlow, Allen, & Choate, 2006; Campbell-Sills & Barlow, in press). Recent articles on the unified approach (e.g., Allen, Ehrenreich, & Barlow, 2005; Barlow et al., 2004) provide examples of the pragmatic realization of the UP's primary treatment techniques, including application of these techniques across an array of negative emotions (e.g., fear, sadness, anger, etc.).

#### Preliminary Data

Recently, the UP has been examined in the individual treatment of six adult and three adolescent patients (Allen et al., 2005). These nine patients presented with a range of anxious and unipolar depressive principal diagnoses, including dysthymia, MDD, GAD, OCD, co-principal MDD and social phobia, co-principal MDD and GAD, and anxiety disorder not otherwise specified (Allen et al., 2005). Upon completion of the treatment, five of the six adult patients reported a reduction in principal diagnostic symptomatology such that their symptoms no longer reached clinical levels.

In the adolescent sample, all three of the adolescent patients and their parent(s) reported a reduction in the severity and interference of principal diagnostic symptoms upon completing treatment. In addition, all three evidenced an even further reduction of symptoms at a 6-month follow-up interview, such that all symptoms warranting a clinical diagnosis at the pretreatment assessment were significantly reduced to subclinical levels or completely absent. This reduction in symptoms, observed across both adult and adolescent samples, appears to be comparable to those found in cognitive-behavioral treatments for more diagnostically homogeneous populations, although the sample is clearly very small. These findings suggest that the treatment techniques utilized in the UP may be effective in the reduction of a broad range of emotional disorder symptoms that may

present during development or in adult-hood.

#### **Future Directions**

Consistent with the NIH road map, one primary appeal of a unified approach to the treatment of anxiety and depressive disorders in adolescents is its potential to condense the manual and training needs of community clinicians looking to apply empirically based treatment procedures for these commonly co-occurring difficulties. However, this treatment approach is in its early stages of development with regard to its child and adolescent application. At present, we are revising the original UP and infusing it with a broader emotion-focused format and parent-relevant elements, in addition to modifying descriptions of technique, language, and other relevant aspects of the protocol to developmentally suit an adolescent population. Research meant to determine the effect size of this treatment protocol with an adolescent sample, now supported by a grant from NIMH (PI: Ehrenreich), is under way.

#### New Models of Treatment Development and Dissemination: The Adolescent Traumatic Stress and Substance Abuse Treatment Program

#### Clinical Need

Despite the strong link between substance abuse problems and traumatic stress among adolescents (Giaconia, Reinherz, Paradis, & Stashwick, 2003), there are currently no evidence-based treatment programs targeting this subpopulation. In order to address the complex needs of this group, we have applied Trauma Systems Therapy (Saxe, Ellis, & Kaplow, in press) to the problem of adolescent traumatic stress and substance abuse. The resulting intervention combines the work from the Adolescent Traumatic Stress and Substance Abuse Treatment Center at Boston University and the Center for Medical and Refugee Trauma at Boston Medical Center. The treatment program utilizes existing promising practices for treating adolescent substance abuse, traumatic stress, and emotional regulation problems.

Trauma Systems Therapy (TST) is based on a social-ecological model of mental health (Bronfenbrenner, 1979), which acknowledges the complexity of the social environment that surrounds an individual, and how disruptions in one area of the social ecology may create problems in another. Interventions are designed to work in two dimensions: strategies that operate through and in the social environment to promote change, and strategies that enhance the individual's capacity to self-regulate. These interventions include home- and community-based care, emotion-regulation skills training, services advocacy, trauma processing, and psychopharmacology. TST is implemented using a modular approach, in which interventions are provided based on the level of need.

# Treatment Development Activities and Preliminary Data

TST for Adolescent Substance Abuse (TST-SA; Suárez, Saxe, Ehrenreich, & Barlow, 2006) includes several modifications to the existent intervention. Motivational interviewing strategies are included in order to engage youth in treatment and establish a commitment to change. Parents and teens are provided with psychoeducation about substance abuse and its interaction with symptoms of traumatic stress. TST-SA places a strong emphasis on family communication, behavior management, and positive community integration. Additionally, youth learn skills in recognizing and planning for substance abuse cues or trigger situations, cognitive and interpersonal problem-solving techniques, and other relapse-prevention strategies.

Preliminary data from an open trial of TST demonstrated a significant reduction of trauma symptoms and increased emotion-regulation skills among children, as well as a more stable social environment after 3 months of treatment (Saxe, Ellis, Fogler, Hansen, & Sorkin, 2005). A controlled trial of TST is currently in progress. The substance abuse adaptation of TST is currently being piloted at our site.

#### Implications for NIH Road Map

Consistent with the current NIH road map for translational research, the TST approach is innovative for its flexibility and relevance to settings and needs common to community-based work. At the core of its implementation, the treatment model incorporates a multidisciplinary team and involves collaborations with local agencies, including mental health programs in hospital, school, and community settings, social services, home-based care providers, legal advocacy, and emergency response teams. Members of the team are trained in the application of the treatment model and participate in the treatment planning process. The team takes part in the care of the adolescent and family, and strategically allocates limited intervention resources to maximize the chance of helping the child regulate emotion and to stabilize the social environment.

#### References

- Allen, L. B., Ehrenreich, J. T., & Barlow, D. H. (2005). A unified treatment for emotional disorders: Applications with adults and adolescents. *Japanese Journal of Behavior Therapy*, 31, 3-31.
- Barlow, D. H., Allen, L. B., & Choate, M. L. (2004). Toward a unified treatment for emotional disorders. *Behavior Therapy*, 35, 205-230.
- Barlow, D. H., Allen, L., & Choate, M. L. (2006). The Unified Protocol for Treatment of the Emotional Disorders. Unpublished observation, Boston University.
- Barrett, P. M., Rapee, R. M., Dadds, M., & Ryan, S. M. (1996). Family enhancement of cognitive style in anxious and aggressive children. *Journal of Abnormal Child Psychology*, 24, 187-203.
- Bronfenbrenner, U. (1979). Making human beings human: Bioecological perspectives on human development. Thousand Oaks, CA: Sage.
- Campbell-Sills, L., & Barlow, D. H. (in press). Incorporating emotion regulation into conceptualization and treatment of anxiety and mood disorders. In J. J. Gross (Ed.), *Handbook* of emotion regulation. New York: The Guilford Press.

- Chorpita, B. F., & Barlow, D. H. (1998). The development of anxiety: The role of control in the early environment. *Psychological Bulletin*, 124, 3-21.
- Clark, L. A., & Watson, D. (1991). Tripartite model of anxiety and depression: Psychometric evidence and taxonomic implications. *Journal of Abnormal Psychology, 100*, 316-336.
- Eyberg, S. M. (1988). Parent-child interaction therapy: Integration of traditional and behavioral concerns. *Child & Family Behavior Therapy*, 10, 33-46.
- Giaconia, R. M., Reinherz, H. Z., Paradis, A. D., & Stashwick, C. K. (2003). Comorbidity of substance use disorders and posttraumatic stress disorder in adolescents. In P. Ouimette & P. J. Brown (Eds.), *Trauma and substance abuse: Causes, consequences, and treatment of comorbid disorders* (pp. 227-242). Washington, DC: American Psychological Association.
- Kendall, P. C. (1990). *Coping Cat Workbook*. Ardmore, PA: Workbook Publishing.
- Pincus, D., Eyberg, S., & Choate, M. (2005). Tailoring parent child interaction therapy for young children with separation anxiety disorder. *Education and Treatment of Children*, 28, 163-181.
- Pincus, D. B., Spiegel, D. A., Mattis, S. G., Micco, J. A., & Barlow, D. H. (2003, November). Treatment of adolescents with panic disorder and agoraphobia: A comparison of an 8day intensive treatment program and an 11-week treatment program. Paper presented at the annual meeting of the Association for Advancement of Behavior Therapy, Boston.

- Saxe, G. N., Ellis, B. H., Fogler, J., Hansen, S., & Sorkin, B. (2005). Comprehensive care for traumatized children. *Psychiatric Annals*, 35, 443-448.
- Saxe, G. N., Ellis, B. H., & Kaplow, J. B. (in press). Collaborative treatment of traumatized children and teens: The Trauma Systems Therapy approach. New York: The Guilford Press.
- Schoenwald, S. K., & Hoagwood, K. (2001). Effectiveness, transportability, and dissemination of interventions: What matters when. *Psychiatric Services*, 52, 1190-1197.
- Schuhmann, E. M., Foote, R. C., Eyberg, S. M., Boggs, S. R., & Algina, J. (1998). Efficacy of parent-child interaction therapy: Interim report of a randomized trial with short-term maintenance. *Journal of Clinical Child Psychology*, 27, 34-45.
- Street, L. I., Niederehe, G., & Lebowitz, B. D. (2000). Toward greater public health relevance for psychotherapeutic intervention research: An NIMH workshop report. *Clinical Psychology: Science and Practice*, 7, 127-137.
- Suárez, L. M, Saxe, G. N., Ehrenreich, J. T., & Barlow, D. H. (2006). *Trauma Systems Therapy* for adolescent substance abuse. Boston: Center for Anxiety and Related Disorders and Boston University.

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# Unlocking Speech Where There Is None: Practical Approaches to Treatment of Selective Mutism

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elective mutism is a rare disorder of childhood characterized by the failure  $\mathcal{O}_{\mathrm{to}\,\mathrm{speak}}$  in certain social situations, despite the ability to speak in other situations. Classically, children are reluctant or unable to speak in school, with teachers, peers, or even outside of the home. As a result, selective mutism causes interference with academic achievement and with social relationships. Prevalence rates vary between 0.3% and 0.7% (Bergman, Piacentini, & McCracken, 2002), with some authors suggesting a higher prevalence in females (Black & Uhde, 1992; Hayden, 1980; Wergeland, 1979; Wilkins, 1985; Wright, 1968) and others finding no differences be-

tween rates in males and females (Parker et al., 1960). The disorder usually begins in the preschool years with an insidious onset. Although the average age of referral and diagnosis usually does not occur until the child reaches kindergarten or grade one and verbal skills are expected (Krohn et al., 1992; Wright, Miller, Cook, & Littman, 1985), most parents report that their child has always been shy and quiet. While interventions have largely focused on cognitive behavioral strategies, selective mutism remains a difficult disorder to address. This paper will focus on practical approaches for effectively intervening with this group of anxious children.

#### **Behavioral Therapies**

From a behavior therapy standpoint, mutism is a learned behavior that develops either as a means of getting attention or avoiding anxiety (Reed, 1963). As a result, the goal of treatment using a behavioral approach is to improve self-confidence and dewhile extinguishing crease anxiety reinforcement for the mutism (Reed, 1963). Most clinicians working with children with selective mutism would concur that some type of reinforcement for speaking, in combination with an absence of reinforcement for the mute behaviors, is necessary. Stimulus fading, a technique that is similar to desensitization used to treat social anxiety, has been used with success (Dow et al., 1995), and shaping, a procedure in which the therapist reinforces mouth movements that resembles speech, has also been used with benefit (Austad, Sininger, & Stricken, 1980). In addition, self-modeling, having the mute child watch videotapes of him- or herself speaking, has also achieved some success (Dorwick & Hoo, 1978; Pigott & Gonzales, 1987).

#### Cognitive Behavioral Therapy

Cognitive behavioral therapy (CBT) typically encompasses the use of self-talk strategies while incorporating modeling, anxiety management, contingency management, and graded exposure therapy. The basic premise of using CBT with children is the development of a repertoire of skills so that the child can function without excess distress (Silva, Gallagher, & Haruke, 2006). There are numerous studies demonstrating the efficacy of CBT with anxious children (e.g., Barrett, 1998; Kendall, 1994; Kendall & Southam-Gerow, 1996; Kendall et al., 1997; Mendlowitz et al., 1999). The assumption that selective mutism is a variant of social anxiety precipitated a move toward using the same evidence-based interventions used for other anxiety disorders. Children with selective mutism, however, do not always respond in a similar manner to CBT interventions, with many of these cases tending to be much more treatment resistant (e.g., Bergman et al., 2002; Kehle, Madaus, & Baratta, 1998). While the average child with generalized anxiety, separation anxiety, or social anxiety responds to CBT within an average of 10 to 16 sessions, it has been this clinic's experience that children at the more severe end of the selective mutism spectrum often require 5 to 6 times more intervention sessions. As with pharmacological studies, early intervention appears to improve outcome (Bergman et al., 2002; Kehle et al, 1998). In summary, although many children with selective mutism exhibit significant anxiety, typical CBT strategies alone are often not sufficient to produce change.

#### Need for Modification to CBT Approach

Selective mutism remains a difficult disorder to treat, and no set treatment is ideal. The standard model of CBT in which children are taught to recognize and identify anxious situations and learn specific strategies to address anxiety is not sufficient with this population. In our clinic's experience, the selectively mute child benefits most from the incorporation of several types of approaches, including cognitive behavioral techniques, graded exposure, and social skills training, as well as some speech and language techniques. The integration of these techniques and strategies across several settings is critical as well.

While all treatments involving children should consider a parental component, this element is particularly salient with this population. Parental work includes teaching the parent anxiety-management skills, sup-

porting the parent's efforts to reinforce speaking, and helping the parent advocate for his or her child in an effective manner. Many parents of selectively mute children are themselves shy, quiet, and reserved, and do not have the necessary skills to advocate for their child in the school setting. Furthermore, given that the main issues with lack of speaking occur in the classroom, the key challenge is creating strategies that are effective in the classroom setting while also ensuring that the child utilizes these strategies in the school setting, specifically the classroom. For this to occur, coordination of treatment with the child's school is critical.

