

the Behavior Therapist

President's Message

Bruce F. Chorpita

What Does ABCT Stand For? • 89

PRESIDENT'S MESSAGE

What Does ABCT Stand For?

Bruce F. Chorpita, *UCLA*



THE THEME of the convention and this year's activities centers on purposeful reflection about our organization's collective impact. For a community of members who share a commitment to science and its principles, such

reflection can quickly take us out of our comfort zone, particularly when it comes to questions that are values-based, for which reason and facts cannot offer a clear answer (cf. Simon, 1947). Nevertheless, I hope we pose a few of these questions to each other at various points throughout the year, such that we each feel we have crafted suitable answers, at least for ourselves. The point is not to achieve consensus, but rather to establish or reestablish our beliefs, however diverse, so we have a sense of what guides our work, and to encourage conversation and perspective taking among our members.

One seemingly perennial question that I would like to raise this month involves what ABCT stands for—not quite literally, of course, but almost. Do we in fact stand for the advancement of behavioral and cognitive therapies, in their various forms? Or do we stand for evidence-based therapies, which happen to be substantially represented by cognitive and behavioral approaches? To be clear, this is precisely not a question of how the evidence lines up; rather, it is a question about our beliefs and values. If the evidence base were to evolve such that cognitive and behavioral therapies were eventually just unremarkable portions of a

special issue **CBT in DIVERSE CONTEXTS and PROFESSIONS**

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Kate Wolitzky-Taylor

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INSTRUCTIONS for AUTHORS

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

- Feature articles that are approximately 16 double-spaced manuscript pages may be submitted.
- Brief articles, approximately 6 to 12 double-spaced manuscript pages, are preferred.
- Feature articles and brief articles should be accompanied by a 75- to 100-word abstract.
- Letters to the Editor may be used to respond to articles published in *the Behavior Therapist* or to voice a professional opinion. Letters should be limited to approximately 3 double-spaced manuscript pages.

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larger collection of effective approaches, where would our allegiance be?

This is perhaps hypothetical at the moment, but it is by no means trivial. Many of us have probably contemplated this question privately, but, for better or worse, answering it publicly can be comfortably avoided, so long as the evidence base continues to support CBT and its variants. But even that fact raises a corollary question: Should we even aspire to the empirical dominance of CBT, or should we wish for and perhaps even work toward an ever-increasing diversity of effective options?

I first encountered this question formally when Karen Wells served as a discussant at an ABCT symposium chaired by John Weisz and myself, which described a newly proposed multisite randomized effectiveness trial to compare different models of cognitive and behavioral treatments against a usual-care comparison condition (Wells, 2005). The Child STEPs multisite trial was to be one of the first large tests of multiple evidence-based approaches for youth in community mental health clinics and schools, and Dr. Wells raised her question just as she concluded her remarks, noting presciently that the trial may not turn out the way we expect or the way we would like. Like the expert in behavioral parent training that she is, Dr. Wells gently but firmly warned that if there were surprises, how we behaved afterward would define who we are. Would we discover ourselves empiricists, or would we be devoted advocates of cognitive and behavioral treatments? Although the premise of the question bothered me for years (how could 7 years of hard work not produce an epic CBT success?!), the question itself gave me great relief. Dr. Wells essentially reminded us that any results were an opportunity to learn. Incidentally, the trial turned out to yield both good news and bad news for cognitive and behavioral treatments at the time (for the interested reader, see Weisz et al., 2012), convincing me, among other things, that we had chosen a truly prophetic discussant for the 2005 symposium.

To explore this question a bit more as ABCT members, we could choose to look at our organization's history. ABCT was formed in the 1960s, at least in part as an intellectual and political reaction to the nonempirical practices of the time. Thus, the focus on behavior therapy was quite possibly incidental to a larger commitment to empiricism. If we would like something

more current to consider, we could also look to our mission statement for guidance; it communicates a commitment to addressing health and well-being using "behavioral, cognitive, and biological evidence-based principles," which, to me, seems to cover all sides but maybe commits to none. Finally, we could look at the composition of the literature itself: A casual search of the youth mental health treatment literature performed as I wrote this column on March 5, 2019, yielded 602 randomized trials that summarized 736 protocols meeting evidence-based treatment standards (PracticeWise, 2019). Although roughly 80% of those would be considered cognitive or behavioral by most judges, that still leaves approximately 150 non-cognitive-behavioral evidence-based treatments for youth, manualized and tested in at least one randomized controlled trial against an active treatment condition, and include such approaches as Adlerian group therapy, attachment therapy, case management, client-centered therapy, expression, hypnosis, play therapy, psychodynamic therapy, and social support. Although we could debate some of these findings, the exact study counts, or treatment classifications, the larger point is clear: There is limited but increasingly conspicuous evidence supporting a wide variety of treatment approaches other than behavioral and cognitive ones. What do we as members of ABCT make of that?

As we think this year about increasing ABCT's impact, and about the aim of dissemination outlined in ABCT's strategic plan, this question of our identity is worthy of reflection—not simply because we could change our name again, but because the answer speaks to what we will pursue, showcase, and embrace at our convention, throughout the year's activities, and in our own professional endeavors. As Dr. Wells cautioned: the answer will define us.

Yielding to my own instincts, I think the issue is important enough to warrant a behavioral rehearsal. Yes, that's right—I am assigning homework for those of you reading this. It is quite simple: I encourage you to seek out a peer or colleague, perhaps at lunch, over coffee, or at a happy hour. Ask for their thoughts on this question, and then ask for their reaction to yours. I tried it several times this year with a few well-chosen colleagues, and every conversation was a unique mixture of excitement, inspiration, challenge, and insight. I hope you find it as rewarding and worthwhile as I have.

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Who Are We? What Do We Do? And Where Do We Do It? CBT in Diverse Contexts and Professions

Kate Wolitzky-Taylor, *UCLA*

IN THE EARLY DAYS of behavioral and cognitive therapies, the vast majority of professionals who were developing, evaluating, disseminating, and delivering these interventions were clinical psychologists who primarily worked as professors in psychology departments or in psychiatry departments of academic medical centers; and disseminating was typically limited to training clinical psychology doctoral students in the context of their graduate programs. Even when we go to the ABCT Annual Convention now, it is easy to assume that that remains the case. However, as the field has progressed, cognitive and behavioral therapies have reached a

variety of contexts because of the diverse professional experiences and activities of behavior therapists, many of whom call ABCT their professional home. In this special issue, we highlight the unique career paths of our members and celebrate the creative work they are doing to increase CBT's reach. The articles in this issue illustrate how ABCT members positioned in a variety of career settings are training the next generation of those who may deliver CBT or develop clinical research programs (beyond the traditional clinical psychology Ph.D. student in a clinical science or scientist-practitioner program). The articles also highlight several novel and exciting

approaches and programs for delivering CBT in diverse, nontraditional settings. This issue aims to challenge our assumptions about who we are, what we do, and where we do it as ABCT members, and to highlight the diverse career paths and diverse opportunities and models to expand CBT's reach in the community.

I would like to thank all of the authors and the *Behavior Therapist* Editorial Board for their contributions, and I would especially like to thank Richard LeBeau and Bitá Mesri for their additional support in putting this special issue together. I hope you enjoy reading about the exciting work described in this special issue.

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Expanding Membership as a Method for Extending the Social Impact of Cognitive Behavioral Science

Alyssa Ward, *Virginia Department of Medical Assistance Services*

Cameo Stanick, *Hathaway-Sycamores Child and Family Services*

Dakota McPherson, *Membership Services Manager, ABCT*

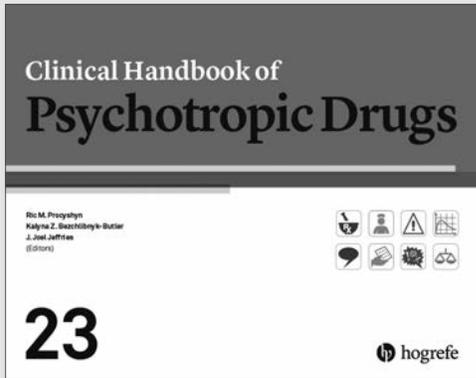
AT THE TIME OF THIS WRITING, we have arrived at the phase in the ABCT calendar year where convention planning is in full-swing. We are all preparing for how we will contribute to the evolving scientific conversation about what we continue to learn about cognitive and behavioral therapies and how we take that knowledge and turn it into wisdom in action. As you have heard from Dr. Chorpita in his columns so far this year, the focus of his presidency and the theme of the 2019 convention in Atlanta is "Wisdom of Purpose and Perspective: Extending the Social Impact of Cognitive Behavioral Science." As Program Chair and Assistant Program Chair, our humble role

alongside our team is to support how we bring this theme to life through our call for papers, rigorous review process, invited speaker presentations, and overall spirit of the convention program. As we have considered our current social impact as an organization, many of our conversations come back to questions of our membership composition and convention attendees. Who does our membership represent in the field of cognitive behavioral science? Who attends our Annual Convention and how do we use it as a venue to expand our social impact? How can we best support and amplify the voices of wisdom within our membership to impact a wider audience?

How do we encourage our membership to work across disciplines and fields of study to tackle the "big questions" related to our shared mission of advancing health and well-being?

These are not new inquiries, and perhaps many of you have had these conversations within your Special Interest Groups. During Dr. Ward's 3-year tenure as Special Interest Groups (SIG) chair, she noted growing interest in collaboration between SIGs in convention submissions and development of publications and a desire to break down traditional silos within the organization to make broader impact statements about the implications of findings. The Dissemination and Implementation Science Special Interest Group (DIS SIG) has had a particularly strong interest in these questions of membership, as it has come to attract the affiliation of ABCT members from outside of academic institutions.

In 2015, members of the DIS SIG wrote an article for the *Behavior Therapist* titled "Dancing With Ourselves: Reflections on Increasing Stakeholder Involvement in ABCT" (Stanick, et al., 2015). The article was a reflection on both the efforts of the DIS SIG to engage stakeholders with ABCT



Ric M. Procyshyn / Kalyna Z. Bezchlibnyk-Butler /
J. Joel Jeffries (Editors)

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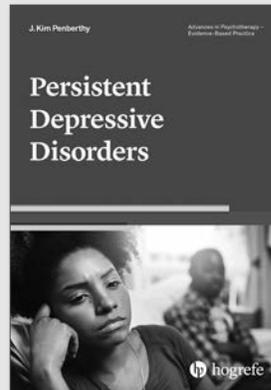


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convention events and to highlight stakeholder-researcher collaborative projects in order to emphasize the need for stakeholder relationships in the ABCT mission of closing the research-practice gap. The article also served as a charge to the ABCT membership at large to ensure we are engaging, expanding, and embracing avenues for stakeholders to partner with research initiatives, increase membership, and amplify their voice in the association. As the DIS SIG article suggested, if we are not involving stakeholders across the research-to-practice spectrum, then we risk continuing to dialogue only among ourselves, and the science stagnates.

