

the Behavior Therapist

Contents

President's Message

Robert L. Leahy

The Confessions of a Cognitive Therapist • 1

Research Forum

*Kees Korrelboom, Karin van der Weele, Martijn Gjaltema,
and Carla Hoogstraten*

Competitive Memory Training for Treating Low
Self-Esteem: A Pilot Study in a Routine Clinical Setting • 3

Sandra L. Hunt, Patricia A. Wisocki, and Patricia R. Roger
"What, Me Worry?" An Examination of the Literature on
Worry and the Older Adult • 9

Steven E. Bruce

Center for Scientific Review: Proposed Changes
and New Concerns • 16

Training Forum

David C. Schwebel

Thoughts on Mentoring Students in a Research
Laboratory • 18

Book Review

Reviewed by Stanley Zwebach

Weiner & Greene (2008). *Handbook of Personality
Assessment* • 20

Classifieds • 21

- p • Awards & Recognition Photo Gallery (pp. 22–23)
- l • Student Awards Program (pp. 24–25)
- ll • Nominate the Next Candidates for ABCT Office (p. 27)
- § • CALL for PAPERS for the 43rd ANNUAL CONVENTION
(back page)

President's Message

The Confessions of a Cognitive Therapist

Robert L. Leahy, *American Institute for
Cognitive Therapy, New York*



Amid the turf wars that help dramatize debates at ABCT and on various listserves, there is the reality of what clinicians actually do in their daily practice. I am one of those clinicians who actually see patients every week. Many people who don't really know me will easily identify me as a "cognitive therapist" who has written and edited a number of books. They will conclude that I am doing "cognitive therapy" all the time, following a canonized version of how to help people change.

Well, they don't know me. Yes, I am proud to say that I was trained by Aaron Beck, the founder of cognitive therapy, and I continued with individual supervision with David Burns, the master of techniques. I use cognitive therapy every day. I do help patients examine the advantages and disadvantages of their thoughts, consider the evidence and set up behavioral experiments to test out their negative predictions. If you stopped there you would think, "See, I told you so. Cognitive therapist through and through."

But, wait. Here's a patient concerned about the lack of discipline in his daughter. Well, I guess I am going to use some child behavior management. Try to catch her being "good," label and reward the positive, try ignoring. Let's consider some contingency management, maybe a star system. Hmm, thank you Bob McMahon and Rex Forehand. Or, with another couple I notice that I am using some of John Gotman's emo-

continued on p. 3

the Behavior Therapist

Published by the Association for Behavioral and Cognitive Therapies
305 Seventh Avenue - 16th Floor
New York, NY 10001-6008
(212) 647-1890/Fax: (212) 647-1865
www.abct.org

EDITOR *Drew Anderson*
Editorial Assistant *Melissa Them*
Behavior Assessment *Timothy R. Stickle*
Book Reviews *C. Alix Timko*
Clinical Forum *John P. Forsyth*
Clinical Dialogues *Brian P. Marx*
International Scene *Rob Holland*
Institutional
Settings. *David Penn*
Tamara Penix Sbraga
Lighter Side *Elizabeth Moore*
News and Notes. *David DiLillo*
Laura E. Dreer
James W. Sturges
Public Health Issues. *Jennifer Lundgren*
Research-Practice
Links. *David J. Hansen*
Research-Training
Links. *Gayle Y. Iwamasa*
Science Forum. *Jeffrey M. Lohr*
Special Interest
Groups *Andrea Seidner Burling*
Technology Update. *James A. Carter*

ABCT President *Robert L. Leaby*
Executive Director *Mary Jane Eimer*
Director of Education &
Meeting Services *Mary Ellen Brown*
Director of Communications *David Teisler*
Managing Editor *Stephanie Schwartz*

Copyright © 2009 by the Association for Behavioral and Cognitive Therapies. All rights reserved. No part of this publication may be reproduced or transmitted in any form, or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

Subscription information: *the Behavior Therapist* is published in 8 issues per year. It is provided free to ABCT members. Nonmember subscriptions are available at \$40.00 per year (+\$32.00 airmail postage outside North America).

Change of address: 6 to 8 weeks are required for address changes. Send both old and new addresses to the ABCT office.

ABCT is committed to a policy of equal opportunity in all of its activities, including employment. ABCT does not discriminate on the basis of race, color, creed, religion, national or ethnic origin, sex, sexual orientation, gender identity or expression, age, disability, or veteran status.

All items published in *the Behavior Therapist*, including advertisements, are for the information of our readers, and publication does not imply endorsement by the Association.

Call
for

WORKSHOP SUBMISSIONS

43rd Annual Convention | November 19–22, 2009
New York

Please send a 250-word abstract and a CV for each presenter to:

Carolyn M. Pepper, Ph.D.
University of Wyoming
Dept. of Psychology, Dept. 3415
16th and Gibbon
Laramie, WY 82071

or email: cpepper@uwyo.edu

* **DEADLINE for submissions: February 2, 2009** *

INSTRUCTIONS for AUTHORS

The Association for Behavioral and Cognitive Therapies 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.

Submissions must be accompanied by a **Copyright Transfer Form** (a form is printed on p. 24 of the January 2008 issue of *tBT*, or contact the ABCT central office): *submissions will not be reviewed without a copyright transfer form*. Prior to publication authors will be asked to submit a final electronic version of their manuscript. Authors submitting materials to *tBT* do so with the understanding that the copyright of the published materials shall be assigned exclusively to ABCT. Submissions via e-mail are preferred and should be sent to the editor at drewa@albany.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:

Drew A. Anderson, Ph.D.
SUNY-Albany
Dept. of Psychology/SS369
1400 Washington Ave.
Albany, NY 12222

continued from p. 1

tion interventions, suggesting validation, tolerating and accepting emotion, and using emotion to get closer. While I'm at it, I notice that I am using ideas from Neil Jacobson and Andrew Christensen—helping this couple accept their own differences and find resources in each other's uniqueness rather than friction in their styles. I also noticed that Les Greenberg's emotion-focused therapy was helpful with this couple—as well as in encouraging a woman to come to terms with her ambivalence after a breakup.

Several of my patients this week have benefited from the innovative ideas in metacognitive therapy for which I have my friend Adrian Wells to thank. Yes, Adrian's ideas have informed my use of standing back and examining thought-control strategies that don't work and setting up experiments to modify the nature of worry. But I also want to say that it wouldn't be complete without acknowledging that Tom Borkovec, Rick Heimberg, and Doug Mennin have influenced how I have helped another woman cope with her worry as a way of avoiding painful emotions. In fact, I also used some of my own ideas about emotional schemas to help this woman realize that her worry about anxiety seems to be a way that she is invalidating her own anger toward her husband. So, immodestly, I briefly thanked myself.

But I also recognized that I owed some gratitude to Steve Hayes and the ACT community for helping me use acceptance and mindfulness with a man who seemed consumed with anger and jealousy. As I was working with him, I could hear the wisdom of my old friend and colleague, Marsha Linehan, when I used terms like “radical acceptance” and “improve the moment” with this angry and somewhat perplexed man. Indeed, I even used some radical acceptance on myself when I noticed that I was feeling frustrated with his anger and I decided to stand back, observe mindfully, while recognizing that Zindel Segal, Mark Williams, and John Teasdale had helped me at this moment. And, then, like all good moments, it passed.

But as I was reflecting on all of these different people in the CBT community, I also realized that before there was cognitive therapy, there was existentialism, there was Victor Frankl's logotherapy, and there was the literature of civilization. With names dropping out of my lexicon of gratitude, I realized that what I was doing with my patients this week also incorporated what we today call “positive psychology” but which Aristotle and others knew as “the good life.” As I spoke with a patient about “pursuing his virtue”—the values and discipline of a good life (such as integrity, kindness, generosity, self-discipline)—I realized that I was no longer testing out the truth of “biased thinking” but rather was helping

someone find the meaning of what a life worth living would look like.

And I realized that as I helped a man recognize that losing money provided an opportunity to learn what was really valuable, to embrace humility and simplicity as tools for appreciation and gratitude, I knew—at this moment—that I would never be able to remember all the people who have written about wisdom over the last 2,500 years. I began to remember a course on Tragedy that I took my freshman year in college, I recalled the vast corpus of literature that was my preoccupation for many years, and I knew that cognitive therapy—and CBT—are a very small component of a larger picture.

So, as I shuffled off at the end of the day, reminding myself with reassurance that I “really am” a cognitive therapist, I also took joy in recognizing that I am part of something much larger and more wonderful. There is a larger community “out there.” There are many teachers, many sources of wisdom, continual growth. It is possible to believe in this freedom without being a “true believer.”

. . .

Correspondence to Robert L. Leahy, Ph.D.,
American Institute for Cognitive Therapy, 136
E. 57th St., Suite 1101, New York, NY 10022;
Leahy@CognitiveTherapyNYC.com

Research Forum

Competitive Memory Training for Treating Low Self-Esteem: A Pilot Study in a Routine Clinical Setting

Kees Korrelboom, *PsyQ, The Hague*, Karin van der Weele, *Research Intitute Groningen*, and Martijn Gjaltema and Carla Hoogstraten, *Center for Clinical Psychotherapy, Groningen*

Although, according to the DSM-IV criteria, low self-esteem is not a specific disorder and is only one of several distinguishing aspects in some disorders, many patients with emotional problems have to deal with this condition. Low self-esteem can manifest itself in social phobia (Izgcic et al., 2004), obsessive-compulsive disorder (Ehnholt, Salkovskis & Rimes, 1999), and posttraumatic stress disorder (Kashdan et al., 2006). Moreover, low

self-esteem can be part of the clinical picture of major depression (Schmitz, Kugler & Rollnik, 2003), schizophrenia (Knight, Wykes & Hayward, 2006), and eating disorders (Dunkley & Grilo, 2007). Finally, the condition is regularly seen in several personality disorders, mainly in avoidant (Meyer, 2002) and borderline personality disorder (Zeigler-Hill & Abraham, 2006). Apart from these manifestations, low self-esteem is considered to be a risk factor for relapse in

the development of several psychopathological conditions (Abela & Skitch, 2007; Stice, 2002). Although there are no generally accepted evidence-based treatment protocols for low self-esteem, some specific treatment programs for low self-esteem have been described (Fennell, 1998; Hall & Tarrrier, 2003). Hall and Tarrrier seek to focus the patient's attention on positive characteristics by discussing concrete instances in which these positive characteristics were in action. The program reported by Fennell is synthesized from ideas and methods grounded in cognitive therapy and schema-focused cognitive therapy for anxiety disorders and depression. Her approach is characterized by the identification and Socratic challenging of dysfunctional negative automatic thoughts, assumptions and core beliefs about one's own worth and importance. Fennell also described a range of specific behavioral experiments, the majority of which are concerned with the reaction of others to the capacities and personal

worth of the patient (Fennell & Jenkins, 2004).

Competitive Memory Training (COMET) is a new intervention for treating low self-esteem. It aims primarily at direct self-evaluation and was developed as an addition to the existing interventions for specific emotional disorders.

Although cognitive behavioral therapy is generally considered to be an effective intervention for a range of disorders, the mechanisms involved in instigating change remain unclear. According to Brewin (2006), cognitive therapy does not directly modify negative information in memory, but rather influences the relative retrievability of the different meanings of emotional concepts stored in memory. The relative strengthening of positive representations, which are in "retrieval competition" with dysfunctional negative representations, is considered to be the mechanism of change in various effective cognitive and behavioral procedures.

Prior to Brewin's (2006) publication, but largely consistent with his suggestions, a series of cognitive behavioral interventions was developed for patients that failed to develop a positive change in feelings, despite adequate changes in cognition after traditional Socratic challenging and behavioral testing of their dysfunctional thoughts. These interventions were based on Lang's concept of cognitive emotional networks (Lang, 1994) and were considered to be a modern, cognitive variant of counterconditioning. Assuming that the negative feeling state of these patients was steered by Lang's cognitive emotional networks, COMET is aimed at changing these networks.

COMET is a stepwise cognitive-behavioral intervention. Its aims are to make functional emotional networks more competitive and to put them higher in Brewin's retrieval hierarchy. Competitiveness is strived for by enhancing the emotional saliency of functional networks, by repeatedly activating these networks and by relating them to personalized cues that are known to trigger the patient's dysfunctional ideas and cognitions. Imagery (Holmes et al., 2006), positive self-verbalizations (Lange et al., 1998), the purposeful manipulation of posture and facial expression (Segal, Gemar, & Williams, 1999), as well as listening to emotion-inducing music (Parrott & Hertel, 1999), are repeatedly employed to promote the saliency of positive emotional networks.

Once a strong and competitive functional emotional network has been formed, the patient imagines problematic situations

that normally trigger dysfunctional thoughts and opinions. Then, in a counterconditioning procedure, the functional network that had been strengthened earlier is related to these triggers.

COMET protocols for several emotional problems have been developed and are currently being tested; the result of a COMET pilot study for obsessions was recently reported (Korrelboom et al., 2008). The present study describes the first empirical testing of a COMET protocol for low self-esteem in a routine residential setting. It concerns a baseline-controlled study with a short to intermediate follow-up period of hospitalized patients and patients in daytime treatment with personality disorders and/or eating disorders.

Method

Patients

Patients were recruited from the Center for Clinical Psychotherapy (CCP) of Lentis, a large organization for mental health in the Netherlands. The CCP cares mainly for patients with personality and/or eating disorders who are hospitalized for periods of up to 9 months, for 5 days a week. The CCP also has a day treatment program (patients are not hospitalized) in which patients receive intensive treatment (similar to that in the clinic) in groups for 2 to 4 days a week. In addition to both these regular programs there is also a special "modular program": patients from the clinic and the day treatment center, with the appropriate indication (and who have been receiving regular treatment for at least 2 months), can opt to participate (one at a time) in various interventions included in this modular program. As an experiment and as part of the present study, COMET for low self-esteem was added as an option within this latter modular program. Thus, for all patients who opted for COMET, this treatment module was an addition to their regular treatment.

Instruments

At the start of their treatment in the CCP and at the end of it, all patients (not only those in COMET) were assessed with the following instruments:

Positive Outcome Scale or POS (Positieve Uitkomsten Lijst or PUL; Appelo, 2005). This 10-item Dutch self-report instrument assesses resilience; 7 items address autonomy and 3 address social optimism. Dutch norms exist for a normal population and a psychiatric population; reliability (Cronbach's alpha 0.88) and validity (correlations

of about 0.60 with different measures for self-efficacy) are sufficient (Appelo, 2005). High scores are favorable.

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). On a Dutch version of this 10-item scale, items have to be answered on a 4-point Likert scale (range 0–3), ranging from *strongly agree* to *strongly disagree*. The RSES assesses "global self-esteem" and a Dutch version is sufficiently reliable (Cronbach's alpha 0.87) and valid (partial correlation with neuroticism, controlling for gender: $r = -0.56$) (Schmidt & Allik, 2005). A high score is favorable. There are no official norms for the RSES. However, a large-scale multinational survey (Schmidt & Allik, 2005) reported the mean RSES score for a Dutch nonclinical population to be 21.6 ($SD = 4.5$); this after transforming the 1–4 score of this study to the 0–3 system of scoring that was used in the current study.

