ADVANCES IN Cognitive Therapy newsletter

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ACT PRESIDENT'S MESSAGE DENNIS GREENBERGER, PHD, ACT

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I have always appreciated the durable and expandable nature of the cognitive model. The simple yet powerful idea that there is a reciprocal interaction between thoughts, moods, behaviors and biology is a remarkable way of understanding experiences – pathological and healthy. The model further accounts for early experiences that create or contribute to ways that we look at ourselves and others. The cognitive model allows for a clear understanding of a person's experience and it creates a map of potential cognitive and behavioral interventions.

Positive psychology has been one of the more exciting developments in psychology in the last 15 years. It is not surprising that Martin Seligman, one of the luminaries of CBT has been at the forefront of positive psychology. The field of Positive Psychology has been embraced and advanced by other CBTers including many in the Academy.

The CBT model seems wholly consistent with newer developments in positive psychology. Positive psychology has researched positive emotion, gratitude, a positive vision of one's self and future, meaning, engagement, optimism, positive ethics, resilience, self-determination, mindfulness, compassion, empathy, altruism and forgiveness. The traditional CBT model may be a template to understand positive as well as negative experiences as well as other dimensions that are the focus of positive psychology.

Sonja Lyubomirsky in *The How of Happiness* describes multiple happiness activities including cultivating optimism (cognition) and practicing acts of kindness (behavior). Cognitive therapists are very familiar with the negative, pessimistic explanatory style of depressed patients. We address this regularly in treatment. The opposite side of this coin is the cultivation of optimism - a positive psychology exercise. Research has demonstrated that optimism is correlated with happiness or a sense of well-being. A change in our thinking (optimism) affecting a change in our mood (happiness) is the nature of the reciprocally interacting CBT model.

Lyubomirsky goes on to describe research demonstrating that practicing acts of kindness (behavior) also contributes to happiness. Similarly, this is entirely consistent with the CBT model which suggests that any change in behavior or cognition will be followed by a change in mood. The CBT model is one way of explaining the results of these Positive psychology exercises. Research findings in the field of Positive Psychology may expand the CBT model to positive emotions and a sense of well-being.

Gratitude is a foundational theme in many religious traditions and has been extensively researched in the Positive Psychology literature. Gratitude is the ability and willingness to think about the people, events and experiences in your life that you are appreciative

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IACP PRESIDENT'S MESSAGE
LATA K. MCGINN, PHD, ACT

As my three-year term as president of IACP draws to a close, it is inevitable that I reflect back on the last three years. I began my term as president at the 7th *International Congress of Cognitive Psychotherapy* (ICCP), chaired by IACP board member Mehmet Sungur in Istanbul, Turkey in 2011. I will end my term in June, 2014 at the closing ceremonies of the 8th *International Congress of Cognitive Psychotherapy* (ICCP), chaired by Wing Wong in Hong Kong. Although the global economy continues to be sluggish, a lot has changed in the world since 2011. The construction of the freedom tower was finally completed in my hometown in New York City, social media has changed our lives immeasurably both in good ways and bad, and the arctic sea melt has increased appreciably, leading to severe climactic changes in the world.

Our field has witnessed many changes as well. There are now close to 300 meta-analyses on CBT demonstrating that CBT is effective for a wide range of psychological problems and disorders. Additionally, Eastern philosophy has overwhelmingly influenced the latest advances in cognitive behavioral approaches. Constructs such as mindfulness, dialectical thinking, and acceptance are no longer waves that ebb and flow but are steady streams that influence how cognitive behavioral therapists approach treatment. Emerging research also offers new insights on the impact of therapists, therapy processes, and clients' sociocultural and demographic factors on treatment, although research in these areas still lags behind technique-based approaches.

Broader changes have also transpired over the last three years. Despite its waning influence over disease classification and treatment, the fifth edition of the *Diagnostic and Statistical Manual (DSM)* was published in 2013 amidst much fanfare and criticism. Although the codes are essentially the same, the *International Classification of Diseases* continues to exert a far greater influence across the globe than the DSM, and will also be officially used for billing purposes in the US by the end of 2014. More importantly, the year 2013 witnessed the launch of an alternative disease classification for purposes of research. Established by the *National Institute of Mental Health* in the US, the *Research Domain Criteria* (RDoC) are intended to classify psychopathology based on dimensions of observable behavior and neurobiological measures rather than on categorical dimensions based on clinical observation and self-reported symptoms. The RDoC project intends to draw on latest research across genomics, neuroscience, and behavioral science, and hopes to inform better approaches for clinical diagnosis and treatment in the future.

The *International Association of Cognitive Psychotherapy* (IACP) has also undergone many changes since I began my term as president. Not least of all, IACP received a facelift as we successfully developed and launched our new logo and website and our journal's new electronic management portal. As president, my goals were to increase IACP's presence throughout the world and to disseminate CBT, particularly in regions of the world where CBT is under-represented. Our initiatives to offer a discounted membership rate for economically disadvantaged regions, and to offer free online training for our members were met with success. We now have over 40 countries represented in our membership and we have launched free training initiatives for our members. Under the direction of Henrik Tingleff, chair of IACP's International Training Committee, IACP launched a speaker's bureau and a monthly video newsletter for our members. Under John Riskind's editorship, the quality and the impact factor of our scientific peer-reviewed journal, the *International Journal of Cognitive Therapy*, has climbed over the last three years. David Dozois transformed our newsletter published jointly with the *Academy of Cognitive Therapy*, and has now placed it in the skillful hands of Simon Rego, who continues to offer excellent columns for our readers. With Lynn McFarr at the helm of our Public Domain Committee, IACP now has 2,354 members on our Facebook page and has a presence on twitter. Under Frank Dattilio's direction and guidance, IACP successfully launched the International Delegate Program - we now have delegates from 25 countries, with more delegates being appointed each year. My sincere thanks go to Sharon Clevenger and Laura Stone for their able management of IACP operations, I wish them well as they move on from their roles. I also want to thank past-president Keith Dobson for his invaluable contributions to IACP as he leaves the board at the end of June after nine years of service. By the time you read this column, we will be on our way to Hong Kong to participate in the 8th *International Congress of Psychotherapy*, where conference attendees will learn about the latest advances in CBT across the globe and mingle with each other. I want to extend my gratitude to Wing Wong and his extraordinary team for hosting our congress. It has been a pleasure working with him. I also want to thank Scientific Program Chair, Ron Rapee, and the scientific advisory team for putting together an excellent program at the Congress. It is my hope that over time every country will be represented within our membership and delegate program, and that IACP will continue to disseminate CBT to all its members. My goal is to build a truly inclusive world CBT organization that increases mutual and respectful understanding and dialogue between communities throughout the world.