We were asked to submit this article in part because we both (AW and CS) began our careers and our involvement with ABCT from what seems to be the traditional route of most members, though our trajectories have taken us into roles where we sit as cognitive behavioral scientist practitioners in stakeholder systems. Many of the stories to be shared in this issue come from others like us, and we thought that describing a bit about our journeys might illustrate our recommendations for broadening the reach of convention attendees and organizational membership.

Both of us began attending ABCT during our graduate school years while enrolled in our clinical psychology doctoral programs. We both wrote theses and dissertations related to cognitive-behavioral evidence-based practice (EBP) under the mentorship of long-time ABCT members. We met as postdoctoral fellows working for the current ABCT President on a randomized, controlled effectiveness trial testing modular vs. standard approaches to EBP with children in community mental health settings. We both have been national trainers in evi-

dence-based practice approaches. Dr. Stanick took a traditional route following postdoc and went on to earn tenure at the University of Montana with a research program focused on implementation science, with specialty areas in childhood trauma and school-based mental health. Dr. Ward departed from the traditional academic route and became an administrator in community mental health, overseeing workforce training development and implementation of 11 EBPs at an agency with the largest Medicaid contract in Los Angeles County. When she left to accept an assistant professorship in a medical school doing a combination of research and practice with EBP for pediatric populations, Dr. Stanick left her tenured position to take over Dr. Ward's former position in Los Angeles County and has expanded that role to include fortification of implementation science principles and measurement, the development of a training and research institute, and increased focus on trauma-informed care. After 2 years back in academics, Dr. Ward was lured back into "the real world" to become the Behavioral Health Clinical Director at Virginia Medicaid, where she is overseeing the redesign of the public behavioral health system to an evidence-based, trauma-informed, prevention-focused system of care.

Both of us agree that without our roots with our mentors and connection to the DIS SIG, we would have terminated our ABCT memberships and ceased attending the conference. Without being academically affiliated, we lack consistent funding for membership and convention costs. We both attend numerous conferences for our work, but these are focused more specifically on the real world of behavioral health systems implementation. We have remained connected to the organization

because the DIS SIG has provided a "professional home" for us as "recovering academicians" who are not as often producing the kinds of research traditionally presented at our convention. The DIS SIG has valued our voices and included us as "real-world" discussants on panels of research that intend to inform system architects like ourselves, as well as in leadership positions within the SIG. We continue to be as intimately involved in service to ABCT because we hope to further the mission of our mutual

mentor, Dr. Bruce Chorpita, to influence the organization to move towards increased focus on how we can make the greatest difference in the lives of those who we all hope benefit from cognitive behavioral science.

The Call for Papers for the 2019 convention specifically challenges us to reach out and partner with new and diverse populations (e.g., global mental health, underutilized behavioral health audiences, underserved communities, intersecting interests among two or more Special Interest Groups) and encourages submissions that strive to solve problems meaningful to stakeholders in industry, behavioral and physical health care, government agencies, and other contexts of our work. This theme also challenges us to apply the "lessons learned" of the past 2 decades since the American Psychological Association Division 12 task force highlighted the importance of focusing on implementation contexts where practitioner stakeholders are primarily associated.

This brings us back around to the existing composition of our organizational membership and questions as to whether we have sufficiently propped open the doors to our dining room and then attracted, welcomed, and integrated diverse voices to seats around our table. We have shared a bit about our stories and why we have remained with the organization, but what about those who never had a traditional, academic route to ABCT orientation? What about our colleagues in public health settings? In technology contexts? In nursing? How are they represented among us and how can we welcome them into our conversations? In seeking data to inform this question, we requested some information on membership trends from the ABCT central office and will summarize that here.

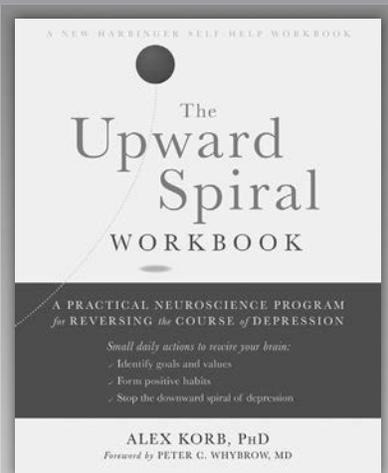
In thinking about the theme of social impact and global health, it was first interesting to us to look at composition by geography. In 2018, 94% of our members lived in the United States ($N = 4,598$) with an additional 4% from Canada ($N = 206$) and a small 2% scattered across other countries (e.g., 18 members from Japan, 19 from Australia, 9 from Germany). This says to us that our organization has a largely domestic composition and has opportunity to grow in terms of diversification of international members. Within that domestic audience, the largest proportion of members come from New York (14%), California (12%), Massachusetts (7%), and Pennsylvania (6%), Texas, (4%) and Illinois (4%).

In terms of our ability to impact and integrate the work of a diverse group of

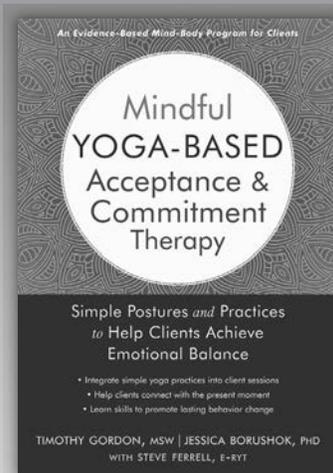


Figure 1. ABCT full membership by state for highest concentrations. *Note.* The numbers reflected in the figure represent full members (full, new professionals, etc., not student members).

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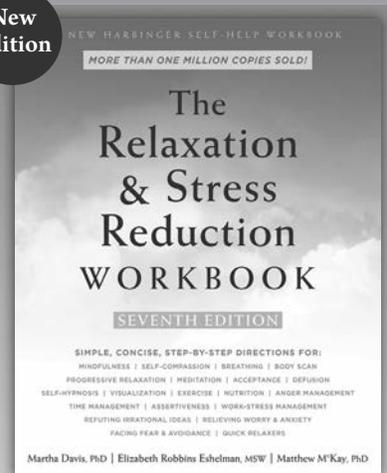
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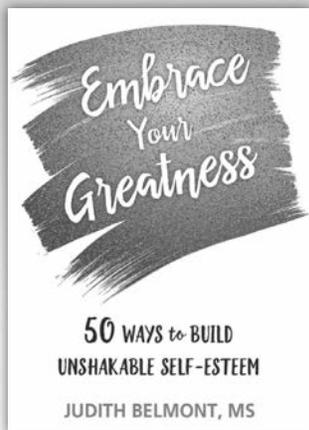
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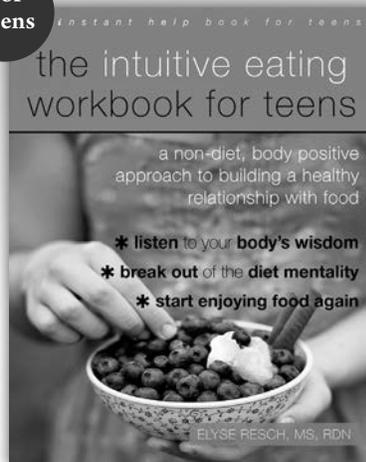


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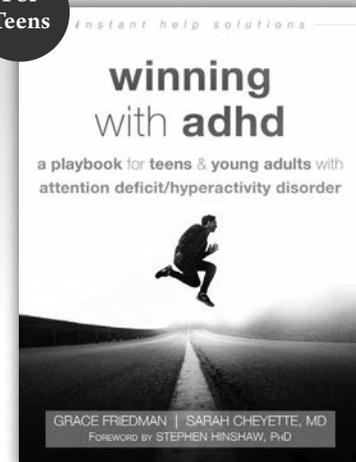
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domestic stakeholders, it appears that the coasts have the highest representations, with relatively low portrayal of the work happening in the middle, northwest, and southern areas of the country. Given the distributions of membership, it is not surprising that membership enrollment has been up during years when the Annual Convention is held in particular locations, such as New York (membership total, including students, in 2016 New York convention = 5,372) compared to more central locations (membership total, including students, in 2007 Chicago convention = 4,684).

Other important distributions regarding membership include the ratios of full members to students, as well as the primary “role” of members (e.g., the context in which they spend 50% or more of their time). It is clear from membership data that ABCT fosters a large student population (N Student 2018 = 1,663 compared to N Full 2018 = 2,470). There are a number of opportunities for students, including the main conference presentation possibilities as well as student-focused networking events such as specific presentations and gatherings focused on the internship match process. What is less clear, however, is if ABCT attracts students from diverse programs outside of psychology, counseling, and social work, such as psychiatry, nursing, and/or organizational or other health-care industry sectors. In addition, data supplied by the central office shows that a large proportion of our membership (52%, $N = 1,218$) spends 50% or more of their time in clinical roles; whereas only 12.8% ($N = 299$) and 26% ($N = 614$), respectively, spend 50% or more of their time in “academic” or “research” roles. We found these statistics rather surprising, as we felt that much of what we see in terms of convention programming tends to represent traditional research from those with psychology department affiliations. This data also showed that only a small percentage (5%) reported spending 50% or more time in administrative roles such as ours, though it made us eager to seek out this subgroup and learn about their careers and contributions to ABCT.

Given what this glimpse of our membership data reveals, we think that there are several opportunities before us as an organization in terms of expanding the reach of our science. In order to create an appreciable impact on the research-practice gap, our organizational efforts will require a multi-pronged approach. As an association, we must elevate our members’ work that is inclusive of populations more representative of community mental health settings

(e.g., transdiagnostic approaches, treatments geared toward complex comorbidities, underrepresented populations, etc.). We must also increase efforts to engage professional partnerships across different sectors. In a *tBT* article from 2017, dissemination and implementation experts were interviewed and asked if they had learned lessons from other disciplines that could be applied to their work. Each interviewee, Drs. David Clark, Bruce Chorpita, Ann Garland, Rochelle Hanson, and Shannon Dorsey, reported that they had relevant, working partnerships with colleagues in a number of other fields and also that certain other disciplines had done far more to address the research-practice gap than behavioral health (e.g., technology, economy, nursing, epidemiology, etc.).

One immediate strategy that we can employ is to collect richer data on our membership. For instance, having a better understanding of our members who are in clinical contexts—are these primarily direct-care roles? Are they in agencies or in private practice? How/do they utilize research and in what way? For the “other” category, what job functions make up this group? Further, to ensure we are sufficiently propping open the doors to our dining room, we must return to the questions posed in Stanick et al. (2015), which is to ask ourselves, *What do stakeholders get from their involvement in ABCT?* Also, are the incentives that ABCT membership offers actually what stakeholders across different sectors want? What do other stakeholder-focused associations, such as the National Council for Behavioral Health, target that are draws for providers?