At the start and at the end of COMET all patients were also assessed with:

The Self-Esteem Rating Scale (SERS SF-20; Lecomte, Corbière & Laisné, 2006). On this 20-item Dutch version the patient indicates on a 7-point Likert scale his (dis)agreement with 20 statements about his self-esteem. In contrast with the global self-esteem that is tapped by the RSES and in line with observations that self-esteem might consist of two relatively independent dimensions, being positive and negative self-esteem (Barrowclough et al., 2003), the SERS SF-20 is thought to tap aspects of positive and negative self-esteem separately. Reliability (test-retest: $r = 0.90$) and validity (concurrent validity with the RSES positive subscale: $r = 0.72$ and with the RSES negative subscale: $r = 0.79$; Lecomte et al., 2006) are good. High scores are favorable on positive self-esteem and unfavorable on negative self-esteem.

The Beck Depression Inventory (BDI; Beck et al., 1961). A Dutch translation of this 21-item self-referent depression 4-point Likert scale (range 0–3) has proven to be reliable (Cronbach's alpha: $r = 0.82-0.86$; Bouman et al., 1985) and valid (correlations with several other depression scales > 0.80 ; Bouman, 1989). Depression was assessed to allow for comparisons between similarities and changes in self-esteem and depression. Low scores are favorable.

Therapists

All sessions of COMET were led by two therapists. A total of four therapists were involved; all were trained and supervised by the first author. The senior therapist (third

author) was involved in all groups. The COMET therapists were different from the therapists involved in the patient's choice for the intervention.

Treatments

Treatment at the CCP consists of a regular program that all patients follow, and specific additional modules that patients can opt for (assuming that an indication is confirmed by their psychotherapist). These individual psychotherapists monitor the patient's progress and supervise and coach them during treatment. The regular treatment programs of the clinic/day treatment center consist of sociotherapy, pharmacotherapy, "creative" therapies, psychomotor therapy, group psychotherapy, family therapy and individual psychotherapy. After a minimum of 2 months of this regular treatment, all patients receive modules of additional therapy. These are practiced concurrently (one at a time) with the regular treatment.

In the present study, patients opting for the COMET module received 8 weekly sessions of 1.5 hours of COMET for low self-esteem; this training was practiced in small groups of 6 to 8 patients and encompassed four main steps:

- *Identifying the negative self-image.* The patient is simply asked what they think is so bad about themselves and whether they really believe this to be true.

- *Identifying a positive self-image.* This positive self-image that the patient (intellectually) knows to be true but nevertheless does not feel to be true, should be incompatible with the negative self-image. Here, the patient is asked which personal experiences and characteristics indicate that the negative self-image is untrue.

- *Making the positive self-image more competitive in the memory retrieval hierarchy.* Several procedures are expected to influence the memory retrieval competition. COMET focuses on three: emotional saliency, repetition, and association. First, emotional saliency of functional self-concepts is stimulated by writing self-referent stories about situations where positive characteristics of the patient were manifest, and by repeatedly verbalizing positive self-statements connected to these situations. Second, purposeful manipulation of a self-confident posture and facial expression and imagery are used to promote the emotional saliency of positive self-esteem. Finally, not only subjective mood states but also positive self-esteem is expected to be promoted by listening to specific kinds of music. This

already emotionally enhanced positive self-knowledge is activated repeatedly during COMET, during therapy sessions, as well as in homework assignments.

- *Associating the emotionally enhanced positive self-knowledge with cues that usually trigger dysfunctional negative self-concepts.* This is effected by a procedure that is considered to be a modern variant of counterconditioning. The patient imagines himself in a difficult situation, where his negative self-image normally is provoked. However, during imagining he deliberately activates his feelings of positive self-esteem with the aid of posture, facial expression, positive self-statements, and music. This procedure is also practiced repeatedly during sessions and in homework assignments until the difficult situation can be imagined without undue self-demeaning feelings. Then another difficult situation is tackled in the same way.

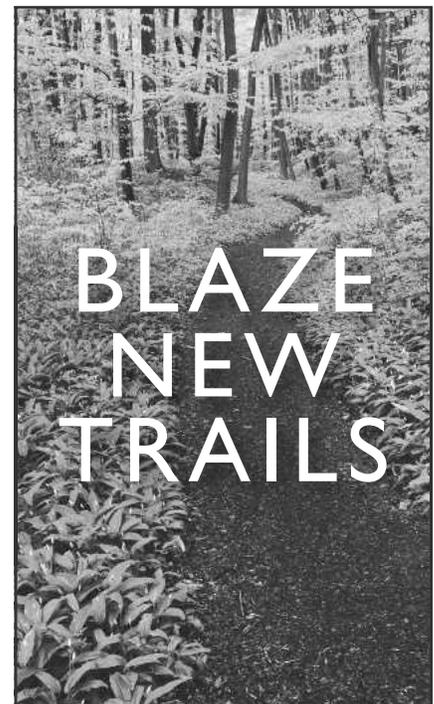
Procedure

All patients of the CCP (with indication from their psychotherapist) could opt for COMET as an additional treatment to their regular treatment program. Patients were considered to have an indication when they had followed the regular program for at least 2 months and when low self-esteem was considered to be one of their key problems both by themselves and their psychotherapist. Then, mixed groups, consisting of 6 to 8 patients, each with a different main diagnosis and from different treatment programs, were formed.

Because all patients were from the CCP, most COMET patients had routinely been assessed at the start of their treatment with the POS and RSES (M1). At the start of COMET all patients filled in the POS and RSES again, as well as the SERS SF-20 and BDI (M2); they did this again at the end of COMET, i.e. after 8 weekly group sessions of 1.5 hours each (M3). At the end of their entire treatment program all CCP patients, including those that followed COMET, routinely completed the POS and RSES again (M4). In the main analyses, POS and RSES measurements at M4 were only included in the analyses when M4 was filled in at least 8 weeks after M3.

Objectives and Hypotheses

The main hypothesis tested was that COMET in combination with regular therapy would enhance self-esteem more than regular therapy alone.



PEDIATRIC/CHILD CLINICAL PSYCHOLOGIST

Geisinger Health System seeks a Pediatric/Child Clinical Psychologist to join its growing team of pediatric subspecialists in a group clinic practice located at Geisinger Medical Center, Danville, PA.

About the position:

- Provide inpatient and outpatient services to a broad range of pediatric patients with medical and psychological/behavioral disorders
- Experience desired in disruptive behavior disorders, ADHD, parent training, consulting with pediatricians and pediatric subspecialists, and using evidence-based treatment approaches
- Opportunities to teach residents and perform research, especially treatment outcome research, are available
- A clinical faculty appointment is available at Temple Medical School

For more information, contact Search Director Paul Kettlewell, Ph.D., ABPP, c/o Kathy Kardisco, Physician Recruiter, at 1-800-845-7112, email: kkardisco@geisinger.edu or visit www.Join-Geisinger.org/754/PediatricPsych

GEISINGER
REDEFINING THE BOUNDARIES OF MEDICINE.

Main Statistical Analyses

Differences between dropouts and completers on the continuous variables were examined with *t* tests for independent groups and with chi-square tests for categorical variables. Differences between M1 and M2, between M2 and M3 (i.e., those most interesting to assess the potential value of COMET), and between M3 and M4 were examined with *t* tests for paired samples. When significant differences emerged, Cohen's *d* was calculated to estimate the effect sizes of these differences (Cohen, 1988). For those who completed COMET, the clinical significance of the changes on the RSES was calculated with a procedure described by Jacobson and Truax (1991).

In a post-hoc analysis, univariate ANCOVAs were performed to test for differences between 20 COMET patients who had completed the RSES and POS at M1 and at M4 and a comparison group of 18 different patients who were also treated at the CCP but who had not followed COMET.

Results

During a 1-year period, 41 patients were referred to COMET: 6 (15%) males and 35 (85%) females with a mean age of 25.3 ($SD = 6.3$) years. Of these, 40% had a personality disorder as main diagnosis, 27.5% had one of the eating disorders as main diagnosis, and the remainder (32.5%) had a miscellaneous diagnosis. Five patients (12.5%) were from the day treatment center, and the remainder (87.5%) from one of the clinical programs. Twelve patients (32%) had a relatively low level of education (none or lower vocational or general secondary training), 11 (27%) had finished a high level of education (university, college, or high school), and the remainder (41%) were somewhere in between. All patients had a western (Dutch) cultural identity. Mean duration of illness (dating from the first contact with mental health care) was 6.1 ($SD = 6.0$) years. Partly due to a change in practice concerning intake at the CCP shortly before the start of this study, at M1 36 of the 41 COMET patients had filled in the POS but only 26 patients had filled in the RSES.

All 41 patients were treated in 6 different COMET groups. Of these, 3 (7.5%) stopped COMET prematurely or missed more than 2 sessions and were considered "intervention dropouts." For 7 other patients (17.5%) M3 was missing; 2 of these patients stopped their entire treatment at the CCP prematurely during COMET, the other 5 (for different reasons) did not attend

the last session. Therefore, 31 patients completed COMET and filled in M2 and M3. Their data entered the main analyses. There were no significant differences between the 10 dropouts and the 31 completers regarding gender, age, educational level, or main diagnosis, and no significant differences on the outcome measures at M2. All analyses pertain to the 31 completers.

Of the 31 COMET completers, 18 finished their entire treatment at the CCP within 8 weeks after M3; they were not included in the follow-up analyses (M3–M4). Thus, 13 COMET completers had finished their regular treatment at CCP and had filled in M4 at least 8 weeks after M3; for these 13 patients follow-up data were calculated.

The mean period between M1 and M2 (regular treatment) for COMET patients was 16.8 ($SD = 9.5$) weeks. During this period no significant changes were found on the POS subscales Autonomy and Social Optimism, or on the RSES (Global Self-Esteem); this suggests that the regular CCP program had no significant impact on these factors in the first 4 months of treatment (Table 1).

During the 8 weeks of COMET, between M2 and M3 (regular treatment + COMET) all measures showed significant improvement. Thus, it seems that COMET (+ regular treatment) influences Global Self-Esteem (RSES), Autonomy, Social Optimism (POS), Positive and Negative Self-Esteem (SERS SR-20), and Depression (BDI) in the expected directions. These effect sizes were large (> 0.8) for all measures, except for Social Optimism, where they were intermediate (0.5–0.8) (Table 2).

Of the 30 patients that had completed COMET and had filled in the RSES at M2 and M3 (one RSES at M3 was missing), the Clinical Significant Improvement (CSI) was calculated. CSI is said to have occurred when the patient's score migrates during treatment from the patient distribution to the distribution of a normal population and when this score shows a Reliable Change (RC); the latter is calculated based on the standard error of measurement of the instrument (Jacobson & Truax, 1991). Prior to COMET, 3 patients (10%) scored closer to the mean of the normal population on the RSES (cutoff point > 15) than to the mean of the patient group; after COMET, 13 patients (43%) did. During COMET 22 patients (73%) showed an RC (difference between M2 and M3 > 3) on the RSES based on Cronbach's α of 0.87 (Schmitt & Allik, 2005). CSI (positive RC + a post-treatment score within the normal range)

on the RSES was achieved by 11 patients (37%).

The mean treatment period between the end of COMET (plus regular treatment) and discharge from the CCP for those 13 patients who had at least 8 weeks of regular treatment after COMET was 19.9 ($SD = 11.1$; range 8–39) weeks. In this time period with only regular treatment, no further significant changes in Autonomy, Social Optimism (POS), and Global Self-Esteem (RSES) were observed. Thus, it was concluded that changes in these characteristics during COMET are maintained but not further enhanced during the remaining regular treatment program of the CCP (Table 3).

In a post-hoc analysis, the data of 18 additional patients treated at the CCP in the same time period but who (for reasons unknown) had not opted for COMET were compared with patients who had followed COMET. These 18 patients had also filled in the RSES and the POS at the start of their treatment (M1) and at the end of it (M4). Data on measurements at M1 and M4 (irrespective of the length of follow-up) were also available for 20 COMET patients. At the start of treatment at the CCP there were no significant differences on the RSES between these two groups ($t = -0.46$, $df = 36$, $p = 0.84$). The univariate ANCOVA over the posttreatment (M4) data on the RSES with the pretreatment RSES score (M1) as a covariate was significant in favor of the group that had followed COMET during their treatment, $F(1, 35) = 6.65$, $p = 0.01$; this supports the findings in the main analyses of the present study. However, a similar post-hoc analysis for the POS showed no significant differences for the Autonomy, $F(1, 33) = 0.15$, $p = 0.71$, and the Social Optimism, $F(1, 33) = 0.03$, $p = 0.86$, scales.

Discussion

This pilot study is the first empirical investigation of COMET for low self-esteem, as an adjunct to ongoing regular treatment, in hospitalized and day treatment patients with eating disorders and personality disorders. The results suggest that, in this population, COMET may be effective in reducing both low self-esteem and co-occurring depressive symptoms while enhancing positive self-esteem, autonomy, and social optimism. It is noteworthy that replacing part of the regular treatment program with only 12 hours of COMET (over an 8-week period) seems to have a beneficial effect on these variables, whereas during

Table 1. Data on Changes Between the Start of Treatment at the CCP and the Start of COMET; Baseline: M1–M2

	Start CPP	Start COMET	<i>t</i> value	<i>df</i>	<i>p</i> value
Global self-esteem (RSES)*	10.8 (5.4)	10.2 (3.4)	-0.59	24	0.56
Autonomy (POS)	15.1 (4.0)	15.9 (3.4)	1.51	35	0.14
Social optimism (POS)	8.3 (1.8)	7.8 (1.4)	-1.56	35	0.13

* 1 RSES missing

Table 2. Data on Changes Between the Start and the End of COMET; Treatment: M2–M3

	Pre-COMET (M2)	Post-COMET (M3)	<i>t</i> value	<i>df</i>	Significance	Effect Size (Cohen's <i>d</i>)
Global self-esteem (RSES)*	9.0 (3.8)	15.5 (5.8)	-6.03	29	<0.000	1.33
Autonomy (POS)	15.3 (3.7)	19.6 (4.1)	-5.67	30	<0.000	1.10
Social optimism (POS)	7.9 (1.5)	8.8 (2.0)	-2.96	30	<0.00	0.51
Depression (BDI)*	27.4 (7.7)	15.2 (11.0)	7.11	29	<0.000	1.28
Positive self-esteem (SERS SF-20)	36.9 (7.9)	44.5 (9.8)	-5.04	30	<0.000	0.85
Negative Self-Esteem (SERS SF-20)	53.4 (8.1)	40.7 (13.3)	4.82	30	<0.000	1.15

* 1 RSES and 1 BDI missing

Table 3. Data on Changes Between the End of COMET and the End of Treatment at the CCP; Follow-up: M3–M4*

	End COMET	End CPP	<i>t</i> value	<i>df</i>	<i>p</i> value
Global self-esteem (RSES)*	12.8 (3.1)	14.2 (4.3)	-1.58	12	0.14
Autonomy (POS)	18.1 (3.3)	18.9 (4.6)	-.51	12	0.62
Social optimism (POS)	8.4 (1.9)	8.8 (2.2)	-.60	12	0.56

* M4 > 7 weeks after M3

“baseline” the regular treatment program of the CCP without COMET fails to do so in a 4-month treatment period. These results are in line with the results of another preliminary study which tested the COMET protocol for obsessions (Korrelboom et al., 2008). In the present study, the COMET results remained stable during the follow-up period of 2 to 9 months ($M = 19.9$, $SD = 11.1$) weeks), and when accompanied by the regular CCP treatment.