IACP's mission, to address the burden of mental illness by facilitating the growth of CBT as a scientific discipline and professional activity, is an important one. Although the RDoC project includes behavioral sciences in its mandate, its clear emphasis is on using advances in genetics and neural basis of mental illness to inform classification and treatment. Despite the overabundance of research demonstrating efficacy of cognitive behavioral approaches, the

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STANDING ON THE SHOULDERS OF GIANTS: AN INTRODUCTION TO ANNE MARIE ALBANO, PH.D., ABPP, ACT

BY SIMON A. REGO, PSYD, ABPP, ACT, MONTEFIORE MEDICAL CENTER, BRONX, NEW YORK

If you are a regular reader of *Advances*, I am sure by now you are aware that this column features a giant in the field who is asked to write about his or her influences in training. Past issues have featured contributions from luminaries in our field such as Art Nezu, David M. Clark, Christopher Fairburn, Philip Kendall, Jack Rachman, and most recently, Aaron Beck. While I am certainly very proud of this list, you may have noticed a certain theme: thus far, all of our featured giants have been men! Needless to say, therefore I was thrilled when Dr. Anne Marie Albano accepted my invite to be our next contributor, as hers was the first face that popped into my head when thinking of the next giant in the field to invite to contribute to the newsletter ***and*** this is also the first step towards correcting this gender imbalance!

Dr. Albano is an Associate Professor of Clinical Psychology in Psychiatry within the Division of Child and Adolescent Psychiatry at the Columbia University College of Physicians and Surgeons and Director of the Columbia University Clinic for Anxiety and Related Disorders. She received her Ph.D. in Clinical Psychology from the University of Mississippi and completed a Postdoctoral Fellowship at the Phobia and Anxiety Disorders Clinic of the Center for Stress and Anxiety Disorders at SUNY-Albany, under the mentorship of David H. Barlow, Ph.D.

Dr. Albano is Past President of both the Society for Clinical Child and Adolescent Psychology of the American Psychological Association and the Association for Behavioral and Cognitive Therapies. She is Associate Editor of the Journal of Consulting and Clinical Psychology and a past Editor of the journal Cognitive and Behavioral Practice. Dr. Albano is a Founding Fellow of the Academy of Cognitive Therapy, a Beck Institute Scholar, and Board Certified in Clinical Child and Adolescent Psychology.

Dr. Albano was a principal investigator on two of the largest clinical studies in children funded by the National Institutes of Mental Health, the Child/Adolescent Anxiety Multimodal Treatment Study (CAMS), and the Treatments for Adolescents with Depression Study (TADS). Overall, Dr. Albano's clinical and research careers have centered on developing and disseminating effective treatments for anxiety and depression in children, adolescents, and young adults.

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STANDING ON THE SHOULDERS OF GIANTS

ANNE MARIE ALBANO, PH.D., ABPP, ACT
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It is a distinct honor to be asked to contribute my thoughts about my mentors and their influence on my development and career in cognitive behavioral therapy. Before I go back to the beginning, let me start with the present. I am a clinical psychologist, scientist-practitioner, and the director of an empirically-supported clinical and research program housed within a department of psychiatry. My roots are "heavy-duty" behavioral and I fully identify with the cognitive-behavioral school and model. My research is focused on developing effective CBT approaches for children, adolescents, and young adults.

In 1977, I was a community college transfer student to Florida State University. My plan was to become a photojournalist and live a life somewhere in between Jackie Kennedy's and Dorothea Lang's. It took just 2 weeks of journalism classes to turn me topsy-turvy and send me to drop/add, where my second interest, psychology, wound up filling my schedule. Given that I wasn't quite prepared to know what courses to take and whether I could even make a go of this major, I literally knocked on doors throughout the psychology building, asking one professor after another if they would help me to understand what it would take to become a psychologist and would they also advise me over the longer term.

Feeling like a Fuller Brush salesperson, one door after another was shut until I met Charles H. Madsen, Jr., professor of clinical and school psychology. Charlie is best known for his work in classroom management training and parenting. Using multiple baseline designs, Charlie's work demonstrated that the combination of ignoring inappropriate behavior while showing approval for appropriate behavior was key for teachers in establishing control in the classroom. He invited me into his office and for over two hours, Charlie listened, explored, talked, advised, and encouraged my interest in the field. Soon, I was taking a full complement of classes, assisting his doctoral students on their research projects, and working as a therapy assistant in his clinical practice.

For the three years I was steeped in behavioral principles and their application to relieving human suffering. Clinically, Charlie taught me how to conduct a range of behavioral techniques, all delivered within a sound functional analysis of the presenting problem. I have very clear memories of his demonstration of systematic desensitization, with a patient who was near completely housebound with agoraphobia. I am forever grateful to Charlie and his patient for welcoming a very green 20-year old into the therapy room, where

I first observed and learned the application of anxiety reduction methods. I conducted imaginal desensitization with this patient and later, in-vivo desensitization in her home, paving the way for my later work in exposure therapy. Clinically, my work expanded to conducting in vivo social skills training with young adults suffering with schizophrenia, and in applying thought stopping and contingent reinforcement techniques with an older adult with major depression.

Being an integral part of Charlie's clinical team, in addition to taking graduate seminars and practica with his students, convinced me that I indeed did want to pursue psychology and to commit to the behavioral model. Charlie engaged me in work as a confederate for several of his graduate students, including one Richard G. Heimberg, who was conducting his dissertation on heterosocial dating anxiety in shy men. I assisted Rick for a semester on his research after which he went onto a stunning career. I literally carried Rick's dissertation around for the next two decades and used it as my key reference for how to design and organize an exceptional behavioral experimental program of research. Little did I know that these early experiences would be foundational and enduring to my overall development and central to my work today, and that Rick would one day figure prominently in my professional life.