As with other anxiety disorders, an important treatment component involves exposing one to the feared situation. While most strategies can be learned in a rote manner, the opportunity for practice during in-vivo exposures serves to solidify learning. In many cases of selective mutism, this can be achieved in the therapist's office-for example, by having selectively mute children practice their skills by asking scripted questions to different people in the office (e.g., administrative staff, other therapists, and people in the waiting area or in the outside environment). However, given that the most feared situation is speaking in the classroom, a hierarchy needs to be developed in order to work toward the child eventually talking with his or her teacher and classmates in the classroom. In order for this to occur, a cross-discipline intervention and a supportive school environment are critical components for successful outcome. It was with these goals in mind that we set out to develop our treatment approach for this complex disorder.

#### Our Treatment Approach

While a thorough assessment is necessary prior to treatment of any disorder, with selective mutism special attention needs to be directed toward understanding the conditions under which the child will or will not speak and who may or may not be present, as well as the level of speech that is produced in these situations. This involves gathering information from the parent, the child (questionnaires, if they are old enough to read), the school (teacher, counselor), and from informants in any additional areas where the child might be involved in social interaction (babysitter, nanny, grandparents, play group, etc.). A speech and language assessment, if available (especially within the academic environment), is advantageous. An integral part of this assess-

ment is to determine exactly where and in which situations the child speaks; who is present when the child speaks; and what combinations of persons will the child speak with and in what environments. For example, there are some selectively mute children who will not speak to their peers in any location; however, others will speak to their school peers in their own home, or other areas outside the school environment, despite not speaking to them at school. This is important information in trying to engage allies to facilitate speech for the child in different locations. Clearly, willingness of the school to collaborate in the process is a critical component of successful outcome.

The first step in the treatment is to gather the treatment team and develop a set of goals. The team should involve the therapist (psychologist, psychiatrist, or social worker), parent, teacher, and other school personnel (ideally speech and language pathologist, special education teacher, and principal). The purpose of this meeting is to ensure that all members are working toward the same goal-having the child converse in a "regular" speaking voice to anyone. Second, the therapist should provide an explanation of the disorder to dispel any false notions about the problem. Third, the role of each individual (directed by the therapist) should be discussed. In addition, everyone should become knowledgeable about the child's level of speech functioning. Figure 1 represents a guideline for evaluating the child's speech. This should be used by all members to set targets for the child to speak.

#### Intervention

At the core of our treatment approach are the basic tenets of CBT that involve the child's identification of the emotional, physiological, cognitive and behavioral manifestations of anxiety so that they can learn specific strategies to manage their anxiety more effectively. Graded exposure<sup>1</sup> therapy (Bednar, 1974; Croghan & Craven, 1982; Kehle et al., 1998; Lachenmeyer & Gibbs, 1985; Rasbury, 1974) is a central element of any effective CBT program for anxiety. However, with respect to the selectively mute population, a component of social skills training is an important additional component. To start with, the therapist must help the child recognize and understand situations in which the child feels anxious and does not speak, for example, "when the teacher looks at you funny." The next step is to help the child develop socially appropriate ways of responding to peers-

#### INSTRUCTIONS:

Look at this table outlining 13 stages in the emergence of speech at school. Which stage would your child fall into at this point?

	STAGE	DESCRIPTION
1	Complete mutism at school	Child speaks freely at home but is silent at school. Appears anxious at school. May resist attending school.
2	Relaxed nonverbal participation	Child speaks at home but not at school. Child begins participating nonverbally in classroom activities (facial expressions, gestures). May begin to talk positively about school when at home.
3	Speaks to parent at school	When alone with a parent at school, where students and teachers can- not hear or see, the child speaks at school, often in a whispered voice.
4	Speech observed by peers	Child speaks at school, usually to a parent. Peers observe but do not hear the child speaking.
5	Speech overheard by peers	Child speaks at school, usually to a parent. Other children observe and hear the child speaking. Child does not speak directly to the other chil- dren or teachers.
6	Child speaks through parent to peers	Child speaks to parent who conveys message to another child sitting nearby. The other child may overhear the child speaking and respond directly.
7	Child speaks to one peer—whisper	Child speaks at school to one peer, often on the playground. Child does not speak to teachers. Tone of speech is low, likely resembles a whisper.
8	Child speaks to one peer—normal tone	Child speaks at school to one peer, often on the playground. Child does not speak to teachers. Tone of speech is normal (is audible to others).
9	Speech to several peers—whisper	Child speaks to several children at school. Child does not speak to teachers. Tone of speech to peers is low, likely resembles a whisper.
10	Speech to several peers—normal tone	Child speaks to several children at school. Child does not speak to teachers. Tone of speech is normal (is audible to others).
11	Speech to teacher—whisper	Child begins speaking to teacher and speaks to several peers. Tone of speech is low, likely resembles a whisper.
12	Speech to teacher—normal tone	Child begins speaking to teacher and speaks to several peers. Tone of speech is normal (is audible to others).
13	Normal speaking	Child speaks indiscriminately to most adults (including teachers, other school staff) and peers at school.

Figure 1. Rate the degree of mutism.

Adapted from Cunningham, C. E. (2000), COPEing with Selective Mutism: A collaborative school-based approach.

"how to make a friend." For example, the child may need to practice smiling and making a "friendly" face in the mirror, alone and with the parents and siblings. Children are also encouraged to record themselves delivering friendly greetings, such as "Hi, what are you doing?", and then play back the tape to listen to their voice. These social interactions are practiced with increasing degrees of comfort, culminating in demonstrating these behaviors in the classroom.

Concurrent with CBT strategies, efforts should be made by the school to desensitize the child to anxiety-provoking schoolrelated situations. In order to do this one must determine the talking zone. The talking zone is a term we have developed to determine the zone or the point at which the child does not talk. For example, if the parent takes the child to school each day, does she stop talking as soon as the car door opens, as she approaches peers in the yard, only if a teacher is present, or as she walks into the actual school building? Talking zones will occur in a multitude of locations (e.g., areas in and around the neighborhood, the clinician's office, the school, the playground). It is important to have an understanding of where these zones occur as the goal of treatment is to expand this talking zone to the point that every area of the child's life is a talking zone.

It has been clearly noted by our group that the child with selective mutism can learn most strategies without stating any words; therefore, it is important to establish a guideline of expectations for speech at the beginning of treatment. In our experience, it is unrealistic to expect a child to speak by the third or fourth session; however, at this stage they should be able to mouth speech. Within the next few sessions, they should be able to mouth speech in public situations, such as mouthing words to administrative staff in the clinic. Even if the child is doing this in the clinic, they may be less willing to do so outside the clinic setting. Since our goal is to have them consistently speak in their classroom, one must help facilitate this process. One method is to have the teacher meet regularly with the child for a few minutes before or after school. Ideally, this time would be spent playing a game and just allowing the child to become less anxious in this situation (i.e., exposing the child). The setting for this meeting should be the child's classroom. Another idea is to have the teacher attend a home visit. As the child gains comfort, nonverbal class signals need to be replaced with mouthing words, followed by speech. While initially a speech and language pathologist could also be

working with the child on these scenarios, the goal is to gradually introduce a peer into these sessions. Peers must not be permitted to talk for the selectively mute child. If this occurs, the teacher should respond by saying, "That's very nice of you to help, but Sarah has a voice and she can tell me when she needs something."

Concurrently, the parent needs to be placing the expectation that the child will respond to questions such as "How are you today?" One way to facilitate this is to have a prepared set of questions and answers on an index card. These social scenarios can be practiced in session with parents and then the parents can take the child into a public situation to practice using these skills. While it may take many in vivo exposures to accomplish this task, small rewards or reinforcers always facilitate the process (Kehle et al., 1998).

One common treatment challenge is that children can often demonstrate knowledge of CBT through their written work but cannot apply the strategies to speaking. While development of a visual hierarchy, with the child earning some type of reward at each stage (e.g., sticker), may be helpful, other strategies have been found by our group to be more effective. One of these methods of expanding the talking zone is the introduction of "sound tag." This technique stages the introduction of sounds (e.g., Jolly Phonics program) by first using gestures to imitate sounds-for example, stating "s" is for "snake," then making the gesture of a snake with the hand. Other letters are also introduced, so that there are enough to make short three-letter words. These are initially practiced nonverbally, playing "sound tag" with the child, graduating to mouthing each sound, then whispering the sounds, then forming words using the phonetic sounds (e.g., *s-a-t*). Once the child gains mastery, other staff or a peer may be introduced to the game. Other approaches utilized to initiate and promote talking zones include reading alternate passages with the child while reading a story and gradually increasing the amount read by the child; as well as playing simple games such as Hangman or I Spy with the child. Recall that the goal is to have the child reach a comfort zone so that he or she can use a regular speaking voice in any situation. One important note regarding the use of verbal praise is the distinction between selectively mute children and children with other anxiety disorders. Although most children appreciate verbal praise-the louder the better-this is not true with the selectively mute child, who

often cringes when the verbal praise is too loud or too extensive.

Finally, it is evident in our clinical setting that one third to one half of children with selective mutism do not meet the goals of therapy as expected and often do not progress unless pharmacotherapy is initiated. In the past, parents have been reluctant to agree to medication consultation; however, as our group has observed significant improvement with the addition of medications such as selective serotonin reuptake inhibitors (SSRIs), we have been advocating that this is an important piece in the treatment protocol. At assessment, our group clearly indicates to parents that if no progress has been made by Session 6, it is important to have a medication consultation. Clearly, there is not an expectation that all children must be on medication. However, by providing parents this piece of information, they have a better understanding of the treatment approach and are less reluctant to meet and discuss the option of medications. The medication consultation involves a clear discussion of the use of medications, their side effects, and potential risks (including the risk of suicidal ideation) and benefits. Many of the children who undergo treatment at our clinic have had adjunctive pharmacotherapy, specifically a low dose of fluoxetine, with significant benefit.

#### Future Directions and Research

There remains much to learn about selective mutism, including a better understanding of the etiology as well as treatment approaches. Although a relatively rare disorder, these children suffer significantly academically and socially. Because teachers, parents, educators, physicians, and other professionals are now more aware of this disorder, many more children are being referred for treatment. Beginning with a thorough clinical and diagnostic assessment and clearly defining "talking zones" is essential. We have developed a general treatment protocol using a modified cognitive behavioral approach that includes anxiety management techniques such as the use of graduated exposure in the therapist's office and in the classroom. In our experience, the addition of social skills training and speech and language techniques is also needed for a number of selectively mute children who are socially anxious as well as mute. Parental practice and reinforcement of specific child strategies as well as school involvement and support are also critical elements. Furthermore, frank discussions of the treatment process and the approach, as

well as judicious utilization of medications ,must be discussed early on in treatment. Attention to ideographic factors and patience on the part of the therapist are also important factors in successful treatment outcome. Further studies utilizing objective measures and standardized treatment protocols should be given priority as we move forward in clarifying this complex disorder.

#### References

- American Psychiatric Association. (1994). Diagnostic and statistical manual of mental disorders (4th ed.) Washington, DC: Author.
- Austad, L. S., Sininger, R., & Stricken, A. (1980). Successful treatment of a case of elective mutism. *the Behavior Therapist*, 3, 18-19.
- Barrett, P. M. (1998). Evaluation of cognitivebehavioral group treatments for childhood anxiety disorders. *Journal of Clinical Child Psychology*, 28, 459-468.
- Bednar, R. A. (1974). A behavioral approach to treating an elective mute in school. *Journal of School Psychology*, 12, 326-336.
- Bergman, R. L., Piacentini, J., & McCracken, J. T. (2002). Prevalence and description of selective mutism in a school-based sample. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41, 938-946.
- Black, M., & Uhde, T. W. (1992). Elective mutism as a variant of social phobia. *Journal* of the American Academy of Child and Adolescent Psychiatry, 31, 711-718.
- Bouchard, S., Mendlowitz, S., Coles, M., & Franklin, M. (2004) Considerations in the use of exposure with children. *Cognitive Behavioral Therapy and Practice*, 11, 56-64.
- Dow, S. P., Sonies, B. C., Scheib, D., Moss, S. E., & Leonard, H. L. (1995). Practical guidelines for the assessment and treatment of selective mutism. *Journal of the American Academy of child and Adolescent Psychiatry*, 34, 836-846.
- Dorwick, P. W., & Hood, M. (1978). Transfer of talking behaviors across setting using faked films. In E. I. Glynn & S. S. McNaughton

(Eds.), New Zealand Conference for Research in Applied Behavioral Analysis. Auckland, NZ: University of Auckland Press.