Because this study was performed during the daily practice of a (nonuniversity) clinical psychiatric center, randomization was not feasible. However, post-hoc comparison between COMET patients and a group of patients with similar main diagnoses (eating disorders, personality disorders, and miscellaneous disorders), treated at the same institution in the same period with the same regular treatment procedures—except for COMET—suggests that COMET for low self-esteem has specific (additional) effects, at least on low self-esteem as measured with the RSES.

The debate continues regarding the necessity to identify and intellectually challenge dysfunctional thoughts in cognitive therapy in order to adequately treat psychiatric patients (Brewin, 2006; Longmore & Worrell, 2007). Many patients appear to change without such challenge, and patients whose thoughts have not been formally challenged during therapy also appear to change their dysfunctional thinking (Jacobson et al., 1996). In COMET there is no deliberate challenging of thoughts. Patients with low self-esteem are asked directly whether they truly believe that their negative self-image is correct. If not, they are invited to learn to feel what they apparently already know (i.e., that they are more worthwhile than they feel most of the time). Subsequently, COMET is primarily aimed at making already existing positive self-knowledge better retrievable from long-term memory. Retrievability is enhanced by making this functional information emotionally more salient, by repeatedly activating it using procedures that have proven to enhance emotional feeling and mood states in experimental psychology, and by associating this information with specific cues.

As a first pilot study in treating low self-esteem for hospitalized and day treatment patients with eating disorders and/or personality disorders, this study has some limitations. These include the small sample size, the absence of a randomized comparison condition, and lack of long-term fol-

low-up. In addition, COMET was provided as an adjunct to the patient's ongoing regular therapy. Therefore, the positive results found in this study cannot be attributed unequivocally to COMET alone. Nevertheless, patients had received their regular therapy for an average of 4 months prior to the start of COMET without any significant improvement in general self-esteem, autonomy, and social optimism. Moreover, during COMET the level of global self-esteem (RSES) rose from far below ($M = 9.0$) the mean of a normal Dutch population ($M = 21.6$) to a level ($M = 15.5$) almost within one standard deviation from the mean of the general population. In addition, CSI was achieved by 37% of the patients, and all variables (except for social optimism) showed large positive changes during COMET in a relatively short period of time.

Conclusions

COMET may be an effective intervention for the treatment of psychiatric patients with low self-esteem. The promising results found in the present study warrant further investigation of this intervention in well-defined psychiatric populations, using a randomized controlled design with more challenging comparison groups, sufficiently large samples, and a sufficiently long follow-up period.

References

- Abela, J. R., & Skitch, S. A. (2007). Dysfunctional attitudes, self-esteem, and hassles: cognitive vulnerability to depression in children of affectively ill parents. *Behaviour Research & Therapy*, *45*, 1127-1140.
- Appelo, M. T. (2005). *Positieve uitkomsten lijst (Positive outcome scale)*. Nijmegen: Cure & Care.
- Barrowclough, C., Tarrrier, N., Humphreys, L., Ward, J., Gregg, L., & Andrews, B. (2003). Self-esteem in schizophrenia: Relationships between self-evaluation, family attitudes, and symptomatology. *Journal of Abnormal Psychology*, *112*, 92-99.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, *18*, 561-571.
- Bouman, T. K. (1989). Assessment van stemmingsstoornissen (Assessment of mood disorders). In F. A. Albersnagel, P. M. G. Emmelkamp, & R. H. van den Hoofdakker (Eds.), *Depressie. Theorie, diagnostiek en behandeling (Depression. Theory, diagnostics and treatment)*. Deventer: Van Loghum Slaterus.
- Bouman, T. K., Luteijn, F., Albersnagel, F. A., & Ploeg, F. A. E. van der (1985). Enige ervaringen met de Beck Depression Inventory (BDI). (Some experiences with the Beck Depression Inventory (BDI)). *Gedrag-Tijdschrift voor Psychologie*, *13*, 13-24.
- Brewin, C. R. (2006). Understanding cognitive behaviour therapy: A retrieval competition account. *Behaviour Research & Therapy*, *44*, 765-784.
- Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Dunkley, D. M., & Grilo, C. M. (2007). Self-criticism, low self-esteem, depressive symptoms, and over-evaluation of shape and weight in binge eating disorder patients. *Behaviour Research & Therapy*, *45*, 139-149.
- Ehnholt, K. A., Salkovskis, P. M., & Rimes, K. A. (1999). Obsessive-compulsive disorder, anxiety disorders, and self-esteem: An exploratory study. *Behaviour Research & Therapy*, *37*, 771-781.
- Fennell, M. J. V. (1998). Low self-esteem. In N. Tarrrier, A. Wells, & G. Haddock (Eds.), *Treating complex cases: The cognitive behavioural therapy approach*. Chichester: John Wiley & Sons.
- Fennell, M. J. V. & Jenkins, H. (2004). Low self-esteem. In J. Bennett-Levy, G. Butler, M. Fennell, A. Hackmann, M. Mueller, & D. Westbrook (Eds.), *Oxford guide to behavioural experiments in cognitive therapy*. Oxford: Oxford University Press.
- Hall, P. L. & Tarrrier, N. (2003). The cognitive-behavioural treatment of low self-esteem in psychotic patients: a pilot study. *Behaviour Research & Therapy*, *41*, 317-332.
- Holmes, E. A., Mathews, A., Dalgleish, T., & Mackintosh, B. (2006). Positive interpretation training: effects of mental imagery versus verbal training on positive mood. *Behavior Therapy*, *37*, 237-247.
- Izgin, F., Akyuz, G., Dogan, O., & Kugu, N. (2004). Social phobia among university students and its relation to self-esteem and body image. *Canadian Journal of Psychiatry*, *49*, 630-634.
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., Gortner, E., Prince, & Stacey E. (1996). A Component Analysis of Cognitive-Behavioral Treatment for Depression. *Journal of Consulting & Clinical Psychology*, *64*, 295-304.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting & Clinical Psychology*, *59*, 12-19.
- Kashdan, T. B., Uswatte, G., Steger, M. F., & Julian, T. (2006). Fragile self-esteem and affective instability in posttraumatic stress disorder. *Behaviour Research & Therapy*, *1609-1619*.
- Knight, M. T. D., Wykes, T., & Hayward, P. (2006). Group treatment of perceived stigma and self-esteem in Schizophrenia: A waiting list trial of efficacy. *Behavioural & Cognitive Psychotherapy*, *34*, 305-318.
- Korrelboom, C. W., Gaag, M. van der, Hendriks, V., Huijbrechts, I. & Berretty, E. W. (2008). Treating obsessions with competitive memory training: A pilot study. *the Behavior Therapist*, *31*, 29-36.
- Lang, P. J. (1994). The motivational organization of emotions. In S. van Goozen, N. E. van de Poll, & J. A. Sergeant (Eds.), *Emotions: Essays on motion theory*. Hillsdale, NJ: Lawrence Erlbaum.
- Lange, A., Richard, R., Gest, A., Vries, M. de, & Lodder, L. (1998). The effects of positive self-instruction: a controlled trial. *Cognitive Therapy & Research*, *22*, 225-236.
- Lecomte, T., Corbière, M., & Laisné, F. (2006). Investigating self-esteem in individuals with schizophrenia: Relevance of the Self-Esteem Rating Scale-Short Form. *Psychiatry Research*, *143*, 99-108.
- Longmore, R. J., & Worrell, M. (2007): Do we need to challenge thoughts in cognitive behavior therapy? *Clinical Psychology Review*, *27*, 173-187.
- Meyer, B. (2002). Personality and mood correlates of avoidant personality disorder. *Journal of Personality Disorders*, *16*, 174-188.
- Parrott, W. G., & Hertel, P. (1999). Research methods in cognition and emotion. In T. Dalgleish & M. Power (Eds.), *Handbook of cognition and emotion* (pp. 61-82). Chichester: John Wiley & Sons.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Schmidt, D. P., & Allik, J. (2005). Simultaneous administration of the Rosenberg self-esteem scale in 53 nations: Exploring the universal and culture-specific features of global self-esteem. *Journal of Personality & Social Psychology*, *89*, 623-642.
- Schmitz, N., Kugler, J., & Rollnik, J. (2003). On the relation between neuroticism, self-esteem, and depression: results from the National Comorbidity Survey. *Comprehensive Psychiatry*, *44*, 169-176.
- Segal, Z. V., Gemar, M., & Williams, S. (1999). Differential cognitive response to a mood challenge following successful cognitive therapy or pharmacotherapy for depression. *Journal of Abnormal Psychology*, *108*, 3-10.
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin*, *128*, 825-848.
- Zeigler-Hill, V., & Abraham, J. (2006). Borderline personality features: instability of self-esteem and affect. *Journal of Social & Clinical Psychology*, *25*, 668-687.

Correspondence to Kees Korrelboom, PsyQ, Monsterseweg 83, Room 114, 2553 RJ, The Hague, Netherlands; email: k.korrelboom@psyq.nl

“What, Me Worry?” An Examination of the Literature on Worry and the Older Adult

Sandra L. Hunt, *City University of New York–College of Staten Island*, Patricia A. Wisocki, *University of Massachusetts–Amherst*, and Patricia R. Roger, *Johns Hopkins University School of Medicine*

The idea of old age as a difficult time is a common one in Western culture. The notion of aging tends to elicit a number of negative connotations. In old age, we may rightly anticipate a number of chronic health problems (e.g., impaired mobility, sensory decline, diseases) and serious social changes (e.g., declines in income, loss of family members and friends), any or all of which may produce considerable stress. In addition to these challenges, the aged individual has often been portrayed in the popular media as physically weak, unsteady, and generally inferior to their younger counterparts (Ellis & Morrison, 2005). As Neikrug (2003) discussed, these ageist attitudes may result not only in stress about the aging process itself, but also may be internalized, possibility leading older adults to experience the negative affect that is being portrayed. Thus, older adults are faced with very real challenges associated with aging (e.g., health-related issues, social problems), compounded by negative societal influences, which combine to promote the notion of old age as a time of significant stress, worry, and anxiety.

Over the past two decades, however, psychological research examining the experiences of the elderly has challenged the notion of old age as a time of angst. One important aspect of this research has been the literature on worry and the elderly, which has provided some alternative views regarding the experiences of older adults and has contributed significantly to our knowledge of psychological processes in later life. This body of research has examined worry in older adults as relates to the following topics: (a) the measurement of worry; (b) delimiting the worries of the elderly; (c) how the worries of the elderly differ not only from those of younger populations, but also within their various subpopulations; and (d) what variables may make a difference to the experience of worry (e.g., severity of worry, controllability of life

events, and coping strategies used to handle worry).

In this article we will discuss the research in these areas and conclude with an analysis of the quality of the research, focusing particularly on the methodological problems in the assessment of worry, and directions for future research. A search of the relevant literature was undertaken using electronic databases: PsychINFO; PsycARTICLES; MEDLINE; and Health Sciences: A SAGE full-text collection. Search terms were “Elderly,” “Older Adults,” “Geriatric,” and “Aged.” All were cross-referenced with “Worry.” The above terms were also cross-referenced with “Anxiety” and “Stress” to determine whether this yielded any worry-related articles. No date limitations were placed on the search. Three authors who have published extensively on this topic were contacted to ascertain if relevant articles were in press. Articles addressing treatment of generalized anxiety disorder in older adults were excluded, as were articles in which there was no English translation available.

To better compare and contrast worry in various elderly populations, mean worry scores are presented in Tables 1, 2, and 3, for available studies conducted since 1986.

Worry: Definition and Various Theoretical Conceptualizations

Worry has been defined as “a chain of thoughts and images, negatively affect laden and relatively uncontrollable; it represents an attempt to engage in mental problem-solving on issues whose outcome is uncertain but contains the possibility of one or more negative outcomes; consequently worry closely relates to the fear process” (Borkovec, Robinson, Pruzinsky, & Depree, 1983, p. 10). In this context, worry is regarded as pathological. In addition to being an important clinical phenomenon in and of itself, chronic worry is central to GAD and may be a significant feature in all other anxiety disorders as well (Borkovec, 1994;

Vanin & Helsley, 2008). Worry has also been discussed as a means of cognitive avoidance in which the worry process distracts the individual from dealing with more distressing, anxiety-provoking material, thus decreasing the autonomic arousal associated with anxiety (Borkovec, 1994). As with other avoidance behaviors, this process is not adaptive but rather contributes to the maintenance of anxiety.

Some investigators have viewed worry as more adaptive, describing the process as problem-focused coping, and useful in the reduction of anxiety. In this context, worry is viewed as a constructive strategy that involves information-seeking, problem-solving, and use of coping behaviors as a means of navigating negative or stressful events (Davey, 1994).

A theoretical model that incorporates both adaptive and maladaptive views of worry (Wells, 1995, 1997) has also been applied to older adults. This model examines the role of metaworry in the development of severe worry. Specifically, worry is seen as a multilevel experience in which worry about external things, such as prediction of future threats, may have adaptive functions and thus may provide benefit to the individual. This form of worry (Type I worry) is non-pathological, and from the individual's viewpoint, is perceived as a positive means of coping with threats. Type II or metaworry (worry about one's own thoughts and concerns) is a more pathological form of worry that occurs when individuals perceive worry as excessive or intrusive and unsuccessfully attempt to control it. To this end, the individual engages in cognitive, behavioral, and emotional responses to decrease worry; but instead, these responses (e.g., avoiding situations thought to be threatening) serve to maintain and reinforce worry.

Assessment Approaches

Measurement of worry has evolved from the simple self-report by subjects about the estimated percentage of the day spent worrying (Borkovec et al., 1983) to a number of specific questionnaires, each designed to address specific facets of worry, usually with a particular population in mind. Self-report measures are the most widely used method of assessing worry in older adults and include the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger & Borkovec, 1990), Penn State Worry Questionnaire–Abbreviated (PSWQ-A; Crittendon & Hopko, 2006), Worry Scale for Older Adults (Worry Scale; Wisocki, Handen, & Morse, 1986), the Worry

Scale-Revised (WSR; Wisocki, 1994), and the Worry Domains Questionnaire (WDQ; Tallis, Eysenck, & Matthews, 1992). For brief descriptions of these questionnaires, see Table 4.

Other methods used to measure worry in this population have consisted of a supplemental worry diary (Skarborn & Nicki, 1996, 2000), a focus group format (Wisocki, 1994), examination of the content of ADIS-R interviews (Diefenbach, Stanley, & Beck, 2001), and older adults' retrospective accounts of worry (Basevitz et al., 2008).

How Much Do Older Adults Worry and What Do They Worry About?

Given the popular perception of old age as a stage of life filled with challenges and difficulties, we may expect the elderly to evidence high rates of worry, but the data do not support that assumption. Overall, older adults report very few worries, and often endorse less than 15% of possible item content on self-report measures (e.g., Skarborn & Nicki, 1992; Stanley, Beck, & Zebb, 1996; Wisocki, 1988). The incidence of worry is low not only in healthy older adults, but also ill or physically challenged/homebound elderly (Cappeliez, 1989; Skarborn & Nicki, 1996; Wisocki et al., 1986). These findings are consistent across a number of culturally different groups as well, with representative studies from American (Hunt, Wisocki, & Yanko, 2003), Canadian (Skarborn & Nicki, 2000), Spanish (Montorio, Nuevo, Marquez, Izal, & Losada, 2003), Israeli (Niekrug, 2003), Japanese American, and European American samples (Watari & Brodbeck, 2000) of older adults. In fact, the 94 elderly who participated in one of the early studies on worry among healthy older adults indicated few worries, and reported significant positive affect, including high scores on subscales measuring elation, vigor, and contentment (Wisocki, 1988).