My next stop in 1980 was an experimental psychology master's program at the University of Richmond as I was not yet ready for a prime time PhD program. At UR, I had the great fortune to study under Matt Jaremko, who had us delve deeply into Skinnerian behaviorism, paradigm shifts in science, and empiricism in applied clinical psychology. Matt challenged us to be critical in our analysis of the applied clinical treatment literature, and it was through his indefatigable Socratic teaching style and mentorship that I woke up to an understanding that psychological treatments could and should be subjected to empirical testing, much the way medications were for various medical illnesses. Matt also had us studying the cognitive revolution in behavior therapy, and he introduced us to Don Meichenbaum.

Together, Matt and Don were publishing their work on stress and coping, focusing on the notion of the multifaceted nature of both. Whereas stress is multidetermined and can exert its effects for a lifetime, successful coping encompasses multiple strategies, flexibly and variably applied within certain contexts, with individual differences being key to understanding the patient and their functional status. Don joined us on campus for colloquia and a workshop, and took us through his self-instructional training approach for children with impulsive behavior. This was the early days of the treatment "manual", which turned out to be a 25-page mimeographed document that was packed with step-by-step instructions for guiding children in developing self-control skills.

At the same time, as a research assistant at the Virginia Treatment Center for Children, I was supervised by Conway Saylor and Al J. Finch, Jr., who were undertaking the study of multimethod assessment of anger, anxiety and depression in children. Al was the research mentor to an exceptional group of students who went on to become leaders in clinical child and pediatric psychology, including Conway, Philip C. Kendall, and Tony Spirito. This was my second exposure to a well-mentored, engaging and productive CBT clinical research program, where trainees from undergrads to postdocs were collaborative and each highly valued, and all focused on the pursuit of a systematic understanding of assessment and treatment of childhood disorders. I left Richmond with copies of Phil's mimeographed manual for treating anxiety in children, which turned out to be the precursor to the Coping Cat, a manual that would figure prominently in my eventual work.

I next worked for several years as a master's-level therapist in the area of child abuse and neglect. I corresponded with Don Meichenbaum and received some long-distance (Waterloo to Ft. Lauderdale) consultation on applying his cognitive behavior modification approach to children who were in therapeutic foster care and experiencing significant psychosocial stress and its concomitant psychological sequelae. Working in the public sector gave me a highly concentrated, intense, and brutally real view of mental health care in action. As a therapist at an emergency shelter and therapeutic school, and as a psychologist with the Broward County Child Protection Team, I was often in family court and involved in the adjudication or disposition of cases. So striking was the presentation of "expert" mental health opinions proffered in court, most often in the absence of any coherent model and lacking in any empirical basis, although directly impacting the mental health and placement of children and families who were in the highest needs category for warranting empirically-supported care. I came up against therapists advocating everything from "holding therapy" to military-style wilderness programs for children suffering with significant PTSD and related conditions that result from severe abuse and neglect. Although I worked in a haven where my supervisors Harvey Broman and Joel Kimmel (both PhDs from Hofstra University) adhered to an empirical, scientist-practitioner model, I knew that I would not be able to make a difference in the way children were treated unless I had the educational experience and credibility of a doctorate.

And so, from 1985 through 1990, I earned my PhD in clinical psychology at the University of Mississippi, with internship at the Boston VA Medical Center. Karen Christoff was my primary mentor and dissertation chair, and forever is my role model for helping a student to find her path and passions. I remember her smile as she went around the room on our first day, with each of my classmates announcing their goals to be principal investigators and lead research programs, and then my assertion that I wanted to be in practice in Florida. This was my goal....to return to Ft. Lauderdale and open a practice that would offer families CBT, and to convert colleagues to this approach along the way. Karen asked me to keep all options open and to seek out challenges that would offer depth

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COGNITIVE BEHAVIORAL THERAPY IN ISRAEL
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Jonathan Huppert is the director of clinical training and associate professor in the department of psychology at The Hebrew University of Jerusalem. He is also an adjunct faculty at the Center for the Treatment and Study of Anxiety in the University of Pennsylvania School of Medicine. Dr. Huppert researches processes related to anxiety and its treatment with CBT. He has been conducting treatment and supervision for the last 15 years.

When Israeli therapists have the opportunity to speak with Aaron Beck, he often recalls that he had plans on moving to Israel in his youth. Unfortunately for us, he remained in the US, and it took some time for CBT to arrive here. One can trace the origins of CBT in Israel back to one of the earliest behavior therapists- Dov Friendlander, who studied at the Mausdley Hospital in South London in the 1950s and was present when Wolpe presented his first talk on reciprocal inhibition there. In the 1970's, Friedlander, along with some colleagues founded the first CBT organization, ITA, (in Hebrew agudah israelit ltipul hitnahguti cognitivi- The Israeli Society for Cognitive Behavior Therapy). The association was formally registered in 1980 and has been a member of the EABCT since its very beginning.

In 1980 Israel hosted the first World Congress of Behavior Therapy in Jerusalem, which was a great success. There were many hopes that this would be a landmark event which would usher in a new era of CBT in Israel. Unfortunately, this was not the case, and CBT remained outside of the main practice of psychologists, psychiatrists, and social workers, despite its official recognition, and the ability to sit for the licensing exam in psychology with a CBT case (along with the presentation of a psychodiagnostic assessment using a battery of projective tests). Despite this, there were a number of individuals including Michael Rosenbaum and Tami Ronen at Tel Aviv University and Marylin Safir at Haifa University along with Dov Friedlander who started to teach CBT courses.

