

# The Child & Adolescent Anxiety SIG Newsletter

Advancing the Science and Practice  
of Youth Anxiety

March 2010

## Letter from the SIG Leader

Greetings and Happy New Year!

A number of significant changes greet the SIG this year, including a number of new Executive Committee members. I am looking forward to my new role as SIG Leader, and I would like to first, and foremost, extend the SIG's deep gratitude to **Jill Ehrenreich May** for her energy, initiative, and commitment in seeing the SIG through these last two years. The SIG experienced great growth in membership and became one of the most active SIGs at ABCT under Jill's leadership. I look forward to maintaining the excitement and activity levels that have become standard for our SIG. I hope to follow Jill's lead by continuing to generate interest in the SIG, expand membership, and develop ways for members to feel increasingly involved in the CAASIG.

I am pleased to welcome to the 2010-2013 Executive Committee: **Aleta Angelosante**, NYU Child Study Center, as Leader-Elect; **Anthony Puliafico**, Columbia University/NYSPI as Chair of Membership/Treasurer; **Candice Alfano**, Children's National Medical Center/George Washington University, as Newsletter Co-Editor; and our new Student Representatives **Ariceli (Shelly) Gonzales**, San Diego State University/UCSD; **Emily Laird**, University of Miami; and **Laura Skriner**, Rutgers University. I am also grateful that the remaining committee members will be retaining their roles. Please see our piece "*Election Results Are In...*" to learn about executive committee current activities.

This past conference marked yet another very active showing for the SIG. We again filled the maximum number of poster slots at the SIG Poster Exposition and SIG members were represented widely throughout the ABCT conference. We had another very active annual SIG meeting, and we extend special thanks to **Joel Sherrill** from NIMH for delivering an informative and insightful keynote at our annual SIG meeting.

I would also like to give special thanks to **Jill Ehrenreich May** and **Brian Chu** for their remarkable organization of the SIG poster and student travel award submissions. Congratulations to 2009 Student Travel Award Winner, **Kelly O'Neil**, Temple University, and Student Poster Award Winner, **Michelle Rozenman**, San Diego State University / UCSD. Please see summaries of their presentations/research in this issue.

Also a reminder to members to please renew your membership. Membership dues are due for 2010 and all are encouraged to complete the Renewal Form (with a convenient PayPal option). Please encourage students and colleagues who are not already members to join. Membership offers access to the SIG Listserve and Newsletter and special opportunities to participate in SIG sponsored events. Dues allow us to continue to offer travel and poster awards and to host exciting events and meetings at ABCT. I also encourage members to keep using the SIG Listserve! Please take advantage of this open forum for child anxiety-related discussion, questions, job postings, etc. All current members are registered to the listserv unless otherwise requested. For changes of email address, please email Jennie Hudson ([Jennie.Hudson@psy.mq.edu.au](mailto:Jennie.Hudson@psy.mq.edu.au)). To post to the listserv simply send an email to [caasig@listmail.temple.edu](mailto:caasig@listmail.temple.edu).

Warmest regards,  
Muniya

## In this issue:

Letter from SIG Leader	1
Note from Co-editors	2
SIG Annual Meeting Minutes	4
<b>Review of 2009 ABCT Annual Convention</b>	
<b>SIG Poster Award</b>	<b>6</b>
<i>An Initial Investigation of Interpretation Bias in Clinically Anxious Youths</i> By, Michelle Rozenman	
<b>SIG Student Travel Award Winner</b>	<b>10</b>
By, Kelly O'Neil	
<b>Student Corner: Notes from the Conference Floor</b>	<b>16</b>
By, Kaitlin Gallo, Shelly Gonzalez, & Natoshia Raishevic Cunningham	
<b>Announcements</b>	
SIG Election Results	3
SIG New Member/ Membership Renewal Form	5
Job Market	18

-- Published by the Child and Adolescent Anxiety SIG. The contents of this newsletter have not been reviewed, approved, or endorsed by the Association for the Advancement of Behavior and Cognitive Therapy.

## Letter from the Newsletter Co-Editors

---

Dear SIG Members:

Happy New Year! We are delighted to bring you the first CAASIG Newsletter of 2010—our annual post-ABCT convention issue where we summarize many of the exciting Child & Adolescent Anxiety SIG events of the conference and present the work of our annual SIG award winners. In this post-Convention issue, Kelly O'Neil shares with us a summary of her work on depression and child anxiety treatment that won her this year's CAASIG Student Travel Award. Congratulations Kelly! And congratulations go to our 2009 CAASIG Student Poster Award winner, Michelle Rozenman, who in this issue shares with us a summary of her poster, *An Initial Investigation of Interpretation Bias in Clinically Anxious Youths*, coauthored by Robin Weersing and Nader Amir.

In addition, this issue includes an installment of the Student Corner, edited by Student Representatives Kaitlin Gallo, Shelly Gonzalez, and Natoshia Raishevich Cunningham, who provide a nice summary of standouts from the 43<sup>rd</sup> Annual ABCT Convention. Also, please take some time to read about the exciting scholarly activities of our newest members of the 2010-2013 CAASIG Executive Committee ("*Election Results Are In...*").

Please continue to send suggestions and comments, and as always, we hope to hear from members interested in contributing to future issues of the Newsletter.

We look forward to hearing from you!

Warmest regards,

Candice Alfano, Ph.D. (calfano@cnmc.org)

Jonathan S. Comer, Ph.D. (comerj@childpsych.columbia.edu)

Adam S. Weissman, Ph.D. (weissman@jbcc.harvard.edu)

Newsletter Co-Editors

---



# ABCT

ASSOCIATION FOR BEHAVIORAL  
AND COGNITIVE THERAPIES

## Election Results are in...

We are pleased to welcome to these new editions to the 2010-2013 Executive Committee:

**Aleta Angelosante, Ph.D.**, NYU Child Study Center, was elected Leader-Elect. Aleta is a child clinical psychologist and Clinical Assistant Professor at the NYU Child Study Center's Institute for Anxiety and Mood Disorders. She received her B.A. in both Psychology and English at Williams College. Before graduate school she worked at both the Judge Baker Children's Center and the OCD Institute, a residential treatment facility for adults with treatment refractory OCD. Aleta obtained her PhD from Temple University under the mentorship of Philip Kendall. She then completed her pre-doctoral internship at Children's National Medical Center in Washington, DC before completing a post-doctoral fellowship at the Center for Anxiety and Related Disorders (CARD) at Boston University where she ran an intensive treatment program for adolescents with panic disorder. In her role at the Child Study Center, Aleta splits her time evenly between research and clinical work. She currently runs a research project evaluating young children who exhibit severe temper outbursts. In regards to clinical work, she uses CBT interventions to work with anxious and depressed children, teens, and their families. She is also an active member of the DBT team, utilizing DBT to work with multi-problem adolescents and their families. Aleta also teaches a seminar in anxiety and mood disorders attended by interns and postdoc fellows at the Child Study Center.

**Anthony Puliafico, Ph.D.**, Columbia University/NYSPI was elected Chair of Membership/Treasurer. Anthony received his Ph.D. in Clinical Psychology from Temple University under the mentorship of Philip Kendall. Anthony completed his internship at Bellevue Hospital/NYU Child Study Center and his postdoctoral fellowship at Columbia University under the supervision of Anne Marie Albano. Currently, Anthony serves as Co-Director of Psychology at the New York State Psychiatric Institute's Children's Day Unit, a daypatient unit for adolescents with severe anxiety and mood disorders. In this role, he coordinates psychological assessment and treatment throughout the unit and provides supervision to trainees. In addition, Anthony is a clinician at the Columbia University Clinic for Anxiety and Related Disorders, where he specializes in the assessment and treatment of children and adolescents with anxiety disorders. Anthony is also actively involved in the research of anxiety disorders in children and adolescents. He is co-investigator for a research study examining parent-based interventions in the treatment of anxiety in young children. He also serves as lead therapist on a clinical trial of pediatric OCD.