When examining the worries that older adults do endorse, we found that health issues emerged repeatedly. Of the 11 studies addressing worry content, 8 found that older adults mainly worry about health issues, including physical illness, loss of independence, and ability to care for oneself (e.g., Hunt et al., 2003; Powers, Wisocki, & Whitbourne, 1992; Wisocki, 1994). Worry content did not differ based on whether one was healthy or ill/homebound (e.g., Skarborn & Nicki, 1996; Watari & Brodbeck, 2000). The three remaining studies indicated that family and health

concerns predominated for older adults (Diefenbach et al., 2001; Montorio et al., 2003; Wisocki, 1994). Thus, these studies suggest that in later life worry content tends to focus on personal health concerns congruent with the elders' wishes to remain independent and care for themselves, as well as on the well-being of the family. Interestingly, items considered least worrisome to both healthy and physically challenged elderly were in the social category and included issues such as negative evaluations from others and physical appearance.

Age Differences and Worry

Given that older adults endorse low levels of worry in general, it might be logical to assume that younger adults would endorse equally low levels. However, comparative studies suggest that younger adults consistently show a greater propensity toward worry than their elder counterparts.

The first study to investigate age differences and worry using the Worry Scale was done by Powers and colleagues (1992). A cross-sectional study contrasted worry in college students and healthy older adults. Consistent with previous research, findings indicated low levels of worrying in the elderly. Not only did older adults worry less than the younger adults in all categories, but they also reported greater psychological well-being.

Similar age differences in worry have been supported in a number of later studies as well (e.g., Hunt et al., 2003). In one study, older adults reported a lower frequency of worry despite having lower income levels and being in poorer health than the younger, college-aged participants (Babcock, Laguna, Laguna, & Urusky, 2000). In another study, a healthy young adult sample reported levels of worry consistent with an older adult GAD population (Stanley et al., 1996). More recently, Basevitz et al. (2008) found that a sample of older adults demonstrated a reduced tendency to worry compared to younger college students, and when asked to retroactively recall whether their worry level had changed throughout the years, 46% reported that it had decreased with age (compared to 25% unchanged, 25% increased, and 4% not sure).

Significant age differences have been found as well with regard to the content of worry for older and younger adults. While older adults' worries center around health, autonomy, and family issues, younger adult worries have a social basis and focus on such issues as self-confidence, negative evalua-

tions from others, and physical appearance (e.g., Ladouceur, Freeston, Fournier, Dugas, & Doucet, 2002; Powers et al., 1992). These age differences in worry content were found in all of the studies that compared worry content in young and old, and support previous work indicating that, for younger adults, social concerns are highly related to worry (Borkovec, 1994) and that feared outcomes are frequently based in the fear of negative evaluation (Borkovec, Metzger, & Pruzinsky, 1986).

Upon close examination of this research, it is clear that elderly or older adults are often treated as a unitary population rather than acknowledging their heterogeneity. In much of the literature, "younger adults" refers to college students from approximately 18 to 24 and "older adults" (or elderly) may cover as much as a 40-year span in ages, ranging from late 50s to early 90s. This indicates a need for more research on variations in adult developmental differences in order to identify changes in the worry process across different life stages. The three studies that compared specific cohorts in the upper age ranges (i.e., 50s +) found that individuals in a postretirement cohort (i.e., 65 to 74) demonstrated significantly less worry than the younger cohort approaching this milestone (i.e., ages 55 to 64; Niekrug, 2003; Skarborne & Nicki, 2000; Wisocki & Simon, 2000). This may suggest an effect of increased stressors for the preretirement group who may be facing work and financial challenges, while possibly maintaining responsibilities for aging parents (Spillman & Pezzin, 2000). However, as Niekrug (2003) pointed out, worry at this age may also be compounded by dread over an uncertain future, particularly given societal views in most cultures of the aged and the aging process. Of these three studies, two examined a broad band of age groups in 10-year increments and found a progressive increase in worry from adulthood to retirement age, followed by a sharp decrease among those aged 65 to 74 (Niekrug, 2003; Wisocki & Simon, 2000). It should be noted, however, that in Niekrug's study (2003) worry again increased for those in the 75+ age ranges, but to levels no greater than those in middle age. Although these findings may represent cohort effects, they suggest that worry may increase across the lifespan, but then decrease in the postretirement years.

Self-Designated Worriers

Given that the incidence of worry in the elderly is relatively low, it may be useful to

Table 1**Mean Scores on the Original Worry Scale From Studies With Elderly Participants**

Investigators	N	Population	Mean Age	Mean Worry Scale Score
Wisocki et al., 1986 (U.S.)	54	Community Active Seniors from Senior Centers	70	15.0
	44	Homebound Seniors recruited from Meals on Wheels	77	23.7
Wisocki, 1988	94	Community Active Seniors from Senior Centers	72	17.0
Cappeliez, 1988 (Canada)	25	Community Active Seniors from Social Clubs	71	6.3
Skarborn & Nicki, 1992 (Canada)	70	Community Active Seniors from Senior Centers	72	10.4
	30	Homebound Seniors from Homecare Service	83	17.3
Powers et al., 1992 (U.S.)	89	Community Active Seniors from Senior Centers	78	24.3*
	74	Undergraduate Students from large Northeastern University		
Wisocki, 1994 (U.S.)	28	Community Active Seniors self-identified as worriers	20	32.6
				44.7
Hopko et al., 2003 ^a (U.S.)	84	Seniors meeting criteria for GAD recruited from media	66	40.9
Nuevo et al., 2004 (Spain)	105	Seniors selected using random sampling from census	73	8.0

Note. Worry Scale range = 0–88. ^aThese data were not included in the published version of this study.

*Denotes significant difference between groups, $p < .05$.

Table 2**Scores on the Worry Scale–Revised (WSR) From Studies With Elderly Participants**

Investigators	N	Population	Mean Age	Mean WSR Score
Skarborn & Nicki, 2000 (Canada)	48	Preretirement, recruited from community	55	48.6*
	48	Postretirement, recruited from community	67	35.0
Watari & Brodbeck, 2000 (U.S.–Japanese American and European American)	66	Japanese American seniors born in U.S. or emigrated prior to WWII. Recruited from nutrition programs and senior centers.	over 65 ^a	39.4
	65	European American seniors born in U.S. or emigrated prior to WWII.	over 65	32.01
Hunt et al., 2003 (U.S.)	110	Seniors recruited through national media survey	71	40.7
	84	Undergraduates from large Northeastern University	21	40.7
Montorio et al., 2004 ^b (Spain)	74	Nonclinical seniors recruited by mail	73	37.8 ^c
	4	Seniors meeting criteria for subthreshold anxiety recruited by mail	73	63.6
	7	Seniors meeting criteria for GAD, recruited by mail	72	101.5

Note. Worry Scale-Revised range = 0–231. ^a Mean age is 76.04 for both groups combined. ^b Based on a Spanish version modified to 76 items
(range = 0–304). ^c approximate. * Denotes significant difference between groups, $p < .05$.

Table 3

Scores on the Penn State Worry Questionnaire (PSWQ) From Studies With Elderly Participants

Investigators	N	Population	Mean Age	Mean PSWQ Score ^a
Beck et al., 1995 (U.S.)	94	Healthy control participants recruited through media announcements and visits to community agencies	68	28.9*
	50	GAD diagnosed per ADIS-R interview. Recruited through media and community agencies	68	59.9
Babcock et al., 2000 (U.S.)	40	Healthy seniors recruited from community	72	42.6*
	40	Undergraduate students from large Midwestern University	19	50.2
Skarborn & Nicki, 2000 (Canada)	48	Preretirement, recruited from community	55	41.7
	48	Postretirement, recruited from community	67	36.0
Watari & Brodbeck, 2000 (U.S.)	66	Japanese American seniors born in U.S. or emigrated prior to WW II.	over 65 ^b	34.3
	65	European American seniors born in U.S. immigrated prior to WW II	or over 65	34.3
Hopko et al., 2003 (U.S.)	160	GAD diagnosed seniors who participated in CBT outcome project	66 ^c	62.9
Hunt et al., 2003 (U.S.)	110	Seniors recruited through nationwide media survey	71	33.0*
	84	Undergraduate students from large Northeastern University	71	42.3
Nuevo et al., 2004 (Spain)	105	Healthy seniors selected using random sampling from census information	73	33.1
Crittendon & Hopko, 2006 ^b (U.S.)	115	Seniors recruited through community centers	72	36.6*
	183	Undergraduate students from large Southern University	21	48.8
Basevitz et al., 2008 (Canada)	111	Older adults recruited from community	74	37.5
	106	Undergraduates from large Canadian University	24	47.3

Note. ^aPSWQ range = 0–80. ^bMean age = 76.04 for both groups combined. ^cApproximate. ^dMean scores on the PSWQ-A for the same sample were 14.9 (older) and 21.8 (younger), significant at $p < .05$. *Denotes significant difference between groups, $p < .05$.

examine the construct in individuals who describe themselves as worriers in order to understand more pathological forms of worry. Wisocki (1994) performed an in-depth analysis of worry experienced by 28 self-identified chronic worriers, at least 70 years of age, who were recruited from three senior centers in the northeast. Participants were individuals who reported worrying at least 20% of each day. Participants attended one of five focus groups over a period of 12 months. For these self-identified worriers, Worry Scale scores were approximately three times higher (see Table 1) than those of healthy elderly selected from the general population as reported in other studies. Worry was related to depression and a number of other pathologies (measured by the SCL-90-R), with the exception of paranoia.

According to Wisocki (1994), worries included (in order of reported importance) concerns about family, physical decline, finances, being alone/lonely, loss of independence, crime, leaving things in order after death, making decisions, and driving. The content of worries was notably lacking in self-evaluation fears, and there was nothing reported about concern over making mistakes, or being criticized, themes often found in the worries of younger people, as indicated above (Borkovec et al., 1986; Ladouceur et al., 2002). The elderly participants believed that the effects of worry occurred on multiple levels, both physical (e.g., problems with blood pressure, heart, the gastrointestinal system, and digestion) and psychological (feelings of insecurity, depression, anxiety stress, sadness, sleep problems, and attitudinal problems). They also

believed that worry prevented them from doing constructive things, caused fatigue and premature aging, and adversely affected social relationships. Participants associated such cognitive problems as increased errors, poor decision-making, and lack of efficiency, with worry. They differentiated worry from anxiety by emphasizing that anxiety was more serious, less controllable, and more focused on the present. They differentiated worry from depression by emphasizing that depression was the more serious phenomenon. This group felt that worry increased with age, and reported that they attempted to control worry, primarily by utilizing emotion-focused responses (e.g., distraction, self-talk, maintaining a positive attitude, and associating with positive people).

Table 4

Questionnaires Designed to Assess Worry

Questionnaire	Description	Worry Type	Correlates With
PSWQ	Measures trait-like tendency to worry in young populations. Focuses on frequency, intensity, and controllability. Indicates a tendency towards GAD.	<ul style="list-style-type: none"> • Pathological • Process 	<ul style="list-style-type: none"> • State-Trait Anxiety Inventory • Worry Scale
PSWQ-A	Updated version of PSWQ based on factor analysis.	<ul style="list-style-type: none"> • Pathological • Process 	<ul style="list-style-type: none"> • State-Trait Anxiety Inventory • Worry Scale
Worry Scale	Measures the social, financial, and health domains of worry in older adults	<ul style="list-style-type: none"> • Nonpathological • Content 	<ul style="list-style-type: none"> • Symptom Checklist-90 • Multiple Affect Adjective Checklist
WSR	Updated Worry Scale to include three new domains of worry, which were suggested by elderly participants	<ul style="list-style-type: none"> • Nonpathological • Content 	<ul style="list-style-type: none"> • PSWQ • Symptom Checklist-90
WDQ	Measures the worry domains of relationships and work in adults	<ul style="list-style-type: none"> • Nonpathological • Content 	<ul style="list-style-type: none"> • PSWQ, especially in the work and relationship domains

Other Variables Affecting the Experience of Worry

As expected, worry is more highly endorsed in elderly GAD groups than in healthy controls (Beck, Stanley, & Zebb, 1995; Stanley et al., 1996), and higher than those reported by previous community samples of elderly (e.g., Powers et al., 1992; Wisocki, 1988). Although the evidence indicates that the content of worry is different for the young and old, research suggests minimal differences in worry content as a function of worry severity. The two studies addressing this issue in older adults found worry content to be similar for clinical (GAD) and nonclinical elderly groups, but the clinical groups worried more frequently and about a wider variety of topics than did the nonclinical group (Deifenbach et al., 2001; Montorio et al., 2003). This was also evident in Wisocki's (1994) research with self-designated worriers whose primary worries generally mirrored those of healthy older adults in other studies, but were more frequent. These findings are consistent with research with the younger population in which the worry component of GAD has been found to be quantitatively, but not qualitatively, different from nonclinical worriers (Ruscio, Borkovec, & Ruscio, 2001).

Worry content may not be an important factor for predicting severe worry in older adults, but perceptions regarding controllability of life events may play a role. The three studies conducted thus far have found that, as the older adult's sense of control over events decreased, worry increased. Powers et al. (1992) found that increased

worry was associated with an external locus of control in older and younger participants. Montorio et al. (2003) found that decreases in perceived control of worry were related to higher levels of anxiety (GAD) in older adults. Neikrug (2003) found the similar concept of "manageability" inversely related to worry, suggesting that worry increases when one feels ill-prepared to cope effectively with life events. If controllability does play a central role in worry among the elderly, it is not surprising that health concerns predominate for this group, given that health is often seen as out of one's control, and failing health may be perceived as reducing the control an individual has over other aspects of life as well.

Relatedly, Basevitz and colleagues (2008) suggest that age-related reductions in worry may be partially explained by older and younger adults' differing views regarding the functional value of worry. Their research indicated that younger adults are more likely to erroneously believe that worry leads to greater control over events or may be related to effective problem solving, a belief structure that is similar to that of chronic worriers and anxious individuals. Alternatively, they suggest that older adults have learned through life experience that many worrisome fears are not realized (Borkovec & Newman, 1998), and thus see less functional value in worrying.

Another psychological process that has been implicated in worry is intolerance of uncertainty. Intolerance of uncertainty has been viewed as one component of pathological worry and is often addressed in the context of treatment interventions for anxiety

disorders (Dugas & Ladouceur, 2000). In examining reasons for age-related differences in worry, Basevitz et al. (2008) found that older adults demonstrated less intolerance for uncertainty than did the younger sample, suggesting that they are less likely to find ambiguity or unknown outcomes threatening or worrisome. Interestingly, the authors found that, after statistically controlling for differences in intolerance of uncertainty and beliefs about worry, age-related differences on trait worry were no longer significant.