In the last two decades, there has been significant progress. Dr. Edna Foa, herself a native Israeli, has for the last 10+ years been conducting workshops at least twice a year on prolonged exposure, both for supervisors and for therapists. ITA, with its approximately 350 members, also organizes conferences and workshops with local leading CBT trainers and International leading CBT figures. ITA organizes a yearly three day national CBT conference with a variety of workshops. ITA's internet site can be visited at www.itacbt.co.il

In recent years, the place of CBT in mental health practice has begun to change. All universities and clinical psychology programs now have at least one if not more individual who researches and teaches CBT. In the last five years there have been a two-volume textbook on CBT published in Hebrew, a special edition of the main psychotherapy journal in Hebrew (Sichot) published on CBT, and a special section of the Israel Journal of Psychiatry published on CBT.

In addition, there are a number of self-standing, two-year CBT training courses going on that have been accredited by ITA. The Ministry of Health has also started to initiate some training of nurses in CBT, and also has funded mental health professionals in the public sector to take workshops and receive supervision in CBT for anxiety disorders and in DBT. Many of the publically funded Health Maintenance Organizations have also sponsored training in CBT. Psychiatrists are required to have knowledge and to conceptualize a case in CBT for their licensing exam. And just this year, clinical psychologists are now required to learn CBT on an academic level, and many will be required to learn CBT also on their internships, along with psychodynamic therapy.

As with many other countries that follow the EABCT guidelines, one of the major issues in Israel today is an insufficient number of qualified supervisors. However, this is also beginning to improve. Most supervisors in CBT are flooded with referral requests, suggesting the demand from the grassroots to increase access to CBT. In addition, for a number of years there has been preparation for a major mental health reform, which is supposed to take place in July, 2015. Most public outpatient services are planned to move to the HMOs, where there is an emphasis on cost control, access, and efficiency. While there are concerns that these emphases could be made over quality, there is hope that the change will provide significantly more access to provision of CBT. On many levels, the changes occurring with CBT here are exciting and promising.

Along with these developments, Israel is hosting the 45th annual conference of the EABCT in Jerusalem from August 31st -September 3rd 2015. The name of the congress is "CBT: A road to hope and compassion for people in conflict." We have already lined up a list of top speakers from Israel and from around the world. We have high hopes to have a successful conference in our unique city. We look forward to welcoming you there.

COGNITIVE BEHAVIORAL THERAPY AND TECHONOLOGY

INTRODUCTION TO THE SPECIAL SECTION ON TECHNOLOGY AND CBT

BY SIMON A. REGO, PSYD, ABPP, ACT, MONTEFIORE MEDICAL CENTER, BRONX, NEW YORK

I am very excited to present to you a special section on the growing influence that technology is having on CBT. While there certainly still are many issues that need to be addressed in this exciting and ever-evolving frontier, incorporating advances in technology into CBT treatments certainly appears to hold great promise - not only by extending the reach of mental health care beyond our clinics, but also through the creation of adjunctive tools that will make therapy more accessible, efficient, and portable, thereby improving the implementation and impact of our traditional interventions. In order to give you a sample of just a few of the many ways that technology is intersecting with CBT, I invited several people whom I believe are at the forefront of this movement to contribute articles for this issue. *Drew Erhardt and Edrick Dorian* reflect on their *development of a mental health application* in order to address several of the most common questions posed to them by clinicians eager to join the technological revolution, but unfamiliar with the process of app development. *Rebecca Berry and Betty Lai* summarize how technology is currently being used in conjunction with CBT for anxious youth, focusing specifically on *computer- and internet-based CBT and mobile mental health applications.* Finally, *Mary Alvord and Lisa Berghorst* describe some of the beneficial applications of *video conferencing* as either a primary or adjunct modality, while also highlighting some important considerations before utilizing this technology and noting extant research studies in this area. I hope this series of articles encourages you to explore ways in which you might incorporate technology in your clinical work and/or, research endeavors. As always, I welcome your reactions and comments at: srego@montefiore.org

LOOK BEFORE YOU LEAP: REFLECTIONS ON DEVELOPING A MENTAL HEALTH APP FROM THE CREATORS OF MOODKIT

BY DREW ERHARDT, PH.D. & EDRICK DORIAN, PSY.D., ABPP

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Edrick Dorian, Psy.D., ABPP is an independent practitioner, a police psychologist for the Los Angeles Police Department, and co-creator of the CBT-based MoodKit mobile app for iPhone. He is ABPP certified in both Clinical Psychology and Police & Public Safety Psychology, and a diplomate of the Academy of Cognitive Therapy. E-mail: dorian@drdorian.com.

Software applications ("apps") designed to perform particular functions on mobile devices are integral to the rapidly emerging field of *mobile health care* (or *mHealth*). Thousands of apps relevant to psychology are now available with more being released every day (Maheu, Pulier, & Roy, 2013). Whether geared toward informing assessment and diagnosis, providing psychoeducation, implementing particular therapeutic approaches or interventions, or facilitating self-help, psychology-related apps are increasingly being integrated into clinical practice and sought out by the general public. Numerous aspects of CBT make it particularly well suited to the use of mobile applications. These include its emphasis on active client participation, self-monitoring, in vivo experimentation with targeted skills, and regular homework to encourage healthy behavioral and cognitive changes, accelerate therapeutic progress, and promote generalization (Erhardt & Dorian, 2013; Morris & Aguilera, 2012). Although empirical evidence supporting the efficacy of CBT-related apps is only recently emerging, their potential to extend both the efficacy and reach of evidence-based treatments is undeniable (Kazdin & Rabbit, 2013; Morris & Aguilera, 2012).

In addition to enhancing the practice of CBT, apps represent a novel and creative medium in which psychologists can disseminate their distillations of the field's knowledge-base, strategies, and tools. When we released the CBT-based *MoodKit* app in 2011, we hoped for the explosive growth in the use of psychology-related apps by both professionals and consumers that has since come to pass. What we did not anticipate was how often we would be approached by clinicians excited by ideas that they were eager to translate into apps but daunted by their unfamiliarity with the process of app development. Although a soup to nuts description of the steps involved in this process is well beyond the scope of this article (see Nicholson, Elad, & Stolarz, 2010; Sandberg & Rollins, 2013; Wooldridge & Schneider, 2011), we hope the following responses to a few of the most common questions posed to us will be of use to those readers considering developing psychology-related apps.

Where do I begin?