- Kehle, T. J., Madaus, M. R., & Baratta, V. S. (1998). Augmented self-modeling as a treatment for children with selective mutism. *Journal of School Psychology*, 36, 247-260.
- Kendall, P. C. (1994). Treating anxiety disorders in children: Results of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 62, 100-110.
- Kendall, P. C., & Southam-Gerow, M. A. (1996). Long-term follow-up of a cognitivebehaviral therapy for anxiety-disordered youth. *Journal of Consulting and Clinical Psychology*, 64, 724-730.
- Kendall, P. C., Flannery-Schroeder, E., Panicelli-Mindel, S. M., Southham-Gerow, M. A., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting* and Clinical Psychology, 65, 366-380.
- Krohn, D. D., Weckstein, S. M., & Wright, H. L. (1992). A study of the effectiveness of a specific treatment for elective mutism. *Journal of the American Academy of Child & Adolescent Psychiatry*, 31, 711-718.
- Lachenmeyer, J. R., & Gibbs, M. S. (1985). The social-psychological functions of reward treatment in elective mutes. *Journal of Social* & Clinical Psychology, 3, 466-472.
- Mendlowitz, S. L., Manassis, K., Bradley, S., Scapillato, D., Miezitis, S., & Shaw, B. F. (1999). Cognitive behavioral group treatments in childhood anxiety disorders: The role of parental involvement. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1223-1229.
- Parker, E. B., Elsen, T. F., & Throckmorton, M. C. (1960). Social casework with elementary school children who do not talk in school. *Social Casework*, 5, 64-70.
- Pigott, H. E., & Gonzales, F. P. (1987). Efficacy of video tape self-modeling in treating an electively mute child. *Journal of Clinical Child Psychology*, 16,106-110.

# Overview of the *Cool Teens* CD-ROM for Anxiety Disorders in Adolescents

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espite the fact that anxiety disorders affect many adolescents and can cause significant life interference and morbidity if untreated, this age group remains difficult to engage in treatment programs. The Australian Federal Department of Health and Ageing (2004) recently reported that many 16- to 25-yearolds either do not readily access professional services for mental health problems or else encounter barriers to ongoing therapy. The New South Wales Centre for the Advancement of Adolescent Health (2005) and other researchers have identified several potential barriers to traditional services, including therapy availability, approach and appropriateness, confidentiality, stigma, cost, geographic or social isolation, other

- Rasbury, W. C. (1974). Behavioral treatment of selective mutism: A case report. *Journal of Behavior Therapy & Experimental Psychiatry*, 5, 103-104.
- Reed, G. (1963). Elective mutism in children. Journal of the American Academy of Child and Adolescent Psychiatry, 4, 99.
- Silva, R., Gallagher, R., & Haruke, M. (2006). Cognitive-behavioral treatments for anxiety disorders in children and adolescents. *Primary Psychiatry*, 13, 68-76.
- Wergeland, H. (1979). Elective mutism. Acta Psychiatric Scandinavia, 59, 218-228.
- Wilkins, R., (1985). A comparison of elective mutism and emotional disorder in children. *British Journal of Psychiatry*, 146, 198-203.
- Wright, H. (1968). A clinical study of children who refuse to talk in school. *Journal of the American Academy of Child and Adolescent Psychiatry*, 7, 603-617.

<sup>1</sup>Graded exposure therapy is a systematic way of addressing feared situations. Graded exposure therapy with children differs from the approach used with adults. Initially relaxation techniques are taught in order to control anxiety-related responses. This aspect is particularly salient for children. Children, especially very young children who have limited insight, are less likely to engage in exposure if the experience is too stressful, and therefore feel overwhelmed by the experience, hence the importance of coping strategies. The underlying premise for exposure's efficacy is that one's anxiety will decline and mistaken beliefs will be repudiated. See Bouchard, Mendlowitz, Coles, and Franklin (2004) for further explanation.

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rural and remote issues, engagement of participants, and a shortage of trained therapists.

Cognitive behavioral therapy (CBT) is an empirically supported approach to treating young people with anxiety disorders. Over the past 10 years, a number of controlled trials have shown that CBT packages provide significantly greater reductions in anxiety for adolescents relative to wait-list (Barrett, Dadds, & Rapee, 1996; Kendall, 1994; Rapee, 2000). Furthermore, these improvements are maintained for 12 months and up to as much as 6 years (Barrett, Duffy, Dadds, & Rapee, 2001). Thus, highly efficacious treatments for the reduction of anxiety disorders in adolescents currently exist. However, these programs are typically delivered only through specialized clinics and research settings and, to a markedly lesser degree, through general community care. In order to increase and improve access to treatment, young people may benefit from creative and innovative approaches that transcend many existing service boundaries (Australian Federal Department of Health and Ageing, 2004).

For several years, the Macquarie University Anxiety Research Unit (MUARU) has conducted research and development aimed to increase the dissemination and acceptability of empirically validated treatments. This was done initially by reducing the duration of face-toface therapy and by using a group approach rather than offering this treatment to individuals. Results showed that 9-session delivery of a brief group intervention for anxiety was as efficacious as the more common 12- to 16-session individual format (Rapee, 2000). More recently, a bibliotherapy program was developed to allow parents of anxious children to access the skills to help their own child without the need for therapist involvement. Evaluation demonstrated a significant beneficial effect of bibliotherapy, with up to 20% of children being free of an anxiety diagnosis after 12 weeks (Rapee, Abbott, & Lyneham, 2006).

Further development of these methods resulted in an outreach program for anxious children from rural and remote regions of Australia. In this program, bibliotherapy materials were augmented through varying degrees of therapist contact using either telephone or email. In the most efficacious condition, bibliotherapy combined with 9 brief telephone sessions with a therapist produced results that were at least as efficacious as our standard, face-to-face group program (Lyneham & Rapee, 2006). Augmentation of bibliotherapy via email or using "as-required" sessions was also markedly better than bibliotherapy alone. However, dissemination of materials through parents limits delivery to younger children who are still under the direct influence of their parents. Dissemination to anxious adolescents presents a different challenge.

#### Computer-Based CBT

One therapy option that has been studied with anxious adults is computer-based CBT (CCBT). Computer-delivered therapy has a number of potential benefits (Kaltenthaler et al., 2002). It is economical;

once a program has been developed, running costs are minimal. These programs are convenient, especially for self-help, because users can work through content at their convenience. Computer delivery may also allow wider dissemination of therapy, and thus may help to reduce inequity of service provision. Several studies have shown the use of computer programs, delivered either using a CD-ROM or Web site, to be effective for adults with various forms of anxiety disorders (for example, Botella, Hofmann, & Moscovitch, 2004; Carlbring, Westling, Ljungstrand, Ekselius, & Andersson, 2001; Christensen, Griffiths, & Korten, 2002; Kenardy, McCafferty, & Rosa, 2003; Proudfoot et al., 2003; Wright et al., 2002). To date, no data have been published on the development and use of computerized programs specifically for the delivery of treatment to anxious adolescents. Yet this delivery mode provides some major potential advantages for this age group.

Increasing numbers of adolescents use the Internet to seek help for mental health problems (Mission Australia. 2005: Nicholas, Oliver, Lee, & O'Brien, 2004) and Di Noia, Schwinn, Dastur, and Schinke (2003) have shown that either a CD-ROM or an Internet site can be a viable means of disseminating an adolescent prevention program. This is particularly likely to be the case for adolescent males, who are typically the hardest to reach with traditional treatments (Booth et al., 2004). Computerized self-help allows a tremendous degree of personal control and flexibility. Gega, Marks, and Mataix-Cols (2004) suggest that it also has the potential to minimize treatment stigma. Finally, the use of multimedia components designed with adolescent input allows therapeutic materials to be delivered in a format that is familiar and acceptable to this age group.

#### The Cool Teens Program

In response to the identified gap in therapy provision and use in adolescents with anxiety disorders, we engaged a multidisciplinary team to develop *Cool Teens* (Cunningham, Rapee, Lyneham, Schniering, Hudson, & Wuthrich, 2006), a multimedia, self-help CD-ROM specifically for this age group. The program is an adaptation of existing paper-based therapy materials developed and used successfully for group therapy at our clinic (Lyneham, Schniering, Hudson, & Rapee, 2005; Rapee, Wignall, Hudson, & Schniering, 2000). The project has four phases. The first was to design and develop a prototype program. Phase 2 evaluated the prototype with young people to assess the structure, design, and presentation format. Feedback was used to guide Phase 3, the development of a full clinical version of the program. The final phase is a treatment outcome study to evaluate clinical efficacy and user acceptability.

The development phase of the Cool Teens project, finished in December 2005, is described in detail elsewhere (Cunningham, manuscript in preparation). The resulting program consists of eight modules— Understanding Anxiety, Setting Goals, Realistic Thinking I & II (cognitive restructuring), Stepladders I & II (exposure), Other Coping Skills, and Staying Cool—each of which takes 15 to 30 minutes to complete.

Each module contains information, interactive exercises, hypothetical scenarios, case studies, and practice tasks. Content is presented using a multimedia format: text, audio, graphics, animation, video, and interactivity (see examples in Figure 1). Each page uses an appropriate mixture of media. For example, the Techniques to Manage Anxiety page of the psychoeducation module contains an interactive flowchart of graphics that allows the user to selectively play voice-over descriptions of each of the maintaining factors of anxiety. The user can also listen to descriptions of the techniques that can be used to help manage these factors. Specific media formats are used for various purposes in the program. For example, live video is used to follow the stories of six young people with anxiety problems and cartoon animations are used to present hypothetical situations in an engaging manner. Program users enter data at various stages and these are stored and used to provide feedback and motivational messages. The program charts the user's progress over time by tracking self-reported ratings of anxiety levels and therapy achievements. The program was developed for delivery on CD-ROM but was created and programmed in a manner that makes migration to an online Web site possible if this becomes a delivery preference in the future. The program focuses mostly on social phobia and generalized anxiety disorder because these are the two most common types of anxiety in this age group and are experienced by most anxious teenagers as comorbid issues.

Beginning in early 2006, the final phase of the project is a treatment outcome study to assess the program's effect on clinical symptoms and life interference. Delivery issues, such as program usage patterns, user satisfaction, and perceptions of treatment

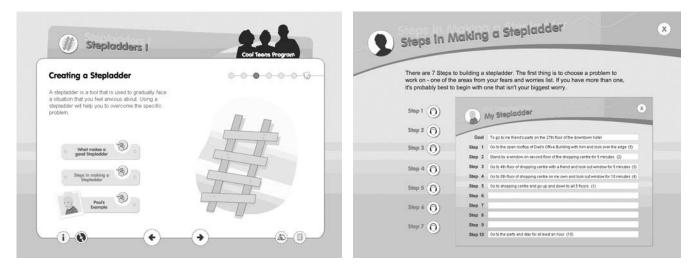


Figure 1. Example content pages from the Cool Teens CD-ROM.

relevance and therapist alliance, will also be analyzed. This final phase will be accompanied by a pilot series of early case studies (Cunningham, Wuthrich, Rapee, & Lyneham, manuscript in preparation).

#### **Preliminary Data**

Phase 2 of the Cool Teens project evaluated a prototype CD-ROM containing one full module and a menu and navigation system (Cunningham, Rapee, & Lyneham, 2006). A summary of this study is presented here.

#### Sample and Procedure

Nonclinical community participants and adolescents who had previously undergone group psychotherapy at Macquarie University's Adolescent Anxiety Clinic were recruited. Participants used the prototype CD-ROM for 1 hour on a home computer. The ethical aspects of the study were approved by the Macquarie University Ethics Review Committee (Human Research).

#### Measures

Participants completed a feedback questionnaire. The questions were designed to provide direction for the development of the full clinical version of the program and also to identify delivery issues that might affect user satisfaction. Participants who had previously attended the Anxiety Clinic were asked to identify advantages and disadvantages of the CD-ROM and to compare it with group therapy.

#### Results

Thirteen (7 female) nonclinical participants and 9 adolescents (6 female) who had previously attended group therapy for an anxiety disorder returned completed questionnaires. Participants ranged from 14 to 18 years of age (modes = 17 years and 16 years for the two groups, respectively) and from Australian school year 9 to 1st-year university (modes = year 11 for both groups).

Participants in both groups rated all of the multimedia components and general aspects of the program, such as navigation, appearance, etc., as either "very good" or "good." They reported a strong preference for live video over text, audio, and cartoonstyle options in key program sections. Participants listed various likes and dislikes and many provided suggestions for improving the program. The majority in both groups found the CD-ROM to be an "interesting and fun way to learn."

The group of adolescents who had previously attended group therapy sessions at the Anxiety Clinic perceived several advantages of the CD-ROM over group therapy, including convenience (time or travel), privacy/comfort, ability to focus on your own problems, good progress tracking, and "not having to speak in front of others." Balanced against this very positive feedback, a large proportion of participants also identified disadvantages to CD-ROM delivery. Most of these were attributable to the absence of the involvement of a therapist and other group members (e.g., asking questions, getting support, making friends). Despite these perceived disadvantages, almost all participants reported they would use the program to prepare for group therapy and all would use it to help practice. In response to the overall key question of whether they would use a CD-ROM like this instead of attending group therapy, answers were divided almost evenly between yes (3), no (4), and in combination (2).

#### Discussion

The development of computerized CBT programs can help answer recent government calls to provide more timely and effective mental health care services to cater to specific population groups, especially adolescents (Australian Health Ministers, 2003), and to explore the potential use of technology-based solutions to improve access and to reduce barriers for rural and remote communities. This type of program also fits into the NIH Roadmap goal of bringing research developments into clinical practice in the United States and the National Institute for Health and Clinical Excellence's call to establish the place for CCBT in the management of anxiety disorders in the United Kingdom.

We believe that programs such as Cool Teens can provide realistic, low-cost treatment options for many young people who do not access professional services for their anxiety. In these days of increasing demands on health care professionals, less timeintensive programs have the potential to help free up psychologist time for those who would benefit most from face-to-face methods of therapy. The development of technology-based options to increase dissemination may address the call to further explore preliminary positive findings on the use of CBT to treat adolescents with anxiety disorders (Kendall & Ollendick, 2004) and may also help to develop our understanding of the treatment process in young people (Chu et al., 2004).