The ways in which older adults cope with worry is an undeveloped area of research. These preliminary studies suggest that the older adult uses few strategies to manage worry, and those that are utilized are generally more emotion based than focused on problem solving (Cappeliez, 1989; Hunt et al., 2003). In general, these findings are consistent with the coping literature, which has indicated that younger adults use more active, problem-focused coping styles, while the older adults use more passive, intrapersonal emotion-focused styles (Folkman, Lazarus, Pimley, & Novacek, 1987).

Methodological Issues

When critically examining this body of work, several issues related to methodology arise that limits the degree of confidence in our conclusions. A clear methodological concern is shared method variance due to the almost exclusive reliance on self-report assessments, which were used in 90% of the studies. In addition, many of the self-report measures are still evolving with regard to

available psychometric data. Reliability and validity data on the WSR are still quite limited. The PSWQ, a well-validated measure of worry, has recently been scrutinized regarding its effectiveness with older adults who reportedly have noted difficulty understanding items (Hopko et al., 2003). Some have also indicated that a two-factor structure has been revealed and items labeled “worry” and “absence of worry” are actually a function of forward- and reverse-scored items (Brown, 2003; Brown, Antony, & Barlow, 1992). This raises some concern regarding the validity of the findings, as well as the value of reverse-scored items for the older population. The recent development of the PSWQ-A in response to these issues (Crittendon & Hopko, 2006) is a positive event, but still requires additional psychometric evaluation.

Although some researchers have introduced alternatives to self-report, the use of these measures has been very limited. Further evaluation of existing measures is needed, as is more frequent use of other measurement formats (e.g., focus groups, structured interviews, and diaries).

Response bias is another factor that must be taken into account when examining this body of research. Given the frequent use of self-report measures, it is possible that these findings simply reflect different response styles in older and younger cohorts. Underreporting of mental health symptoms has been documented in the elderly in other contexts (Levy, Conway, Brommelhoff, & Merikengas, 2003). Older adults often disregard symptoms as inherent to the aging process rather than indicative of psychopathology, and generally are more reluctant to make use of mental health services (Burns & Taube, 1990; Ettner & Hermann, 1997). In addition, they may be concerned about stigmatization and what it might mean to admit to symptoms of mental illness. Furthermore, it is difficult to recall past emotional experiences accurately at any age, making suspect any retrospective information provided by older adults who naturally have a longer history. Information taken from memory may be contaminated to some extent by the tendency of older adults to put a positive spin on past emotional experiences and options they have selected (Lawton, Kleban, & Dean, 1993; Mather & Johnson, 2000).

It is also possible that the participants in these studies were not representative of the elderly at large. Despite the widening cultural range of this research, samples were still rather homogeneous, without a significant representation of the poor, disadvan-

taged, and non-White elderly populations. Nor is it clear that investigators paid careful attention to selection issues, such as appropriate randomization. Too often participants were selected on the basis of availability.

Another measurement issue, and one to which insufficient research attention has been accorded, is the type of worry that these various measures address. These measures are referred to as representing process or content approaches to worry, or as measuring a traitlike tendency to worry, or a pathological or nonpathological tendency to worry. More research would help verify the meaning and accuracy of these labels and would assist in developing theoretical frameworks to account for worrying in the elderly. The more recent studies on worry and the older adult appear to rely more heavily on theoretical frameworks to guide research questions, which is a positive direction, but this will require sound measurement instruments.

Other Considerations

Finally, there are a number of nonmeasurement-related possibilities for these findings that should be considered when examining the evidence suggesting that worry is a low-frequency event for older adults. Some have suggested that an age-related biochemical decline in cognitive functioning may somehow lessen the impact of a stimulus so that it does not elicit worry. There is no clear evidence, however, to support such a biological condition. Although decreases in activation of brain regions responsible for emotionality (e.g., amygdala) have been demonstrated in the elderly relative to younger individuals (Grady, 2000), there is also evidence that differential brain networks (e.g., prefrontal cortex) may be activated in the elderly to compensate for these changes (Tessitore et al., 2005). In addition, research regarding the functional consequences of these age-related brain alterations has been equivocal, with some investigators finding elders' assessment of emotional stimuli to be relatively impaired (Brosigole & Weisman, 1995; Sullivan & Ruffman, 2004), while others have shown it to be intact (Macpherson, Phillips, & Della Sala, 2002; Moreno, Borod, Welkowitz, & Alpert, 1993). In one study of emotional memory (Leigland, Schulz, & Janowsky, 2004), both older and younger participants showed increased memory for positive emotional stimuli (as opposed to neutral and negative), but the finding was slightly more

marked in the elderly, suggesting perhaps a bias toward more positive emotionality for this group. The authors attributed these differences to a shift from the amygdala-hippocampal system, which shows greater activation for negative stimuli, to the prefrontal cortex, which is more likely to show activation to positive stimuli. Thus, despite established differences in underlying brain circuitry related to emotional processing in young and old, there is not sufficient evidence that this is linked to differential abilities regarding identification and subjective experience of emotions.

If, alternatively, we accept the findings reviewed here as representing an accurate picture of worry in the elderly, we must speculate on why, given the realistic problems accruing in older age, such as declines in health, financial support, loss of loved ones, and an uncertain future, elderly people are able to take pleasure in their lives and avoid the perils of worry. Borkovec (1988) has suggested that one explanation may lie within the notion of habituation or practice. Having been exposed over the years to frustration, loss, pain, and suffering, a long life has given us more opportunity to learn ways of effectively dealing with the setbacks to which we have been exposed. It is also possible that, having achieved old age, we are finished with the work of striving, accumulating, and achieving material success and we can choose what we will focus on for the remainder of our lives. As was reported by the participants in a focus group study on worry (Wisocki, 1994), the relationship between worry and significant life events is important. When individuals were engaged in the activities of marrying, raising children, and maintaining a job, they worried a great deal. Once those activities were completed and individuals were less likely to make mistakes in those areas, worrying took on a different perspective.

However, Basevitz and colleagues (2008) suggest that an age-related reduction in the experience of worry cannot be solely explained by situational factors, but may be partially attributed to other psychological processes such as older adults' greater ability to tolerate uncertainty and their tendency to find less value in worry.

Finally, the social evaluative component of worry, which is considered the basis for the original etiology of chronic worry (Borkovec, 1994), may be the most important factor in the diminishment of worry in older adults. Lacking fears of making mistakes and being criticized, and no longer caring excessively about one's appearance and the opinions of others, can be a highly

liberating experience, perhaps corresponding to a lack of worry for all but the important things in life.

Future Research

Although a summation of the literature on worry and older adult presents a positive picture of psychological functioning in the latter years, the existing body of knowledge also highlights the need to attend to issues related to methodology and to expand upon a number of future research directions. Longitudinal studies regarding worry and the elderly will provide much needed information on whether age differences in worry reflect a development shift in worry across the lifespan, or whether these findings are more reflective of a cohort effect. As indicated above, other methods of data collection, such as interview and perhaps focus groups, will be crucial in better understanding worry, including the underlying processes associated with worry in the older population. Further research in the area of worry and coping will help us more fully understand what strategies the elderly use, and whether they are adaptive and associated with the older adult's tendency toward less worry. Conversely, we may learn whether increasing the repertoire of coping strategies utilized will be clinically useful in managing the worries that older adults do express.

Although these results suggest that worry is relatively infrequent in the older population, the domain of worries that are endorsed by older adults are clearly related to concerns over health and well-being. Future research could be directed toward examining the role of worry in clinical concerns such as hypochondriasis and health anxiety, in which fear of illness and illness consequences are major content features. Finally, while worry is typically used as an assessment device in the context of GAD, the proper assessment of worry may be beneficial in clinical settings addressing other anxiety disorders as well.

References

- Babcock, R. L., Laguna, L. B., Laguna, K. D., & Urusky, D. A. (2000). Age differences in the experience of worry. *Journal of Mental Health and Aging, 6*, 227-235.
- Basevitz, P., Pushkar, D., Chaikelson, J., Conway, M., & Dalton, C. (2008). Age-related differences in worry and related processes. *International Journal of Aging and Human Development, 66*, 283-305.
- Beck, J., Stanley, M. A., & Zebb, B. J. (1995). Psychometric properties of the Penn State Worry Questionnaire in older adults. *Journal of Clinical Geropsychology, 1*, 33-42.
- Borkovec, T. D. (1988). Comments on Worry as a phenomenon relevant to the elderly. *Behavior Therapy, 19*, 381-383.
- Borkovec, T. D. (1994). The nature, functions, and origins of worry. In G. C. L. Davey & F. Tallis (Eds.), *Worrying: Perspectives on theory, assessment, and treatment* (pp. 5-33). Chichester, UK: Wiley.
- Borkovec, T. D., & Newman, M. G. (1998). Worry and generalized anxiety disorder. In A.S. Bellack, M. Hersen (Series Eds.), & P. Salkovskis (Vol. Ed.), *Comprehensive clinical psychology: Vol. 6. Adults: Clinical formulation and treatment* (pp. 439-459). New York: Elsevier Science.
- Borkovec, T. D., Metzger, R. L., & Pruzinsky, T. (1986). Anxiety, worry and the self. In L. M. Hartman & K. R. Blankstein (Eds.), *Perception of self in emotional disorder and psychotherapy* (pp. 219-260). New York: Plenum Press.
- Borkovec, T. D., Robinson, E., Pruzinsky, T., & Depree, J. A. (1983). Preliminary exploration of worry: Some characteristics and processes. *Behaviour Research and Therapy, 21*, 9-16.
- Brosigole, L., & Weisman, J. (1995). Mood recognition across the ages. *International Journal of Neuroscience, 82*, 169-189.
- Brown, T. A. (2003). Confirmatory factor analysis of the Penn State Worry Questionnaire: Multiple factors or method effects? *Behaviour Research and Therapy, 41*, 1411-1426.
- Brown, T. A., Antony, M. M., & Barlow, D. H. (1992). Psychometric properties of the Penn State Worry Questionnaire in a clinical anxiety disorders sample. *Behaviour Research and Therapy, 30*, 33-37.
- Burns, B. J., & Taube, C. A. (1990). Mental health services in general medical care and in nursing homes. In B. J. Fogel, A. Furino, & G. L. Gottlieb (Eds.), *Mental health policy for older Americans: Protecting minds at risk* (pp. 63-84). Washington, DC: Psychiatric Press.
- Cappeliez, P. (1989). Daily worries and coping strategies: Implications for therapists. *Clinical Gerontologist, 8*, 70-71.
- Crittendon, J., & Hopko, D. R. (2006). Assessing worry in older and younger adults: Psychometric properties of an abbreviated Penn State Worry Questionnaire (PSWQ-A). *Journal of Anxiety Disorders, 20*, 1036-1054.
- Davey, G. (1994). Pathological worrying as exacerbated problem solving. In G. Davey & F. Tallis (Eds.), *Worrying: perspectives on theory, assessment, and treatment* (pp. 35-60). New York: Wiley.
- Diefenbach, G. J., Stanley, M. A., & Beck, J. G. (2001). Worry content reported by older adults with and without generalized anxiety disorder. *Aging & Mental Health, 5*, 269-274.
- Dugas, M. J., & Ladouceur, R. (2000). Treatment of GAD: Targeting intolerance of uncertainty in two types of worry. *Behavior Modification, 24*, 635-657.
- Ellis, B. A., & Morrison, T. G. (2005). Stereotypes of aging: Messages promoted by age-specific paper birthday cards available in Canada. *International Journal of Aging and Human Development, 61*, 57-73.
- Ettner, S., & Hermann, R. (1997). Provider specialty choice among Medicare beneficiaries treated for psychiatric disorders. *Health Care Financing Review, 18*, 43-59.
- Folkman, S., Lazarus, R. S., Pimley, S., & Novacek, J. (1987). Age differences in stress and coping processes. *Psychology and Aging, 2*, 171-184.
- Grady, C. L. (2000). Functional brain imaging and age-related changes in cognition. *Biological Psychology, 54*, 259-281.
- Hopko, D. R., Stanley, M. A., Reas, D. L., Wetherell, J. L., Beck, J. G., Novy, D. M., & Averill, P. M. (2003). Assessing worry in older adults: Confirmatory factor analysis of the Penn State Worry Questionnaire. *Psychological Assessment, 15*, 173-183.
- Hunt, S. L., Wisocki, P. A., & Yanko, J. (2003). Worry and use of coping strategies among older and younger adults. *Journal of Anxiety Disorders, 17*, 547-560.
- Ladouceur, R., Freeston, M. H., Fournier, S., Dugas, M. J., & Doucet, C. (2002). The social basis of worry in three samples: High school students, university students, and older adults. *Behavioural and Cognitive Psychotherapy, 30*, 427-438.
- Lawton, M. P., Kleban, M., & Dean, J. (1993). Affect and age: Cross-sectional comparisons of structure and prevalence. *Psychology and Aging, 8*, 165-175.
- Leigland, L. A., Schulz, L. E., & Janowsky, J. S. (2004). Age related changes in emotional memory. *Neurobiology of Aging, 25*, 1117-1124.
- Levy, B. R., Conway, K., Brommelhoff, J., & Merikengas, K. (2003). Intergenerational differences in the reporting of elders' anxiety. *Journal of Mental Health and Aging, 9*, 233-241.
- Macpherson, S. E., Phillips, L. H., & Della Sala, J. (2002). Age, executive function, and social decision-making: A dorsolateral, prefrontal theory of cognitive aging. *Psychology & Aging, 17*, 598-609.
- Mather, M., & Johnson, M. (2000). Choice supportive source monitoring: Do our decisions seem better to us as we age? *Psychology and Aging, 15*, 596-605.
- Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research & Therapy, 28*, 487-495.
- Montorio, I., Nuevo, M., Marquez, M., Izal, M., & Losada, A. (2003). Characterization of worry according to severity of anxiety in elderly living in the community. *Aging & Mental Health, 7*, 334-341.
- Moreno, C., Borod, J., Welkowitz, J., & Alpert, M. (1993). The perception of facial emotion across the adult lifespan. *Developmental Neuropsychology, 9*, 305-319.
- Neikrug, S. M. (2003). Worrying about a frightening old age. *Aging & Mental Health, 7*, 326-333.