We also know that accessibility is a frequently cited barrier to association and convention involvement; thus, below is a list of suggestions for our Membership Committee and our Board focused on increasing our stakeholder reach:

1. Offering a reduced rate for practitioners to attend the convention.
2. Offering a reduced rate for nonstudent, first-time attendees.
3. Using technology to increase access to convention presentations such as live streaming sections of strategic talks on social media platforms and exploring methods of “virtual” conference attendance for a reduced rate but with CEU credit.
4. Developing a “Welcome Project” that targets new members or new attendees from nonpsychology disciplines or nonacademic settings. This could involve a specialized name badge at the convention and forming

a committee that greets these individuals, supports them in finding presentations of interest, connects them with relevant SIGs.

5. Continue with convention themes that emphasize and encourage submissions that include nontraditional members as presenters, discussants, etc.

6. Identify ABCT “Ambassadors” who would be members who sit in nontraditional, nonacademic roles and highlight and reward these members for the type of impact they have on the organization and the field of cognitive behavioral science.

What is clear is that a lot more work can be done to increase reach and outreach to stakeholders within and across various sectors for our ABCT community. ABCT has a committed membership and of course all of us are invested in the promotion of best practices for the behavioral health consumers our work ultimately serves. In order to ensure that ABCT continues to reflect growth in the field, this begins with membership and the active inclusion of colleagues and industry associates who historically may not have seen the value of membership and/or are struggling to see the continued value of membership. We believe enhancing the social impact of cognitive behavioral science will require an increased professional diversity of our members, new pathways for nontraditional and junior members, and a dedicated collaboration. We hope the 2019 convention moves us further in that direction.

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Mentoring Emerging Clinical Scientists While Maintaining Scholarly Productivity at a Small Liberal Arts College

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UNDERGRADUATE RESEARCH TRAINING in psychology serves several essential functions, including professionalizing students within the boundaries and expectations for the discipline, helping them to develop their critical thinking and research skills, and helping them to truly grasp the scientific basis of the discipline (Behar-Horenstein, Roberts, & Dix, 2010; Brewer, Dewhurst, & Doran, 2012; Van Vliet, Klinge, & Hiseler, 2013). Although several sources have described the opportunities, barriers, and recommended procedures for supervising undergraduate research assistants, the vast majority of these reports focus on large research universities

wherein undergraduate research assistants typically work in a lab along with graduate students who may occasionally serve as their primary supervisors (e.g., Evans, Perry, Kras, Gale, & Campbell, 2009; Morales, Grineski, & Collins, 2017; Thiry & Laursen, 2011). Moreover, several of these accounts focus broadly on other STEM fields (e.g., Behar-Horenstein et al., 2010; Morales et al., 2017; Thiry & Laursen) rather than on the more specific needs of emerging scientists in clinical, counseling, or other applied health areas of psychology. Our purpose here is to describe a model of mentorship for supervising undergraduate researchers at a small liberal arts college

(SLAC) and share the perspective of a faculty supervisor as well that of a (former) undergraduate student. Although there are various opportunities to mentor undergraduate psychology researchers through classroom instruction in research design/analysis, or supervision of independent studies and honors projects, we focus here on one particular model—the student-faculty collaborative research model—and review strategies, recommendations, and the impact of this approach on the student’s development and on the faculty mentor’s research program.

A Faculty Mentor’s Perspective

Given the multifaceted intellectual benefits conferred by the practice of research, the Council on Undergraduate Research (CUR.org) recommends that undergraduate research opportunities “should be accessible to as broad a range of students as is practical” (p. 3) rather than limited solely to more advanced students (Rowlett, Blockus, & Larson, 2012). For many, this recommendation may pose a quandary: Is it feasible and beneficial to invest in the rel-

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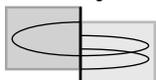
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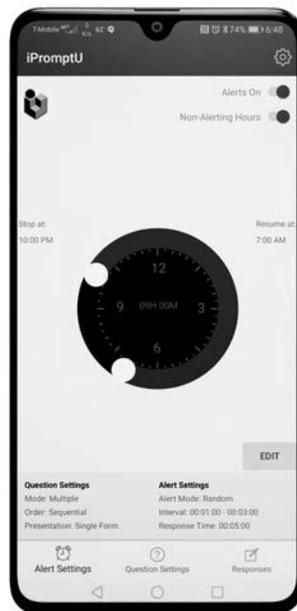
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actively time-intensive practice of mentoring student researchers across the spectrum of knowledge and ability, particularly when many institutions do not offer teaching credit or tenure/promotion benefits for doing so? Why would you do so? According to one multisite investigation of formal undergraduate research training programs, faculty are more likely to serve as mentors if they value increasing diversity through mentorship of underrepresented groups, believe mentorship will be associated with institutional rewards (i.e., reviews and promotions), have unconstrained access to undergraduate research candidates, do not see mentorship as very time consuming, and are mid-career (rather than late-career) faculty (Morales et al., 2017). Although SLACs do prioritize teaching, my institution does not require or formally consider student-faculty collaborative research for tenure or promotion, we have limited access to formal undergraduate research programs geared toward increasing diversity, and, in my experience, research mentorship is always a time-consuming activity. Nonetheless, my answer to the “is it worth it?” question is an enthusiastic yes, but with a qualifier: Students must have completed at least one course in research design, have a good academic record, and be willing to commit to a year-long experience in my lab. As long as students meet these criteria, there are many ways for us to establish a mutually beneficial and productive research collaboration.

Several unique features of SLACs facilitate student-faculty research collaborations and thereby advance the research programs of faculty supervisors. First, small classrooms allow faculty to work closely with students and learn their individual strengths and weaknesses, and this information can be used strategically to recruit lab research assistants: whereas one might excel at literature research, another might have a sophisticated understanding of research design, while another might demonstrate strong attention to detail, time-management skills, and online survey development skills, and a fourth may be well-versed in data set-up and basic analysis in SPSS. My goal is to generate a lab group with a versatile skill set, where students can engage in peer mentoring and instruction to emulate real-world research groups in which scientists are invited to collaborate based on their unique contributions to a given project. Second, numerous classroom opportunities to design studies, prepare IRB applications, collect and analyze data, practice scientific writ-

ing, and, perhaps most crucially, engage in scholarly discussion and debate regarding research, all serve to prepare students well for research collaboration. For instance, my (advanced) research methods in clinical psychology course (a 3-hour course with a 3-hour weekly lab component) is a largely discussion-based course that involves critical review of the research methods and scholarship in the discipline. The curriculum itself therefore teaches students essential research, critical thinking, and communication skills that are useful for their work in faculty research labs or for their postgraduation endeavors. Group-based research projects teach them about the complexities of psychological assessment (indeed, none of my students seems to fully grasp the inherently complex nature of scale development until they read Clark and Watson’s 1995 paper!), the rigorous, time-consuming nature of research, the inevitable errors and need for transparent reporting of these errors, the temptation to take shortcuts and the ethical responsibility to avoid doing so, and, of course, the benefits and challenges of working as part of a research team. Third, SLACs are rooted in multidisciplinary knowledge and lend themselves readily to collaboration across diverse areas of study. For instance, my lab initially designed a new study comparing images of “overweight” individuals engaging in positive (e.g., eating vegetables, exercising) and negative (e.g., eating junk food, napping) stimuli to see if exposure to positive media might result in more favorable attitudes toward weight antidiscrimination legislation. Although we had immersed ourselves in relevant psychology literature, it was only when we consulted one of my colleagues, an American Studies and Women’s, Gender, and Sexuality Studies scholar who is an expert on fat stigma, that we understood the inherently stigmatizing nature of our experimental design (i.e., assumption that there is a “good-fatness” and a “bad-fatness”) and language (i.e., “overweight” assumes that there is a “normal” weight that one is “over” and the preferred term among fat activists is fat). Based on her recommendation, we consulted the multidisciplinary *Fat Studies Reader* (Rothblum & Solovay, 2009) and interviewed a fat activist artist, strategies that helped us to significantly improve our research design. Throughout this process, I was excited to observe my RAs’ openness and ability to integrate new knowledge with information from their other nonpsychology courses. Although other academic

institutions likely do provide opportunities for multidisciplinary collaboration, I believe that the ease with which my students and I were able to learn from outside our “psychology-silo” was unique to the SLAC experience.

In their summary of evidence-based practices for effective undergraduate research mentorship, Shanahan and colleagues (2015) highlight the need to set clear, scaffolded expectations and build community among lab members. Indeed, one of the most essential components of a successful student-faculty research collaboration is a thorough lab orientation to assess the student’s knowledge and skills and establish clear expectations. Unfortunately, I failed to appreciate the importance of this step during my initial mentoring experience in graduate school: While supervising a team of undergraduate research assistants, I incorrectly assumed that everyone understood the need for diligent and professional behavior in a research setting. During the data collection phase for my dissertation, I stumbled upon one of my research assistants chatting informally with a study participant while the participant completed a mood questionnaire. When I followed up with the research assistant the next day to explain the potential impact of her inappropriate behavior on our data and to ask if she had engaged in similar behavior with other participants, she denied other instances and tearfully attributed her behavior to her consumption of alcoholic beverages at happy hour with her friends before our data collection session. Based on this startling disclosure, I made the difficult decision to exclude all of her data from the study. Now, I make my expectations for research assistants explicit: Students must commit to a minimum of 8 hours of research per week, attend (and be prepared to present at) weekly lab meetings, respond to lab emails within 24 hours, behave professionally in all research activities, complete assigned tasks in a timely manner, complete researcher training before commencing data collection, and produce work to the very best of their abilities. I also remind students that the stakes are higher for research than for their regular course work because of the opportunity to make a meaningful contribution to science, one that other scientists may draw upon for their own work. Moreover, once they join the lab, I treat them as junior colleagues (rather than undergraduate students), which helps to establish a sense of trust, responsibility, and mutual respect. When

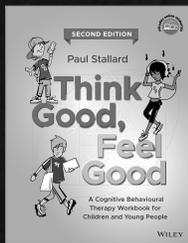
considered research collaborators in the pursuit of scientific discovery, students are able to see the importance of their labor and need to carefully attend to detail and prioritize research activities. Finally, consistent with the recommendations to scaffold expectations and build community, I have adopted an apprenticeship model to help research assistants learn about the process of research from start to finish while fostering progressing levels of autonomy and collaboration. After initially reviewing the basics for critically evaluating published research, our weekly lab meetings often involve discussions about journal articles, ethical issues and scientific misconduct, issues of measurement reliability and validity, and practical aspects of ongoing research (e.g., data collection issues, questions about data analysis, preparation for conference submissions and journal articles). This model requires that assigned tasks be appropriate to the skill set of the student: Whereas a sophomore might assist with literature research, annotated bibliographies, data collection, and IRB documentation, a junior might conduct basic data analyses, draft method sections, and assist with new project devel-

opment, and a senior might serve as lab supervisor, conduct more advanced analyses, and assist with drafts for conference submissions and manuscripts. I encourage students to work in the lab for more than a year (sometimes continuing postgraduation) so that they can continue to build their skills, and in some cases, follow projects from conception to completion. Moreover, working as part of a research team not only serves to professionalize students, but also offers a unique opportunity for peer mentorship, where more advanced students can train and supervise their more junior peers, and thereby reduce the time commitment for faculty supervisors.