**Candice Alfano, Ph.D.**, Children's National Medical Center/George Washington University, was elected Newsletter Co-Editor. Candice is Assistant Professor of Psychiatry and Pediatrics at The George Washington University School of Medicine. She also founded and directs the *Child and Adolescent Anxiety Program* (CAAP) at CNMC, which provides comprehensive assessment and treatment services for youth with anxiety disorders as well as training opportunities for psychology externs and interns, and child psychiatry fellows. After receiving her Ph.D. in Clinical Psychology from the University of Maryland under the mentorship of Deborah Beidel, Candice completed a post-doctoral fellowship in child psychiatry at the Johns Hopkins University School of Medicine. In 2006, she joined the faculty at CNMC. The primary focus of her research is on the etiology, development, and treatment of anxiety disorders in children and adolescents. She has published numerous empirical papers and book chapters on anxiety and is currently editing a comprehensive text on Social Anxiety Disorder in adolescents to be published by the American Psychological Association (APA). Candice also serves as a peer-reviewer for numerous scientific journals and is on the editorial boards of the *Journal of Anxiety Disorders* and *Child & Youth Care Forum*. Her current research program focuses on the role of sleep in the development and pathogenesis of anxiety disorders. She is the recipient of a 5-year Mentored Career Development Award (K23) from the National Institute of Mental Health (NIMH) to study sleep disturbances in children with Generalized Anxiety Disorder. Candice has received several awards for her research including awards from the Anxiety Disorders Association of America (ADAA), Division 53 of the American Psychological Association (APA) and a 2008 New Investigator Award from the New Clinical Drug Evaluation Unit (NCDEU) co-sponsored by the NIMH.

And please also welcome our new Student Representatives: **Ariceli (Shelly) Gonzales**, San Diego State University/UCSD; **Emily Laird**, University of Miami; **Laura Skriner**, Rutgers University.

# SIG Annual Meeting minutes

Prepared by Natoshia Raishevich Cunningham, M.S.

- Jill Ehrenreich May recognized for excellent past leadership of SIG
- Recognition of 2009 CAA-SIG Poster Presentation Winner
- Michelle Rozenman won for her poster examining interpretation bias in clinically anxious youth. She initiated data collection and analyses.
- Update on CAA-SIG sponsored pre-conference meeting in San Francisco
  - First day of the Workshop; Ideas for themes welcomed; Theory based in addition to treatment
- Voting for 2010-2013 CAA-SIG Executive Committee position
  - A survey will be sent out through list-serve
- Presentation by 2009 Student Travel Award Winner, Kelly O'Neil, M.A.
  - Introduction: child anxiety and child depression highly comorbid (as high as 69% in some samples). Comorbid depressive symptoms may account for one-third of non-responders of child anxiety treatment.
  - Treatment maintenance, multiple informants and dimensional measures used.
  - Sample information: 72 youth age 7-14. GAD, Social Phobia, SAD. 17 youth had comorbid depressive disorder.
  - HLM analyses revealed youth with comorbid depressive disorders or self-reported depressive symptoms had more severe anxiety disorders at pre treatment.
  - Child reported depressive symptoms predicted less favorable treatment outcome while maternal reported depressive symptoms had less favorable treatment outcome from post treatment to one-year follow-up. CBT treatment was robust in cases of co-morbid non-principal depression.
- Keynote address by Joel Sherrill, Ph.D., NIMH: "Treatment Research for Childhood Anxiety Disorders: Current Status and New Directions" [Write-up of Keynote address to appear in next newsletter edition]
  - Overview: the context of the existing treatment literature; potential future research directions (pre and post CAMS)
  - Pre-CAMS
    - Substantial evidence around CBT. Silverman et al., found that several interventions were "probably efficacious"; pharmacotherapy (e.g., SSRIs) effective versus controls
  - CAMS
    - Multi-site investigation- six year, six-site, unbalanced randomization, fewer children received placebo
    - Primary outcome measure (CGI) and Pediatric Anxiety Rating Scale (PARS)
    - Treatment Response: combined group (80.7%), Medication (54.9%), CBT (59.7%), Placebo (23.7%)
    - Each active treatment superior to placebo; combined treatment superior to mono-therapies
  - CAMS in the context of literature
    - Multi-disciplinary expertise in both modes of therapy; Focus on CBT and Medication
    - Diverse sample; broader inclusion; Comprehensive Assessment of Treatment Process/Putative Mechanisms; Broader assessment of outcomes; Potential Future Research Directions; Informing New/Improved Treatments
    - Exploring longer-term outcomes
    - Dissemination
    - The use of technology

## 2010 New Member/Membership Renewal Form

# Child and Adolescent Anxiety

## Special Interest Group

Name: \_\_\_\_\_  
 Title: \_\_\_\_\_ Degree \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Fax: \_\_\_\_\_  
 Email: \_\_\_\_\_  
 Web Page: \_\_\_\_\_

Membership Status (check one):

Professional \_\_\_\_\_ Student \_\_\_\_\_  
 \$10 (US funds) \$5 (US funds)  
 for one year for one year

Are you an AABT member or student member?

YES \_\_\_\_\_ Note: You must be an ABCT member to join the Child and Adolescent Anxiety SIG.  
 NO \_\_\_\_\_

Would you like to join the Child and Adolescent Anxiety SIG Listserve:

YES \_\_\_\_\_ (make sure email address is included above)  
 NO \_\_\_\_\_

To initiate your membership:

Please send a check or money order (in US funds), payable to Child and Adolescent Anxiety SIG, to  
**Anthony C. Puliafico, Ph.D., 3 Columbus Circle Suite 601, New York, NY 10019**

OR

Use Paypal in 5 easy steps:

1. Go to [www.paypal.com](http://www.paypal.com). To complete the following steps, you must be a registered PayPal member. If you aren't registered already, follow their directions to "Sign Up," then continue with the following steps:
2. Login to your account.
3. Click on the "Send Money" tab.
4. Enter [childanxietysig@yahoo.com](mailto:childanxietysig@yahoo.com) as the recipient's e-mail address.
5. Enter the amount and currency type, then hit "Continue."
2. 6. Enter credit card information, review, and hit "Send Money."

# 2009 SIG POSTER SESSION WINNER

## *An Initial Investigation of Interpretation Bias in Clinically Anxious Youths*

Michelle Rozenman, V. Robin Weersing, & Nader Amir  
San Diego State University / University of California, San Diego Joint Doctoral  
Program in Clinical Psychology

Correspondence: Michelle Rozenman, SDSU/ UCSD Joint Doctoral Program, 6363 Alvarado Court, Suite 103, San Diego, CA, 92120, mrozenma@ucsd.edu

**Introduction:** Major theories of anxiety implicate the role of biased cognition in the development and maintenance of internalizing disorders (Mathews & MacLeod, 2005). Interpretation is proposed as the second stage of cognition, occurring after individuals selectively attend to environmental stimuli (e.g., Crick & Dodge, 1994). During interpretation, individuals begin to attribute meaning or context to information. Studies with anxious adults have demonstrated a strong relationship between performance-based interpretation bias and anxious symptomatology (e.g., Amir, Beard, & Przeworski, 2005). The majority of published work in youth interpretation bias examines youth-reported self-statements (e.g., Schniering & Rapee, 2002) or time-unlimited responses to vignettes and other stimuli presented in vivo (e.g., Barrett, Rapee, Dadds, & Ryan, 1996; Waters, Wharton, Zimmer-Gembeck, & Craske, 2008). Such techniques do not necessarily target basic interpretation bias, as tasks with time-unlimited responding occur at slower, controlled levels of processing, whereas interpretation is proposed to be quick and uncontrolled (e.g., Daleiden & Vasey, 1997). The current study examined performance-based interpretation bias in 18 clinically anxious youths.

**Method:** The sample consisted of 18 clinically-anxious youths (ages 8-17) presenting for services at a youth internalizing disorders treatment research center. Youths and parents completed a diagnostic interview (K-SADS-PL; Kaufman, Birmaher, Brent, Rao, & Ryan, 1996) and self-reports of anxiety (Screen for Childhood Anxiety Related Disorders; SCARED; Birmaher, Brent, Chiappetta, Bridge, Monga, & Baugher, 1999) and depression (Mood and Feelings Questionnaire; MFQ; Wood, Kroll, Moore, & Harrington, 1995). All youths met diagnostic criteria for either primary Separation Anxiety Disorder (n=2), Social Phobia (n=3), or Generalized Anxiety Disorder (n=13), with 61% of youths meeting for a second anxiety disorder diagnosis.