Evaluation of this Cool Teens prototype suggests that this method of delivering therapy is likely to be acceptable to many adolescents with anxiety disorders. User feedback on multimedia and presentation preferences has been used to guide the development of the full clinical version of the program. Feedback from the participants who had previously attended group therapy raises a couple of interesting issues. While some users perceived "not having to speak in front of others" as an advantage, any treatment option that does not involve the social involvement of a group situation may reduce opportunities for live practice and, for some users, could potentially even facilitate avoidance of social interaction. Also, given the positive responses regarding the use of the CD-ROM to prepare for group sessions and to practice afterwards, the CD-ROM could also be explored as a therapy adjunct or as a means of reducing time or therapist involvement in face-to-face treatment. Programs such as Cool Teens require further exploration as a method of increasing service access and providing new options for many young people who would otherwise not receive help. Our current randomized, controlled trial will provide important data on the clinical efficacy and user acceptance of this method of therapy.

#### References

- Australian Federal Government Department of Health and Ageing. (2004). Responding to the mental health needs of young people in Australia. Discussion paper: Principles and strategies. Retrieved October 10, 2005, from http://www.mentalhealth.gov.au/resources /pdf/youngpeople.pdf
- Australian Health Ministers. (2003). National Mental Health Plan 2003-2008. Canberra: Australian Government.
- Barrett, P. M., Dadds, M. R., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting* and Clinical Psychology, 64, 333-342.
- Barrett, P. M., Duffy, A., Dadds, M. R., & Rapee, R. M. (2001). Cognitive-behavioral treatment of anxiety disorders in children: Longterm (6-year) follow-up. *Journal of Consulting and Clinical Psychology*, 69, 135-141.
- Booth, M. L., Bernard, D., Quine, S., Kang, M. S., Usherwood, T., Alperstein, G., et al. (2004). Access to health care among Australian adolescents: Young people's perspectives and their sociodemographic distrib-

ution. Journal of Adolescent Health, 34, 97-103.

- Botella, C., Hofmann, S. G., & Moscovitch, D. A. (2004). A self-applied, Internet-based intervention for fear of public speaking. *Journal* of *Clinical Psychology*, 60, 821-830.
- Carlbring, P., Westling, B. E., Ljungstrand, P., Ekselius, L., & Andersson, G. (2001).
  Treatment of panic disorder via the Internet: A randomized trial of a self-help program. *Behavior Therapy*, 32, 751-764.
- Christensen, H., Griffiths, K. M., & Korten, A. (2002). Web-based cognitive behavior therapy: Analysis of site usage and changes in depression and anxiety scores. *Journal of Medical Internet Research*, 4. Retrieved October 10, 2005, from http://www.jmir.org/2002/1/e3
- Chu, B. C., Choudhury, M. S., Shortt, A. L., Pincus, D. B., Creed, T. A., & Kendall, P. C. (2004). Alliance, technology, and outcome in the treatment of anxious youth. *Cognitive and Behavioral Practice*, 11, 44-55.
- Cunningham, M. J. (manuscript in preparation). Development and evaluation of a computer-based program for the treatment of anxiety disorders in adolescents. Doctoral dissertation. Macquarie University, Sydney.
- Cunningham, M. J., Rapee, R. M., & Lyneham, H. J. (2006). Feedback to a prototype selfhelp computer program for anxiety disorders in adolescents. Australian e-Journal for the Advancement of Mental Health, 5(3). Retrieved December 12, 2006, from www.auseinet .com/journal/vol5iss3/cunningham.pdf.
- Cunningham, M. J., Rapee, R. M., Lyneham, H. J., Schniering, C. A., Hudson, J. L., & Wuthrich, V. (2006). The Cool Teens CD-ROM: An anxiety management program for young people. Sydney: Macquarie University Anxiety Research Unit (MUARU).
- Cunningham, M. J., Wuthrich, V., Rapee, R. M., & Lyneham, H. J. (manuscript in preparation). The Cool Teens CD-ROM for Anxiety Disorders in Adolescents: A Pilot Case Series.
- Di Noia, J., Schwinn, T. M., Dastur, Z. A., & Schinke, S. P. (2003). The relative efficacy of pamphlets, CD-ROM, and the Internet for disseminating adolescent drug abuse prevention programs: An exploratory study. *Preventive Medicine*, 37, 646-653.
- Gega, L., Marks, I., & Mataix-Cols, D. (2004). Computer-aided CBT self-help for anxiety and depressive disorders: Experience of a London clinic and future directions. *Journal of Clinical Psychology*, 60, 147-157.
- Kaltenthaler, E., Shackley, P., Stevens, K., Beverley, C., Parry, G., & Chilcott, J. (2002). A systematic review and economic evaluation of computerised cognitive behavioral therapy for depression and anxiety. *Health Technology Assessment*, 6, 1-89.
- Kenardy, J., McCafferty, K., & Rosa, V. (2003). Internet-delivered indicated prevention for anxiety disorders: A randomized controlled

trial. Behavioral and Cognitive Psychotherapy, 31, 279-289.

- Kendall, P. C. (1994). Treatment of anxiety disorders in children: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 62, 100-110.
- Kendall, P. C., & Ollendick, T. H. (2004). Setting the research and practice agenda for anxiety in children and adolescence: A topic comes of age. *Cognitive and Behavioral Practice*, 11, 65-74.
- Lyneham, H.J., & Rapee, R.M. (2006). Evaluation of Therapist-Supported Parent-Implemented CBT for Anxiety Disorders in Rural Children. *Behaviour Research and Therapy*, 44, 1297-1300.
- Lyncham, H. J., Schniering, C. A., Hudson, J. L., & Rapee, R. M., (2005). *The Cool Kids Program—Adolescent version*. Macquarie University Anxiety Research Unit, Sydney.
- Mission Australia. (2005). 2004 National Youth Survey. Retrieved October 10, 2005, from www.missionaustralia.com.au/cm/resources /documents/Youth survey 2004.pdf
- Nicholas, N., Oliver, K., Lee, K., & O'Brien, M. (2004). Help-seeking behavior and the Internet: An investigation among Australian adolescents. Australian e-Journal for the Advancement of Mental Health. Retrieved October 10, 2005, from http://www .auseinet.com/journal/vol3iss1/nicholas.pdf
- NSW Centre for the Advancement of Adolescent Health. (2005). Understanding adolescents. Retrieved October 10, 2005, from http://www.caah.chw.edu.au/resources /gp-section1.pdf
- Proudfoot, J., Swain, S., Widmer, S., Watkins, E., Goldberg, D., Marks, I., et al. (2003). The development and beta-test of a computer-therapy program for anxiety and depression: Hurdles and lessons. *Computers in Human Behavior*, 19, 277-289.
- Rapee, R. M. (2000). Group treatment of children with anxiety disorders: Outcome and predictors of treatment response. *Australian Journal of Psychology*, 52, 125-129.
- Rapee, R. M., Abbott, M. J., & Lyneham, H. J. (2006). Bibliotherapy for children with anxiety disorders using written materials for parents: A randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 74, 436-444.
- Rapee, R. M., Wignall, A., Hudson, J. L., & Schniering, C. A. (2000). *Treating anxious* children and adolescents: An evidence-based approach. Oakland, CA: New Harbinger.
- Wright, J. H., Wright, A. S., Salmon, P., Beck, A. T., Kuykendall, J., Goldsmith, J., et al. (2002). Development and initial testing of a multimedia program for computer-assisted cognitive therapy. *American Journal of Psychotherapy*, 56, 76-86.

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# Intensive Cognitive-Behavioral Therapy for Pediatric Obsessive-Compulsive Disorder

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bsessive-compulsive disorder (OCD) is a common childhood psychiatric condition (Douglass, Moffitt, Dar, McGee, & Silva, 1995; Flament, Whitaker, Rapoport, & Davies, 1988; Zohar, 1999) associated with significant psychosocial impairment (Koran, Thiennmann & Davenport, 1996; Piancenti et al., 2003). Fortunately, recent treatment advances have identified two evidence-based treatments: cognitive-behavioral therapy (CBT) and serotonin reuptake inhibitors (SRIs). Considered the first line of treatment for children and adolescents with OCD (March et al., 1997), CBT consists of two parts: exposure and response prevention (ERP) and cognitive therapy (Storch, 2005). However, there are insufficient numbers of therapists trained in the use of CBT, with approximately 5 million Americans not having access to CBT providers in their home region (Obsessive-Compulsive Foundation, 2004). For those who do receive CBT, response rates are positive (e.g., Barrett, Healy-Farrell, & March, 2004; Pediatric OCD Team, 2004) and durable (Barrett et al., 2004). However, a sizable percentage of youth remain refractory after treatment, necessitating augmentation approaches (Lewin et al., 2005). A more intensive schedule of treatment may offer an alternative for these types of patients and address geographic barriers to providers.

CBT for pediatric OCD is based on the notion that obsessions and compulsions are functionally related (i.e., compulsions are performed to reduce/avoid anxiety associated with obsessions) and consists of three interrelated core components: (a) exposure (placing the patient in situations that elicit anxiety related to their obsessions); (b) response prevention (deterring the ritualistic or compulsive behaviors that may serve to reduce or avoid anxiety); and (c) teaching objective thinking strategies (e.g., training the child to identify and correct anxietyprovoking cognitions). Exposure relies on the gradual reduction of anxiety after being exposed to a feared or ritual-provoking stimulus. Successive exposures with the feared stimulus result in both decreased elevations in anxiety and more rapid attenuation of distress in future exposures. Response prevention is based on the assumption that rituals/compulsions serve as short-term anxiety reducers via negative reinforcement (escape and/or avoidance of distress; Meyer, 1966). As individuals with OCD perform rituals to reduce anxiety, they do not have the experience of having anxiety reduced without ritual engagement. Accordingly, response prevention requires the individual to avoid engaging in the ritual so that anxiety can be reduced via habituation instead of by rituals, thus reorganizing cognitive fear structures to become more realistic and adaptive (Foa & Kozak, 1996). Finally, children are taught cognitive responses to anxiety, which is based on the notion that anxious thoughts involve inaccurate conclusions or interpretations of events (Salkovskis & Kirk, 1997). Common themes within the thoughts of children with OCD include inaccurate estimates of danger, responsibility, and probability.

As noted, recent research strongly supports the effectiveness of CBT for treatment of OCD relative to other methods of treatment. The Pediatric OCD Treatment Study Team (2004), for example, concluded that CBT or combined CBT and SSRI therapy were more effective than placebo or an SSRI alone. Other controlled trials (Barrett et al., 2004; de Haan, Hoogduin, Buitelaar, &



Keijsers, 1998) have corroborated these findings, reporting response rates as high as 88%.

Over the past decade, researchers have introduced the notion of providing treatment in a concentrated, "intense" manner for a range of anxiety disorders including panic disorder (Deacon & Abramowitz, 2006), OCD (Foa et al., 2005; Lewin et al., 2005; Storch et al., 2004), and social phobia (Mortberg et al., in press). Experiences deriving from this approach have provided further impetus for studying the utility of intensive CBT for pediatric OCD for several reasons. First, intensive CBT may be useful for children with severe OCD or more impaired functioning who may, for example, be missing school or other important ageappropriate activities (Storch, Gelfand, Geffken, & Goodman, 2003). Intensive treatment may help the child return to premorbid levels of functioning more efficiently. It is estimated that as many as 30% of those who receive weekly CBT do not have a clinically significant response and that many of those who do improve continue to experience residual symptoms (Storch, 2005). Second, intensive therapy reduces geographic barriers. Many youth with OCD do not have access to clinicians trained in evidence-based CBT; thus, many children who do receive treatment receive non-CBT psychotherapy. Within our clinic, for example, we have seen patients from virtually every state and several from Europe, none of whom had access to CBT within their home region. The shorter time-frame of intensive CBT makes relocation for the purposes of treatment feasible. Third, intensive CBT may also increase patient motivation, as treatment becomes the primary focus during those weeks (Foa & Steketee, 1987).

Evidence in adults suggests the benefits of more intensive services. For example, Foa et al. (2005) showed that intensive CBT, alone or in combination with clomipramine, was associated with significantly greater improvement on the Yale-Brown Obsessive Compulsive Scale (Y-BOCS; Goodman et al., 1989) and NIMH Global Obsessive-Compulsive Scale scores relative to SRI and placebo groups. Similarly, Abramowitz, Foa, and Franklin (2003) demonstrated the efficacy of intensive ERP relative to weekly treatment. Results indicated a trend toward lower Y-BOCS scores in the intensive group at posttreatment.

To date, the literature on intensive CBT in children has lagged behind that of adults. There are five reported examples of the effects of intensive CBT on pediatric OCD. Franklin et al. (1998) treated 7 children and adolescents with OCD for an average of 18 ERP sessions over 1 month. They showed an average improvement of 70% on Y-BOCS scores pre- to posttreatment. Storch et al. (2005) reported on 5 patients treated in daily 90-minute CBT sessions (M =13.4). All participants were considered treatment responders, with Children's Y-BOCS (CY-BOCS; Scahill et al., 1997) scores decreasing from 32.0 to 11.2. Franklin et al. (2001) reported on the case of a 12-year-old boy with severe OCD symptoms improved after 11 daily sessions. One case of PANDAS-related OCD showed CY-BOCS improvement of 34 to 8 after 5 CBT sessions over 1 week (Storch et al., 2004). Finally, a CY-BOCS reduction of 18 to 4 was found after 11 daily CBT sessions (Fernandez et al., in press). Taken together, the above results highlight the potential efficacy of intensive CBT for pediatric OCD. To date, however, methodologically rigorous, controlled research is lacking.