- Powers, C. B., Wisocki, P. A., & Whitbourne, S. K. (1992). Age differences and correlates of worrying in young and elderly adults. *The Gerontologist, 32*, 82-88.
- Ruscio, A. M., Borkovec, T. D., & Ruscio, J. (2001). A taxometric analysis of the latent structure of worry. *Journal of Abnormal Psychology, 110*, 413-422.
- Skarborn, M., & Nicki, R. (1996). Worry among Canadian seniors. *International Journal of Aging and Human Development, 43*, 169-178.
- Skarborn, M., & Nicki, R. (2000). Worry in pre- and postretirement. *International Journal of Aging and Human Development, 50*, 61-71.
- Spillman, B. C., & Pezzin, L. E. (2000). Potential and active family caregivers: Changing networks and the 'sandwich generation.' *Milbank Quarterly, 78*(3), 347-374.
- Stanley, M. A., Beck, J. G., & Zebb, B. J. (1996). Psychometric properties of four anxiety measures in older adults. *Behaviour Research & Therapy, 34*, 827-838.
- Sullivan, S., & Ruffman, T. (2004). Emotion recognition deficits in the elderly. *International Journal of Neuroscience, 114*, 403-432.
- Tallis, F., Eysenck, M., & Matthews, A. (1992). A questionnaire for the measurement of non-pathological worry. *Personality and Individual Differences, 13*, 161-168.
- Tessitore, A., Hariri, A. R., Fera, F., Smith, W. G., Das, S., Weinberger, D. R., & Mattay, V. S. (2005). Functional changes in the activity of brain regions underlying emotion processing in the elderly. *Psychiatry Research: Neuroimaging, 139*, 9-18.
- Vanin, J. R., & Helsley, J. D. (2008). Geriatric anxiety and anxiety disorders. In J. D. Helsey & S. K. Vanin (Eds.), *Anxiety disorders: A pocket guide for primary care* (pp. 221-242). Totowa, NJ: Humana Press.
- Watari, K. F., & Brodbeck, C. (2000). Culture, health, and financial appraisals: Comparison of worry in older Japanese Americans and European Americans. *Journal of Clinical Geropsychology, 6*, 25-39.
- Wells, A. (1995). Meta-cognition and worry: A cognitive model of Generalized Anxiety Disorder. *Behavioural and Cognitive Psychotherapy, 23*, 301-320.
- Wells, A. (1997). *Cognitive therapy of anxiety disorders*. Chichester: Wiley.
- Wisocki, P. A. (1988). Worry as a phenomenon relevant to the elderly. *Behavior Therapy, 19*, 369-379.
- Wisocki, P. A. (1994). The experience of worry among the elderly. In: G. Davey & F. Tallis (Eds.), *Worrying: perspectives on theory, assessment, and treatment* (pp. 35-60). New York: Wiley.
- Wisocki, P. A., Handen, B., & Morse, C. (1986). The Worry Scale as a measure of anxiety among homebound and community active elderly. *The Behavior Therapist, 5*, 91-95.
- Wisocki, P. A. & Simon, S. (2000). Differences in worry across the adult life span. Paper presented at the European Congress of Cognitive and Behavioral Therapies, Granada, Spain.
- ...

Correspondence to Sandra L. Hunt, Ph.D., City University of New York-College of Staten Island, 2800 Victory Blvd., Bldg. 4-S, Rm. 108, Staten Island, New York 10314; e-mail: hunt_cornell@yahoo.com

Research Forum

Center for Scientific Review: Proposed Changes and New Concerns

Steven E. Bruce, *University of Missouri, St. Louis, and Chair, ABCT Committee on Research Agenda*

On April 25, 2007, the Center for Scientific Review (CSR) held an open house for the behavioral and social sciences in order to elicit feedback on the overall quality and extent to which CSR evaluates research grant proposals. It had been over 7 years since the last assessment of the scientific community's opinions of the Independent Research Group (IRG) committees. The purpose of the open house was to represent a comprehensive effort to engage stakeholders from all the many scientific disciplines to ensure their voices were heard and CSR's review groups properly aligned and prepared for the future.

The CSR scheduled this meeting as part of a review of the IRG's study sections to examine what problems and gaps exist in the review process. Feedback from this meeting and other open houses was intended to provide CSR with information to better organize these review committees to ensure that (a) each application has at least one study section "home" and (b) that the review committees reflect the changes in science over

the past 7 years (since the last review of this process). While CSR does not intend to do a wholesale reorganization of study sections, they sought input into how the CSR peer review system can best keep pace with the progress in behavioral and social sciences and the accelerating rate of change. In attendance were 160 individuals, representing study section chairs, society scientific leadership members, and NIH staff (program officers, Scientific Review Administrators, etc.). Also in attendance was Dr. Toni Scarpa, Director of the CSR. Throughout the day, participants were asked to provide comment on the following topics:

1. **Is the science of your discipline, in its present state, appropriately evaluated within the current study section alignment?**
2. **What will be the major questions and/or enabling technologies you see forthcoming within the science of your discipline in the next 10 years?**

After an initial informational discussion on the current state of the IRG's study sections, participants were divided into smaller groups where CSR solicited our feedback regarding the two questions above. The breakout groups were facilitated by study section chairs and professional society representatives and staffed by scientific review administrators who recorded all comments and discussion. As a representative from ABCT, I was asked to participate in the Risk, Intervention, and Prevention breakout group.

For the first question, the breakout group discussed and came up with three underlying comments and concerns related to the review of grant proposals: The overall view was that the system works well, but some types of applications do not have adequate coverage in study sections. This results in inappropriate/inadequate review. Examples include research examining behavioral interventions, sleep and pain disorders, developmental research, qualitative research, and behavioral psychopharmacology.

Secondly, the group was concerned that there remain several disciplines that may be insufficiently represented on study sections, thus resulting in an inadequate review of grant application. Specifically, concerns were expressed about applications involving social work, emergency medicine, toxicology.

Finally, the largest concern our group identified was the difficult challenge in reviewing multidisciplinary/translational research projects. By the very nature of these projects, the review of these applications require ongoing and continuous efforts from NIMH to recruit and retain multidiscipline-oriented reviewers (in terms of both content and perspective). This is especially problematic given NIMH's transdisciplinary emphasis. This concern regarding the grant review of transdisciplinary and translational research appeared to be a concern across all breakout groups. This is clearly the largest concern for CSR as Dr. Scarpa conceded that review of translational grant proposals are vulnerable to inadequate review. He noted that CSR is experimenting with a 2-day orientation session for new reviewers, in hopes of improving the system's handling of innovative and interdisciplinary applications.

For the second question (What will be the major questions and/or enabling technologies you see forthcoming within the science of your discipline in the next 10 years?), the Risk, Intervention, and Prevention group came up with the following themes:

Community-based participation research. Concern was expressed that more work needs to be done in developing relationships with various populations and community leaders in order to increase the level or participation in research (e.g., to reduce mistrust, misconceptions about research, etc.).

Use of new technology, including in vivo assessment of individuals, fMRI, data mining from previous studies. Use of technologies such as fMRI will enable us to show how behavior and cognitions significantly impact and change functional areas of the brain.

Continue to examine the environment-gene interplay across psychological disorders and conditions. It will be increasingly important to inspect the potential genetic risk and resiliency as they relate to the development or exacerbation of psychological conditions (and how genetics may interact with environmental stimuli such as stressful life events).

Dissemination science. Given the complexity of human behavior and psychological conditions, it is readily apparent that large sample sizes are critical in advancing research. Thus, it is important for researchers to access and share data from large research projects. Additionally, getting data out quickly and to a broader audience (i.e., media, clinicians, government officials) is crucial for increasing the accessibility of ef-

fective cognitive and behavioral interventions.

Potential CSR Modifications and Changes

The last component of the open house meeting was to hear about the overview and changes to the peer review process by Dr. Scarpa and to comment and discuss these current and potential future changes. Dr. Scarpa gave a summary of the progress that CSR has already made in reforming the process of peer review, as well as the remaining challenges and opportunities for peer review. In particular, the number of applications received by CSR has nearly doubled between 2001 and 2006, reaching 80,000 per year. This escalation in the number of applications combined with the decreasing payline for grant proposals presents a serious problem. Overall, CSR's goals are to (a) increase communication and transparency, (b) increase uniformity, (c) increase efficiency, and (d) improve study section alignment and content areas.

These changes include:

Electronic grant submission. As of January 2008, nearly all grant submissions are submitted electronically. Transitions are still on hold for Career Development (K), Fellowship (F), Training & Development (T&D) and complex mechanisms (Center grants).

Different grant application due dates (by type of grant submitted). In 2007, CSR modified their application due dates in order to disperse the workload of CSR staff throughout the month. Previously, grant application due dates were the same dates for nearly all applications, which caused a delay in processing the applications. Spreading the due dates across the month enables CSR to more efficiently assign the applications to the appropriate IRGs in a more timely manner. For more information on the specific due dates for each grant mechanism, please see the following website: <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-07-001.html>

Shorten the grant review cycle to 3 months. Currently, most revised applications can be submitted approximately 8 months (at the earliest) after the initial submission because the IRG meetings occur near or after the next application due date. CSR began to pilot a program for new R01 investigators that allow these PIs to receive an accelerated review. This pilot program has been successful and, as of the September/October 2007 due dates, all new investigators have the option of participating in this program to resubmit the very next grant cycle. It is hoped that this program for new investiga-

tors will continue to be successful and will be implemented for all applications and all investigators.

Shorten applications from the 25-page limit. Within the past 12 to 18 months, there have been significant discussions to reduce the length of R01 applications to 7 to 15 pages. The rationale for the reduction in length is to reduce the burden on both the investigator as well as the reviewer. Review of applications under the proposed new format would focus less on preliminary studies and more on the overall impact and innovation of the grant proposal. Though many noted the potential advantages for a reduction in application length, several participants expressed significant concern that this potential change could harm new investigators in that review committees may be more trusting of experienced researchers if information is not included in the application because of space requirements. Dr. Scarpa noted that no decision has been taken on shorter applications. Currently, approximately seven pilot studies are under way that would assess applications that limit the research plan to 7, 10, or 15 pages.

Move to recruit high-quality reviewers (to decrease burden on reviewers and applicants). CSR believes there are currently too many reviewers on study sections as well as too many ad hoc reviewers. CSR and members of the audience also believe that there need to be more experienced researchers on these committees. CSR is constantly working to recruit and retain high-quality reviewers, and Dr. Scarpa appealed to those in the audience to volunteer as reviewers and urge their organization members to do the same. CSR is also experimenting with new electronic review techniques, such as telephone- and video-enhanced meetings that would enable CSR to recruit more scientists who would not normally come to NIH for the review meetings. Dr. Scarpa also noted that CSR is experimenting with a 2-day orientation session for new reviewers, in hopes of improving the system's handling of innovative and interdisciplinary applications. Finally, CSR is attempting to increase the incentives for reviewers. To this end, as of January 2008, permanent members on NIH's peer review groups now have more flexibility in submitting their own grant applications. Reviewers now have the option to submit, as soon as they are developed, grant applications that would normally be submitted for standard submission dates. This new policy assists in better compensating chartered reviewers, who can be disadvantaged by deadlines that force them to

develop their own applications while reviewing those submitted to NIH by others.

Provide unambiguous feedback to all applicants. To assist in reducing the number of grant applications submitted to NIH, it is recommended that CSR provide specific and unambiguous feedback to help applicants make faster, more informed decisions to either refine an existing application or develop a new idea. There is a current concern that applications without merit are repeatedly resubmitted, clogging the review process. This often occurs when an applicant's grant application is not scored: instead, the applicant receives vague feedback and often does not know if they were just on the cusp of being in the scorable range. Therefore, a further recommendation was made to establish a Not Recommended for Resubmission (NRR) decision option. A reviewer could check this NRR category box if they believe that a research idea would not have the appropriate potential impact or feasibility no matter how it was revised to be competitive in the future.

Additionally, in a recent CSR update (May 2008), a further recommendation is to have more focused reviews of grant applications. Specifically, peer reviews would be designed to be shorter in length and to specifically address the extent to which applications address each of the criteria: impact, investigator, innovation/originality, research plan, and environment. The goal of these recommended changes is to increase the emphasis of the overall impact of the application rather than the specific methodology used.

Finally, Dr. Scarpa concluded by reiterating that it has been more than 7 years since the last IRG review process. He stated that CSR will be moving to a biannual IRG review process in order to keep up with ever-changing research areas and technologies. For additional information regarding the CSR, please visit their website at <http://cms.csr.nih.gov>. Specific information regarding this and other open houses (for other disciplines), including meeting summaries, summaries of the breakout groups, and a list of participants, can also be found at <http://cms.csr.nih.gov/AboutCSR/Publications/Reports/openhousereports.htm>.

...

Correspondence to Steven E. Bruce, Ph.D.,
University of Missouri-St. Louis, Dept. of
Psychology, One University Boulevard, St.
Louis, MO 63121; email: Bruceese@umsl.edu

Training Forum

Thoughts on Mentoring Students in a Research Laboratory

David C. Schwebel, *University of Alabama at Birmingham*

A scientific discipline can only grow if we sow the seeds. Much has been written about mentoring students (e.g., Cesa & Fraser, 1989; Cramer & Prentice-Dunn, 2007; Kardash, 2000; McLean et al., 2007), but surprisingly little of that literature considers the specific and somewhat different role of a research mentor. As universities emphasize undergraduate research to a greater and greater degree (Katkin, 2003; Kinkead, 2003), faculty must ponder the challenges, opportunities, and complexities of research mentorship in psychology. How can a faculty member be an effective research mentor to undergraduate, graduate, and postdoctoral students? What strategies might help mentors help students succeed in a research laboratory?

This article is designed to address those questions. Not surprising given the small samples of students available in each laboratory at a single time, empirical data on this topic are sparse and difficult to obtain. I rely therefore on personal experience and anecdotes to offer four mentoring principles, and then conclude with a brief discussion of practical concerns.

Encourage Multilevel, Hierarchical Mentoring

Emotional support is a critical component of successful mentoring, but sharing knowledge and wisdom is arguably the most essential aspect of mentoring. A successful laboratory has students at varying levels of training, and with varying degrees of knowledge, who can disseminate research-oriented knowledge vertically. Skilled faculty mentors can rarely afford the time to properly mentor all students alone, so hierarchical or vertical mentoring strategies are invoked. Postdoctoral students and graduate students possess knowledge the advanced undergraduates lack; advanced undergraduates possess knowledge the beginning undergraduates lack. A multilevel hierarchical mentoring approach allows that knowledge to trickle down the pyramid, so that all students learn and grow. The mentor meets with students at all levels, but most often with the more senior

students, who then pass the knowledge to their protégés. This strategy also allows more senior students to develop critical supervisory and leadership skills they will need when they begin their own laboratories and careers.

An example model of a vertically integrated team for an undergraduate-based laboratory involves three semesters of research participation. In the first, students develop basic research skills and learn the administrative and logistical aspects of laboratory functioning. In the second, students develop a research proposal. In the third and final semester, the research protocol is conducted and a report prepared. In some situations, a fourth semester might be used for data analysis and writing, allowing the third semester to be devoted entirely to data collection. More senior students provide critical mentorship to the more junior ones.

Be Active, Directive, and Respectful

On occasion, a mentor must authoritatively enforce rules and deadlines, but in most cases a mentor will perform best as an engaged guide to research. Treating students with respect encourages the students to offer creative and collaborative administrative, logistic, and scientific solutions. Engaging in a hands-on manner demonstrates to students both the mentor's devotion to the work and his or her desire to see the students succeed. A skilled mentor develops the ability to recognize and choose instances when firm direction, active cooperation, or hands-off observation with subsequent feedback is the optimal didactic technique.

Model Passion

Psychological science has long recognized the impact of social learning theory, which suggests students are likely to mimic the behavior of trusted mentors (Bandura, 1977). Thus, mentors who display passion for their research are likely to develop students with a similar passion for research. In time, students may and should explore other research topics, theoretical underpin-

nings, and analytic methods, but mentors who demonstrate passion for the topics that intrigue them personally are likely to inspire students to someday develop passion for their own topics of interest.

Similarly, mentors who passionately edit students' work in a timely and critical but supportive manner; who organize laboratory social events to celebrate accomplishments; and who applaud student successes, are likely to create a laboratory where work is completed in an efficient and competent manner. They also will inspire a supportive rather than competitive laboratory atmosphere.