Begin with an appreciation of the risks of quickly cobbling together

an app with the hope that it will make a "big splash." With more than a million apps in the Apple App Store alone, it is harder than ever for an app to get noticed as opposed to becoming lost in the deluge of new software continually entering the marketplace. Thus, begin by thinking like a software developer and marketer, as well as an author and mental health professional. A great idea remains just that if the execution is not engaging and user friendly, resulting in an app that few ever see. Our experience tells us this is far more challenging than it sounds; mental health professionals generally prioritize comprehensiveness while underappreciating the cost of content that is over-inclusive and dry. As a result, several mental health apps developed by highly credible experts or organizations have received tepid responses from their intended audience. One should never lose sight of the fact that whatever content or features a mobile app provides, it should do so in the most intuitive, engaging, and efficient manner possible. Although this can, at times, feel like converting a book into a "tweet," it is a "make or break" component of successful app development.

I've written articles/blogs/chapters/books before. How should my mindset be different when approaching an app?

Even cognitive-behavior therapists are not immune to overgeneralizing from the text-heavy and graphics-light traditional modalities with which we're most familiar. Mobile devices offer extremely limited real estate, which places a premium on economy of language and on straightforward, non-academic, jargon-free writing. Additionally, the target audience for an app typically extends beyond your professional colleagues to clients and the general public. One must aim whenever possible for simplicity, succinctness, and clarity. The more varied and complex an app's content and features, the greater the challenges in designing, marketing, and maintaining it, and in users understanding and benefitting from it.

What if a similar app already exists?

It is indeed important to conduct extensive searches on relevant app stores to determine if similar apps already exist. There is much to gain from learning about the strengths and limitations of existing, comparable apps. Although it can be discouraging not to be the first to market with a novel idea, there is ample room for multiple high quality apps with similar functions. In fact, it is widely known that consumers tend to purchase multiple apps of the same ilk on their devices. If similar apps do exist, your task is to either build a better mousetrap or to market more effectively—optimally both.

How dæs the actual programming of the app occur?

Unless you are an expert programmer as well as a mental health professional, you will need to contract with an individual programmer or an app development company to transform your idea into an app. In fact, developing a successful app invariably encompasses, at minimum, the following elements: (a) a clear sense of the app's intended functions, (b) adequate funds, (c) programming expertise, (d) graphic design expertise, (e) marketing expertise, and (f) a commitment to ongoing development and customer support. The last point is underappreciated but important to consider, as app stores are littered with thousands of failed apps commonly referred to as "abandon-ware." Beyond their initial development, apps require ongoing programming (released as free updates to users) to accommodate both advances in software/hardware and consumer requests/complaints. The decision of which programmer to work with should be made with consideration not only of their requisite skills, track record, availability, and cost, but also for the fact that you are initiating an ongoing professional relationship.

How long will it take and how much will it cost?

As with home remodeling, developing an app will likely take longer and be more expensive than you think. When you consider that a single app constitutes not only a product but also typically the start of a new small business, it is easy to appreciate how the process might be more involved than anticipated. The basic infrastructure supporting an app often involves the legal formation of a company (e.g., an LLC), a dedicated website, graphics licensing, trademark registration, and possibly data hosting services. For comparison purposes, the multifunction ***MoodKit*** app, developed as a side-project by two fully employed psychologists, took over 14 months to complete.

Cost represents the biggest and most unpleasant surprise for most would-be app developers, typically running into the tens of thousands of dollars. Programming is expensive and time is money. So, the more work the programmer has to do to clarify your vision for the app with respect to its purpose, functions, look, and flow, the more expensive the endeavor will be. To reduce costs, you will want to present at the outset your vision for the app in as much detail as possible. This is often referred to as "wireframing," which can be done by creating mock-ups in PowerPoint, Keynote or Microsoft Word so you can visualize the flow and get a sense of how intuitive the user interface is likely to be. Once your idea is wireframed, and you have a proper non-disclosure agreement in place, you can begin shopping it for programming bids.

What's the revenue potential?

Truth be told, this is a key concern for many clinicians who are considering developing apps. The dollar signs in the eyes of many would-be app developers frequently fade when they consider the costs involved in developing and maintaining an app, the expectations among app users to obtain "a lot for a little," the slice of the revenue pie taken by app stores, and the limited success to date of most mental health apps (as evidenced by reviews, sales

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COGNITIVE-BEHAVIORAL THERAPY FOR ANXIOUS YOUTH: THE NEW ROLE OF TECHNOLOGY

BY REBECCA RIALON BERRY, PH.D. AND BETTY S. LAI, PH.D.

Rebecca Rialon Berry, Ph.D., is a licensed psychologist and clinical faculty member in the Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine in Stanford, California. She has extensive experience in the evaluation and evidence-based treatment of anxiety, trauma, ADHD, and disruptive behavior disorders in children, adolescents, and young adults. Dr. Berry is the director of the Stanford behavioral parent training program, and is active in providing behavioral and mental health consultation to schools, teachers, and community practitioners. She is also involved in dissemination research through the Stanford Early Life Stress and Pediatric Anxiety Program, and is active in teaching and training of Stanford graduate students, psychology interns, post-doctoral fellows, psychiatry residents and fellows. She is a diplomate of the Academy of Cognitive Therapy.

Dr. Berry received her Ph.D. in Psychology from Columbia University in New York City. She completed a clinical psychology internship at Lucile Packard Children's Hospital at Stanford and a Postdoctoral Fellowship at Stanford University School of Medicine, Department of Psychiatry and Behavioral Sciences.

Betty Lai is an Assistant Professor in the School of Public Health at Georgia State University. Dr. Lai's research focuses on understanding how stressors are related to children's subsequent psychological distress symptoms (posttraumatic stress, depression, anxiety), health behaviors (sedentary activity, physical activity, diet), and health outcomes (cardiovascular risk factors, blood pressure). Her work has included examinations of children's responses after disasters (Hurricanes Andrew, Charley, Ike, and Katrina), war, and peer victimization. Her statistical expertise focuses on latent variable modeling and longitudinal modeling techniques.