There are, of course, costs that accompany working closely with undergraduate research assistants at a SLAC. First, there are times when quickly approaching deadlines may make it more expedient for faculty to complete tasks themselves rather than assign them to student researchers and then undergo the necessary stages of drafting and revision. In those instances, I still invite student researchers to offer feedback on drafts and fill-in-the-blanks however they can (such as by gathering information for different sections of the

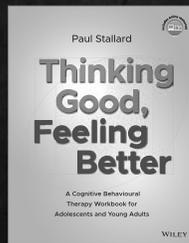
manuscript, reviewing submission guidelines, or formatting references) to maintain the collaborative nature of our pursuit. Second, students often struggle to grasp the time-span for a research project to evolve from initial conceptualization to publication. For instance, when I was invited a few years ago to take the lead on two research projects that involved analyzing existing datasets, one of my research assistants eagerly volunteered to take primary responsibility for both projects. Encouraged by her enthusiasm, I agreed to take on both projects and we made some good progress by the end of the semester. However, when we met the following semester to continue our work, she indicated that she no longer had the time to take a leading role on the projects due to other commitments. Although I was disappointed and a bit overwhelmed to realize that work would therefore fall to me, I later realized that an undergraduate research assistant could not be expected to automatically grasp the notion that research projects are typically multisection endeavors (in contrast to semester-long classroom assignments). I am now much more cautious about external commitments that rely heavily on the

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ongoing contributions of my undergraduate research assistants, but I also strive to more clearly communicate the expected time line for projects. Finally, a third cost of working with undergraduate RAs is that all of the work must be checked carefully and cannot automatically be assumed to be correct. Work will frequently include errors, even among the most experienced students. Part of the allure of working in a research team is that we can all serve as peer-reviewers, ensuring that we do not have typos or grammatical errors, that our arguments are logical and clear, that we submit all of the required documentation to meet external deadlines, and that we include all of the measures that we want to include in our surveys. But how do we teach students to write in a concise manner? How do we teach them to parse the essential from nonessential information for a poster presentation? How do we teach them to thoroughly (rather than superficially) support their arguments with evidence from the research literature, and to include a balanced selection of sources rather than merely those that support the points that they want to make? It is admittedly sometimes tempting to just do things myself, particularly when I have planned poorly and do not have time for extensive revisions. However, at those times I remind myself that I chose to pursue a career as a faculty member at a SLAC because I truly enjoy being a teacher-scholar. And part of that responsibility involves facilitating the development of independent scholars who are capable of critical thinking, scientific writing, and honing their research and professional skills for graduate study or for entry into the workforce. Moreover, we should not underestimate the capabilities of undergraduate student researchers; indeed, I am often inspired by my students' ideas, thoughtfulness, and enthusiasm for science and find opportunities to work closely with them to be among the most intellectually stimulating and enjoyable aspects of teaching at a SLAC.

A Student Researcher's Perspective

Although I started my undergraduate career at a large university, I transferred to a SLAC because I was told that I would likely not have an opportunity to participate in student-faculty research until my junior or senior year. This restriction of research opportunities to more advanced students is unfortunately consistent with research on universities across multiple scientific fields (e.g., mathematics, computer

science, environmental science, etc.; Russell, Hancock, & McCullough, 2007). In contrast, within 2 months of transferring to a SLAC, I was able to join a clinical psychology faculty research lab and continued to work there for my remaining 3 years at the college.

There were several unique features to my SLAC experience that were essential to my research training. First, the greater student-faculty interaction stemming from small class sizes helped me to learn about faculty research interests and potential mentorship styles, and gave me the courage to approach my professor about research opportunities. I knew that my professor knew my name and likely had a sense of my capabilities as a student, which may not be universally true for students at larger universities. Second, I received intensive training in psychology research methodology: Our curriculum required one introductory research methods course, one introductory statistics course, plus two advanced research methods courses in subdisciplines of psychology (e.g., clinical psychology, cross-cultural psychology, social psychology), all of which included weekly labs and required completion of group-based empirical research projects. These experiences not only helped me develop essential skills in literature research and synthesis, scientific writing, and research design and analysis, but they also taught me how to work as a part of a research team, which research suggests helps students hone skills in time management, collaboration, and communication (Colbeck, Campbell, & Bjorklund, 2000). For instance, when I found that one of my group research projects was largely being completed by only two of us in the group, we confronted our other members to discuss group dynamics and workload in an attempt to practice effective communication in a difficult situation. Although this was a challenging conversation, it taught me to assertively express my needs in a respectful manner and begin to feel comfortable with being uncomfortable. Finally, my SLAC education required me to take several courses outside of psychology, broadening my perspective and helping me to understand the interaction of multiple life factors, including psychological, biological, and social factors (among others; Engel, 1977) in shaping the human experience. For instance, several of my courses focused on the roles of culture, movement and expression, and country of origin in understanding others (such as Introduction to Latin American Studies, Dance and Culture, and

Exploring German Cultures), which reinforced the importance of cultural and environmental factors in shaping cognition, behavior, and relationships with one's body. Moreover, part of this multidisciplinary education involved drawing upon experiences outside the classroom, whether these were campus-wide events, residential life experiences, or interdepartmental colloquia. In fact, my own research (for my undergraduate honors thesis) was inspired by a speaker invited by the Psychology Club, Dr. Carolyn Becker, who presented her research on eating disorder prevention. My faculty supervisor and I collaborated with various campus constituents to organize our first Fat Talk Free Week (based on Dr. Becker's research) and when I observed that many of my peers failed to take the programming seriously, I decided to investigate the impact of these types of conversations on our student community. As my research was directly connected to campus programming, I was also able to solicit funding from the Dean of Students Office (not a typical source for research funding), which further highlights the interaction between administration, cross-disciplinary campus events, and student scholarship at a SLAC.

I benefited from several structures that made my student-faculty research experience a positive one. First, my lab orientation helped me to understand the expectations for my work and the risk of producing and disseminating low-quality information to other researchers and the general public. Being treated as a junior scientist also fostered my investment in the lab's research, and as the experience progressed, I observed a shift in my priorities toward scheduling more time for research duties and taking initiative to pursue additional lab responsibilities. For instance, I volunteered to take the lead on a poster presentation and worked late on several evenings to draft and revise the poster based on suggestions from my faculty advisor. Had this merely been a classroom assignment, I would have just completed the work and gone to bed at my usual time, but I was very invested in this poster presentation (as an investment in my professional development) and took a more meticulous approach toward its completion. My identity as a junior scientist was also fostered by attending and presenting our lab's research at national and international scientific conferences, opportunities that were made possible by student presentation travel grants through my SLAC. Through these experiences, I learned about

the professional research community, challenged myself to initiate conversations with scholars whose work I admired (even when I found the prospect to be very intimidating), and honed my skills in critical thinking, scientific writing, and, perhaps most important, verbal communication of scientific research in a clear, concise manner; these accomplishments have all been identified as learning gains of undergraduate research training (Lopatto, 2004). Finally, the apprenticeship structure employed by my faculty supervisor helped me to learn about the scientific process in a manner that was personalized, developmentally appropriate, and manageable. For instance, I transitioned from initially conducting literature reviews and serving as a second data coder on a qualitative research project during my sophomore year; to assisting with set-up, data collection, and technological troubleshooting for an ecological momentary assessment study during my junior year; to serving as lab coordinator, training, scheduling, and mentoring other research assistants, and managing the project budget (in addition to conducting my own honors thesis research) during my

senior year. At the end of a research training experience, both students and mentors indicate significant improvements in research skills (Kardash, 2000), and at the end of my 3-year undergraduate research assistant experience, I felt confident in my foundational knowledge about scientific principles and research methodology and prepared for my current program of graduate study in clinical psychology.

I also faced several challenges as an undergraduate researcher, some of which may offer useful guidance for aspiring student researchers at SLACs. For instance, I struggled to critique scientific literature (who was I to identify limitations and critique published work?) and found it difficult to write in the clear, concise, and somewhat repetitive manner valued by the sciences, which frequently contrasted expectations for writing in my nonpsychology courses. During these times, I found it particularly helpful to discuss the pros and cons of journal articles as a lab group and to receive specific feedback on my writing style. For instance, my supervisor would sometimes rewrite a few of my sentences to demonstrate scientific writing, and I would

then use those sentences to guide the rest of my revisions. She also reviewed multiple drafts of posters and papers and pushed me to ask questions of my writing: Were my ideas connected and coherent? Were my hypotheses and conclusions supported by the research? And, perhaps most important, did I convince the reader that the research was worthy of consideration by providing a strong argument to the all-important "so what?" question? Consistent with previous research (Kardash, 2000), this training strengthened my ability to contextualize research findings and advocate for the importance of our study results. To that end, I would recommend that undergraduate students embrace critical feedback and recognize that drafts replete with tracked-changes and editorial questions are acts of thoughtfulness and commitment on the part of the research supervisor to facilitate your professional growth. Second, I also struggled to anticipate possible sources of error in the process of research. For example, when I discovered that a participant had unexpectedly taken the food stimuli after completing our experiment, I was caught off-guard and

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had to determine not only how to handle her data, but also how to prevent this situation with future participants. I would therefore recommend that undergraduate research assistants talk to their supervisors about unexpected situations or difficulties stemming from their own research so there can be a preemptive discussion of possible errors. They may also find it helpful to approach research with a flexible stance, accepting that error is an inevitable part of the scientific process and that knowledge is gleaned cumulatively, rather than solely from any one study. Finally, I found it difficult to learn how to treat my research-related mistakes as opportunities for growth and I greatly appreciated that my supervisor approached errors calmly and compassionately. For instance, I was mortified when I accidentally deleted a variable from one of our datasets, but once I gathered the courage to tell my supervisor, she expressed concern but did not make me feel bad or incompetent. Instead, she reviewed the dataset with me to understand how the error occurred and we developed a plan to prevent future problems. This experience taught me that it is acceptable to occasionally make mistakes (as long as we can document them) and that we can use these errors as learning tools rather than as indicators of scientific unworthiness or failure. Reflecting upon this experience, I encourage student researchers to push past fear to frankly and precisely disclose mistakes to their mentors so that they can work collaboratively toward solving (and preventing) problems. I also urge advisors to approach errors in a compassionate manner similar to my advisor, as a harsher response may have dissuaded me from pursuing a career as an academic psychologist. In the future, I hope to adopt the same approach to supervising student researchers to foster their learning and sense of self-efficacy in research.