Recognize Differences

To state the obvious, students are people, and people vary. Some students require close guidance and firm deadlines to complete theses; others benefit from more distal guidance and are self-motivated enough to set their own deadlines. Some students are mentally strong while others require mentors who serve as part-time informal advisors to help students cope with minor challenges (and, occasionally, who refer students to professionals for help with more significant mental health challenges). Students come from a wide range of ethnic, cultural, socioeconomic, and educational backgrounds; a skilled mentor recognizes these differences and accommodates the students' varying needs.

Despite differences that are inevitably present among students in a laboratory, all students must be held to equivalent academic standards. The procrastinating student should be penalized for late completion of assignments and the late student disciplined for tardiness. Individual differences should be respected, but unprofessional and unethical differences rectified (Schwebel & Hodari, 2005).

Practical and Logistical Concerns

Talented mentors recognize the institutional structure within which they are working and utilize the constraints of that structure to their own advantage and to the advantage of the students. Sometimes this is an easy process, but usually there are obstacles. Below, we address some of the more common challenges to mentoring undergraduate and graduate/postdoctoral students.

Mentorship of Undergraduates

Two significant challenges to mentorship of undergraduate students are recruitment of students and structuring of the

research experience. From a recruitment perspective, a system should be developed so that there is a steady flow of students and a healthy, supportive, hierarchically structured laboratory "culture" can be maintained. Skilled mentors will develop a reputation and typically have a surplus of students interested in research experiences. In that case, an application process might be invoked. New faculty members will need to advertise opportunities in appropriate locations, and usually can develop a laboratory bustling with undergraduate researchers fairly quickly.

From a structural perspective, most departments offer the opportunity for undergraduate students to register for courses entitled "Research Practicum," "Directed Readings," "Honors Research," or something of that nature. Such courses offer several advantages, including (a) giving faculty members some recognition, authority, and sometimes course-load teaching credit for his or her mentorship role, (b) offering the student formal academic credit for his or her learning experience, and (c) providing some legal and academic protection against failure to complete laboratory duties, laboratory-based injuries, and other such matters.

Mentorship of Graduate and Postdoctoral Students

Mentorship of graduate and postdoctoral students presents different challenges to faculty members. For graduate students, recruitment is usually conducted through the process of graduate admissions. Formal course registration is common. Postdoctoral students are typically recruited and carefully selected after either national searches or through local contacts.

Perhaps the most prominent challenge of mentoring graduate and postdoctoral students is the balancing of clinical and research duties and interests (Olatunji, Feldner, Witte, & Sorrell, 2004; Reynolds, Sargeant, Rooney, Tashiro, & Lejuez, 2008). Some students enjoy clinical work, find the more immediate behavioral rewards of clinical treatment satisfying, and dread the research-oriented tasks of data collection, analysis, and writing. Other students absorb themselves in research and fail to adequately complete necessary clinical tasks. Skilled mentors will encourage both pursuits; teach and model time-management skills; and emphatically highlight the fact that clinical and research work should be connected, intermingled, and translated rather than acting as disparate nonoverlapping entities (Olatunji et al., 2004).

Conclusion

These principles and guidelines are rather obvious, not exhaustive, and easier to talk about than actually implement. Skilled mentors wear many hats; they serve as teachers, but also advisors, cheerleaders, and mediators. Through passionate guidance, supportive recognition of differences, and active mentoring, a faculty member will help his or her protégés succeed, and in doing so will help science flourish.

References

- Bandura, A. (1977). *Social learning theory*. New York: General Learning Press.
- Cesa, I. L., & Fraser, S. C. (1989). A method for encouraging the development of good mentor-protégé relationships. *Teaching of Psychology, 16*, 125-128.
- Cramer, R. J., & Prentice-Dunn, S. (2007). Caring for the whole person: Guidelines for advancing undergraduate mentorship. *College Student Journal, 41*, 771-778.
- Kardash, C. M. (2000). Evaluation of an undergraduate research experience: Perceptions of undergraduate interns and their faculty mentors. *Journal of Educational Psychology, 92*, 191-201.
- Katkin, W. (2003). The Boyer Commission Report and its impact on undergraduate research. In J. Kinkead (Ed.), *Valuing and supporting undergraduate research* (pp. 19-38). San Francisco: Jossey-Bass.
- Kinkead, J. (Ed). (2003). *Valuing and supporting undergraduate research*. San Francisco: Jossey-Bass.
- McLean, C. P., Miller, N. A., Lilienfeld, S. O., Lohr, J. M., McNally, R. J., & Stickle, T. R. (2007). Teaching students to think like scientists. *the Behavior Therapist, 30*, 84-87.
- Olatunji, B. O., Feldner, M. T., Witte, T. H., & Sorrell, J. T. (2004). Graduate training of the scientist-practitioner: Issues in translational research and statistical analysis. *the Behavior Therapist, 27*, 45-50.
- Reynolds, E. K., Sargeant, M. N., Rooney, M. E., Tashiro, T., & Lejuez, C. W. (2008). Actively assessing fit when applying to Ph.D. programs in clinical/counseling psychology: The applicant's perspective. *the Behavior Therapist, 31*, 57-61.
- Schwebel, D. C., & Hodari, A. J. (2005). Ethical standards and acculturation: Two case studies. *Ethics and Behavior, 15*, 131-137.

...

Correspondence to David C. Schwebel, Department of Psychology, University of Alabama at Birmingham, 1300 University Blvd., CH 415, Birmingham, AL 35294; e-mail: schwebel@uab.edu

Book Review

Weiner, Irving B., & Greene, Roger L. (2008)

Handbook of Personality Assessment

Hoboken, NJ: Wiley (677 pp., hardcover)

Reviewed by Stanley Zwebach, *Towson University*

The *Handbook of Personality Assessment* represents an important contribution to the field of clinical psychology. Irving B. Weiner, who served for 8 years as editor of the *Journal of Personality Assessment* and is a preeminent figure in both clinical and forensic psychology, has partnered with the current associate editor of that journal and noted MMPI textbook author Roger L. Greene to produce this outstanding text. It is likely that the handbook will serve as the “go to” reference for both graduate students in personality assessment courses and for professional psychologists who wish to update their knowledge of already used instruments and/or learn about unfamiliar tests.

While these scientist-practitioners have focused on only one strategy, namely the effective use of standardized tests to assess personality, the authors make it blatantly clear that important additional personality assessment methods include diagnostic interview, review of records, collateral interview, and behavioral observation. Their well-articulated viewpoint is that when employed by ethical and skilled professionals the use of standardized personality tests in combination with other important assessment methods lead to the most accurate clinical decisions. That position, as notably expressed by Thorne (1961), has had a long and venerable history in the field of clinical psychology.

Comprehensive coverage is provided for the self-report as well as performance-based (projective) personality assessment tests that are currently in widest use. The text is distinguished by its analytic, clinically relevant, and extremely balanced treatment of each instrument. Readers are provided with recent and extensive research citations combined with incisive, critical commentary. The authors' outstanding presentation of relevant material allows the reader to make informed decisions about the appropriate uses of each test.

Structure of the Book

In Part I: Basic Considerations, a brief but informative chapter on the history of personality assessment is initially presented. This review is followed by separate chapters covering the key components in the personality assessment process and the psychometric foundations of personality assessment. The material in chapters 1 to 3 is particularly relevant for graduate students; but may demand less attention from professional psychologists who have remained current in the field and are experienced in personality assessment.

Chapter 4 is a “must read.” Standards relevant to personality assessment from the Ethical Principles and Code of Conduct of the American Psychological Association (APA, 2002) are presented in abbreviated form along with extremely clear and insightful commentary. Also included is important coverage of the less well known but important Rights and Responsibilities of Test Takers: Guidelines and Expectations by the Working Group of the Joint Committee on Test Practices (1998). The chapter would have been further strengthened by the inclusion and analysis of relevant material from Standards for Educational and Psychological Testing developed jointly by the American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education (1999). Historically, these three sponsoring organizations have been the leaders in providing definitive guidance for the development and use of psychological tests.

Part II, Self-Report Inventories, begins with an overview of key characteristics and components that define this type of test. The individual chapters on the MMPI-2, MMPI-A, MCMI-III, PAI, and NEO PI-R are structured as follows: History, Administration, Scoring, Assessing Validity, Interpretation, Applications, Psychometric Foundations, and References. All of the chapters, with the exception of the one de-

voted to the MMPI-A, contain a brief but helpful concluding comments section. The inclusion of concluding comments for the MMPI-A would be desirable, as such material would provide the reader with clear awareness of the authors' key points of emphasis relative to the use of this instrument.

Each of the five chapters covering self-report inventories resembles a well-annotated test manual. However, grounding in the basic concepts of ethical standards, statistics, tests and measurement, personality psychology and abnormal psychology is required if the reader is to effectively process the material presented for each self-report inventory. The authors' succinct, cogent writing style and excellent use of numerous tables and figures will provide most doctoral-level psychologists with a clear framework for improving facility with a measure that they already employ in clinical practice or provide a sound basis for adoption of a previously unfamiliar test. Graduate students in psychology will require extensive instruction and supervision related to the appropriate uses of each instrument, training in data analysis, report writing and in the direct communication of results to clients/patients.

Part III, Performance-Based Measures, is covered in four individual chapters. The techniques presented include the Rorschach Inkblot Method, Thematic Apperception Test, Figure Drawing Methods, and Sentence Completion Methods. Given the wide variation in the theoretical and test development characteristics of each of the four performance-based approaches, the authors appropriately provide no overview chapter. However, each respective performance-based type of measure is presented in a similar format: Nature of the Method, History, Administration, Coding/Scoring, Interpretation, Applications, Psychometric Foundations, and References.

The accessibility and usability for psychology professionals of the material covered in the performance-based chapters depends heavily on the previous education and training of the reader. For those practitioners experienced in the use of the Rorschach, the lengthy and dense Chapter 11 (82 pp.) will offer much valuable material that will strengthen their clinical use of the method. This chapter will also serve as a very thorough and completely updated reference source. Graduate students and those psychologists inexperienced with the Rorschach will find the material very difficult to process.

In contrast, the material presented on the Thematic Apperception Test, Figure

Drawing Methods, and Sentence Completion Methods will, like all the self-report chapters, provide most doctoral-level psychologists with the conceptual and structural basis needed for either the adoption or improved use of these measures. Similar to the self-report measures presented in earlier chapters, graduate students in psychology will require detailed instruction and supervision related to the appropriate uses of each instrument, training in data analysis, report writing and in the direct communication of results to clients/patients.

The concluding Part IV contains sample computer-generated interpretive reports for the MMPI-2, MMPI-A, MCMI-II/III, PAI, NEO PI-R, and Rorschach Inkblot Method. Inclusion of the sample reports enhances the ability of readers to make informed decisions about the use of specific tests. Not only do these reports provide direct examples of the format of such software generated documents but they clearly illus-

trate the great potential for their effective integration into professional personality assessment practice.

Summary

Handbook of Personality Assessment is a textbook that the field has long awaited. In a scholarly, comprehensive, and insightful fashion, the distinguished authors have collaborated to provide psychologists and graduate students with a current guide to the most widely used self-report and performance-based instruments. The reviewer, who has taught graduate courses in personality assessment for more than two decades, views this resource as providing the best available stand-alone, single text coverage of major personality tests.

References

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational*

and psychological testing. Washington, DC: American Educational Research Association.
 American Psychological Association. (2002). Ethical principles of psychologists and code of Conduct. *American Psychologist*, 57, 1060-1073.
 Thorne, F. C. (1961). Clinical judgment: A study of clinical errors. Brandon, VT: *Journal of Clinical Psychology*.
 Working Group of the Joint Committee on Test Practices. (1998, August). *Rights and responsibilities of test takers: Guidelines and expectations*. Washington, DC: American Psychological Association. Retrievable at <http://www.apa.org/science/ttrr.html>.

...

Correspondence to Stanley Zwebach, Ph.D., Department of Psychology, Towson University, 8000 York Road, Towson, MD, 21252
 e-mail: szwebach@towson.edu.

Classifieds

ASSISTANT OR ASSOCIATE PROFESSOR (RESEARCH). The Department of Medicine at Rhode Island Hospital, one of the affiliated hospitals of The Warren Alpert School of Medicine at Brown University, seeks a research faculty member on or before July 1, 2009. 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). Associate Professor level candidate should have a national reputation and scholarly achievements.

Applicants must have a doctoral degree in psychology, sociology, social work or equivalent with research experience and interest in women's health, correctional health, international health, cancer screening, pain medicine, substance abuse, mental health, and/or HIV disease. Primary responsibilities include the applicant is expected to develop an independent funded research program and participate in Brown's funded research program working with multi-disciplinary group of investigators whose adult and adolescent studies include behavioral interventions, health services research, international research, community-based research, and work with incarcerated populations.

Please send CV and letter of interest to: Peter Friedmann, MD, MPH, Rhode Island Hospital, Division of General Internal Medicine Research, 593 Eddy St.-Plain St. Bldg., Providence, RI 02903. 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.

CLINICAL PSYCHOLOGIST, ASSISTANT PROFESSOR: The University of Arizona Department of Psychiatry, in conjunction with the University Physicians Healthcare, is recruiting a full-time Clinical Psychology faculty member within a progressive and growing academic department located in the beautiful Southwest. The primary criteria for appointment will be excellence in research and training. The individual will supervise and teach psychology interns, psychiatry residents, and medical students. Candidates with clinical and research interests in behavioral medicine, affective disorders, oncology, or forensic psychology, and a strong commitment to diversity in academic, clinical and research pursuits are encouraged to apply. Other responsibilities may include providing psychological evaluations for adult outpatients, psychotherapeutic intervention to adult outpatients, and forensic evaluations. Applicants must have a doctorate and internship training in APA accredited programs in clinical psychology and be eligible for licensure as a clinical psychologist in Arizona. Applicants should also demonstrate promise to develop fundable research. Send curriculum vitae, three letters of recommendation, and letter of interest to Anne M. Herring, Ph.D., Search Committee, Dept. of Psychiatry, College of Medicine, PO Box 245002, Tucson, AZ 85724-5002. Call 520-626-2357 for further information. The University of Arizona is an affirmative action/equal opportunity employer.

ADVERTISING in tBT

Classified ads are only \$4.00 per line. For a free price estimate, attach the text of your ad in the form of a Word document and email Stephanie Schwartz at sschwartz@abct.org. For information on display ads, deadlines, and rates, contact S. Schwartz at the email above or visit our website at www.abct.org and click on ADVERTISE. Below are the 2009 deadlines:

ISSUE	DEADLINE
January	December 3
February	January 3
March	February 4
April	March 3
June	May 3
September	August 2
October	Sept. 3
Winter	November 2

And don't forget ABCT's on-line . . .