Cognitive Behavioral Therapy (CBT) for anxious youth may benefit from the inclusion of technology. Using technology in conjunction with CBT has several advantages: cost containment, convenience, improvements in treatment adherence, portability, near constant connectivity, programmability, ability to record information, ease of use, and acceptability (Bouchard et al., 2000; Heimberg & Coles, 1999). In this article, we summarize how technology is currently being used in conjunction with CBT for anxious youth. We focus specifically on computer- and internet-based CBT and mobile mental health applications (i.e., mobile phone, smartphone, and tablet technology).

Computer- and Internet-Based CBT

CBT is ideal for delivery by computer or through the internet because CBT is a highly structured treatment modality that may be implemented in a sequential fashion (Heimberg & Coles, 1999; Proudfoot, 2004). Computer- or internet-based CBT also provides several general advantages such as increased mastery and control for the user, accessibility, privacy, convenience, and reproducibility (Greist, Osgood-Hynes, Baer, & Marks, 2000).

Several empirically supported treatments for youth have been adapted to computer- or internet-based formats (Elkins, McHugh, Santucci, & Barlow, 2009), including the BRAVE-Online program (March et al., 2009) and Camp Cope-a-Lot: The Coping Cat CD-ROM (CCAL; Khanna & Kendall, 2008; Khanna & Kendall, 2010). In a randomized controlled trial, BRAVE-Online, a 10-session, internet-based program for anxious youth ages 7 to 14 years, produced comparable anxiety symptom reduction and significantly greater symptom reduction relative to clinical and wait-list control groups, respectively (Spence et al., 2006). Similarly, CCAL demonstrated efficacy with a sample of anxious youth 7-13 years when compared to individual CBT and a control condition (i.e., computer-based education, support, and attention). Computerized CBT approaches for adolescents have also shown promise. These programs include the Cool Teens CD-ROM (Cunningham et al. 2006; Cunningham et al. 2009) and BRAVE for Teenagers—ONLINE (Spence et al., 2011).

Mobile Mental Health: Mobile phone, Smartphone, and Tablet Applications

Several basic mobile-based CBT tools have also been developed. We recommend that readers and practitioners complete individualized searches for mobile applications that meet your specific needs as well as those of your clientele. For example, numerous self-monitoring mobile applications are currently available. Self-monitoring

Submissions to Advances in Cognitive Therapy are reviewed on an ongoing basis. Topic areas may include clinical issues, research updates, conference and training information, book reviews, and summaries of any CBT-related activities from around the world! Articles co-written by professors and students are particularly encouraged.

The next deadline for submission is September 15th, 2014. Submissions should be 350-700 words with no more than five references (using APA style and as an MS Word document). In addition, please include a brief (50-100 word) author bio and high quality photo/headshot with your submission.

Submissions and/or suggestions for how to improve the newsletter and/or topics that should be considered should be sent to: Simon A. Rego, PsyD, Editor: srego@montefiore.org.

is an essential component of CBT (Association of Behavioral and Cognitive Therapies, 2013), and self-monitoring applications are available to track various behaviors, including sleep, mood, food intake, and alcohol use. For example, searching the Apple iTunes store for mood self-monitoring applications (search criteria: "mood tracker") yielded 122 available mobile self-monitoring applications (as of March 4, 2013). Self-monitoring mobile applications allow individuals to track their feelings and behaviors in real time (Aguilera & Muench, 2012), potentially increasing the accuracy of this data, and helping to increase client accountability for monitoring efforts. Results are typically displayed graphically, providing clients with instant feedback, reducing therapist time spent reviewing outcomes, and also providing summarized reports over time. A more in depth description and ratings of self-monitoring mobile applications can be referenced at the Quantified-Self website (http://quantifiedself.com/guide).

Aguilera and Muench (2012) conducted a review of information technology applications for CBT practitioners. They featured two applications for mood monitoring via mobile phone: Mood 247 (www.mood247.com) and the T2 Mood Tracker. Mood 247 utilizes text messaging to collect data. Mood data is uploaded to a website and tracked over time. This information may be shared with a health-care provider or therapist. The T2 Mood Tracker is a smartphone application developed by the National Center for Telehealth and Technology. The T2 Mood Track allows individuals to track their mood and emotional states in real time.

Other mobile phone applications may augment components of CBT treatment, such as psychoeducation and relaxation, and promote anxiety management through calming audio tracks (e.g., relax melodies, calm.com), meditation (e.g., rest and relax guided meditations), and diaphragmatic breathing exercises (e.g., Breathe2Relax, BellyBio (Belly Biofeedback) Interactive Breathing).

Conclusion

In summary, the use of technology with CBT offers a promising new area of investigation in the field of child anxiety research. Technology may increase access to mental health services, and it may remove barriers to treatment engagement. Decisions about how technology may be incorporated into treatment should occur on a case-by-case basis, taking into account such variables as the disorder being treated, client familiarity and ease with technology, access to technology, privacy, and ethical issues. Additional consideration should be given to the utility of communication applications on the internet, such as video telehealth, e-mail, instant messaging, blogs, and chat rooms, which have become an important and familiar component of the lives of many adolescents (Subrahmanyam & Lin, 2007). Advances in technology may also have promise for isolating and identifying key mechanisms of change underlying CBT.

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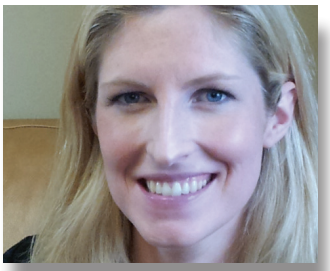
(CONTINUED PG. 12)

USING TECHNOLOGIES TO ENHANCE COGNITIVE BEHAVIORAL TREATMENTS
BY MARY KARAPETIAN ALVORD, PH.D. AND LISA H. BERGHORST, PH.D.



Dr. Lisa Berghorst is a licensed psychologist with a doctoral degree from Harvard University. She currently works at Alvord, Baker, & Associates in Rockville, Maryland, and provides empirically-based treatment services to children and adults, with particular expertise addressing mood and anxiety disorders. In addition, Dr. Berghorst has extensive research experience from her work within the National Institutes of Mental Health, the Affective Neuroscience Laboratory at Harvard University, and the Center for Depression, Anxiety, and Stress Research at McLean Hospital. Her research interests include treatment outcome studies and examining the etiology of mental disorders.