Conclusion

The purpose of the current report was to describe some of the opportunities, challenges, and recommended steps for conducting student-faculty research in psychology at a SLAC. We posit that SLACs are uniquely positioned to provide faculty labs with undergraduate research assistants who have received extensive classroom instruction in research methodology, and the small class sizes and multidisciplinary focus foster student-faculty rapport and creative approaches to investigating questions relevant to clinical psychology.

Although working with undergraduate researchers does pose unique challenges, certain structures are likely to reduce burden on faculty time and increase the likelihood of positive outcomes. Moreover, for teacher-scholars at SLACs, student-faculty collaborative research offers an ideal opportunity to mentor emerging scholars and simultaneously benefit from their important (and personally rewarding) contributions to the lab. We hope that sharing the perspectives of both the faculty mentor and student will encourage student-faculty research endeavors at SLACs as well as at larger institutions. Future investigations may focus on examining institutional barriers to these opportunities as well as alternate approaches to undergraduate research mentorship and training. This information could help establish best practices for mentoring undergraduate students into the next generation of scientific researchers and psychologists.

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Reflections and Advice Related to the Transition to a Practitioner-Scholar Training Environment: The Challenges and Rewards of Working as Part of a Professionally Diverse Team

Lisa S. Elwood, *University of Indianapolis*

BEFORE ACCEPTING A POSITION as a core faculty member with a Psy.D. program, my professional training occurred exclusively in environments operating from a scientist-practitioner model. In addition to engagement in direct research activities, coursework in my graduate training prioritized empirical literature and clinical training highlighted science-based decision-making and empirically supported treatments. Among students and faculty, diversity in clinical orientation was limited, generally representing a range from foundational empirically supported approaches (e.g., behaviorism) to approaches that were in earlier stages of evaluation at the time, such as third-wave behavioral therapies.

While emphases varied and the requisite strengths and weaknesses were taught, I do not recall the scientist-practitioner model being seriously questioned. My training continued with a postdoctoral fellowship as a project director of a treatment outcome study examining an empirically supported treatment. When it came time to apply for academic positions, my professional experiences and the competitiveness of the academic job market led me to apply to a wide range of openings. After spending 3 years doing clinical research, I believed my experiences were well suited for both research- and practice-focused programs. A combination of personal and professional reasons led me to accept a position as a core faculty

member with a Psy.D. program that operates from a practitioner-scholar model and possesses a lot of professional diversity among the faculty. Although I was aware at the time that this would be a different environment than I was used to, I did not anticipate the challenges and rewards that entering a workplace with a high degree of professional diversity would bring.

The scientist-practitioner (based on the Boulder model) and the practitioner-scholar (based on the Vail model; e.g., Stoltenberg et al., 2000) models both include training on the science and practice components of psychology. Many similarities exist across program types, and the differences lie more in the emphasis of the training than the activities themselves. Scientist-practitioner programs emphasize the production of research in addition to the prioritization of empirical findings in decision-making. While practitioner-scholar programs may involve a research production component as well, the emphasis is typically more on the consumption of research and integration, along with other factors, into clinical decision-making and there are typically lower research produc-



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tion expectations. Although graduates from both types of programs end up working in a wide range of professional positions, a larger number of academic and research positions are comprised of individuals with scientist-practitioner training and the majority of graduates from practitioner-scholar programs end up in applied, practice positions. While Ph.D. programs primarily belong to the Council of University Directors of Clinical Psychology (CUDCUP), which identifies with the scientist-practitioner model, most Psy.D. programs and practitioner scholar programs are members of the National Council of Schools and Programs of Professional Psychology (NCSPP). Although APA has embraced the evidence-based practice (EBP) movement, evidence-based practice conceptualizations include three parts: research evidence, clinician expertise, and client characteristics, culture, and preferences (APA Presidential Task Force on Evidence-Based Practice, 2006). Similar to training approaches, models that vary in the prioritization of these components can fall under the larger evidence-based practice umbrella. For example, those prioritizing the science component generally support models that emphasize the quality of empirical findings (see Tolin, McKay, Forman, Klonsky, & Thombs, 2015, for a consideration of a revised approach to empirically supported treatments [ESTs] and Lilienfeld, Lynn, & Bowden, 2018, for a call for science-based practice). Alternatively, practitioner-focused models often prioritize individual client characteristics, clinician expertise, and the applicability of research findings to the client and setting. For example, NCSPP endorses a local clinical scientist model (Peterson, Peterson, Abrams, & Stricker, 2006; Stricker & Triewiler, 1995). Although both models consider the same components, the variation in emphases can result in markedly different conclusions. For the purposes of this article, I will use the evidence-based practice term to refer to decision-making strategies that are influenced by scholarship and experience broadly, without an emphasis on original and empirical/quantitative research, and science-based practice to refer to decision-making strategies that prioritize empirical/quantitative research.

Although not incorporated into the professional identities themselves, scientist-practitioner and practitioner-scholar programs also frequently differ in the theoretical orientations represented. Scientist-practitioner models line up well with the

goal of identifying empirically supported treatments and often emphasize cognitive behavioral therapy and other orientations that are well represented in research. Practitioner-scholar programs often include a wider variety of theoretical orientations, a greater representation of orientations that are less commonly represented in research, and an increased emphasis on the utilization of multiple orientations through integrative or eclectic practices. Our program curriculum currently includes required student coursework in five clinical orientation courses: cognitive, behavioral/learning, humanistic, psychoanalytic/psychodynamic, and family systems. Many faculty members are licensed and courses are taught by individuals trained, and often practicing, in the orientation that is presented. Academic freedom is valued and instructors are allowed to teach their courses in a manner consistent with their philosophy of teaching and professional values. Consequently, students are exposed to different, and likely contradictory, information and interpretations throughout their training. All students must pass each of the classes, thus gaining a basic familiarity with each approach. As students proceed through the program, it is anticipated that students will begin to develop their professional identities, including their preferred theoretical orientation. While many graduates identify a primary orientation from which they practice, others practice from a variety of approaches. Subsequently, our program includes faculty and students with a wide range of approaches to clinical work. The transition from largely homogeneous professional circles to one that embraces and celebrates heterogeneity initiated consideration of my own professional identity. As I reflect on the experience, I notice similarities between my personal journey and theories of intergroup contact and biases (e.g., Dovidio, Gaertner, & Saguay, 2009; Pettigrew & Tropp, 2006) and adolescent identity development (e.g., Marcia, 1966; Stephen, Fraser, & Marcia, 1992).

One of the first things that happened when I began working with individuals from different professional backgrounds is that I became aware of my prior assumptions about "the other," specifically non-scientist-practitioners and individuals of different theoretical orientations. While operating in fairly homogeneous professional groups, it was difficult to imagine the perspective of others who do not prioritize the quantitative research process and results of randomized controlled trials. It was easy

to think of professionals with different perspectives as outdated, uninformed, or even negligent. Although a latent belief, I generally presumed that the scientist-practitioner model carried innate appeal and that exposure to and understanding of research should be sufficient for one to adopt a commitment to science-based practice. However, consistent with intergroup contact theory (e.g., Pettigrew & Tropp, 2006), as my interactions with individuals with differing professional models and orientations increased, my views of the other changed as well. My interactions revealed intelligent, well-trained, ethical, and caring clinicians representing a variety of training models and orientations and possessing a wide range of views of the role of research. Additionally, as I began to work closely with individuals from the other group, I realized that we shared similar opinions on many issues that were important to me. Thus, an initial step in my growth process was to realize that there were many similarities between my group and the others and that both groups contained a wide variety of individuals.

As my exposure to alternative viewpoints increased and I began to understand some of the arguments raised, I found myself critically evaluating my viewpoints, engaging in self-reflection, and in the midst of a mini professional identity crisis. Exposure to critiques of the empirically supported treatment literature revealed some challenging and valid points (e.g., Westen, Novotny, & Thompson-Brenner, 2004). I considered points raised regarding statistical versus clinical significance, dropout rates, and the influence of researcher allegiance. Furthermore, consideration of challenges to the research and publication process, such as publication bias, the file drawer problem, and the subjectivity that is involved in the peer review process reveal legitimate concerns. Regardless of an individual's commitment to the research process, it seems impossible to ignore some of the weaknesses of the current system.

Consideration of these points led to questioning if my scientist-practitioner identity was one that I critically considered and chose, or if it was a consequence of adopting my professional parents' values and practices. Although it may have occurred, I do not recall ever intentionally considering alternative perspectives before choosing an orientation. I wondered if I neglected to question or examine my views because the environment in which I developed as a professional maintained a scientist-practitioner focus. Additionally, I considered how challenging it would be to

spend considerable time, effort, and professional resources investing in and successfully practicing a treatment approach, only to be told by other professionals later that I needed to abandon my learned skills and expertise and essentially start over with a new approach. It is easy for me to imagine a scenario in which I would be the one who would be skeptical of alternative approaches, even as they gained professional and empirical support.

My reflection process ultimately led me to reaffirm my commitment to the scientist-practitioner approach and science-based practice. My professional commitment to the field and to the best interest of patients leads me to prioritize clients receiving treatment that is well suited for their needs, gives them the best chance at recovery and improved quality of life, and that will reduce symptoms as quickly as possible. Despite the flaws in the research and publication processes, I continue to believe that research is an essential tool for making decisions about treatment choice. However, I have come to believe that the perspectives of both researchers and practitioners have strengths and weaknesses and that dialogue, communication, and collaboration across groups will strengthen both research and practice. Research being conducted related to dissemination and implementation provides some encouraging examples of what can develop from such partnerships (e.g., Becker, Stice, Shaw, & Woods, 2009).

As my beliefs solidified I found they also evolved. For example, rather than viewing myself as an individual who is committed to a specific treatment approach, I realized that my larger commitment is to providing best practice treatments based upon the available data. Therefore, I must remain open and prepared to participate in additional training and alter my approach if needed in order to provide the best available services to my clients and education to my students. Additionally, I considered that my commitment to science-based practice should not be restricted to my treatment choices. I felt challenged to become more familiar with best practices in teaching and to aim for science-based teaching, as well.

My role as a faculty member involved in the training of future psychologists challenges me to consider how I interact with students in my generalist environment. I realized my goal for my students is that they think critically and make informed decisions based on available data. Ultimately, it is important to me that their deci-

sions are made thoughtfully, that they consider available evidence and theory, and that they are able to justify their choices. Combined with the opportunity to develop and teach an evidence-based practice course, I found myself considering how to promote critical thinking, informed decision-making, and, hopefully, science-based practice in students who enter with a range of intrinsic interests and initial affiliations. As I consider my experiences, I am reminded that, cliché as it may be, my students are here because they genuinely do want to help people. They are bright individuals who are committed to their training and want to do what is best for their clients. If they come to believe that practicing in a science-based manner is in the best interest of their clients and we sufficiently prepare them to do so, they will adopt the approach and carry it with them into practice. Furthermore, receiving a theoretically diverse training experience may result in the students participating in the professional identity development process early in their careers. Rather than loosely adopting professional family values, our students can be encouraged to engage in a professional moratorium (i.e., exploration of options and preparation for making a commitment; Marcia, 1966) and progress towards their professional identities earlier.