With this in mind, our lab (Principal Investigator: Dr. Eric Storch) is completing a randomized trial examining the efficacy of intensive CBT (14 sessions over 3 weeks) relative to standard weekly treatment (14 weekly sessions). The content of CBT is generally the same across the intensive and weekly groups; only the treatment schedule is manipulated. To date, 36 children and adolescents have been enrolled in the trial, with all but 2 completing their treatment course. Comprehensive assessments involving diagnostic, clinician-rated symptom indices, and parent- and child-report measures were given at pre, posttreatment, and 3-month follow-up.

Preliminary results are consistent with that of Abramowitz et al. (2003) in adults, and suggest that intensive treatment may hold distinct advantages over weekly treatment in terms of treatment acceptability and reducing barriers. Perhaps most interesting is the relative speed of intensive treatment. The weekly program did not take 14 weeks due to inevitable occurrences (e.g., hurricanes in our locale) and missed appointments due to a variety of reasons (e.g., holidays, scheduling conflicts). In many cases, OCD-related impairment was resolved more quickly in the intensive protocol. In addition, attrition in the intensive condition was lower than those receiving weekly treatment (1 versus 3 dropouts). A full report with complete outcome data will be forthcoming shortly.

Based on the results of several studies with adult patients and preliminary studies with children, intensive CBT appears to be an effective treatment for OCD. It offers an alternative for treatment refractory, severely functionally impaired, or geographically limited youth with OCD by removing potential roadblocks to treatment Future studies should examine circumstances such as these under which intensive treatment may lead to better outcome than weekly CBT. There is also currently a lack of longterm follow-up data with CBT (both intensive and weekly approaches). It will be important to know whether benefits gained through intensive CBT are maintained. Finally, we plan to examine a number of moderator (e.g., comorbidity) and mediator (e.g., therapeutic alliance, patient expectations) variables with respect to outcome. Understanding the variables that affect response will have important implications for treatment planning.

The National Institute of Health translational research road map emphasizes clinical testing to provide effective services for the general public. Intensive treatment addresses this need by providing a condensed treatment package suitable for those who do not have local access to CBT and for those who are refractory. Notably, services are provided without undue 14-week disruption in their lives, thus removing a roadblock to empirically supported treatment.

#### References

- Abramowitz, J. S., Foa, E. B., & Franklin, M. E. (2003). Exposure and ritual prevention for obsessive-compulsive disorder: Effects of intensive versus twice-weekly sessions. *Journal* of Consulting and Clinical Psychology, 71, 394-398.
- Barrett, P, Healy-Farrell, L., & March, J. S. (2004). Cognitive-behavioral family treatment of obsessive compulsive disorder: A controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 46-62.
- Deacon, B., & Abramowitz, J. (2006). A pilot study of two-day cognitive-behavioral therapy for panic disorder. *Behavior Research and Therapy*, 44, 807-817.

- de Haan, E., Hoogduin, K. A. L., Buitelaar, J. K., & Keijsers, G. P. J. (1998). Behavior therapy versus clomipramine for the treatment of obsessive-compulsive disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 1022-1029.
- Douglass, H. M., Moffitt, T. E., Dar, R., McGee, R., & Silva, P. (1995). Obsessive-compulsive disorder in a birth cohort of 18-year-olds: Prevalence and predictors. *Journal of the American Academy of Child and Adolescent Psychiatry*, 34, 1424-1431.
- Fernandez, Storch, E. A., Lewin, A. Murphy, & Geffken, G. (in press). Intensive treatment of pediatric OCD: Successful reduction of an adolescent's obsessive thoughts. *Clinical Case Studies*.
- Flament, M. F., Whitaker, A., Rapoport, J. L., & Davies, M. (1988). Obsessive compulsive disorder in adolescence: An epidemiological study. *Journal of the American Academy of Child* and Adolescent Psychiatry, 27, 764-771.
- Foa, E. B., & Kozak, M. J. (1996). Psychological treatments for obsessive-compulsive disorder. In M. R. Mavissakalian & R. F. Prein (Eds.), *Long-term treatments for anxiety disorders* (pp. 285-309). Washington, DC: American Psychiatric Press.
- Foa, E. B., & Steketee, G. (1987). Behavioral treatment of phobics and obsessive-compulsives. In N. S. Jacobson (Ed.), *Psychotherapists* in clinical practice: Cognitive and behavioral perspectives (pp. 78-120). New York: The Guilford Press.
- Foa, E. B., Leibowitz, M. R., Kozak, M. J., Davies, S., Campeas, R., Franklin, M. E., et al. (2005). Randomized, placebo-controlled trial of exposure and ritual prevention, clomipramine, and their combination in the treatment of obsessive compulsive disorder. *American Journal of Psychiatry*, 162, 151-161.
- Franklin, M. E., Kozak, M. J., Cashman, L. A., Coles, M. E., Rheingold, A., & Foa, E. B. (1998). Cognitive-behavioral treatment of pediatric obsessive-compulsive disorder: An open clinical trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37, 412-419.
- Franklin, M. E., Tolin, D. F., March, J. S., & Foa, E. B. (2001). Treatment of pediatric Obsessive-Compulsive Disorder: A case example of intensive cognitive-behavioral therapy involving exposure and ritual prevention. *Cognitive and Behavioral Practice*, 8, 297-304.
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischman, R. L., Hill, C. L., Heninger, G. R., & Charney, D. S. (1989). The Yale-Brown Obsessive Compulsive Scale: I. Development, use, and reliability. *Archives of General Psychiatry* 46, 1006-1011.
- Koran, L. M., Thienemann, M. L., & Davenport, R. (1996). Quality of life for patients with obsessive-compulsive disorder. *American Journal of Psychiatry*, 153, 783-788.

- Lewin, A. B., Storch, E. A., Merlo, L. J., Adkins, J. W., Murphy, T. K., & Geffken, G. R. (2005). Intensive cognitive behavioral therapy for pediatric obsessive compulsive disorder: A treatment protocol for mental health providers. *Psychological Services*.
- March, J. S., Parker, J. D., Sullivan, K., Stallings, P., & Conners, C. K. (1997). The Multidimensional Anxiety Scale for Children: Factor structure, reliability, and validity. Journal of the American Academy of Child and Adolescent Psychiatry, 36, 554-565.
- Meyer, V. (1966). Modification of expectations in cases with obsessive rituals. *Behavior Research* and Therapy, 4, 270<sup>-</sup>280.
- Mortberg, E., Karlsson, A., Fyring, C., et al. (in press). Intensive cognitive-behavioral group treatment (CBGT) of social phobia: A randomized controlled study. *Journal of Anxiety Disorders.*
- Obsessive-Compulsive Foundation. (2004). Behavior therapy institute: Features and benefits. Retrieved December 18, 2004, from http://www.ocfoundation.org/ocf1130d.htm.
- Pediatric OCD Treatment Study Team. (2004). Cognitive-behavior therapy, sertraline, and their combination for children and adoles-

cents with obsessive-compulsive disorder. Journal of the American Medical Association, 292, 1969-1976.

- Piacentini, J., Bergman, R. L., Keller, M., & McCracken, J. T. (2003). Functional impairment in children and adolescents with obsessive-compulsive disorder. *Journal of Child & Adolescent Psychopharmacology*, 13S-1, S61-S69.
- Salkovskis, P. M., & Kirk, J. (1997). Obsessivecompulsive disorder. In D. M. Clark & C. G. Fairburn (Eds.), Science and Practice of Cognitive Behaviour Therapy (pp. 179-208). London: Oxford University Press.
- Scahill, L., Riddle, M. A., McSwiggin-Hardin, M., Ort, S. I., King, R. A., Goodman, W. K., Cicchetti, D., & Leckman, J. F. (1997). Children's Yale-Brown Obsessive Compulsive Scale: Reliability and validity. *Journal of the American Academy of Child and* Adolescent Psychiatry, 36, 844-852.
- Storch, E. A. (2005). Pediatric Obsessive-Compulsive Disorder: Guide to effective and complete treatment. *Contemporary Pediatrics*.
- Storch, E. A., Gelfand, K. M., Geffken, G. R., & Goodman, W. K. (2003). An intensive outpatient approach to the treatment of obses-

sive-compulsive disorder: Case exemplars. Annals of the American Psychotherapy Association, 4(6), 14-19.

- Storch, E. A., Gerdes, A., Atkins, J., Geffken, G. R., Star, J., & Murphy, T. (2004). Behavioral treatment of child with Pediatric Autoimmune Neuropsychiatric Disorder associated with Group A Streptococcal Infection. Journal of the American Academy of Child and Adolescent Psychiatry, 43, 510-511.
- Storch, E. A., Geffken, G. R., Heidgerken, A. D., Adkins, J. W., Murphy, T. K., & Goodman, W. K. (2005). Intensive cognitivebehavioral psychotherapy for pediatric obsessivecompulsive disorder: A case series of five patients. Unpublished manuscript.
- Zohar, A. (1999). The epidemiology of obsessive-compulsive disorder in children and adolescents. *Child Psychiatry Clinics of North America*, 8, 445-460.

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# New Frontiers: Computer Technology in the Treatment of Anxious Youth

Muniya Khanna, *Columbia University*, and Sasha G. Aschenbrand and Philip C. Kendall, *Temple University* 

he last decade has seen a growing interest in the development of Internet- and computer-administered assessments and treatments for mental health disorders (NICE, 2002). The field sees efficiency, accessibility, and high standard of consistency as among the potential advantages of computer-based approaches (Greist, 1998). A number of studies provide evidence supporting computer-based interventions for use in the treatment of psychological disorders in adults and preliminary data are emerging on the feasibility of the modality with children. Internet- and/or computer-based treatments have great potential for the dissemination of evidencebased practice and offer a promising new area of investigation in the field of child anxiety research.

#### **Bridging Science and Practice**

Despite ample evidence supporting the use of CBT for childhood anxiety (e.g., Barrett, Dadds, & Rapee, 1996; Kendall, 1994; Kendall et al., 1997; Silverman et al., 1999), there continues to be a disjunction between treatments that are empirically supported and those used in practice settings (Weisz, 2000). Clinical outcomes of youth treated in community settings are, unfortunately, much more modest than youth treated in research settings (Weersing & Weisz, 2002). Investigators have called for research broadening the range of treatment delivery models to bridge the gap between lab-tested treatments and the conditions of real-world practice (Southam-Gerow, Weisz, & Kendall, 2003; Weisz & Jensen, 2001). Despite long-standing concerns, little progress has been made.

The emergence of health care management organizations and the development of treatment standardization procedures are providing a fresh impetus to address this problem. Evolving criteria for third-party reimbursement of services is likely to be based on evidence of effectiveness and cost (Kenardy et al., 2003; Newman, Kenardy, Herman, & Taylor, 1997). In addition, for the more than 40 million Americans who have no health insurance, and the many with insurance who are granted only 10 (or fewer) sessions with a mental health professional, a more efficient, accessible, and affordable treatment modality is needed (Greist, 1998). Thus, methods that increase the dissemination and application of costeffective empirically supported treatments in community settings should be pursued (Southam-Gerow, Weisz, & Kendall, 2003).

#### **Computer-Based Treatment**

Computer-based treatments hold the potential to address several of these issues and may have many practical advantages over standard therapy. First, it has been suggested that the costs of therapy can be reduced by as much as one-third relative to the cost of conventional behavioral treatments (McCrone et al., 2004; Newman, 2000; Wright et al., 2005). Second, the modality can be made available in multiple environments including schools, community agencies and mental health centers, and community counseling centers.

Computers may also improve standardization and enhance treatment adherence by standardizing therapy materials (e.g., practice examples for role-plays, challenging automatic thoughts, and exposures), homework assignments, and initiating built-in knowledge checks and reward systems (i.e., video game time). Programs can be customized (e.g., modify instructions based on client responses), while still maintaining protocols in the correct sequence, and can facilitate review of material as needed. Further, because CBT is structured and sequentially implemented, it lends itself to interactive computer software (Kenardy & Adams, 1993; Selmi et al., 1990).

Computer-based approaches may be particularly beneficial for the treatment of anxiety because they can present both still and video images of feared stimuli in hierarchies, ranging from simple drawings to video clips, and offer a medium by which exposure to feared situations can occur in a controlled manner. Ease of record keeping and data collection is also among the advantages. Using Internet-based programs, user input can be automatically recorded, stored in secured private databases, and can be monitored regularly—a function that can reduce time and cost for researchers and clinicians alike.

#### **Preliminary Evidence**

Computerized systems to aid treatment have shown promising clinical outcomes in studies of adults with phobic, panic, and obsessive-compulsive disorders, nonsuicidal depression, smoking cessation, bulimia, and agoraphobia (e.g., Anderson, Jacobs, & Rothbaum, 2004; Bachofen et al., 1999; Baer & Greist, 1997; Klein & Richards, 2001; Marks et al., 2004; Newman, Consoli, & Taylor, 1999; White, Jones, & McGarry, 2000, Wright et al., 2005). Computer programs have also been shown to effectively implement CBT techniques including relaxation (e.g., Baer & Surman, 1985; Buglione, DeVito, & Mulloy, 1990), systematic desensitization (e.g., Chandler, Burck, Sampson, & Wray, 1988), exposure (e.g., Carr, Ghosh, & Marks, 1988; Ghosh, Marks, & Carr 1988), parent training (Gordon & Rolland-Stanar, 2003), and cognitive restructuring (Selmi et al., 1982; Selmi, Klein, Greist, Sorrell, & Erdman, 1990).