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The combination of new technologies and the Internet have made it possible to expand and enhance evidence-based mental health treatment. One particularly promising mode of telehealth is video conferencing (VC), which allows real-time, interactive audiovisual services and enables the clinician and client to be in different locations (e.g., office, home). VC can also facilitate service delivery when the clinician and client are in different rooms within the same location. In addition, most VC systems allow document sharing so both parties can view the same forms and assignments. Below we briefly describe some of the beneficial applications of VC (either as a primary or adjunct modality), highlight some important considerations before utilizing this technology, and note research studies in this area to date.

Home observations and client training with immediate behavioral rehearsal

VC provides a way to assess and observe family interactions in

the home environment in real time, in order to better understand the interpersonal system and develop the most helpful treatment solutions. For example, VC might provide important information to a clinician about nuances in behaviors, body language, or tone of voice, which might not be reported in the office because people either aren't aware of them or don't realize their relevance. Importantly, VC enables clinicians to intervene "in-the-moment" to deliver treatment skills to clients. Some examples include helping clients challenge and reframe negative thinking, helping family members appropriately respond to reassurance-seeking questions or defiant behaviors, or helping them walk through the implementation of a contingency plan.

Exposures

Incorporating VC technology into exposure therapy provides many more options for guiding clients through exposure hierarchies in situations that are not easily duplicated in the office (e.g., specific home settings, an airplane environment, height). As smart phones are capable of supporting VC apps, exposures can even be conducted "in transit," for example, in the car (under safe circumstances; not while driving), on a bus/train/plane, in the parking lot of a school, or walking into any anxiety-provoking setting.

Parent Coaching (Room-to-Room, Within Office Location)

VC can also aid in the implementation of Parent Child Interaction Therapy (PCIT), or other in-vivo coaching situations within the office, where the clinician is in one room and the parent/child dyad or family as in another room. In this way, VC replaces the need for one-way mirrors and expands service options in office settings previously unable to accommodate such treatments. In-vivo coaching of behavioral parenting skills allows for mistakes to be corrected in the moment and for parents to demonstrate mastery of the skills that guide the course of treatment.

Important Considerations

Prior to utilizing VC in clinical practice, it is recommended that the clinician gain competence in the technology, and review licensure, professional guidelines, and liability regulations in telehealth. As with in-person treatment, clinical competence through VC is subject to the same standards of care, requirements for informed consent, privacy and security rules. Of particular importance, the functioning of the client and risk factors (e.g., self-or other harm potential) must be evaluated to determine appropriateness for this delivery system. A client who is at high risk may not be appropriate to treat via VC and contingency plans for clinical or medical emergencies, as well as technological malfunctions, must be in place. Other potential limitations include the lack of sensory cues of smell and touch that may indicate poor hygiene or alcohol problems. Furthermore, the camera field of view might not capture all relevant details, such as movements of the lower body, others in the room, or distractions in adjacent rooms.

Research on Evidence-Based Therapies via Video Conferencing

Backhaus et al. (2012) and Gros et al. (2013) have published articles reviewing the evidence base of VC to date. While most studies have been conducted since 1996, the majority of studies with larger subject samples and sophisticated research designs have been conducted in the past 6 years, and the number of studies in this area is increasing rapidly. When type of treatment was described, the majority were forms of Cognitive Behavioral Therapy, including behavioral activation and exposure therapies. The modality studied was primarily individual therapy, with fewer involving family or group therapy; couples therapy was not examined. The range of disorders treated using VC included PTSD, depression, OCD, eating disorders, anxiety disorders (e.g., panic disorder, agoraphobia, social phobia), childhood tic disorders, substance abuse, smoking cessation, and anger management. Overall, studies on VC reveal similar treatment outcomes to comparable in-person treatments. The majority of studies reported equally favorable satisfaction ratings, although only a subset reported strong therapeutic alliance. Satisfaction ratings that were lower predominantly revolved around technology issues: delays, visual or audio distortions, and interruptions/dropped calls. Importantly, attrition rates were sometimes lower with VC, since barriers such as distance and travel to treatment were reduced.

Although the synthesis of technology and mental health care remains a relatively new area, these early studies yield promising results. Privacy-secured and HIPAA compliant (for U.S.) VC systems promote more comprehensive, generalizable treatment plans and enable dissemination of therapeutic services across settings. In these ways, VC importantly expands the realm of treatment possibilities and reduces potential barriers (e.g., living in rural or remote areas, home-bound due to physical or psychiatric reasons) for clients who might not otherwise receive mental health care.

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Backhaus, A., Agha, Z., Maglione, M. L., Repp, A., Ross,

(CONTINUED PG. 13)

STANDING ON THE SHOULDERS OF GIANTS CONTINUED FROM PG. 4

in CBT training but also advance my skills and interests.

It was a natural step to take my internship at the Boston VA, a Terry Keane had been Karen's training director in Mississippi's internship. This was fateful, as Terry and my supervisors, Brett Litz and Dudley Blake, set me up with opportunities that resulted in not just novel therapy experiences (e.g., working in the area of PTSD, sexual dysfunction, and emergency room care) but also in my first empirical publication. And then, it happened. Amongst the various practice settings that I applied to for entry-level clinical positions, the VA team encouraged my application for a postdoc in the anxiety disorders at the Center for Stress and Anxiety Disorders (CSAD) at SUNY-Albany, with David H. Barlow.

It was an interview that I will never forget, as Dave's tell-it-like-it-is and long-term right hand, Bonnie Brown, grabbed me in the waiting room and said "You know, you're not really top choice for this position as a researcher on the panic study, and he has someone else already in mind for it, but you might talk to him about continuing a child program here because Wendy Silverman is leaving." Imagine hearing that as you wait for an interview. But, Bonnie was right on, and I did ask Dave what was he going to do with the child program, and the long story short is that he hired Guylaine Cote for the panic project and, me, too! The time (1990-1995) and setting of CSAD was like finding the end of the rainbow. The pot of gold was filled with stimulating research meetings, clinically-savvy senior staff and visitors, enthusiastic and intellectually gifted students and staff, and a steady flow of ideas and patients.