JOB BANK

JOB SEEKERS | EMPLOYERS
<http://jobbank.abct.org>

ABCT's Annual Convention ✨ Awards & Recognition Ceremony



Top row, left to right: Jeremy Luk, Elsie Ramos Poster Award; Luana Marques, ADAA Career Development Travel Award; Anna Rosenberg, ADAA Career Development Travel Award; Anne Marie Albano, ABCT President; Jackie Persons, Outstanding Clinician; G. Terence Wilson, Outstanding Mentor; Robert Klepac, Outstanding Service to ABCT; Rinad Beides, ADAA Career Development Travel Award; Lisa J. Merlo, ADAA Career Development Travel Award; M. Joann Wright, Awards & Recognition Committee Chair

Bottom row, left to right: Michael Davis, Distinguished Friend to Behavior Therapy; David H. Barlow, Lifetime Achievement; Katherine Dixon-Gordon, Elsie Ramos Poster Award; Meredith Terlecki, Elsie Ramos Poster Award; Marina Bornovalova, Virginia Roswell Dissertation; Matthew Nock, President's New Researcher



M. Joann Wright, Awards Chair, and President Albano with David Barlow, recipient of the Lifetime Achievement Award



ABCT's 2008 Outstanding Clinician, Jacqueline Persons



President's New Researcher Matthew Nock with President Albano



Michael Davis accepting the Distinguished Friend to Behavior Therapy Award

Left to right: Lily McNair, Awards & Recognition Committee, with the Elsie Ramos Student Poster Award winners Katherine Dixon-Gordon, Jeremy Luk, and Meredith Terlecki



Robert Klepac, Outstanding Service to ABCT, with M. Joann Wright and Anne Marie Albano



Marina Bornovalova (center), Virginia Roswell Dissertation Award winner, with M. Joann Wright and Anne Marie Albano



G. Terence Wilson, ABCT's 2008 Outstanding Mentor



Anne Marie Albano, ABCT's President (2007–08)

Call for Award Nominations

NOMINATIONS DEADLINE:
March 2, 2009



Outstanding Educator ♦ Outstanding Training Program ♦ Lifetime Achievement
Distinguished Friend to Behavior Therapy ♦ Outstanding Service to ABCT

Questions?
email David A. F. Haaga:
dhaaga@american.edu

NOMINATE ON-LINE: www.abct.org

2009

STUDENT AWARDS PROGRAM

President's New Researcher Award

ABCT's President, Robert L. Leahy, Ph.D., invites submissions for the 31st 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 universal processes across cognitive behavioral models that have been implicated in the development of vulnerability and treatment of psychopathology 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 Robert L. Leahy, Ph.D.; Anne Marie Albano, Ph.D., ABCT's Immediate Past-President; and Frank Andrasik, the ABCT President-Elect. Submissions must be received by August 13, 2009, 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 Leonard Krasner Student Dissertation Award

This New this year, we are pleased to announce that we will be presenting two student dissertation awards! Family and friends of ABCT founding member Leonard Krasner wanted to commemorate Dr. Krasner's memory and contributions to the field of the behavioral therapies by offering this named award in the same manner as the Virginia A. Roswell Student Dissertation Award.

Each award will be given to one student based on his/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 form at www.abct.org. Then, e-mail the completed forms to dhaaga@american.edu. Also, mail a hard copy of your submission to ABCT, Student Dissertation Awards, 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 43rd Annual Convention in New York. The winners will each receive a 2010 ABCT Student Membership, a 1-year subscription to an ABCT journal of their choice, and a complimentary general registration at ABCT's 2010 Annual Convention. To be eligible, students must complete the submission for this year's ABCT convention by **March 2, 2009**. The proposal must then pass ABCT's peer review process. ABCT's Awards and Recognition Committee will judge all student posters.

**Awards
will be
presented
at ABCT's
convention
November
19-22,
New York**

The Neil S. Jacobson Research Awards for Outstanding & Innovative Clinical Research

On June 2, 1999, Neil S. Jacobson died suddenly and unexpectedly of a heart attack. He left behind a stunned and grieving family and cadre of students, colleagues, and collaborators. In the years since his death, Neil's work has stood the test of time, and his ideas and visions continue to shape his three areas of scholarship: marital therapy, domestic violence, and the treatment of depression.

Neil's early research in marital therapy included publishing the definitive book on behavioral couple therapy (Jacobson & Margolin, 1979) and conducting some of the best clinical trials on this treatment, trials that provided a substantial part of the empirical basis on which this treatment has been categorized as an "efficacious and specific treatment" (Baucom, Shoham, Mueser, Daiuto, & Stickle, 1998). Yet, dissatisfied with the magnitude of change brought about by this treatment, Neil worked to develop what he believed was a more truly behavioral and more powerful treatment, Integrative Behavioral Couple Therapy (IBCT; Jacobson & Christensen, 1996). Neil and Andrew Christensen conducted a pilot study of IBCT followed by a major two-site clinical trial of IBCT. Results generally indicated the superiority of IBCT over the traditional behavioral approach and demonstrated that even in a large sample of couples chosen for their serious and chronic distress, over two thirds of couples treated with IBCT made clinically significant improvement in their relationships that maintained over a 2-year follow-up.

In the area of depression treatment, he conducted clinical trials that provided evidence for the impact of marital therapy on depression (Jacobson, Dobson, Fruzzetti, Schmaling, & Salusky, 1991; Jacobson, Fruzzetti, Dobson, Whisman, & Hops, 1993) and that challenged the putative power and mechanisms of cognitive behavior therapy (Jacobson et al., 1996). Neil also developed a behavioral approach to depression, behavioral activation (BA), which he believed was a powerful treatment for depression. The study that he began at the University of Washington was completed after his death, with results demonstrating that BA was comparable in efficacy to antidepressant medication and superior to cognitive therapy among more severely depressed adults with major depression. Research on BA is ongoing, with recent studies addressing questions about the mechanisms and transportability of BA as

well as its applicability to novel populations such as depressed adolescents and veterans.

Neil's development of a metric for measuring clinical significance (Jacobson & Truax, 1991) was a major contribution to treatment research in general as well as to treatment for couple problems and depression. In the domestic violence area, he conducted some groundbreaking research that contributed to a typology of males who batter their wives and girlfriends (Jacobson & Gottman, 1998). As a result of these and other contributions, Neil established himself as an undisputed leader in the three areas of couple therapy, depression treatment, and domestic violence. Anyone who achieves in a full career what he did in any one of these three areas would have reason to be proud. That he achieved this much in so short a lifetime is truly phenomenal.

The week prior to his death, Neil told his graduate student, Sona Dimidjian, that he was most proud of two aspects of his professional life. The first was developing and maintaining his three distinct and remarkable programs of research—marital therapy, domestic violence, and the treatment of depression. The second was training graduate students. To honor that which Neil valued most as a scientist, we have created three graduate student/early career research awards that will be announced at the November, 2009, ABCT meeting in New York City.

References

- Baucom, D., Shoham, V., Mueser, K., Daiuto, A., & Stickle, T. (1998). Empirically supported couple and family interventions for marital distress and adult mental health problems. *Journal of Consulting and Clinical Psychology, 66*, 53-88.
- Jacobson, N. S., & Christensen, A. (1996). *Integrative couple therapy*. New York: Norton.
- Jacobson, N., Dobson, K., Fruzzetti, A., Schmaling, K., & Salusky, S. (1991). Marital therapy as a treatment for depression. *Journal of Consulting and Clinical Psychology, 59*, 547-557.
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., Gortner, E., & Prince, S. E. (1996). A component analysis of cognitive behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*, 295-304.
- Jacobson, N., Fruzzetti, A., Dobson, K., Whisman, M., & Hops, H. (1993). Couple therapy as a treatment for depression: II. The effects of relationship quality and therapy on depressive relapse. *Journal of Consulting and Clinical Psychology, 61*, 516-519.
- Jacobson, N. S., & Gottman, J. M. (1998). When men batter women: New insights into ending abusive relationships. New York: Simon & Schuster.
- Jacobson, N. S., & Margolin, G. (1979). *Marital therapy: Strategies based on social learning and behavior exchange principles*. New York: Brunner/Mazel.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*, 12-19.

About the Award: The award will fund graduate student clinical research (including those who are within 5 years of having completed their Ph.D.), with an emphasis on dissertation research. The award will provide up to \$5,000 for research projects that are relevant to the understanding and treatment of people with difficult life problems. Projects that involve new initiatives that help to move the field in creative directions and that demonstrate promise for continued, ongoing development and investigation are particularly welcome. **This award is limited to graduate student members of ABCT.**

Application: Proposals should describe the aims, background and significance, and methods, and should clearly state how the project will advance clinical research efforts. Proposals should be a maximum of 3 single-spaced pages in length, plus references, and should include a 1-page budget. Finally, proposals should be accompanied by a letter of support from a faculty mentor.

➔ **APPLICATIONS:** www.abct.org ➔

Proposals are due May 1, 2009. Please email 1 copy of your proposal to Virginia Rutter, Ph.D., at vrutter@gmail.com, and mail 1 hard copy of your proposal to: ABCT, The Neil S. Jacobson Research Awards for Outstanding Innovative Clinical Research, 305 Seventh Ave., New York, NY 10001. Applicants will be notified of the committee's decisions by September 1, 2009. Award recipients will be announced at the November 2009 ABCT convention in New York City and invited to a reception in their honor and in honor of Neil S. Jacobson.

— *NSJ Awards Committee* —

Andrew Christensen, Sona Dimidjian, Steven Hollon, Bob Koblentz, and Virginia Rutter

ABCTAMBASSADORS

are needed to:

messenger

Articulate ABCT's vision, purpose, and identity to encourage membership

guide

Mentor individuals through the process of presenting at the annual convention or transitioning into leadership positions

signify

Act as the eyes and ears of the association locally

ABCT's Ambassador program is a brand-new initiative promoting leadership, participation, and membership in ABCT.

ABCT Ambassadors are easily recognized at the annual meeting by their special ribbons. They also receive a certificate of recognition and are featured on our website and in tBT.

For more information, contact Lisa Yarde at ABCT's central office (lyarde@abct.org)

I NOMINATE

nominate *the following individuals for the positions indicated:*

PRESIDENT-ELECT (2009–2010)

REPRESENTATIVE-AT-LARGE (2009–2012)

SECRETARY-TREASURER (2010–2013)

NAME (printed)

SIGNATURE (required)

The Next Candidates for ABCT Office

Every nomination counts! Encourage colleagues to run for office or consider running yourself. Nominate as many full members as you like for each office. The results will be tallied and the names of those individuals who receive the most nominations will appear on the election ballot next April. **Only those nomination forms bearing a signature and postmark on or before February 2, 2009, will be counted.**

Nomination acknowledges an individual's leadership abilities and dedication to behavior therapy and/or cognitive therapy, empirically supported science, and to ABCT. When completing the nomination form, please take into consideration that these individuals will be entrusted to represent the interests of ABCT members in important policy decisions in the coming years. Contact the Nominations and Elections Chair for more information about serving ABCT or to get more information on the positions.

Please complete, sign, and send this nomination form to Kristene Doyle, Ph.D., Nominations & Elections Chair, ABCT, 305 Seventh Ave., New York, NY 10001.

President-Elect

The person elected as President-Elect (2009–2010) will serve as President (2010–2011) and Past President (2011–2012) and on the Board of Directors for 3 years. The Board meets once a year the Thursday of the convention and conducts monthly conference calls the other 11 months of the year.

The President-Elect works closely with the President on all executive matters. In the President's absence at any meeting except the Board meeting during the annual convention, the President-Elect presides. In case of absence, disability, or resignation of the President, the President-Elect will perform the duties of the President.

The President presides at, schedules, and prepares the agendas of meetings of the Board, the annual meeting of the Association, and any special meetings that may be called. The President may make nominations for approval by the Board for any appointive position which must be filled except as otherwise stated. The President of ABCT is responsible in all matters, stated or implied, that are related to the welfare, stature and proper operation of the Association.

Representative-at-Large

This individual serves as liaison to an ABCT Coordinator, working to review, develop, and/or maintain activities that service and support the members of ABCT in that respective area of the governing structure and serving as the "big picture" person to assist the coordinator in knowing who to keep informed of activities that have an effect on other areas of the governing structure.

The Representative-at-Large should be familiar with the ABCT mission statement, bylaws, and the most recent strategic long-range planning report, and is expected to attend the annual fall Board of Directors meeting and monthly conference calls; maintain contact with the coordinator, and to serve as a facilitator if required to move projects and/or activities along; encourage members' involvement in ABCT and encourage prospective members to join; and attend the annual convention, including all relevant meetings (i.e., with your coordinator and committee chairs).

Secretary-Treasurer

This being is responsible for the receipt, custody and disbursement of all funds and securities of the Association. The Secretary-Treasurer shall make a written and oral report of the financial condition of the Association to the Board and the general membership at the annual meeting. The Secretary-Treasurer shall chair the Finance Committee. The Secretary-Treasurer shall receive the auditor's report and submit to the President a biannual financial report, detailing monies received and expended. The Secretary-Treasurer shall keep the minutes of all meetings. The minutes of each meeting must be mailed to the Directors within one month thereafter.

For full descriptions, visit www.abct.org. Click on the link NOMINATE YOUR COLLEAGUES.

Call for Papers

UNIVERSAL PROCESSES

Mediating Roles in Vulnerability and Treatment

Lata K. McGinn, Ph.D., Program Chair

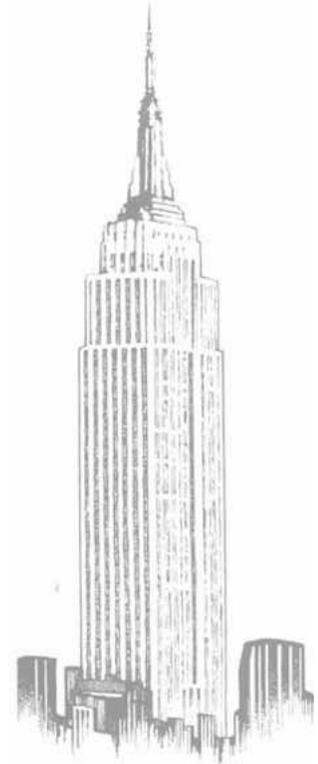
Submissions may be in the form of symposia, round tables, panel discussions, and posters. Discussants will be encouraged to integrate processes implicated in the development, maintenance, and treatment of psychopathology across theoretical models.

Information for submitting abstracts can be found on ABCT's website, www.abct.org, or in the February issue of tBT.

**SUBMISSION
DEADLINE:
March 2, 2009**

Cognitive behavioral models stress the impact of various processes on the development, maintenance, and treatment of psychopathology. Recent advances in methodology have facilitated the growth of studies attempting to test cognitive and behavioral processes and their mediating role in vulnerability and treatment. An emerging body of evidence appears to support the mediating impact of various processes in the development and maintenance (vulnerability) and reduction of psychopathology (mechanisms of change). Moving beyond a categorical nosology, there is also a growing interest in identifying common processes that play a role in the vulnerability and treatment across diagnostic categories.

The theme of the 43rd Annual Convention will be on identifying the various cognitive and behavioral processes that have been implicated in the development of vulnerability and treatment of psychopathology, particularly across diagnostic categories and models. We welcome submissions that focus on identifying universal processes across diagnostic areas and cognitive behavioral models. Submissions that highlight models developed to identify common processes across diagnostic disorders and innovative methods and designs for examining development of vulnerability and mechanisms of change are especially encouraged and will receive special consideration.



43rd ANNUAL CONVENTION

November 19–22, 2009
New York City



the Behavior Therapist

Association for Behavioral and Cognitive Therapies
305 Seventh Avenue, 16th floor
New York, NY 10001-6008

Tel.: 212-647-1890
www.abct.org

ADDRESS SERVICE REQUESTED

PRSRST STD
U.S. POSTAGE
PAID
Hanover, PA
Permit No. 4