Finally, I find my reflections returning to my decision to accept the position with my current program. Prior to joining the faculty here, I had very little exposure to or knowledge of Psy.D. programs. The information I had heard primarily highlighted weaknesses of some versions of the model. As I considered accepting the position, I nervously wondered how my mentors and colleagues would view the decision. Although the specifics are a little blurry at this point, I recall a conversation with a valued and respected mentor. To my surprise, he responded positively to the decision, and noted that it is also important for emerging clinicians to be trained in critical thinking and that the education provided could have an impact on those who are providing the bulk of the clinical services in our field. Rather than viewing the choice as a compromise, he spoke of it as an opportunity.

As I gain experience in my position, I have been pleased to observe the professional development of our students. I have heard students discuss the disconnect (at times) between the classroom and the field and express desire for more supervision in ESTs and science-based practice while in their training. I have had the opportunity to watch students in our program progress

through their development and join us in mentoring through roles as teachers and supervisors and begin to fill some of the gaps they observed. Some of my proudest moments have been hearing my students describe engagement in difficult conversations with other professionals about the utilization of clinical practices that are not supported by research. Consistent with the diversity of the environment, though, I have also observed highly competent students make different choices than I would and have been challenged to respect those decisions also.

There are times when I tire of feeling the need to argue for positions that would never be questioned in other environments and long for the simplicity of being part of a more unified group. While it would be easier in many ways, I know that the diversity of my recent environment has expanded my views and resulted in a more mature and intentional professional identity. I have also come to believe that as a field, we have a lot we can learn from each other and that increased collaboration between individuals with varying emphases within the evidence-based practice model will be beneficial for our field in both the research and practice domains. While not a new idea, it is one that remains relevant, as evidenced by *Behavior Therapy's* decision to republish in 2016 an article on bridging the gap between scientists and practitioners that was originally written in 1996 (Sobell, 1996, 2016). More recent publications written by leaders from different perspectives have come to similar conclusions about the need for increased collaboration (e.g., Lilienfeld et al., 2013; McWilliams, 2017). In the end, I have decided that as comfortable as it may be to remain in professionally homogeneous environments, there is much to gain from communication and participation in generalist training teams, both for individuals and the field.

As I enter mid-career stage and reflect on my journey thus far, I hope that considerations of my experiences may be useful to others in the field, particularly those entering theoretically diverse professional environments or practitioner-scholar programs, and offer a few pieces of advice. First, I recommend focusing on the similarities, including shared goals and values, before the differences. Even if you may not agree on the exact strategy to get there, it can be reassuring to realize the members of your team are all working towards the same goals (e.g., training high-quality clinicians). Second, become comfortable with areas of

respectful disagreement, particularly for less important issues. Rather than viewing disagreements as battles to be won, learn when to step away from topics and just accept the possession of different viewpoints. Third, be open to discussion and consideration of alternate viewpoints. Recognize the likelihood that other approaches may possess some knowledge, strengths, and skills that may be missing from your standard approaches. It may be useful to identify methods of having these conversations that increase the likelihood of success. I, personally, have found some individuals in my program who describe different viewpoints than mine using rationales and language that are familiar to me. Conversations with these individuals have increased my understanding of the other perspective. Additionally, avoid the temptation of viewing your own perspective as a panacea. I believe our field would benefit from an increased willingness to acknowledge limitations, recognition of instances when an approach is not the best option, willingness to acknowledge when very different approaches may be more useful, and comfort referring accordingly. Gain practice communicating with others, especially trainees, in a way that clearly communicates personal beliefs without criticizing alternatives. Finally, identify mentors and peers with similar experiences to yours. The normalization and validation of experiences, combined with advice when appropriate, can provide a sense of support, guidance, and hope during tense moments. I am hopeful that members from many different perspectives in our field will answer the call for increase communication and collaboration, and that the result will be a stronger field.

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More Than Psychometricians: School Psychologists as Prime Potential Disseminators of Cognitive Behavioral Therapies

Amanda A. Bowling, Rebecca Y. Woo, Sarah Kate Bearman, and Jessica L. Tauber, *University of Texas at Austin*

CHILDREN RECEIVE MENTAL HEALTH services from schools more often than from any other service system (Adelman & Taylor, 2010; Burns et al., 1995; Farmer, Burns, Phillips, Angold, & Costello, 2003; Hoagwood et al., 2007). Schools are in a unique position to provide mental health intervention because parents and school staff are often the first to notice youth mental health issues (Loades & Mastroyannopoulou, 2010). School-based mental health interventions increase the accessibility of services to youth and help decrease barriers to mental health care (Owens et al., 2002; Weist, Lever, Bradshaw, & Owens, 2014). School providers also have the advantage of potentially communicating with and observing a student's interactions with peers, teachers, and parents, as well as their academic functioning more easily than community-based providers, whose services are often limited to outpatient clinics (Mennuti & Christner, 2005). Because youth spend the majority of their days in school, an understanding of school ecology also enables effective mental health treatment regardless of the setting in which youth are treated.

We outline the unique position of school psychologists, at both the master's and doctoral levels, to provide and influence the use of cognitive behavioral therapy (CBT) in school settings. The use of CBT in schools and school psychology as a discipline are described and applied examples provided.

CBT in Schools

CBT has been shown to be effective in the treatment of numerous childhood disorders (Kazdin & Weisz, 1998; Ollendick & King, 2004; Weisz & Kazdin, 2010, 2018) and has been advocated for use within school settings (Hoagwood & Erwin, 1997; Mennuti & Christner, 2013). CBT fits well with the existing structure and culture of traditional school settings, which may help to increase its acceptance by school staff (Mennuti & Christner, 2005). The structure of CBT is familiar to both students and

educators: agenda setting, psychoeducation, in-session practice, and the assigning of practice or homework are already commonplace within education systems (Mennuti & Christner, 2005). CBT protocols are relatively short in duration, adaptable for individual youths' current needs, and solution-focused (Reinecke, Dattilio, & Freeman, 2003), allowing providers working in schools to utilize CBT on three different levels: prevention, early identification, and direct service to youth (Mennuti & Christner, 2013). CBT also works well within schools because it is often more time-limited than other approaches, and time is often tightly constrained at schools, both within the day and across the academic year (Mennuti & Christner, 2005).

School Psychology

The field of school psychology encompasses the delivery of psychological services and supports to children and adolescents, often (although not solely) in schools, particularly with regards to students' academic goals and learning. School psychologists can hold either a master's degree with a specialist license, with which they can practice in schools, or a doctoral degree, with which they can become a licensed psychologist through the same avenues that Ph.D.s in clinical or counseling psychology or doctorates in psychology (Psy.D.) become licensed. Practice settings for doctoral-level school psychologists vary immensely, from traditional school settings, to academic positions, community mental health settings, private practices, and pediatric psychology settings, such as hospitals, primary care, and specialty care clinics.

In practice, master's-level school psychologists typically work in schools, assessing students for learning difficulties and coordinating a variety of services to support students' academic success and psychological functioning. These services can include direct psychological services, identifying and implementing specialized programs targeting specific academic skills, and coordinating services among general

and special education teachers, school counselors and social workers, families, and community-based services. Generally, school psychologists working within schools do not administer interventions themselves and instead provide recommendations for interventions and consultation to specialists or teachers implementing them. In fact, school psychologists are the only professional psychologists specifically trained in indirect service delivery (D'Amato, Zafiris, McConnell, & Dean, 2011). Behavioral consultation with teachers is a core practice of school psychologists that is rooted in learning theory to identify the function of student behaviors in classrooms and design an intervention to resolve the problem (Sheridan & Kratochwill, 2007). School consultation often also incorporates other evidence-based practices, such as motivational interviewing, to address teachers' ambivalence about change (Holdaway & Owens, 2015; Reinke, Herman, & Sprick, 2011).

Historically, school psychologists in school settings have focused on the population of students served by Section 504 and special education services. More specifically, the school psychologists' role focused on assessing whether students qualify to receive those services, and coordinating with school personnel to deliver them, primarily in response to an increasing legal demand to serve students with disabilities as mandated by the Individuals with Disabilities Education Act (IDEA) of 1990. Because of increased demand for individual assessments for services, school psychologists spent much more of their time in the 1990s conducting intelligence tests and writing psychological reports detailing students' eligibility for services than ever before. Subsequent legislation—the No Child Left Behind Act of 2001 and the reauthorization of IDEA in 2004—pushed the field of school psychology towards a Response to Intervention (RTI) model, whereby assessment requirements were reduced so that intervention was targeted towards addressing individual needs before they could be designated as having a learning disability (Ball, Pierson, & McIntosh, 2011). This expanded role means that school psychologists can be an important part of prevention by intervening with youth who are showing some early signs of difficulty but do not yet have a level of impairment necessitating referral for therapy. Thus, school psychologists are well-positioned to use CBT for prevention at the universal, targeted, and indicated levels. Most practitioners of CBT come into con-

tact with youth only once they are already experiencing serious mental health concerns; school psychologists can intervene at an earlier stage and hopefully limit the negative impact experienced by youth (Krautswill, 2007).

Compared to their master's-level counterparts, Ph.D.-level school psychologists obtain advanced training in psychoeducational and psychosocial assessment and therapy along with additional coursework and practice in research methods. Training in research methodology qualifies school psychologists to organize and evaluate mental health delivery systems in a variety of contexts with validated tools. Furthermore, the bulk of training for school psychologists focuses on the needs of children and adolescents and the systems of care in which they already operate, such as schools. Even when doctoral-level school psychologists are not practicing in school settings, their foundational experiences in schools help them develop expertise collaborating across disciplines with teachers, administrative personnel, and other educational specialists, and working within delivery systems of care. All of these experiences make school psychology trainees well-poised to work in multidisciplinary spaces, serving as ambassadors for psychology and evidence-based practices such as CBT in mental health.

The school psychology program at the University of Texas at Austin, the first school psychology program to be accredited by the American Psychological Association, is an exemplar training model. The program is interdisciplinary and follows the scientist-practitioner model in its doctoral and master's-level training, which include the same courses in the first 2 years of the programs. These courses provide key foundations in research methodology, development, learning, family interventions, social/emotional and behavioral assessment, and behavioral and cognitive-behavioral mental health interventions, as well as school psychology-specific coursework on the law, ethics, and history of school psychology, psychoeducational assessment and intervention, and consultation. Courses emphasize a multicultural, evidence-based lens to interventions and research. Master's and doctoral students all complete a 1-year school-based practicum and gain a diversity of experiences conducting assessments, consultation, and delivering therapy in school settings. Doctoral students take additional courses for specialty emphases, some of which include diversity, pediatric psychology, neuropsychology,

academic/research, and child clinical.