Youths also completed a computerized performance-based interpretation task, which was modified from a paradigm developed by Beard and Amir (2008). During the task, youths are presented with either a negative or neutral word for 500 milliseconds, followed by an ambiguous sentence. Youths must indicate on the keyboard whether they believe the word and sentence are related. (See Figure 1 for task depiction.)

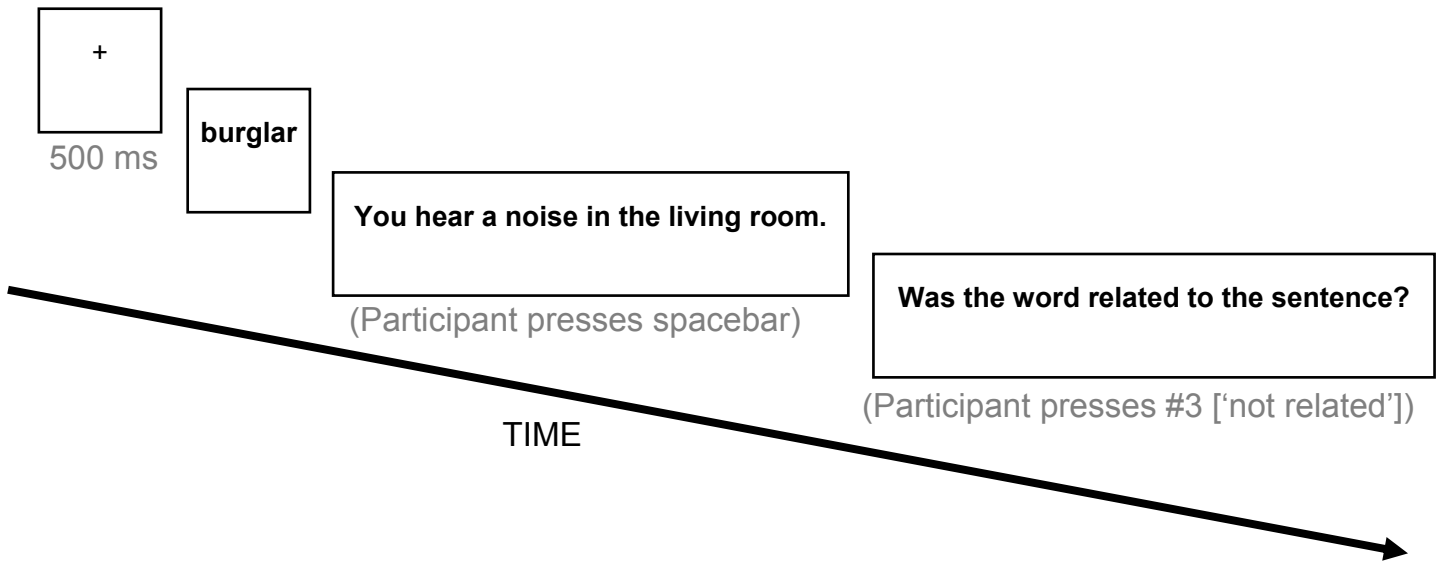
**Results:** Four youths (ages 8 and 9) reported significant difficulty with completing the interpretation task, stating that the stimulus words were presented too quickly for them to read. Therefore, their data were not included in examination of results.

Interpretation data were screened and cleaned to eliminate errors, with less than 7% of data excluded (e.g., inaccurate keypad press). This rate is consistent with that found in adult cognitive bias investigations (e.g., Amir, Beard, Burns, & Bomyea, 2009). We did not find significant differences in response errors between younger (age 10-12) and older (age 13-17) youths. However, older youths responded to trials significantly more quickly (average reaction time = 400 ms) than younger youths (average reaction time = 670 ms;  $p=.046$ ).

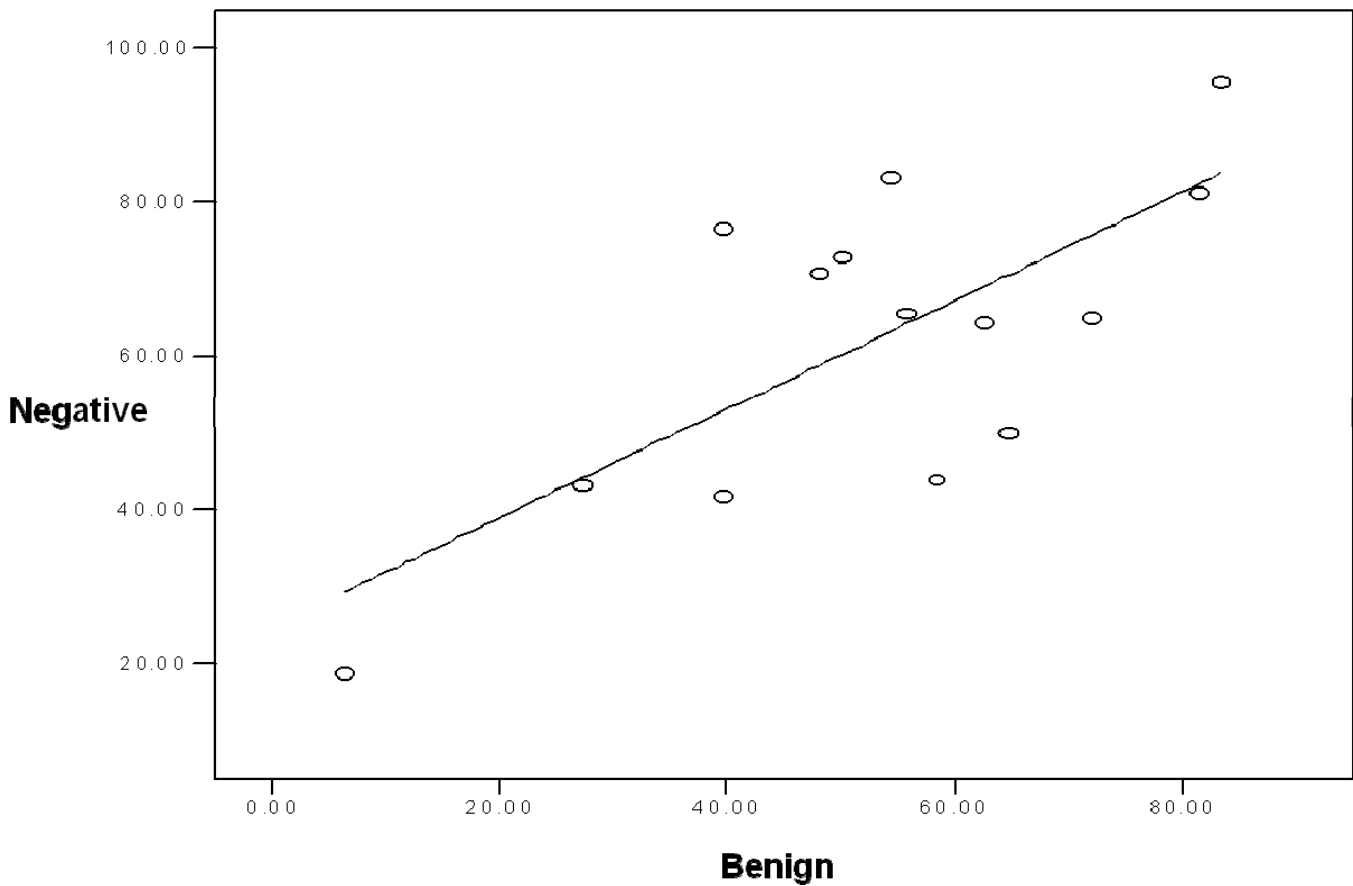
On average, youths selected 64% (SD=17.85) of negative words, but only 49% (SD=21.31) of benign words, as related to ambiguous sentences. Youths endorsed significantly more negative than benign interpretations ( $p=.05$ ). Negative and positive interpretation endorsement were positively correlated ( $r=.71$ ; see Figure 2). Percentage of negative interpretations endorsed was moderately correlated with youth self-reported anxiety (SCARED-C;  $p=.56$ ) and depression (MFQ-C;  $p=.41$ ). Percentage of benign interpretations endorsed by youths was negatively correlated with youth self-reported depression ( $p=-.34$ ).