Some of the early work on computerbased treatment programs has been directed toward depression, phobias, and obsessive-compulsive disorder in adults. Selmi and colleagues (1990) completed a randomized, controlled comparison of a sixsession computer-based CBT with a therapist-conducted CBT and with a wait-list control condition for adult depression. Patients (n = 36) were randomly assigned to computer-based CBT, individual CBT, or waiting-list control. At the end of 6 weeks of treatment and at a 2-month follow-up, both treatment groups had improved more than the control subjects on outcome measures. The treatment outcomes between treatment groups did not differ at either time point.

In another study, Newman and colleagues (1997) sought to determine whether the efficiency and cost-effectiveness of CBT for panic disorder could be improved by computer-based CBT. Eighteen adults who met DSM criteria for panic disorder were randomly assigned to a CBT condition or to a computer-administered CBT condition. Analyses of clinically significant change showed superiority of CBT at posttreatment on some measures; however, there were no differences between treatments at follow-up. Further, consistent with previous findings (e.g., Agras et al., 1990; Burnett, Taylor, & Agras, 1985), the computer-based therapy was found to be

acceptable to clients. Pretreatment ratings showed that clients found computeradministered CBT to be as credible as CBT. In addition, computer-administered CBT was associated with equal ratings of posttreatment satisfaction and equally low dropout rates (Newman, Kenardy, Herman & Taylor, 1997).

More recently, Proudfoot and colleagues (2004) reported a randomized controlled trial comparing a computer-based CBT (CCBT) to treatment-as-usual (TAU) for anxiety and depression in adults in a primary care setting. They reported that CCBT led to reductions in depression and anxiety in adults, regardless of their medication status and severity of illness at pretreatment. They reported that CCBT led to better results than TAU in patients with higher levels of severity of illness. They also reported that patients rated greater satisfaction with the computer-based treatment than with TAU. Importantly, the preliminary data from Proudfoot and colleagues (2004) suggest that computer-based treatments are an acceptable format for therapy. They reported that satisfaction with computer-based treatment was significantly higher for computer-based therapy patients than for TAU patients, and there were minimal differences in dropout rates between computer and clinic treatment approaches.

In a recent review, Kaltenthaler, Parry, and Beverley (2004) reported that computer-based CBTs are "potentially useful in the treatment of anxiety disorders, depression and phobias" (p.31) and that there is some evidence that computer-assisted CBT may be as effective as therapist-delivered CBT and better than treatment as usual, though more rigorous clinical trials are needed. In 2002, the National Institute for Clinical Excellence (NICE) provided guidance on the use of computerized CBT for the treatment of anxiety and depression (NICE, 2002). Their assessment was based on a review of the controlled trials testing the efficacy of computer-based CBT for anxiety and/or depression. They concluded that the evidence was promising and cited the cost-effectiveness, accessibility, privacy, and consistency of care as advantages of this treatment format. They called for further development and research investigating the clinical efficacy of computer-based CBT programs.

Thus, there is preliminary evidence that computer-based CBT may be effective in the treatment of depression, anxiety, and phobias in adults. However, the evidence must be considered preliminary as the studies varied widely in setting, patient populations, comparison groups, and outcome measures, and were limited by small sample sizes. Further research is needed to answer the many questions surrounding the design and implementation of computer-based programs.

Evidence is scant regarding the use of computer-based interventions in youth. Case reports suggest that such approaches may be beneficial for childhood disorders (e.g., Nelissen, Muris, & Merckelbach, 1995). Children and adolescents may be the ideal target population for this type of intervention given their familiarity with and access to computers. According to a U.S. Census Bureau Report (2005), in 2003, 70 million American households (62%) had one or more computers, and 62 million households (55%), had Internet access. Overall, the use of computers by adults (people 18 years and older) was less prevalent than use by children. Sixty-four percent of adults used a computer at some location (home, school, or work) in 2003, compared with 86% of children. About three-quarters (76%) of all children 3 to 17 years live in a household with a computer, and 83% of the 57 million enrolled children used a computer at school, giving this generation more exposure to technology than their predecessors (U.S. Census Bureau, 2005).

#### The Coping Cat CD

Initial development of a computer-based program, the Coping Cat CD (CCCD), for children (ages 8 to 13 years) with an anxiety disorder is under way. Developed by a team of researchers, child psychologists, programmers, and graphic designers, the CCCD combines interactive computer technology with empirically supported cognitive-behavioral treatment. The program is based on the Coping Cat treatment manual (Kendall, 1990), a CBT that has been found to be effective in previous clinical trials (Kendall, 1994; Kendall et al., 1997). The CCCD combines the empirically supported CBT protocol with state-of-the-art computer flash animation and interactive computer-based training utilizing audio, 2D animations, photographs, video, schematics, a built-in reward system, well-written text, and a fun "guide" character, "Charlie," to guide the user through the program.

The program immerses the child in a series of interactive learning environments that permit the child to learn (by watching Charlie) facts about anxiety, the physiological symptoms of anxiety, relaxation techniques, and a series of coping and problem-solving strategies for managing anxiety. Charlie, along with a variety of secondary characters, demonstrates and models the use of coping skills, provides examples, prompts responses, and prepares the user for exposure tasks. Charlie is an encouraging, yet realistic, coping model, and he demonstrates how to practice the coping skills needed in the exposure tasks and helps the child to anticipate anxiety-provoking situations that may arise at home or in school.

To promote generalization of the skills, homework tasks (referred to as STIC tasks, "Show That I Can") are assigned. The CCCD provides self-checks in the form of "challenge" games-providing opportunities for the user to apply the ideas and concepts in the CCCD. Rewards are available for completion of homework, level content, and most importantly, efforts made to approach and face real anxiety-provoking situations. The "real-time" rewards permit the child to choose a video game to play from the "game room" as a reward at the end of the session, with the duration of game-time dependent on accumulated points earned through completion of the program components

Exposure tasks are important in CBT for anxiety, and the CCCD guides the child through planning and design of exposure tasks by providing a variety of video and animated examples of imaginal and in vivo exposures at various degrees of difficulty. The CCCD takes the child step-by-step through developing the plans for exposure tasks. The user progresses through the planning stages by first selecting options to develop an individualized fear hierarchy and then selecting from optional exposure task plans that are designed specifically to match items on their hierarchy. At this stage in the program, the CCCD involves a "coach" to review the hierarchy with the child, plan for the upcoming exposure task, assist in organizing materials for the exposure task, and ultimately encourage completion and provide reinforcement for completing the exposure task.

The program is not designed to be an entirely stand-alone treatment but a "coach-assisted" treatment program. Though our goal was to maximize dissemination of the CBT treatment, regular patient monitoring and evaluation is needed, as well as oversight of the planning and implementation of the exposure phase of treatment. Accordingly, and for good reason, the program employs minimal but necessary involvement of a mental health professional. The CCCD does not require practitioners to be trained or experienced in CBT for anxious youth. The service provider serves as a "coach," ensuring monitoring of patient symptoms and facilitating completion. The "coach's manual" guides the exposure planning.

At this juncture, coaches are mental health professionals from community settings (i.e., schools, training programs, community clinics). At this stage, we decided to enlist hospitals, private clinics, community mental health service agencies, and schools where children are commonly identified for anxiety disorders and where facilities and service providers are available. If the results are encouraging, the transportability of the CCCD could be extended to other settings (e.g., home with parents) for evaluation.

Initial responses to the prototype were favorable from youth and from therapists. Pilot information supports the feasibility and acceptability of this modality and for the expansion of the work to further develop the CCCD and conduct an evaluation of the program in a randomized clinical trial (Choudhury & Kendall, 2005). As with other interventions, research needs to include patients from a variety of socioeconomic and ethnic backgrounds and from different levels of cognitive, social, and emotional development through large randomized controlled trials with adequate power to examine potential mediators and moderators of treatment outcome (NICE, 2002). Additionally, it will be of interest to investigate and determine whom the CCCD approach is likely to benefit most, particularly with regard to the type and severity of the disorder.

#### Implications for Dissemination

Taken as a whole, the extant literature supports the efficacy of CBT for social anxiety disorder, social phobia, and generalized anxiety disorder in youth and the feasibility of a computer-based CBT program. We believe that although questions remain, and further work is needed, these programs have the potential to have a meaningful impact on the dissemination of evidence-based treatments-particularly for anxiety disorders in youth. Once developed, tested, and refined, these programs may be an efficient and effective way to disseminate standardized care and evidence-based treatments across multiple settings (i.e., school, community mental health centers, medical settings, training programs, social service agencies, counseling centers, private clinics). Computer-based treatments (the "other" CBT) could help to address concerns regarding the lack of evidence-based

treatments available in community settings and patients' lack of access to mental health care facilities offering empirically supported treatments (Kenardy et al., 2003).

#### References

- Agras, W. S., Taylor, C. B., Feldman, D. E., Losch, M., & Burnett, K. F. (1990). Developing computer-assisted therapy for the treatment of obesity. *Behavior Therapy*, 21, 99-109.
- Anderson, P., Jacobs, C., & Rothbaum, B. O. (2004). Computer-supported cognitive behavioral treatment of anxiety disorders. *Journal of Clinical Psychology*, 60, 253-267.
- Bachofen, M., Nakagawa, A., Marks, I. M., Park, J-M., Greist, J. H., Baer, L., Wenzel, K. W., Parkin, R. J., & Dottl, S. L. (1999). Home self-assessment and self-treatment on obsessive-compulsive disorder using a manual and a computer-conducted telephone interview: Replication of a U.K.-U.S. study. *Journal of Clinical Psychiatry*, 60, 545-549.
- Baer, L., & Greist, J. H. (1997). An interactive computer-administered self-assessment and self-help program for behavior therapy. *Journal of Clinical Psychiatry*, 58(Suppl. 12), 23-28.
- Baer, L., & Surman, O. S. (1985). Microcomputer-assisted relaxation. *Perceptu*al and Motor Skills, 61, 499-502.
- Barrett, P., Dadds, M., & Rapee, R. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, 64, 333-342.
- Burnett, K. F., Taylor, C. B., & Agras, W. S. (1985). Ambulatory computer-assisted therapy for obesity: A new frontier for behavior therapy. *Journal of Consulting and Clinical Psychology*, 53, 698-703.
- Carr, A. C., Ghosh, A., & Marks, I. M. (1988). Computer-supervised exposure treatment for phobias. *Canadian Journal of Psychiatry*, 33, 112-117.
- Chandler, G. M., Burck, H., Sampson, J. P., & Wray, R. (1988). The effectiveness of a generic computer program for systematic desensitization. *Computers in Human Behavior*, 4, 339-346,
- Choudhury, M. S., & Kendall, P. C. (2005, March). Computer-based CBT for child anxiety: A first look at the Coping Cat CD-ROM. Symposium conducted at the 25th Annual Conference of the Anxiety Disorders Association of America, Seattle, WA.
- Ghosh, A., Marks, I. M., & Carr, A. C. (1988). Therapist contact and outcome of self-exposure treatment for phobias: A controlled study. *British Journal of Psychiatry*, 152, 234-238.
- Ghosh, A., & Greist, J. H. (1988) Computer treatment in psychiatry. *Psychiatric Annals*, 18, 246-250.

- Gordon, D. A., & Rolland-Stanar, C. (2003). Lessons learned from the dissemination of Parenting Wisely, a parent training CD-ROM. *Cognitive and Behavioral Practice*, 10, 312-323.
- Greist, J. H. (1998). Treatment for all: The computer as a patient assistant. *Psychiatric Services*, 49, 887-889.
- Kaltenthaler, E., Parry, G., & Beverley, C. (2004). Computerized cognitive behaviour therapy: A systematic review. *Behavioural and Cognitive Psychotherapy*, 32, 31-55.
- Kenardy, J., & Adams, C. (1993). Computers in cognitive-behaviour therapy. *Australian Psychologist*, 28, 189-194.
- Kenardy, J. A., Dow, M. G. T., Johnston, D. W., Newman, M. G., Thompson, A., & Taylor, C. B. (2003). A comparison of delivery methods of cognitive-behavioral therapy for panic disorder: An international multicenter trial. *Journal of Consulting and Clinical Psychology*, 71, 1068-1075.
- Kendall, P. (1990). *Coping Cat Workbook*. Ardmore, PA: Workbook Publishing.
- Kendall, P. (1994). Treating anxiety disorders in youth: Results of randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 62, 100-110.
- Kendall, P. C., Flannery-Schroeder, E., Panichelli-Mindel, S., Southam-Gerow, M., Henin, A., & Warman, M. (1997). Therapy for youths with anxiety disorders: A second randomized clinical trial. *Journal of Consulting and Clinical Psychology Psychology*, 65, 366-380.
- Klein, B., & Richards, J. C. (2001). A brief internet-based treatment for panic disorder. *Behavioural and Cognitive Psychotherapy*, 29, 113-117.
- Marks, I. M., Kenwright, M., McDonough, M., Whittaker, M., & Mataix-Cols, D. (2004). Saving clinicians' time by delegating routine aspects of therapy to a computer: A randomized controlled trial in phobia/panic disorder. *Psychological Medicine*, 34, 9-17.
- McCrone, P., Knapp, M., Proudfoot, J., Ryden, C., Cavanagh, K., Shapiro, D., et al. (2004). Cost-effectiveness of computerized cognitive-behavioral therapy for anxiety and depression in primary care: Randomized controlled trial. *British Journal of Psychiatry*, 185, 55-62.
- National Institute for Clinical Excellence. (2002). Guidance on the use of computerized cognitive behavioral therapy for anxiety and depression. *Technology Appraisal Guidance No.* 51, London, NICE
- Nelissen, I., Muris, P., & Merckelbach, H. (1995). Computerized exposure and in vivo exposure treatments of spider fear in children: Two case reports. *Journal of Bebavior Therapy & Experimental Psychiatry*, 26, 153-156.
- Newman, M. G. (2000). Recommendations for a cost-offset model of psychotherapy allocation

using generalized anxiety disorder as an example. *Journal of Consulting & Clinical Psychology*, 68, 549-555.