I found the best of everything at Dave's center and grew intellectually, found my path into clinical research, and matured (I think) into a mentor of Dave's and eventually my own trainees. At CSAD, Dave mentored me while I found my own path into child clinical research and provided me with incredibly rich opportunities for collaboration, learning, and also of becoming involved in the field through professional organizations and conferences. But, the biggest surprise and one of the most fruitful bonuses of Albany was that after lugging his dissertation around for years, I was back to work with Rick Heimberg, who had his social phobia clinic within CSAD and was on faculty with Dave. We three, along with Patricia DiBartolo and Craig Holt, were funded on the first try for the development of our group CBT for social anxiety in adolescents. Dave also put me together with Wendy Silverman to further develop the Anxiety Disorders Interview Schedule for DSM-IV, Child and Parent Versions, of which we are now publishing our DSM5 update. Through Dave, I became close with John March, opening the door to my becoming a PI on the Treatments for Adolescents with Depression (TADS) and the Child/Adolescent Anxiety Multimodal Study (CAMS) trials. Luminaries such as Lars Goren-Ost and Tom Ollendick became colleagues and friends through Dave.

The rest, they say, is history.

To sum, what I found with Dr. Madsen at FSU all the way through to Dr. Barlow at CSAD, were mentors who listened, encouraged, and modeled for their students and created environments rich in collaboration, encouraging of curiosity, and stimulating in ideas. Patient care is always forefront, and so now I direct a program of my own and hope that through my work and by mentoring my trainees, effective CBT approaches are reaching a wider range of patients in need and homage is being paid to my mentors.

ACT'S PRESIDENT'S MESSAGE CONTINUED FROM PG. 1

of. Gratitude may be thought of as a belief or a cognitive processing style while the expression of gratitude is a behavior. Gratitude is a combination of the head and the heart. Research suggests that the activation of a grateful attitude and the behavioral expression of gratitude are likely to lead to a greater sense of happiness. In this situation the CBT reciprocal interaction model continues to work but in a positive direction instead of the negative direction that we traditionally talk about.

The link between CBT and positive psychology is also evident in treatment interventions originating out of positive psychology. Martin Seligman and Tayyb Rashid co-authored *Positive Psychotherapy: A Treatment Manual*. This is a fourteen session group psychotherapy model for depression based on positive psychology principles. In part, the treatment interventions include what may be considered positive cognitive and behavioral exercises including recognizing blessings (cognitive), identifying positive experiences that happened during the day (cognitive), writing (behavioral) a forgiveness (cognitive) letter, writing (behavioral) a gratitude (cognitive) letter, cultivating optimism (cognitive), engaging in pleasurable activities (behavioral), savoring (cognitive and behavioral), and developing meaning (cognitive) in life. Although this is in the very early stages of research, a positive psychotherapy group intervention with depressed patients based on this treatment manual produced significant and encouraging results.

The danger in using the CBT model to understand positive psychology is that it becomes a Procrustean bed which unfairly neglects important and distinctive components of positive psychology. That being said the CBT model that we are all quite familiar with may provide a way for us to understand how positive psychology interventions work in clinical as well as non-clinical populations. There is an integrative power to the cognitive model and many of the exciting findings in positive psychology may be the opposite side of the coin that we are so familiar with. Integrating positive psychology principles and findings into the CBT model may not only help our patients get better but it may help them develop happiness, meaning, a sense of purpose and well-being.

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IACP'S PRESIDENT'S MESSAGE CONTINUED FROM PG. 2

influence of behavioral scientists in determining research funding and policy is marginal. As research funding begins to determine what we study as behavioral scientists, our field faces new and unforeseen challenges. Behavioral scientists and clinicians now have a clear mandate and need to work together to ensure that behavioral sciences are recognized, funded, and that advances in behavioral science are utilized to inform classification systems and treatment approaches. Organizations like IACP have a responsibility to ensure that behavioral sciences have a voice in the emerging dialogue on alternative systems to understand and treat mental illness.

I want to thank IACP members and the board for giving me the opportunity to serve as president. I am honored to have led IACP over the past three years. As incoming past-president, I look forward to working with you on our new initiatives to potentially develop closer collaborations with the *Academy of Cognitive Therapy,* to build our new organizational membership category, and to launch further clinical training and research initiatives. I also look forward to seeing you at the 9th ICCP conference in Cluj-Napoca, Romania in 2017. I am delighted to pass the gavel and to extend a warm welcome to Stefan Hofmann, the incoming president of IACP.

Lata McGinn

Lata K. McGinn, PhD
President, IACP

CBT FOR ANXIOUS YOUTH CONTINUED FROM PG. 9

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LOOK BEFORE YOU LEAP

CONTINUED FROM PG. 7

rankings, and absent updates). Although expanding, the market for mental health apps is still limited (i.e., if you're expecting your app to be the next "Angry Birds," you're likely setting yourself up for disappointment). Consider that some experts estimate that over 90% of apps will not break even, let alone produce a significant profit (Foresman, 2012). Although recouping thousands of dollars in development costs a buck or two at a time is neither quick nor easy, the potential for well-designed, effectively marketed apps to produce substantial revenue does exist and, of course, the rewards of app development extend well beyond the financial.

We recommend that those considering translating their ideas into apps do their due diligence so as to embark with a clear-eyed appreciation of the multi-faceted process of app development along with the considerable investment of time and money likely to be required. That said, our intent is not to be discouraging. On the contrary, the potential rewards of developing mental health apps are varied and immense. Beyond the gratification attendant to seeing any idea come to fruition, the global reach of apps creates the potential to dramatically improve access to CBT principles and techniques and to positively impact far more lives than would ever be possible with traditional face-to-face models of therapy. Apps represent the cutting edge with respect to the technology of promoting mental health, and CBT clinicians and researchers are well positioned to advance these tools that providers, their clients, and the general public will increasingly rely upon in the coming years.

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