**Discussion:** In this sample, we found an interpretation bias such that clinically-anxious youths selected more negative than benign words as related to ambiguous sentences during a performance-based task. This finding is consistent with other studies of performance-based interpretation bias in anxious adults (e.g., Beard & Amir, 2008), as well as self-reported negative self-statements (e.g., Schniering & Rapee, 2002) and time-unlimited responses to ambiguous vignettes (Barrett et al., 1996). Percentage of negative interpretations endorsed was moderately correlated with youth self-reported anxiety and depression, while percentage of benign interpretations endorsed was negatively correlated with depression. These results provide initial support for examining cognition at the interpretation stage of processing with performance-based measurement. Additional study of performance-based interpretation bias in clinically anxious youths with comparisons to depressed and non-diagnosed control youths will provide further information about the sensitivity and specificity of cognitive biases implicated in the development and maintenance of internalizing disorders. Such work may navigate future development of novel computerized interventions which modify cognitive biases in anxious youths.

**Figure 1. Performance-Based Interpretation Task: Example Trial**



**Figure 2. Negative and Benign Interpretation Correlation**





## References

- Amir, N., Beard, C., Burns, M., & Bomyea, J. (2009). Attention modification programs in individuals with generalized anxiety disorder. *Journal of Abnormal Psychology, 118*, 28-33.
- Amir, N., Beard, C., & Przeworski, A. (2005). Resolving Ambiguity: The Effect of Experience on Interpretation of Ambiguous Events in Generalized Social Phobia. *Journal of Abnormal Psychology, 114*, 402-408.
- Barrett, P. M., Rapee, R. M., Dadds, M. M., & Ryan, S. M. (1996). Family enhancement of cognitive style in anxious and aggressive children. *Journal of Abnormal Child Psychology, 24*, 187-203.
- Beard, C., & Amir, N. (2008). A multi-session interpretation modification program: Changes in interpretation and social anxiety symptoms. *Behaviour Research and Therapy, 46*, 1135-1141.
- Birmaher, B., Brent, D. A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): A replication study. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*, 1230-1236.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*, 74-101.
- Daleiden, E. L., & Vasey, M. W. (1997). An information-processing perspective on childhood anxiety. *Clinical Psychology Review, 17*, 407-429.
- Kaufman, J., Birmaher, B., Brent, D., Rao, U., & Ryan, S. M. (1996). Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child & Adolescent Psychiatry, 36*, 980-988.
- Mathews, A., & MacLeod, C. (2005). Cognitive vulnerability to emotional disorders. *Annual Review of Clinical Psychology, 1*, 167-195.
- Schniering, C. A., & Rapee, R. M. (2002). Development and validation of a measure of children's automatic thoughts: The Children's Automatic Thoughts Scale. *Behaviour Research and Therapy, 40*, 1091-1109.
- Waters, A. M., Wharton, T. A., Zimmer-Gembeck, M. J., & Craske, M. G. (2008). Threat-based cognitive biases in anxious children: Comparison with non-anxious children before and after cognitive behavioural treatment. *Behaviour Research and Therapy, 46*, 358-374.
- Wood, A. Kroll, L., Moore, A., & Harrington, R. (1995). Properties of the Mood and Feelings Questionnaire: a research note. *Journal of Child Psychology and Psychiatry, 36*, 327-334.

## SIG STUDENT POSTER AWARD

CONGRATULATIONS TO:

**Michelle Rozenman**

San Diego State University/University of California, San Diego

**An Initial Investigation of Interpretation Bias in  
Clinically Anxious Youths**

## 2009 Student Travel Award Winner

Kelly A. O'Neil, M.A.

Temple University

Research indicates that anxiety disorders and depressive disorders (i.e. major depressive disorder [MDD] or dysthymic disorder [DD]) are highly comorbid in youth (e.g., Angold, Costello, & Erkanli, 1999) and that anxious youth with comorbid depression have more severe anxious and depressive symptomatology than anxious youth without a depressive disorder (e.g., Franco, Saavedra, & Silverman, 2007). Given that one study reported more severe internalizing symptomatology to be associated with less favorable treatment outcome (Southam-Gerow, Kendall, & Weersing, 2001), the role of depressive comorbidities in the treatment outcome of anxious youth warrants more detailed examination.

There are a number of reasons to examine the role of comorbidities in treatment outcome for youth with anxiety disorders. If comorbid depression negatively affects outcomes for anxious youth, this (a) may limit the generalizability of the findings regarding current treatments for anxious youth, and (b) may help explain why, despite the efficacy of cognitive-behavioral therapy (CBT) for anxious youth as supported by randomized clinical trials (e.g., Kendall, Hudson, Gosch, Flannery-Schroeder, & Suveg, 2008; Walkup et al., 2008), about one third of anxious youth are not treatment responders. Treatment may need to be altered or applied with greater flexibility for youth with comorbid disorders (e.g., Hudson, Krain, & Kendall, 2001).

A limited number of studies have examined the relationship between comorbid depressive disorders and treatment outcome in anxious youth. In a study of exposure-based treatments for anxious youth, participants with comorbid depression were less likely to be treatment successes (Berman, Weems, Silverman, & Kurtines, 2000). Additionally, youth's pretreatment self-report of depressive symptoms was significantly higher among treatment failures than treatment successes. Crawley and colleagues (Crawley, Beidas, Benjamin, Martin, & Kendall, 2008) reported that fewer socially phobic youth were treatment responders to a manual-based CBT when compared to youth with SAD or GAD, but this difference disappeared when the socially phobic youth with comorbid depressive disorders were excluded. Such a result suggests that the comorbid depressive disorders may have contributed to the differential treatment outcome. Together, the findings suggest that a comorbid depressive disorder or co-occurring depressive symptoms may negatively impact treatment outcome in anxiety-disordered youth.

The present study builds upon previous research by using multi-informant and multi-method assessment of (a) comorbid depressive disorders and (b) co-occurring depressive symptoms. Multi-informant assessment of youth's psychopathology is critical given modest levels of cross-informant agreement commonly reported for youth's symptomatology (e.g., Achenbach, McConaughy, & Howell, 1987), which are likely due to the potential for various informants to report on contextually dependent behavior (Achenbach et al., 1987) or to have discrepant attributions and perspectives about the child's behavior (De Los Reyes & Kazdin, 2005). The multi-method assessment in the present study involves both categorical and dimensional measures of comorbid depression. Dimensional measures of comorbid depression are warranted given that subsyndromal levels of depression in youth and adults may be associated with impairment (e.g., Lewinsohn, Solomon, Seeley, & Zeiss, 2000).

The present study extends the examination of the role of comorbid depression to treatment maintenance at one-year follow-up, and uses hierarchical linear modeling (HLM) to account for the nested nature of the observations within participants and missing observations at the one-year follow-up. The present study examined the role of comorbid depression and co-occurring depressive symptoms as measured by (a) clinician depressive diagnosis, (b) child self-report of depressive symptoms, (c) mother-report of depressive symptoms, and (d) teacher-report of depressive symptoms in treatment outcome and maintenance in a sample of clinic-referred youth. The primary hypothesis was that comorbid depression would predict less reduction in the clinical severity ratings for youth's principal anxiety disorder following treatment. It was also hypothesized that comorbid depression would be associated with less reduction in clinical severity ratings for youth's principal anxiety disorder at the one-year follow-up.

## Method

### Participants

Participants were 72 youth (aged 7-14,  $M = 10.39$ ) who received manual-based individual or family CBT for anxiety as part of a randomized clinical trial (RCT) at the Child and Adolescent Anxiety Disorders Clinic (CAADC) at Temple University. All participants met diagnostic criteria for a principal diagnosis of SP, GAD, or SAD as assessed by the Anxiety Disorders Interview Schedule for children and for parents (ADIS-IV-C/P; Silverman & Albano, 1996) at pretreatment. Exclusion criteria for the RCT were: psychotic symptoms, mental retardation, disabling medical condition, the child's participation in concurrent treatment, the child taking anti-anxiety or antidepressant medications, or a principal disorder other than SP, GAD, or SAD (including a principal depressive disorder).