After the initial school practicum in their second year, doctoral students obtain various practicum experiences pertaining to individual interests, including in community mental health clinics, school-based therapy clinics, and integrated behavioral health settings, such as a pediatric cancer center, community primary care centers, and hospital consultation-liaison services for youth and families. Since 2009, 98% of doctoral students who have applied to internships obtained them and 96% of these internship sites were APA/CPA accredited. Internship placement sites predominantly include medical centers, integrated behavioral health settings, community mental health clinics, schools, and juvenile justice centers. The perspectives of doctoral students within these settings are enriched by their understanding of the school context because they have multiple experiences coordinating within a child's mesosystem among diverse personnel from the school, medical clinic, and governmental agencies, such as the juvenile justice system.

School Psychologists as Ambassadors for CBT in Schools

Research suggests that school psychologists working in schools spend more of their time than they would like on writing psychological reports and IQ testing, and less time than they would like on working in primary and secondary screening and prevention, consultation, research and program evaluation, and conducting therapy, even after the historical push toward an RTI model (Filter, Ebsen, & Dibos, 2013). However, technological advances in delivering psychometric tools and the contracting of cheaper psychometricians to conduct psychoeducational evaluations will likely make conducting assessments less of a central focus of master's-level school psychologists' jobs, such that existing school psychologists may focus more centrally on indirect services, such as consultation with teachers and systems-level screening and intervention. School psychologists in the future may also spend more time doing therapy than the typical school psychologist in school settings currently does.

Both master's and Ph.D.-level school psychologists have potentially important and unique qualifications that would allow them to contribute to the dissemination of CBT. Ph.D.-level school psychologists are

particularly well trained to integrate practices at the systems level and advocate for policy-level changes to include mental health services with other school services. Ph.D.-level school psychologists can also initiate collaborations between schools and local academic institutions, such as the Act & Adapt project (described below), to work with school personnel in implementing CBT and evidence-based interventions. As those in charge of recommending, and often coordinating, services for students, master's-level school psychologists are in an excellent position to advocate for more students to receive both effective preventive and targeted mental health care services and to coordinate their delivery with allied providers. Additionally, their training in consultation makes them uniquely qualified to work with school counselors, social workers, and teachers to disseminate elements of CBT effectively within classrooms and other settings. For example, school psychologists are particularly prepared to coordinate with teachers to disseminate evidence-based classroom-level interventions, such as the Good Behavior Game, that have been shown to affect a wide variety of long-term child mental health outcomes, such as drug use and anti-social behavior (Bradshaw et al., 2009; Embry, 2002). Indeed, school psychologists have key access to critical change agents that play important roles in children's lives, allowing them to increase the ecological validity of the interventions they deliver.

This article describes three examples of school psychologists fostering the use of CBT in school settings from the University of Texas at Austin's (UT Austin) School Psychology program: (a) Two faculty in the UT Austin School Psychology program have collaborated with three local middle schools to conduct a feasibility study to support school providers' use of a CBT-based depression prevention program for youth in schools, called Act & Adapt (Bearman & Weisz, 2009; Polo, Bearman, Short, Ho, & Weisz, 2006); (b) A graduate of this school psychology program has opened Vida Clinic, a school co-located mental health organization that specializes in school-based mental health services; (c) Another graduate of UT Austin, along with current graduate students of UT Austin's school psychology program, has developed a webinar series to train school nurses in CBT-based mental health care.

Act & Adapt

Act & Adapt is a CBT-based coping skills intervention that has been adapted

for use in the school setting, adjusting for time, financial, and training constraints (Bearman & Weisz, 2009; Polo et al., 2006). It is a manualized, video-guided group depression prevention program that teaches youth to learn how to “act” in response to problems that are in their control and “adapt” to stressors that are outside of their control using coping skills, such as behavioral activation and cognitive restructuring. Groups were co-led by master’s and doctoral students in the school psychology program at UT Austin and school staff, interns, and social workers already embedded in the middle schools. The Act & Adapt program was modified to fit into the typical school context, with shortened sessions (30 minutes of content) and more flexible delivery than in the initial design. In addition to expanding service capacity at the schools, a key goal of this research collaboration was to transfer CBT knowledge to school personnel so that they could independently provide these groups to future students without school psychology student support.

School-based mental health providers ($N = 8$) completed surveys before and after implementing the depression prevention program. Providers’ knowledge and use of evidence-based practices were measured using the Practice Elements Checklist (PEC; Weist et al., 2009) and their attitudes toward the use of evidence-based practices was measured using the Evidence-Based Practices Attitudes Scale (EBPAS; Aarons, 2004). *T*-tests were used to examine pre- and postimplementation scores on the PEC and EBPAS. The PEC subscales, PEC total scores, and EBPAS total scores, except for the ADHD subscale score on the PEC, had medium effect sizes (range from $d = .43-.64$; Cohen, 1988). Provider scores on knowledge and use of evidence-based depression techniques improved by a large effect size ($d = .81$; Cohen, 1988), a finding concordant with the goals of the CBT-based preventive depression intervention. As expected, given the small sample size, *t*-tests revealed no significant differences between providers’ knowledge, use, and attitudes pre- and postimplementation. It is difficult to interpret and generalize these results because of the small sample size and lack of a control group. Nevertheless, the substantial effect sizes do suggest that academic-practice partnerships among schools and school psychology programs can influence the use, knowledge, and attitudes of CBT by school-based mental health providers.

Vida Clinic

Vida Clinic is a mental health organization that focuses on school-based mental health programs founded by a graduate of UT Austin’s School Psychology doctoral program. The founder’s background in school psychology facilitated a partnership between Vida Clinic and the Austin Independent School District; Vida Clinic currently has 23 co-located elementary school-based clinics, one middle school clinic, and three high-school-based clinics. Despite being physically located on school campuses, Vida Clinic is an embedded clinic that works as a separate entity from the school. By operating directly on school campuses, the clinics can serve a population that has had trouble accessing traditional mental health services, specifically minority and low-income families (Farmer et al., 2003; Levy & Land, 1994). On-campus locations also allow Vida Clinic to provide services to children, their families, and staff, through teacher consultations, trainings, and school-wide workshops in addition to individual, family, and group therapy. Also, clinicians can pull students directly from the classroom for therapy, working with teachers to ensure that students do not miss important instructional time. The clinic follows a multisystemic approach and emphasizes the use of evidence-based assessment, monitoring client progress through frequent interviews and the use of the Behavior Assessment System for Children—third edition (BASC-3; Kamphaus & Reynolds, 2015).

Many of the therapists at the clinics utilize CBT with their clients. Vida Clinic is one of the practicum sites for UT Austin’s School Psychology graduate program through which practicum students engage in CBT with clients. Individual interventions conducted within the school setting have excellent external validity for students. For example, the school setting facilitates working with teachers on classroom management strategies to address disruptive behavior in the classroom. Furthermore, in-school exposure-based CBT for anxiety can be particularly effective if they directly address the situations in which children experience anxiety, such as eating in the cafeteria, using public bathrooms, or talking in class.

Training School Nurses in CBT

Dell Children’s Medical Center’s Educational Advocacy Program (DCEAP) is a program created in fall of 2016 to help families navigate the stressors related to their transition from hospital- to school-based

care following an illness. In addition to providing families with an advocate to communicate with the school and facilitate student reentry, DCEAP team members, who are all affiliated with the school psychology program in the educational psychology department at UT Austin, strive to find new ways to educate school personnel in effective behavioral health interventions. Recently, the DCEAP team created an 8-part webinar series for Austin-area school nurses to increase knowledge of mental health issues, reduce barriers to mental health screening and empirically supported intervention, and strengthen the school-hospital connection. Webinar speakers were all experts in the field who have a CBT orientation and backgrounds in school psychology or child psychology. Webinar topics were selected by graduate research assistants in school psychology using feedback from previous trainings and current trends in mental health research with youth. School nurses ($n = 79$) from one Austin school district have received training via monthly webinars on topics including: (a) motivational interviewing, (b) an overview of cognitive behavioral therapy, (c) CBT coping skills for depression, (d) CBT for anxiety, and (e) CBT for self-injurious behavior. Screening tools and additional information on webinar topics were provided to viewers after each webinar. Preliminary pre- and postwebinar survey results suggest that this method of disseminating of CBT to school nurses is effective in increasing knowledge of CBT foundations and practice.

Conclusion

The majority of youth who receive mental health care are served by schools and, thus, locating mental health services on school campuses and integrating them with other services increases youth accessibility to mental health treatment. CBT fits well in a school context because it coincides with the existing structure in schools and can conform to time and resource restrictions. Schools are also informative microcosms of knowledge for practice-based research on how evidence-based interventions can better fit the needs of schools and their diverse populations.

School psychologists are uniquely qualified to disseminate CBT in schools and to allied professionals that work in schools. As demonstrated by programs like Act & Adapt, school psychologists are highly familiar with school systems and contexts, which allows them to design research stud-

ies that fit with school settings and appropriately adjust interventions to work within schools. Furthermore, knowledge of mental health interventions at the universal, targeted, and individual level make school psychologists well-suited to bring a cognitive-behavioral lens to each of these levels, to adapt CBT interventions to be most useful given children's ecologies in schools, and to intervene with effective care before problems cause considerable impairment. School psychologists' expertise in interdisciplinary collaboration also make them excellent candidates for coordinating between service systems, such as with medical professionals and schools.

While there are still substantial barriers to the implementation of CBT-based interventions in school settings, including the high existing workload of school psychologists and lack of policy and resources facilitating school psychologists' involvement in mental health service delivery, the role of a school psychologist can and should extend far beyond that of assessor for special education services. School psychologists at the master's and doctoral levels can be particularly valuable coordinators of services and principle disseminators of CBT.

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The “Behavioral Specialist” Model of Training Novice Paraprofessional Clinicians: An Innovative, Cost-Effective Approach for Increasing the Scalability of CBT

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COGNITIVE BEHAVIORAL THERAPY (CBT) is a structured, time-limited approach to psychotherapy that has reliably shown to be an efficacious option for addressing a variety of common mental health disorders (e.g., Hoffman, Asnaani, Vonk, Sawyer, & Fang, 2012). The types of disorders for which CBT has well-established efficacy include anxiety disorders (Olatunji, Cisler, & Deacon, 2010), obsessive-compulsive and related disorders (McKay et al., 2015), eating disorders (Linardon, Wade, de la Piedad Garcia, & Brennan, 2017), and depression (DeRubeis, Siegle, & Hollon, 2008), among others. Relative to other leading treatments (e.g., pharmacotherapy), CBT has been demonstrated to be a cost-effective approach, thereby reducing significant burden on afflicted individuals and health care systems (e.g., Dickerson et al., 2018; Heuzenroeder et al., 2004). Additionally, treatment-seeking patients as well as their family members show a preference for CBT over pharmacotherapy and alternative treatments (Brown, Deacon, Abramowitz, & Whiteside, 2007; Deacon & Abramowitz, 2005). Taken together, the above evidence supports a strong case for CBT as the treatment of choice for many common mental health problems.