- Newman, M. G., Kenardy, J., Herman, S., & Taylor, C. B. (1997). Comparison of palmtop-computer-assisted brief cognitive-behavioral treatment to cognitive-behavioral treatment for panic disorder. *Journal of Consulting & Clinical Psychology*, 65, 178-183.
- Newman, M. G., Consoli, A., & Taylor, C. B. (1997). Computers in assessment and cognitive behavioral treatment of clinical disorders: Anxiety as a case in point. *Behavior Therapy*, 28, 211-235.
- Newman, M. G., Consoli, A. J., & Taylor, C. B. (1999). A palmtop computer program for the treatment of generalized anxiety disorder. *Behavior Modification*, 23, 597-619.
- Proudfoot, J., Ryden, C., Everitt, B., Shapiro, D. A., Goldberg, D., et al. (2004). Clinical efficacy of computerized cognitive-behavioural therapy for anxiety and depression in primary care: Randomised controlled trial. *British Journal of Psychiatry*, 185, 46-54.
- Selmi, P. M., Klein, M. H., Greist, J. H., Johnson, J. H., & Harris, W. G. (1982). Behavior Research Methods and Instrumentation, 14, 181-185.
- Selmi, P. M., Klein, M. H., Greist, J. H., Sorrell, S. P., & Erdman, H. P. (1990). Computer-ad-

ministered cognitive-behavioral therapy for depression. *American Journal of Psychiatry*, 147, 51-56.

- Silverman, W. K., Kurtines, W. M., Ginsburg, G. S., Weems, C. F., Lumpkin, P., White, C., & Hicks, D. (1999). Treating anxiety disorders in children with group cognitive-behavioral therapy: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 67, 995-1003.
- Southam-Gerow, M. A., Weisz, J. R., & Kendall, P. C. (2003). Youth with anxiety disorders in research and service clinics: Examining client differences and similarities. *Journal of Clinical Child & Adolescent Psychology*, 32, 375-385.
- U.S. Census Bureau, U.S. Department of Commerce, Economics and Statistics Administration. (2005). Computer and Internet Use Supplement to the October 2003 Current Population Survey.
- Weersing, V. R., & Weisz, J. R (2002). Community clinic treatment of depressed youth: Benchmarking usual care against CBT clinical trials. *Journal of Consulting & Clinical Psychology*, 70, 299-310.
- Weisz, J. R. (2000). Agenda for child and adolescent psychotherapy research: On the need to put science into practice. Journal of the American Academy of Child & Adolescent Psychiatry, 57, 837-838.

- Weisz, J. R., & Jensen, A. L. (2001). Child and adolescent psychotherapy in research and practice contexts: Review of the evidence and suggestions for improving the field. *European Child and Adolescent Psychiatry*, 10(Suppl. 1), 112-118.
- White, J., Jones, R., & McGarry, E. (2000). Cognitive behavioural computer therapy for the anxiety disorders: A pilot study. *Journal of Mental Health UK*, 9, 505-516.
- Wright, J. H., Wright, A. S., Albano, A. M. Basco, M. R., et al. (2005). Computer-assisted cognitive therapy for depression: Maintaining efficacy while reducing therapist time. *American Journal of Psychiatry*, 162, 1158-1164.

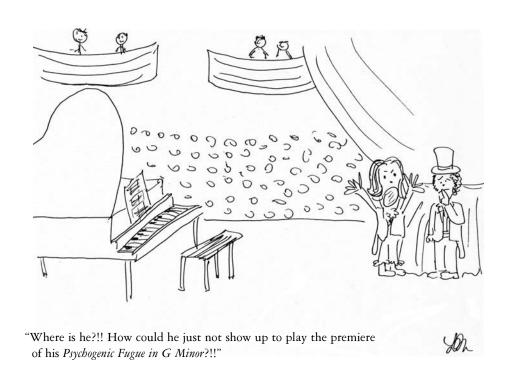
Dr. Khanna is now at the University of Pennsylvania.

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## Lighter Side

Elizabeth Moore, Mayo Clinic



# Call for Award Nominations Outstanding Researcher Outstanding Training Program Virginia A. Roswell Student Dissertation NOMINATIONS DEADLINE: March 1, 2007 Career/Lifetime Achievement Distinguished Friend to Behavior Therapy Outstanding Service to ABCT

NOMINATE ON-LINE: www.abct.org Questions? email Joann Wright at ABCTAwards@gmail.com

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# STUDENT AWARDS PROGRAM

## President's New Researcher Award

ABCT's President, Ray DiGiuseppe, Ph.D., invites submissions for the 29th Annual President's New Researcher Award. The winner will receive a certificate and a cash prize of \$500. Submissions will be accepted on any topic relevant to behavior therapy, but submissions consistent with the conference theme emphasizing basis research are particularly encouraged. Eligible papers must (a) be authored by an individual with five years or less posttraining experience (e.g., post-Ph.D. or postresidency); and (b) have been published in the last two years or currently be in press. Submissions can consist of one's own or any eligible candidate's paper. Papers will be judged by a review committee consisting of Ray DiGiuseppe, Ph.D.; Michael Otto, Ph.D., ABCT's Immediate Past-President; and Anne Marie Albano, the ABCT President-Elect. Submissions must be received by Monday, August 13, 2007, and must include four copies of both the paper and the author's vita. Send submissions to ABCT President's New Researcher Award, 305 Seventh Ave., 16th floor, New York, NY 10001.

# Virginia A. Roswell Student Dissertation Award

This award will be given to a student based on his or her doctoral dissertation proposal. The research should be relevant to behavior therapy. Accompanying this honor will be a \$1,000 award to be used in support of research (e.g., to pay participants, to purchase testing equipment) and/or to facilitate travel to the ABCT convention. Eligible candidates for this award should be student members who have already had their dissertation proposal approved and are investigating an area of direct relevance to behavior therapy, broadly defined. A student's dissertation mentor should complete the nomination. Please complete an on-line nomination by visiting www.abct.org, and completing the appropriate application forms. Then, e-mail the completed forms to ABCTAwards@gmail.com. Also, mail a hard copy of your submission to ABCT, Virginia A. Roswell Dissertation Award, 305 Seventh Ave., New York, NY 10001.

## Elsie Ramos Memorial Student Poster Awards

These awards will be given to three student poster presenters (student first authors only), member or nonmember, at ABCT's 41st Annual Convention in Philadelphia. The winners will each receive a 2008 ABCT Student Membership, a 1-year subscription to an ABCT journal of their choice, and a complimentary general registration at ABCT's 2008 Annual Convention. To be eligible, students must complete the submission for this year's ABCT convention by **March 1, 2007.** The proposal must then pass ABCT's peer review process. ABCT's Awards and Recognition Committee will judge all student posters.

# Awards ceremony at the Annual Convention in Chicago, November 2006



Rick Heimberg, receiving the award for Outstanding Mentor

*top row, l to r*: Michael Otto, President; Joann Wright, Awards Committee Chair; Dennis Russo, receiving the Outstanding Service to ABCT Award on behalf of all past secretary-treasurers; Christopher Beevers, President's New Researcher; Michael Twohig, Virginia Roswell Dissertation; *bottom row, l to r*: Brian Iacoviello, Elsie Ramos Poster Winner; Lily McNair, Awards Committee; Marvin Goldfried, Outstanding Educator; Rick Heimberg, Outstanding Mentor; Ed Blanchard, Lifetime Achievement



Elsie Ramos Poster Award winners June Gruber and Brian Iacoviello with Lily McNair (*center*) and President Michael Otto (*back*). We regret that the third award winner, Angela W. Chiu, is not pictured.



## Classifieds

DIRECTOR OF RESEARCH, ANALYSIS & PLANNING. The Children's Services Council of Broward County is seeking to hire a Director of Research, Analysis and Planning. The Director is a senior management position responsible for all strategic planning, direction and evaluation of its funded children's services, Best Practice research, quality improvement initiatives, and performance outcome development. The Director manages research databases and will possess knowledge of advance research design and analysis, multivariate statistics, intervention design and measurement, and advanced written and verbal communication. Project management experience, research planning, proven scholarly analysis and reporting of research results are expected. The successful candidate will have an excellent record of research conceptualization, psychometrics, statistics, highly organized and task-focused, ability to manage multiple projects, budgets and schedules. The successful candidate should be capable of working independently as well as part of a team and value the business and financial aspects of projects as well as scientific aspects. The Director will collaborate with leading research, academic institutions and government agencies as well as in-house work at the senior management level to maximize the organization's ability to meet established goals.

The position requires a Master's degree in Clinical Psychology, Public Administration or related field, advanced doctoral degree preferred. Ten (10) years demonstrated experience in human services or related field, four (4) years of which are at management or supervisory level, experience training employees, mastery of statistical programs (e.g., SPSS) and appropriate software. The CSC offers a highly competitive salary and benefits package. The CSC's website http://www.cscbroward.org provides a description of the position and agency mission. To apply: Mail, fax, or e-mail CV/resume to Michelle Hamilton, mhamilton@cscbroward. org; 6301 NW 5th Way, Fort Lauderdale, FL 33309; 954-377-1683.

#### POSTDOCTORAL RESEARCH FELLOW-SHIP AT THE NYU CHILD STUDY CEN-TER. A two-year postdoctoral research fellowship is available August 2007 in the Institute of Anxiety and Mood Disorders at the NYU Child Study Center. This position is available to Ph.D. psychologists interested in child anxiety or mood disorders. A primary responsibility will be overseeing an NIMH-funded treatment trial of anxiety disorders in medical settings. Independent research will be encouraged. Send letter of interest, CV, and 3 letters of recommendation to Dr. Carrie Masia, NYU Child Study Center, 215 Lexington Ave., 13th floor, NY, NY, 10016. Email: carrie.masia @med.nyu.edu. NYU is an equal opportunity employer.

ASSOCIATE/FULL PROFESSOR OF MEDI-CINE (RESEARCH), Research Scientist, Rhode Island Hospital/Brown Medical School. The Department of Medicine at Rhode Island Hospital, one of the affiliated hospitals of Brown Medical School, seeks a research faculty member beginning on or before September 1, 2007. This is a renewable, non-tenure track position. The successful candidate must quality for a faculty position at the rank of Associate or Full Professor (Research).

Applicants must have a doctoral degree in psychology, sociology or social work, have prior federal funding along with an actively funded independent research program in alcohol, drug abuse, mental health, and/or HIV disease. Primary responsibilities: the applicant will be expected to participate in Brown's funded research program working with an expanding multidisciplinary group of substance abuse and HIV investigators whose adult and adolescent studies include behavioral interventions, health services research, international research, communitybased research, and work with incarcerated populations. This position provides an outstanding opportunity to develop pilot projects, work with postdoctoral trainees, and collaborate with other senior staff.

Review of applications will begin immediately and continue until the search is successfully concluded. Rhode Island Hospital is an EEO/AA employer and actively solicits applications from minorities and women.

Interested applicants should forward a letter of application, an updated curriculum vitae



## **DIRECTOR OF RESEARCH, ANALYSIS & PLANNING**

The Children's Services Council of Broward County is seeking to hire a Director of Research, Analysis and Planning. The Director is a senior management position responsible for all strategic planning, direction and evaluation of its funded children's services, Best Practice research, quality improvement initiatives, and performance outcome development. The Director manages research databases and will possess knowledge of

advance research design and analysis, multivariate statistics, intervention design and measurement, and advanced written and verbal communication. Project management experience, research planning, proven scholarly analysis and reporting of research results are expected. The successful candidate will have an excellent record of research conceptualization, psychometrics, statistics, highly organized and task-focused, ability to manage multiple projects, budgets and schedules. The successful candidate should be capable of working independently as well as part of a team and value the business and financial aspects of projects as well as scientific aspects. The Director will collaborate with leading research, academic institutions and government agencies as well as in-house work at the senior management level to maximize the organization's ability to meet established goals.

The position requires a Master's degree in Clinical Psychology, Public Administration or related field, advanced doctoral degree preferred. Ten (10) years demonstrated experience in human services or related field, four (4) years of which are at management or supervisory level, experience training employees, mastery of statistical programs (e.g., SPSS) and appropriate software. The CSC offers a highly competitive salary and benefits package. The CSC's website http://www.cscbroward.org provides a description of the position and agency mission. To apply: Mail, fax, or e-mail CV/resume to Michelle Hamilton, mhamilton@cscbroward.org; 6301 NW 5th Way, Fort Lauderdale, FL 33309; 954-377-1683.

along with three letters of reference to: Michael D. Stein, M.D., Chair, Search Committee, Rhode Island Hospital, Division of General Internal Medicine, 593 Eddy Street, Providence, RI 02903.