Of the 72 participants, 39 (54.2%) were male; 60 (83.3%) were Caucasian, 9 (12.5%) were African-American, 1 (1.4%) was Hispanic, 1 (1.4%) self-identified as "Other", and 1 (1.4%) did not report race/ethnicity. Thirty-four participants (47.2%) had a principal diagnosis of GAD, 21 (29.2%) had a principal diagnosis of SP, and 17 (23.6%) had a principal diagnosis of SAD. Seventeen participants (23.6%) were youth who had a comorbid (but not principal) diagnosis of current or past MDD or DD at the pretreatment assessment.

### Measures

The ADIS-IV-C/P (Silverman & Albano, 1996) was administered at pre, post, and one-year following treatment to assess for anxiety disorders and comorbid depressive disorders. Diagnosticians provided a Clinical Severity Rating (CSR) for each diagnosis assigned on a 9-point scale (0-8) with a minimum rating of 4 required for a diagnosis. Youth completed the Multidimensional Anxiety Scale for Children (MASC; March, Parker, Sullivan, Stallings, & Conners, 1997) and the Children's Depression Inventory (CDI; Kovacs, 1981, 1992) at pretreatment to assess self-report of anxiety and depressive symptoms. Mother-report and teacher-report of co-occurring depressive symptoms were assessed at pretreatment using the Child Behavior Checklist- Affective Problems Scale (CBCL- Affective Problems Scale; Achenbach & Rescorla, 2001) and the Teacher's Report Form- Affective Problems Scale (TRF- Affective Problems Scale; Achenbach & Rescorla, 2001) respectively.

## Procedure

Participants in the RCT were referred to the CAADC through multiple sources in the community. A brief phone screen was conducted with parent(s) and an intake was scheduled. At the intake interview, informed consent was obtained from parents and assent from children. Assessments were conducted pre, post, and one-year following treatment. All the participants received individual or family CBT that followed the *Coping Cat* program (Kendall & Hedtke, 2006a) and used the *Coping Cat Workbook* (Kendall & Hedtke, 2006b). The treatment details are described in the treatment manual. The treatment manual was applied with flexibility to address cultural, developmental, and individual differences (Kendall, Gosch, Furr, & Sood, 2008). Treatment included 16 weekly, 60-minute sessions. The first eight sessions focus on teaching skills to the child and/or family (psychoeducation), and the final eight sessions provide the child and/or family with the opportunity to practice these skills (exposure tasks).

## Data Analytic Strategy

Treatment outcome and maintenance analyses were conducted using HLM (HLM 6; Raudenbush, Bryk, Cheong, & Congdon, 2004) to account for the nested nature of the observations within participants and missing observations at the one-year follow-up. Hierarchical linear models with fixed effects for time (pretreatment, posttreatment, and follow-up) and comorbid depression and co-occurring depressive symptoms (comorbid depressive diagnosis, child self-report depressive symptoms, mother-report depressive symptoms, teacher-report depressive symptoms) were fitted to the CSR of the principal anxiety disorder to examine treatment outcome and maintenance.

## Results

### Pretreatment Comparisons

Pretreatment analyses revealed that youth with and without comorbid depressive disorders did not differ in terms of age, gender, or principal anxiety disorder. Youth with a comorbid depressive disorder had higher levels of self-reported anxiety symptoms on the MASC than did youth without a comorbid depressive disorder, but this difference was not significant. Youth with a comorbid depressive disorder had significantly higher levels of self-reported depressive symptoms on the CDI, mother-reported depressive symptoms on the CBCL- Affective Problems Scale, and teacher-reported depressive symptoms on the TRF- Affective Problems Scale than did youth without a comorbid depressive disorder. The clinician's diagnosis of comorbid depressive disorders and child self-report, mother-report, and teacher-report of depressive symptoms were significantly but modestly correlated, a finding that is consistent with cross-informant agreement commonly reported in the child psychopathology literature (e.g. Achenbach, 1987; De Los Reyes & Kazdin, 2005).

### Depression and Anxiety Disorder Severity

Analyses revealed a main effect of comorbid depressive diagnosis,  $t(67) = 2.14, p < .05$ , such that youth with a comorbid depressive diagnosis had significantly higher CSR scores for their principal anxiety disorder at pretreatment than youth with no comorbid depressive disorder. The greater severity of the principal anxiety disorder of youth with a comorbid depressive diagnosis persisted at posttreatment and follow-up. Predicted CSR scores for youth with and without comorbid depressive diagnoses were calculated from the results of the HLM models to illustrate the main effect of comorbid depressive diagnosis (Figure 1). Analyses revealed a main effect of child self-reported depressive symptoms,  $t(67) = 2.55, p < .05$ , such that youth who reported higher levels of depressive symptoms had significantly higher CSR scores for their principal anxiety disorder at pretreatment. The greater severity of the principal anxiety disorder of youth with higher levels of child self-reported depressive symptoms persisted at posttreatment and follow-up. Predicted CSR scores for youth with high and low levels of self-reported depressive symptoms (plus or minus 1 SD on the CDI) were calculated to illustrate the main effect of child self-reported depressive symptoms on anxiety disorder severity (Figure 2). The main effects of mother-reported and teacher-reported depressive symptoms were not significant.

**Depression and Treatment Outcome**

Analyses revealed that child self-report of depressive symptoms (CDI) predicted treatment outcome,  $t(176) = 2.03, p < .05$ , such that youth who reported higher levels of depressive symptoms experienced significantly less reduction in the CSR score of their principal anxiety disorder from pre- to post-treatment. None of the other depression measures predicted treatment outcome.

**Depression and Treatment Maintenance**

Analyses revealed that mother report of depressive symptoms (CBCL- Affective Problems Scale) predicted treatment maintenance,  $t(176) = 2.70, p < .01$ , such that youth with higher levels of mother-reported depressive symptoms experienced significantly less reduction in the CSR score of their principal anxiety disorder from posttreatment to the one-year follow-up. None of the other depression measures predicted treatment maintenance.

**Discussion**

The present findings indicate that despite beginning treatment with a more severe principal anxiety disorder and more severe depressive symptomatology, anxiety-disordered youth with a comorbid depressive diagnosis experienced as much reduction in the severity of their principal anxiety disorder after treatment and at a one-year follow-up as did anxiety-disordered youth without a comorbid depressive diagnosis. This finding was contrary to our hypothesis and to some prior research (Berman et al., 2000; Crawley et al., 2008). As indicated by the present findings, it is specifically the child's own report of their depressed mood that is predictive of less favorable treatment outcome.

The finding that higher levels of child self-reported depressive symptoms predicted less favorable treatment outcome is consistent with the report of Berman and colleagues (2000) that anxious youth who were treatment failures had significantly higher CDI scores at pretreatment than youth who were treatment successes. There are several potential explanations for the differential role of child self-report of depressive symptoms in outcome. It may be that the youth's current internal experience of depressed mood did not manifest in depressive symptoms observable to the parents and teachers of these youth, as informant agreement about depressive symptoms was, and is generally, low. Youth with higher levels of self-reported depressive symptoms may experience less improvement in anxiety because their depression interferes with engagement in treatment. It is also possible that self-reported depression on the CDI predicted treatment outcome because the CDI measures the general construct of negative affectivity, rather than depression specifically (e.g., Comer & Kendall, 2005; Stark & Laurent, 2001).

The current study added to the literature by examining both mother and teacher reports of co-occurring depressive symptoms as potential predictors of outcome and maintenance. We found that youth with higher levels of mother-reported depressive symptoms at pretreatment experienced less improvement over time than youth with lower levels of mother-reported depressive symptoms. Mothers may have unique knowledge about behavioral symptoms of depression not available to clinicians, teachers, or youth themselves. It is also possible that mothers report on more stable, trait-like depression that affects youth into the maintenance period. Further research is necessary to better understand sources of mothers' ratings of child depression and the role of depression in treatment maintenance.

The findings have implications for both assessment and treatment of anxiety-disordered youth. Given the high rate of comorbidity between anxiety and depression, it is important to assess for comorbid depressive disorders when treating anxiety-disordered youth. It may be particularly important to assess the child's self-report and the mother's report of co-occurring depressive symptoms, given the differential role of self-reported and mother-reported depressive symptoms in treatment outcome and maintenance in the present study. The low level of informant agreement about co-occurring depressive symptoms underscores the need for multi-informant assessment.

## References

- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin, 101*, 213-232.
- Achenbach, T. M., & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington: University of Vermont, Research Center for Children, Youth, & Families.
- Angold, A., Costello, E. J., & Erkanli, A. (1999). Comorbidity. *Journal of Child Psychology and Psychiatry, 40*, 57-87.
- Berman, S. L., Weems, C. F., Silverman, W. K., & Kurtines, W. M. (2000). Predictors of outcome in exposure-based cognitive and behavioral treatments for phobic and anxiety disorders in children. *Behavior Therapy, 31*, 713-731.
- Chu, B. C., Colognori, D., Weissman, A. S., & Bannon, K. (2008). An initial description and pilot of group behavioral activation therapy for anxious and depressed youth. *Cognitive and Behavioral Practice, 16*, 408-419.
- Cole, D. A., & Martin, N. C. (2005). The longitudinal structure of the Children's Depression Inventory: Testing a latent trait-state model. *Psychological Assessment, 17*, 144-155.
- Comer, J. S., & Kendall, P. C. (2005). High-end specificity of the Children's Depression Inventory in a sample of anxiety-disordered youth. *Depression and Anxiety, 22*, 11-20.
- Crawley, S., Beidas, R., Benjamin, C., Martin, E., & Kendall, P. C. (2008). Treating socially phobic youth with CBT: Differential outcomes and treatment considerations. *Behavioural and Cognitive Psychotherapy, 36*, 379-389.
- De Los Reyes, A., & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin, 131*, 483-509.
- Ehrenreich, J. T., Goldstein, C. R., Wright, L. R., & Barlow, D. H. (2009). Development of a unified protocol for the treatment of emotional disorders in youth. *Child and Family Behavior Therapy, 31*, 20-37.
- Franco, X., Saavedra, L. M., & Silverman, W. K. (2007). External validation of comorbid patterns of anxiety disorders in children and adolescents. *Journal of Anxiety Disorders, 21*, 717-729.
- Hudson, J. L., Krain, A. L., & Kendall, P. C. (2001). Expanding horizons: Adapting manual-based treatments for anxious children with comorbid diagnoses. *Cognitive and Behavioral Practice, 8*, 338-346.
- Kendall, P. C., Brady, E. U., & Verduin, T. L. (2001). Comorbidity in childhood anxiety disorders and treatment outcome. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 787-794.
- Kendall, P. C., Gosch, E., Furr, J., & Sood, E. (2008). Flexibility within fidelity. *Journal of the American Academy of Child and Adolescent Psychiatry, 47*, 987-993.
- Kendall, P. C., & Hedtke, K. (2006a). *Cognitive-behavioral therapy for anxious children: Therapist manual*, (3rd ed.). Ardmore, PA: Workbook Publishing.
- Kendall, P. C., & Hedtke, K. A. (2006b). *Coping cat workbook* (2<sup>nd</sup> ed.). Ardmore, PA: Workbook Publishing.
- Kendall, P. C., Hudson, J. L., Gosch, E., Flannery-Schroeder, E., & Suveg, C. (2008). Cognitive-behavioral therapy for anxiety disorder youth: A randomized clinical trial evaluating child and family modalities. *Journal of Consulting and Clinical Psychology, 76*, 282-297.
- Kendall, P. C., Kortlander, E., Chansky, T. E., & Brady, E. U. (1992). Comorbidity of anxiety and depression in youth: Treatment implications. *Journal of Consulting and Clinical Psychology, 60*, 869-880.
- Kovacs, M. (1981). Rating scales to assess depression in school aged children. *Acta Paedopsychiatrica, 46*, 305-315.
- Kovacs, M. (1992). *Children's Depression Inventory (CDI) Manual*. North Tonawanda, NY: Multi-Health Systems.
- Lewinsohn, P. M., Solomon, A., Seeley, J. R., & Zeiss, A. (2000). Clinical implications of "subthreshold" depressive symptoms. *Journal of Abnormal Psychology, 109*, 345-351.
- March, J., Parker, J., Sullivan, K., Stallings, P., & Conners, C. (1997). The Multidimensional Anxiety Scale for Children (MASC): Factor structure, reliability and validity. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*, 554-565

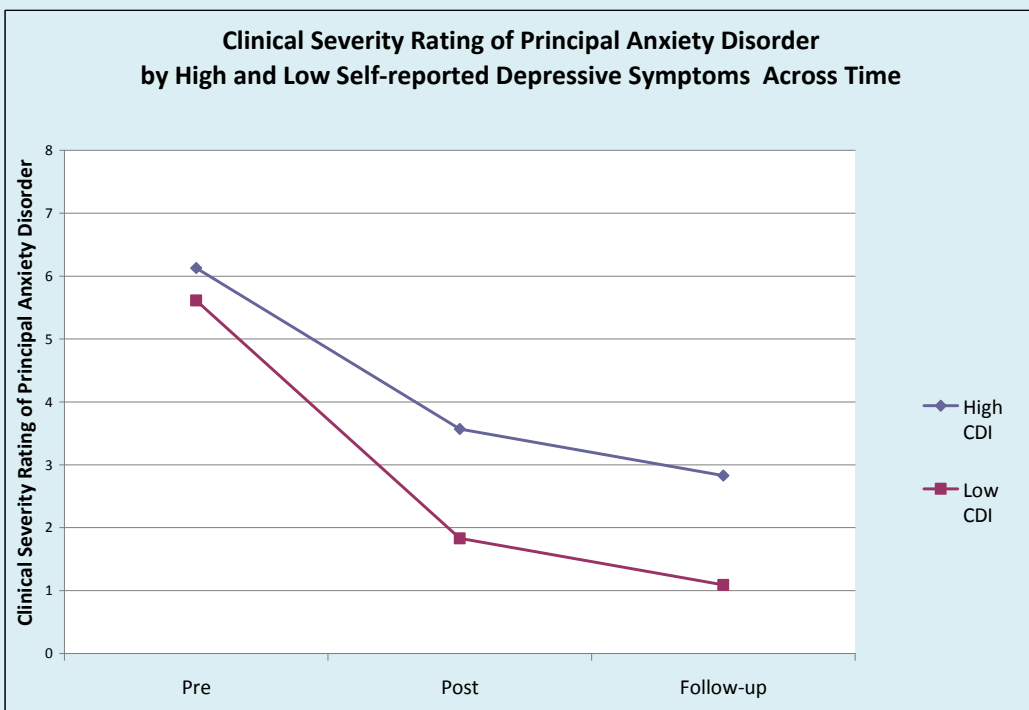
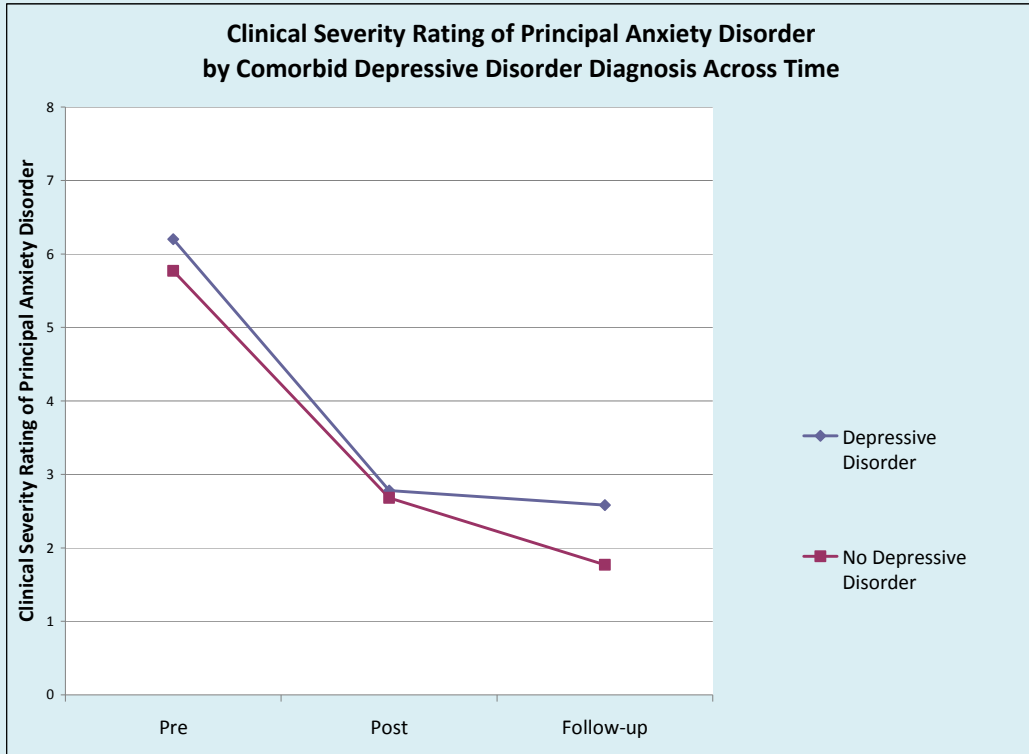
Silverman, W. K., & Albano, A. M. (1996). *Anxiety Disorders Interview Schedule for DSM-IV: Child and Parent Versions*. Boulder, CO: Graywind Publications Incorporated.