ASSISTANT OR ASSOCIATE PROFESSOR OF MEDICINE (RESEARCH), Rhode Island Hospital/Brown Medical School. The Department of Medicine at Rhode Island Hospital, one of the affiliated hospitals of Brown Medical School, seeks a research faculty member beginning on or before September 1, 2007. This is a renewable, non-tenure track position. The successful candidate must qualify for a faculty position at the rank of Assistant or Associate Professor (Research).

Applicants must have a doctoral degree in psychology, sociology or social work with research experience and interest in alcohol, drug abuse, mental health, and/or HIV disease. Primary responsibilities: the applicant will be expected to participate in Brown's funded research program working with multidisciplinary group of substance abuse and HIV investigators whose adult and adolescent studies include behavioral interventions, health services research, international research, community-based research, and work with incarcerated populations. The applicant is expected to develop an independent funded research program.

Review of applicants will begin immediately and continue until the search is successfully concluded. Rhode Island Hospital is an EEO/AA employer and actively solicits applications from minorities and women.

Interested applicants should forward a letter of application, an updated curriculum vitae along with three letters of reference to: Michael D. Stein, M.D., Chair, Search Committee, Rhode Island Hospital, Division of General Internal Medicine, 593 Eddy Street, Providence, RI 02903.

OUTSTANDING OPPORTUNITY FOR A CHILD OR PEDIATRIC PSYCHOLOGIST WITH CLINICAL AND RESEARCH IN-TERESTS. The Department of Psychiatry, School of Medicine and Biomedical Sciences, State University of New York at Buffalo is seeking a psychologist for a tenure track assistant professor or advanced assistant professor position. This position involves 50% time to develop a research program and to collaborate with other faculty in psychiatry and psychology. We are most interested in applicants with interests in internalizing disorders or acute and chronic pediatric illnesses. In addition to developing a program of research, this person will also engage in 50% clinical activities at the University Child and Adolescent Outpatient Clinic.

The Department of Psychiatry is a large multi-site program committed to quality care and empirical research with outstanding resources. The School of Medicine and Biomedical Sciences has organized a consortium of affiliated hospitals offering a wide range of clinical settings including the University Child and Adolescent Outpatient Clinic, Consultation-Liaison Services, Therapeutic Preschool, Pediatric Psychopharmacology Clinic, the Developmental Disabilities Clinic and ECMC. Acute Adolescent Inpatient The department maintains relationships with the Roswell Park Cancer Institute and WNY Children's Psychiatric Center and Intensive Treatment Unit. In addition, we maintain collaborative ties with the Center for Children and Families, a university level, interdisciplinary center with substantial federal funding, focused mainly on treatment outcome research with child disorders. Applicants will be able to collaborate with and receive mentoring from senior faculty at CCF in addition to Psychiatry Faculty. Candidates must have a PhD from an APA-accredited clinical psychology program, have completed an APA approved internship, and be licensed or eligible for licensure in New York State. Previous research experience is essential. This position is tenure track, with excellent salary and benefits. Send cover letter describing clinical and research interests, resume, sample publications, and three letters of recommendation to: Kenneth Leonard, Ph.D. Director of Psychology in Psychiatry, Dept. of Psychiatry, Erie County Medical Center, 462 Grider Street, Buffalo, NY 14215 or kleonard@buffalo.edu.

The University at Buffalo is an Equal Opportunity/Affirmative Action Employer; qualified prospective minority and women candidates with disabilities and qualified individuals may request needed reasonable accommodations to participate in the application process; no persons with the University at Buffalo or The State University of New York shall be subject to discrimination on the basis of age, creed, color, disability, national origin, race, religion, ethnicity, sex, sexual orientation, marital or veteran status.

PSYCHOLOGY. Arkansas Tech University invites applications for a tenure-track Assistant Professor of Psychology beginning August 13, 2007. Ph.D. in Clinical Psychology from an APA-accredited program required. Specialization must include, but is not limited to, empirically based treatments, including cognitive-behavioral therapies, and psychological and psychoeducational assessments. The candidate should be able to teach both master's level graduate and undergraduate clinical courses, and should be able to supervise master's level students in both assessment and therapy. Candidates should be license-eligible in the state of Arkansas. Arkansas Tech University is a midsized liberal arts university emphasizing teaching and undergraduate education, with some masters programs in the liberal arts, including psychology. Closing date is January 5, 2007, or until filled. Send letter of application, resume, copies of transcripts, three letters of reference and clinical work samples (e.g. assessment reports or closing case summaries) to: Dr. Caleb Lack, Chair, Psychology Search Committee, Department of Behavioral Sciences, WPN 347, Arkansas Tech University, Russellville, AR 72801. AA/EOE.

#### FOREST INSTITUTE of PROFESSIONAL PSYCHOLOGY

invites applications for a full-time licensed Psychologist with specialization in outpatient substance abuse. The position requires the provision of services in a community mental health graduate training environment and supervision of psycho-educational groups. Minimum qualifications include a Ph.D. or Psy.D. from an APAaccredited program and Missouri licensure/license-eligible.

Forest Institute's Murney Clinic is a National Health Service Corp (NHSC) loan repayment eligible site. While employment at an eligible site is a requirement to qualify for the NHSC loan repayment program, employment is not a guarantee of an award. Forest Institute's Robert J. Murney Clinic is a community mental health training clinic and is owned and operated by Forest Institute, an independent, non-profit, professional school offering both masters and PsyD degrees in clinical psychology. For more information, please visit our website at http://www.forest.edu.

Forest Institute offers malpractice insurance, as well as a competitive salary and benefits package. Review of applications will begin immediately and continue until position is filled. All qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

Please submit applications via email to Carrie Coward, Recruiting Director, at ccoward@duffygroupinc.com or call 828-225-9096 for further detail.



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### JOURNALS IN PRESS

# Cognitive and Behavioral Practice

Volume 14, # 1, February 2007

#### SPECIAL SERIES

#### Advances and Future Directions in Cognitive Behavior Therapy for Resistant Anxiety Disorders

SERIES EDITOR: Debbie Sookman

- Directions in Specialized Cognitive Behavior Therapy for Resistant Obsessive-Compulsive Disorder: Theory and Practice of Two Approaches (*Debbie Sookman and Gail Steketee*)
- Cognition About Cognition: Metacognitive Therapy and Change in Generalized Anxiety Disorder and Social Phobia (*Adrian Wells*)
- Causes and Management of Treatment-Resistant Panic Disorder and Agoraphobia: A Survey of Expert Therapists (*William C. Sanderson and Timothy J. Bruce*)
- Emotional Schemas and Resistance to Change in Anxiety Disorders (*Robert L. Leahy*)

#### **REGULAR ARTICLES**

- Telepsychology and Self-Help: The Treatment of Fear of Public Speaking (*Cristina Botella, Veronica Guillen, Rosa M. Banos, Azucena García-Palacios, Maria J. Gallego, and Mariano Alcaniz*)
- Virtual Reality Exposure in the Treatment of Panic Disorder With Agoraphobia: A Case Study (*Helena Villa Martin, Cristina* Botella, Azucena García-Palacios, and Jorge Osma)
- Prevention of Postpartum Depression in Low-Income Women: Development of the Mamás y Bebés/Mothers and Babies Course (Ricardo F. Muñoz, Huynh-Nhu Le, Chandra Ghosh Ippen, Manuela A. Diaz, Guido G. Urizar Jr., José Soto, Tamar Mendelson, Kevin Delucchi, and Alicia F. Lieberman)
- Considerations for Culturally Competent Cognitive-Behavioral Therapy for Depression With Hispanic Patients (*Alejandro* Interian and Angélica M. Díaz-Martínez)
- Cognitive Coping Tool Kit for Psychosis: Development of a Group-Based Curriculum (Joel O. Goldberg, Heather Wheeler, Tobi Lubinsky, and Jessica Van Exan)
- Treating an HIV/AIDS Patient's PTSD and Medication Nonadherence with Cognitive-Behavioral Therapy: A Principle-Based Approach (*Robert A. Chernoff*)

#### **BOOK REVIEW**

• Albert Ellis (2004). The Road to Tolerance: The Philosophy of Rational Emotive Behavior Therapy (Reviewed by Tanja Gazibara and Scott R. Ross)

## Behavior Therapy

Volume 38, # 1, March 2007

#### ORIGINAL RESEARCH

- Improving Session Attendance in Mental Health and Substance Abuse Settings: A Review of Controlled Studies (*Noelle L. Lefforge, Brad Donohue, and Marilyn J. Strada*)
- The Effects of Worry and Rumination on Affect States and Cognitive Activity (*Katie A. McLaughlin, Thomas D. Borkovec, and Nicholas J. Sibrava*)
- Virtual Reality Exposure Therapy for PTSD Symptoms After a Road Accident: An Uncontrolled Case Series (J. Gayle Beck, Sarah A. Palyo, Eliot H. Winer, Brad E. Schwagler, and Eu Jin Ang)
- A Pilot Study of Cognitive-Behavioral Therapy of Insomnia in People with Mild Depression (*Daniel J. Taylor, Kenneth L. Lichstein, Jeremiah Weinstock, Stacy Sanford, and Jeff R. Temple*)
- Internalizing and Externalizing Subtypes in Female Sexual Assault Survivors: Implications for the Understanding of Complex PTSD (*Mark W. Miller and Patricia A. Resick*)
- An Open Trial of an Acceptance-Based Behavior Therapy for Generalized Anxiety Disorder (*Lizabeth Roemer and Susan M. Orsillo*)
- Health Anxiety, Hypochondriasis, and the Anxiety Disorders (Jonathan S. Abramowitz, Bunmi O. Olatunji, and Brett J. Deacon)
- Useful Effect Size Interpretations for Single Case Research (*Richard I. Parker and Shanna Hagan-Burke*)

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# LOTTERY Winners

#### Britta K. Rothschild new member

• PRIZE: VIDEO
Robin Barrett

sponsorPRIZE: VIDEO

#### Thomas C. Mack new member • PRIZE: 1 YEAR JOURNAL

Lauren Alloy sponsor • prize: 1 year journal

John E. Williams sponsor • PRIZE: 1 YEAR MEMBERSHIP

# ELSIE RAMOS STUDENT POSTER Award Winners

#### Angela W. Chiu, UCLA

"Therapy Processes in CBT for Children with Anxiety: An Exploration of Early Therapeutic Alliance, Child Involvement and Treatment Outcome"

#### June L. Gruber, UC-Berkeley

"Emotional Reactivity and Regulation in Bipolar Disorder Following Cognitive Reappraisal"

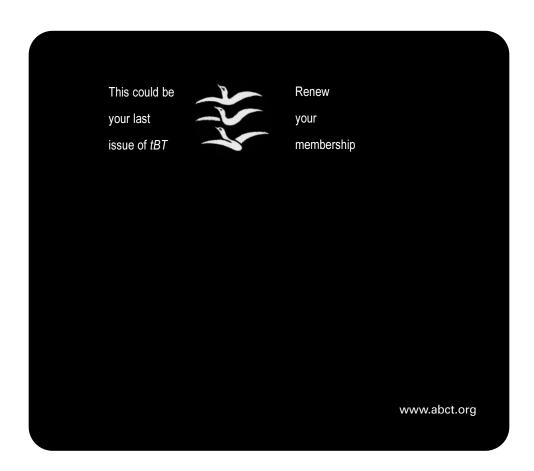
#### Brian lacoviello, Temple University

"The Course of Depression in Individuals at High and Low Cognitive Risk for Depression: A Prospective Study"



## **ABCT Annual Convention**

NOVEMBER 16-19 CHICAGO



THE FOUNDERS OF OUR ORGANIZATION originally defined behavior therapy as the application of scientific-based laws of learning to clinical problems. Since that time our organization has matured and changed its name to include cognitive interventions. However, the focus on science as the foundation for clinical practice has remained.

Our primary stated purpose is "the application of behavioral and cognitive science to understanding human behavior, developing interventions to enhance the human condition, and promoting the utilization of these interventions."

The theme of the 41st Annual ABCT Convention returns to this concept of building our therapeutic interventions on sound psychological science. Researchers and practitioners in our field rarely have the time to reflect upon developments in basic research of human behavior.

What new developments have occurred in our understanding of human learning, information processing, social cognition, memory, psychopathology, linguistics, neural bases of behavior, and emotions? How can these new findings in psychological science inform our mission of reducing human suffering?

Because even our most efficacious treatments fail for some people, we need to explore new areas of scientific inquiry that can enlighten the process concerning human problems and lead to more effective interventions. The applications of basic psychological science to clinical problems cast a wide net. Research and interventions not strictly behavioral or cognitive may provide new insights. However, the expansion of our knowledge is important if our organization is to achieve its goals.

# Return to Basic Research: Developing Clinical Interventions on Recent Scientific Findings

Submissions may be in the form of symposia, round tables, panel discussions, and posters. Look for complete information, including deadlines for submitting abstracts, after Jan. 1, 2007.

# ABCT's 41st Annual Convention

November 15–18, 2007

#### Philadelphia Marriott Hotel

We seek studies that focus on the use of interventions built upon new scientific discoveries or content areas considered nontraditional by this group. Sessions that address new discoveries in learning and cognition or other areas of psychological science and their implications for psychological treatments are welcome.

PROGRAM CHAIR: Dean McKay, Ph.D.

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# the Behavior Therapist

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