Southam-Gerow, M., Kendall, P. C., & Weersing, V. R. (2001). Examining outcome variability: Correlates of treatment response in a child and adolescent anxiety clinic. *Journal of Clinical Child Psychology, 30*, 422-436.

Stark, K. D., & Laurent, J. (2001). Joint factor analysis of the Children's Depression Inventory and the Revised Children's Manifest Anxiety Scale. *Journal of Clinical Child Psychology, 30*, 552-567.

Walkup, J., Albano, A. M., Piacentini, J., Birmaher, B., Compton, S., Sherrill, J., et al. (2008). Cognitive behavioral therapy, sertraline, or a combination in childhood anxiety. *New England Journal of Medicine, 359*, 2753-2766.

Weersing, V. R., Gonzalez, A., Campo, J. V., & Lucas, A. N. (2008). Brief behavioral therapy for pediatric anxiety and depression: Piloting an integrated treatment approach. *Cognitive and Behavioral Practice, 15*, 126-139.



## Student Corner: Notes from the Conference Floor

### *“Child And Adolescent Anxiety Multimodal Study (CAMS): New Findings”*

Summarized by Natoshia Raishevich Cunningham, M.S.

This symposium was chaired by Dr. Golda Ginsburg with Drs. Moira Rynn and Scott Compton serving as discussants. The first talk addressed the secondary outcomes of the CAMS study and was presented by Dr. Anne Marie Albano. These secondary outcomes included clinician severity ratings (CSRs) of the anxiety disorder, and parent- and child-reported anxiety (MASC). Trends of secondary outcomes in the CAMS trial followed the trends in primary outcomes in that the combined treatment was superior to monotherapies, which were superior to the placebo condition. In addition, secondary outcomes suggest that when youth respond to treatment, parent-reported psychopathology decreases. In addition, ratings of child functioning (CBCL) demonstrate significant reductions across all active treatment groups compared to placebo. In measuring other secondary outcomes (e.g., coping), the relationship was less clear and further analyses, such as a factor analytic approach, will be needed. Next, Dr. Philip Kendall addressed moderators of outcome in the CAMS trial. An array of potential moderators was examined, including: demographics, severity/duration of illness, parent psychopathology, psychosocial environment, comorbidity, and treatment expectancy (i.e., expectation for improvement). In sum, there were not many moderators of outcome. One finding suggested that Hispanics responded better to placebo and less well to combination therapies compared to Caucasians. In addition, at baseline, youth diagnosed with ADHD responded marginally better to medication and placebo than CBT. Another finding suggested that high levels of parental anxiety were associated with better outcomes with CBT. Interestingly, treatment expectancies do not yield a large effect on outcome. Of 25 potential moderator variables examined, only 8 were found to serve as potential moderators. Next, Dr. Moira Rynn addressed safety outcomes in the CAMS study. Safety outcomes were addressed by looking at adverse events by age. Moderate/severe adverse events were considered as causing impairment. These findings are important given the controversy surrounding antidepressant medications and their potential relation to suicidal ideation and behaviors in youth. This investigation concluded that the treatments were generally safe and well-tolerated. There were more adverse events: 1) in the combination treatment group, 2) among children 12 years and under, 3) physical adverse events in adolescents, and 4) psychiatric adverse events greater in children. Finally, Dr. Golda Ginsburg presented long-term outcomes, defined as 6-months after treatment. There were no differences in completion rates across arms. In addition, 81% of youth receiving combination treatment were “responders” based on CGI. Across 24-week outcome data, findings indicated that combination treatment recipients responded better than those who received mono therapies, whereas youth who received mono therapies responded better than pill placebo. At 36 weeks, the combination group had the highest rates of improvement.



## Student Corner: Notes from the Conference Floor

### *“Youth with comorbid anxiety and conduct problems: Epidemiology, assessment, and treatment”*

Summarized by Kaitlin Gallo, M.A.

This symposium was chaired by Natoshia Raishevich, M.S., and Dr. Tom Ollendick, with Dr. Joel Sherrill serving as the discussant. Panel speakers integrated research findings about comorbid anxiety and conduct problems in youth. In the first presentation, Natoshia Raishevich reviewed data on the prevalence of co-occurring anxiety and conduct problems in youth. She explained, using data from both clinic and community samples, that the observed comorbidity of these problems is greater than what can be accounted for by chance. For example, in community and clinic samples, respectively, 62% and 40% of youth with Oppositional Defiant Disorder (ODD) met criteria for an anxiety disorder as well.

In the next presentation, Dr. Chris Barry talked about the assessment of youth with both anxiety and conduct problems. He outlined a number of issues to consider in the assessment and case conceptualization of youth with both problems. He explained that assessors should be prepared to assess for a broader range of impairments as well as the developmental pathways of the symptoms and presenting problems. For example, in some youth, oppositionality might stem from anxiety, so a thorough assessment should be conducted to see whether this or other trajectories are present. Dr. Barry encouraged attendees to assess the antecedents and consequences of symptoms and to interview multiple informants when formulating a case conceptualization. He also explained that co-occurring anxiety and conduct problems in this sample may heighten the risk for depression and some forms of aggression, which is important information to consider when planning treatments for these youth.

Next, Dr. Ross Greene discussed data on the use of collaborative problem solving (CPS) to treat children with co-occurring anxiety and conduct problems. Dr. Greene explained that the Collaborative Problem Solving (CPS) approach was initially developed to treat “explosive” youth. The CPS model addresses challenging behaviors by considering that they occur when the cognitive demands being placed on a person are greater than the person’s capacity to adaptively respond to the situation. The main goals of the CPS model are to provide empathy, define the problem, and brainstorm solutions that address the concerns of everyone involved (parents and youth). Dr. Greene presented data from studies in various (e.g., inpatient and juvenile detention) settings that demonstrated the success of the CPS model in various populations.

Finally, Dr. Rhea Chase outlined how to use Parent-Child Interaction Therapy (PCIT) to treat youth with Separation Anxiety Disorder. PCIT was initially developed to treat preschoolers with disruptive behavior disorders, and several studies have demonstrated its effectiveness with that population. The principles of PCIT have recently been applied to decrease fearful behaviors and increase brave behaviors in youth with Separation Anxiety Disorder (SAD) as well as with comorbid SAD and ODD, with promising results. Dr. Chase suggested that symptom-specific modules can be helpful in treating children with comorbid disorders.

Dr. Joel Sherrill brought the information from the four preceding presentations together. He explained the importance of defining the significance of these comorbid problems and properly conceptualizing cases in order to examine and implement evidence-based interventions for these problems. He also offered his thoughts on future research in this area. Specifically, he recommended research on the core processes and underlying substrates of these comorbid problems, as well as its longitudinal course and trajectories. Additionally, he said that research is needed on integrated, sequenced, or modular interventions, which may be the wave of the future for these comorbid problems.

## Job Market

The following is an announcement for a Postdoctoral position in child anxiety clinical research at the University of Pennsylvania. Please read below for further information.

The **Child/Adolescent OCD, Tic, Trich, & Anxiety Group (COTTAGE)** in the Department of Psychiatry at the **University of Pennsylvania School of Medicine** is offering a two-year postdoctoral fellowship. The COTTAGE is a specialty center with a strong dual research and clinical focus. Successful applicants will have experience in evidence-based psychological treatments (e.g., CBT) and assessment of child and adolescent OCD, anxiety, and related disorders (e.g., Tics and Trichotillomania). Strong quantitative skills and prior experience in treatment outcome research preferred. Applicants must have a Ph.D. degree or equivalent and have demonstrated excellent qualifications in education, research, and clinical care.

The successful candidate will join the team of child and adolescent researchers/clinicians at the COTTAGE, and will be supervised by Martin Franklin, Ph.D. and other specialized, licensed psychologists. Information about the COTTAGE is available at <http://www.med.upenn.edu/cottage/>.

Please submit your application materials including curriculum vitae, letter of interest, and 3 letters of recommendation to:

Diana Antinoro, Psy.D.  
Child/Adolescent OCD Tic, Trich & Anxiety Group  
3535 Market Street, 6th floor  
Philadelphia, PA 19104  
antinoro@mail.med.upenn.edu.

The University of Pennsylvania is an equal opportunity, affirmative action employer. Women and minority candidates are strongly encouraged to apply.

## Student Corner: Notes from the Conference Floor

### *“POTS II”*

Summarized by Shelly Gonzalez, M.S.

The publication of the POTS study in 2004 marked the completion of the first large-scale randomized trial testing the relative efficacy of CBT, pharmacotherapy, their combination, and pill placebo for the treatment of pediatric OCD. Results indicated that the combination of selective serotonin reuptake inhibitor (SSRI) and CBT produced the highest improvement rates, with some suggestion that CBT may provide advantage over medication treatment on some measures of improvement. Despite evidence that active treatments provide clinical benefit beyond the effects of placebo, a substantial portion of youths failed to make clinically significant improvements in even the most efficacious treatment group (nearly half). Despite positive evidence for the efficacy of CBT in the treatment of OCD, many providers continue to turn to medication as a first-line treatment. To address the needs of the many youths who would benefit from further clinical improvement, the POTS study team designed the POTS II study, an investigation of the clinical management of youths who have demonstrated partial response to treatment with SRI.

Members of the investigative team (at Brown, UPenn, and Duke) described the study design<sup>1</sup>, sample characteristics, and recent results of the acute treatment phase. First, Abbe Garcia, Ph.D. (Brown) provided an introduction and overview of the project aims and methods of the randomized clinical trial. The main objective of the POTS II design is to evaluate the relative efficacy of the two psychosocial augmentations to medication in order to determine how best to implement services of CBT in a manner that is accessible to youths and feasible for physicians and service settings. During the 12-week treatment phase, youths were randomized to one of three treatment arms: medication management plus CBT (MM + CBT; n=43), MM plus instructions in CBT (MM + I-CBT; n=39), or continue on MM alone (n=42). In all treatment arms, MM consisted of seven 20-30 minute sessions over 12 weeks. Youths in the MM + CBT group received 14 sessions of CBT over 12 weeks, delivered by a psychologist, while youths in the MM + I-CBT group received psychoeducation and instructions from the study psychiatrist on how to implement key elements of exposure and response prevention outside of the session. These instructions occurred during their 7 medication visits (additional description of I-CBT can be found in Freeman et al., 2009). Eligible youths were ages 7-17 (mean age = 13.1 years, with over 68% age 12 or older), had baseline CYBOCS scores of 16 or higher, and were partial responders to SRI treatment. Partial responders, as determined by a study pharmacotherapist, had typically been on medication for over 9 weeks (mean length = 1.4 years) and had experienced some clinical improvement on SRI but continued to demonstrate significant OCD symptoms and typically experienced adverse side effects at increased doses or demonstrated a flat response curve.

Next, Jennifer Freeman, Ph.D. (Brown) described sample characteristics using baseline data. Of the 124 youths who were randomized to treatment, 93% were Caucasian. Though this ethnic makeup is consistent with other OCD trials and prevalence of OCD is comparable across ethnic groups, a number of reasons for this discrepancy were postulated. Some hypotheses are that some families may differ in their experience of barriers to help-seeking and access to prescriptions, that OCD may be misdiagnosed in some groups, and that medication may be less acceptable to some groups, thus limiting the number of youths who have received SSRI. Overall, the sample had moderate to severe OCD symptoms. Unexpectedly, the sample tended to have high family functioning, average levels of impairment due to OCD, and relatively low parental symptoms.

The primary outcomes and moderators of the acute treatment outcomes were summarized by Marty Franklin, Ph.D. (UPenn). Outcomes were assessed using two criteria: responders were indicated by a  $\geq 30\%$  reduction in CYBOCS total, and excellent responders had a post-treatment CYBOCS score of  $\leq 10$  points. Using intent-to-treat analyses, 67% MM+CBT, 37% MM+I-CBT, and 26% MM-only were responders, and 33% MM+CBT, 11% MM+I-CBT, and 9% MM-only were excellent responders. 25% of MM-only were premature terminators or dropouts compared to 10% in the other two groups. Thus, results appear to support the benefits of full CBT and argue for continued efforts to disseminate CBT into community settings.

A host of potential predictors and moderators of treatment outcome were examined and findings were presented by Jeffrey Sapyta, Ph.D. (Duke). Age, site, and gender were unrelated to outcome across measures. However, higher CYBOCS and parental psychopathology (BSI) at baseline was associated with worse outcomes at post-treatment. Moderator findings varied depending on the treatment comparison. Moderators between CBT and MM-only conditions were not observed, meaning that there was no evidence that in some cases CBT would be better than MM-only, or vice versa. There was some evidence that higher reported impairment (higher COIS) and less reported experiential avoidance (higher WAM) were related to better outcome in CBT vs. I-CBT. Higher WAM was associated with better I-CBT response compared to MM-only.

The discussant, John Piacentini, Ph.D. (UCLA) emphasized that one of the important features of the POTS II design is that its aims reflect the real needs of community treatment. Medication use is the prominent treatment model in community settings, and in reality, youths are most likely to receive medications for OCD as a first line treatment. Although the investigators considered a number of potentially informative research designs, their choice to study partial responders was very practical in that it captures many of the youths in the community who seek treatment for OCD. Dr. Piacentini expressed that doing what is most needed, not what is easiest, is a laudatory effort. He also discussed the results of I-CBT, stating that although it appears to be most feasible for community settings, it may be missing the “guts” of effective CBT treatments. He highlights that CBT is not simply a collection of techniques, but a spirit employed by clinicians who have the heart and willingness to do whatever it takes to help an individual face and overcome whatever disturbing, gruesome, or tedious task that serves as a source of anxiety. Because I-CBT lacks some seemingly critical features, such as in-session exposures, patients may not receive the coaching, modeling, and encouragement that are needed and difficult to capture in psychoeducation and didactics alone. Further, important facets of OCD maintenance, such as family accommodation, might not be addressed given the limited number of sessions in I-CBT. For these reasons, Dr. Piacentini speculated that a feasible real world option might be for I-CBT to be an intermediate step between medication and CBT, as one-third of youths did improve with this intervention. This is an innovative approach, and the results of the POTS II study provide a substantial contribution to the current evidence base of treatments for OCD.

<sup>1</sup>Additional detail about the rationale, design, and methods can be found in Freeman, J.B., Choate-Summers, M. L., Garcia, A. M., Moore, P. S., Sapyta, J. J., Khanna, M. S., et al. (2009). The Pediatric Obsessive-Compulsive Disorder Treatment Study II: rationale, design, and methods. *Child and Adolescent Psychiatry and Mental Health*, 3, ArtID 4, 15 pp.