In spite of the substantial evidence base supporting the effectiveness of CBT, the treatment has persistently struggled with what is now a well-documented dissemination problem: The availability of CBT to patients in need is dwarfed by the demand (McHugh & Barlow, 2010; Shafraan et al., 2009). This dissemination problem has persisted in spite of efforts to enhance the scalability of CBT, such as increased efforts to develop CBT-based group therapies as well as technology-based CBT interventions (Kazdin & Blase, 2011). Moreover, the insufficient availability of CBT unfortunately appears consistent across a wide range of disorders, including anxiety disorders (Gunter & Whittal, 2010), eating disorders (Hart, Granillo, Jorm, & Paxton, 2011), and depression (Simons et al., 2010).

The negative effects of this limited availability of CBT are significant; the substantial majority of individuals who experience a common mental health disorder are unable to access evidence-based treatment (Goisman, Warshaw, & Keller, 1999; Stein et al., 2004; Young, Klap, Sherbourne, & Wells, 2001; Young, Klap, Shoai, & Wells, 2008).

A variety of barriers hinder efforts to make CBT more available to individuals in need. Some of these barriers are practical, such as limited availability of training and ongoing consultation in CBT, the prohibitive cost and time required to seek such training, and a lack of organizational support in implementing the treatment (Becker, Zayfert, & Anderson, 2004; Beidas & Kendall, 2010; Gray, Elhai, & Schmidt, 2007; Stewart, Chambless, & Baron, 2012; Weissman et al., 2006). Other barriers to increasing availability of CBT are more ideological in nature; many therapists endorse a host of negative beliefs related to CBT. Some of these beliefs apply broadly to all evidence-based treatments, such as the belief that treatments delivered with adherence to a protocol or manual are compromising to the therapeutic relationship and stifling of therapist creativity (Addis, Wade, & Hatgis, 1999). Other beliefs are more unique to specific CBT components, such as the belief that exposure therapy poses unreasonable risk for harm to patients (Deacon et al., 2013).

Whereas much previous literature has elucidated the role that these practical and ideological barriers play in hindering the dissemination of CBT, one barrier that has received considerably less attention is the limited range of professionals who have historically been eligible to receive training in CBT. That is, those clinicians who are most often the intended recipients of CBT-oriented training and supervision are predominantly doctoral or master's-level practitioners with previous experience in mental health practice (Barlow, Levitt, & Bufka, 1999). The minimal inclusion of

individuals in CBT training who do not have a doctoral or master's degree may run the risk of creating an unnecessary ceiling on the volume of mental health professionals that can competently deliver CBT. There may be an "untapped resource" of novice paraprofessionals who, in spite of limited credentials and experience, are able to implement CBT proficiently under appropriate training and supervision. Such a change within mental health-care systems would have the potential to significantly increase the availability of CBT services that are offered, thereby reducing the burden of accessing effective treatment for individuals in need (Kazdin & Blase, 2011).

There is a small yet promising body of literature attesting to the feasibility and effectiveness of training novice paraprofessionals to use CBT. One of the first known explorations of using novice paraprofessionals to deliver CBT was done by Pruitt, Miller, and Smith (1989), who documented the exposure-based treatment of an elderly female patient with severe, refractory obsessive-compulsive disorder (OCD) by a small group of undergraduate students who received intensive supervision. Although the patient in this case study had not responded to a myriad of previous pharmacological and psychological interventions, she benefitted remarkably from the course of exposure-based CBT delivered by the undergraduate students (Pruitt et al., 1989). More recently, a handful of experimental studies have provided further evidence that CBT can be competently delivered by novice paraprofessionals. Solem, Hansen, Vogel, and Kennair (2009) showed that a group of 10 inexperienced students were able to successfully provide exposure therapy for patients with OCD after receiving relatively little training and supervision (i.e., 90 hours). Additionally, a similarly designed study found that inexperienced student paraprofessionals were able to deliver exposure therapy for patients with OCD with comparable efficacy as compared to experienced therapists (van Oppen et al., 2010). The successful implementation of CBT by novice paraprofessionals is not unique to exposure therapy for OCD. A recent large randomized controlled trial for depression treatment found that relatively inexperienced paraprofessionals were able to successfully use behavioral activation (BA), yielding efficacy that was equivalent to a more all-encompassing CBT "package" that was delivered by experienced therapists (Richards et al., 2016). In sum, a growing body of literature provides evidence that

novice paraprofessionals can be trained within a relatively brief period of time to effectively deliver CBT-based interventions for common mental health problems.

Greater usage of novice paraprofessionals as front-line facilitators of CBT in various clinical settings has the potential to make inroads into the aforementioned dissemination problem. Accordingly, the objective of this article is to provide readers with a comprehensive description of a model for training and supervising novice paraprofessionals that we have been able to use to good effect in our organization over the past two decades. Herein, we describe the history, development, and ongoing refinement of a training/supervision model for novice paraprofessionals known as "behavioral specialists" in our organization. We also provide brief overviews of several treatment outcome studies we have published in which the primary treatment was CBT that was administered primarily by our behavioral specialists. Finally, we conclude with a discussion of advantages and disadvantages of this training model, a few lessons learned from our experience with the model, and suggestions for those potentially considering the inclusion of novice paraprofessionals as CBT-oriented treatment facilitators in their clinical practice setting.

The "Behavioral Specialist" Model of Training and Supervision

History and Development

The behavioral specialist role was developed out of necessity. An adult intensive outpatient program (IOP) for OCD was developed at a private, not-for-profit psychiatric facility in 1997. The particular site was also in a small, rural, Midwest community. It treated up to four individuals at a time and met for 3 hours per day, 4 days per week. This program was created and designed in this fashion for two reasons. First, traditional outpatient "dosage" (i.e., 1 or 2 hours per week) of exposure and response prevention (ERP) was enough for many individuals with OCD but not for all. Some more severe and complex cases needed an intensive outpatient level of care to benefit fully from ERP. Second, providing individual one-on-one intensive treatment limits the number of patients a provider can treat. This model allowed for a combination of therapist-aided and self-directed exposure and could treat four individuals at a time instead of just one. This latter point was critical as a combination of high demand for intensive, specialty

OCD treatment and a lack of trained providers created a serious "bottleneck" for these services. Prospective patients were waiting months for an intensive opening in a provider's schedule. There are obvious limits to what one clinician can do seeing patients on an individual basis.

Given the program's initial small size, staffing this program was not a problem. An experienced psychologist provided the treatment directly. However, demand for the program grew quickly and treatment slots needed to be added to minimize treatment-seeking individuals' wait time. It became apparent that continuing to staff this program with experienced OCD specialists would be problematic due to a lack of trained providers in the geographic area. A potential solution to this problem was to replicate the model of training experienced in graduate school settings, in which a non-credentialed student is trained in the essentials, assigned cases and supervised by a psychologist with expertise in that area. The training would focus on a narrow band of clinical skills (e.g., ERP) and ongoing, weekly supervision would be essential to ensure fidelity to the model and quality of care delivered.

The idea was piloted first with doctoral candidates in a new position we termed behavioral specialists (BSs). These initial doctoral candidate BSs had already received basic didactic and experiential clinical training, but lacked specialty experience in OCD. They shadowed an experienced psychologist and learned quickly how to develop exposure hierarchies and assign and conduct exposure trials. This worked very well; however, there remained two problems with limiting BSs to doctoral candidates: (a) the need for the program continued to grow, both in terms of number of treatment slots offered and also in terms of population served, as there was a need to extend services to children and adolescents as well as adults, and (b) doctoral candidates would inevitably graduate and may move on to full-time psychologist positions elsewhere. Scalability was again being limited for intensive OCD services by the lack of providers.

Therefore, the next step in the process was to attempt to apply this concept to individuals with a master's or bachelor's level of training. A more formal, structured training program was developed including didactic training and a reading list (see "The Training Model," below). In addition to the training program, weekly individual supervision was continued in order to discuss cases, answer questions and mentor

these young clinicians. With proper training and ongoing supervision, master’s and bachelor’s-level staff were also able to adhere to the standard model and perform well. Clinical outcomes have been monitored closely since the inception of the program and match or exceed those found in published randomized controlled trials (see “Treatment Outcomes,” below).

The success of the BS model has allowed scaling these intensive programs significantly to disseminate empirically supported CBT to a greater number of individuals in need of services. There are now 44 different OCD intensive programs offered in seven different states and three residential programs located at the system’s headquarters (see Table 1). Three additional locations are slated to open in 2019.

Given the success of the BS model in intensive OCD treatment, attempts were made to broaden the clinical scope to other areas of clinical subspecialty within this behavioral health system. The first attempt was made in the eating disorders (EDs) programs. It was speculated that, given the exposure-based emphasis of the treatment provided in the ED programs, noncredentialed BSs could also deliver this treatment in a high-quality manner. The training program was modified to be applicable to the population served and weekly supervision was again provided by a psychologist with specialty experience. Treatment outcomes again proved strong. In addition to OCD and EDs, BSs currently provide treatment to mood disorders, posttraumatic stress disorder (PTSD), and those diagnosed with dual substance use and mental health disorders (see Table 2 for other BS programs).

Identifying Appropriate BS Candidates

A BS hiring process was developed in the early stages of this model’s deployment. A series of screening questions were used during interviews to identify appropriate candidates. In addition to basic hiring criteria (e.g., a minimum of a bachelor’s degree), an assessment of compatibility with the CBT model and its key principles was conducted. The basic tenets of the CBT model were described and candidates were asked to confirm whether this was consistent with their personal approach or how they thought “the world worked” (i.e., emotions are a result of the way we think and the way we behave and therefore emotions are often not the direct target of treatment). Those that agreed with a “CBT mindset” moved on in the process and those that did not were eliminated from consideration. They were also asked about

two key areas of ERP work: contamination and religious-themed exposures. Examples of common exposures for each of these symptom subtypes were given and they were asked to confirm that they would be able to conduct these types of exposures without hesitation. Once again, those that could confirm their ability to do this type of work moved on in the process and those that could not were eliminated. An attempt to normalize any hesitation was made by explaining that not all people are “cut out” to be BSs in an OCD program and efforts would be made to place them in other subspecialty programs that did not require this type of work.

Most of the BSs that have been hired over the last two decades have been young, intelligent, and passionate individuals. With youth comes inexperience, but what also comes with it is a lack of bad therapeutic habits. We have found that attempting to “stick a square peg into a round hole” or “teaching an old dog new tricks” has not worked out very well in the BS model. Our BSs have used their youth and energy combined with standardized training and consistent supervision to successfully treat over 30,000 patients with severe and complicated OCD, mood disorders, EDs, PTSD and dual addiction and mental health diagnoses over the past 20 years. Additionally, many BSs have been able to use their train-

ing and clinical experience as a “springboard” to gain admission to doctoral programs in clinical or counseling psychology.

The Training Model

All BSs are required to complete a comprehensive training program consisting of three components: didactic instruction, job shadowing, and required readings. The first component involves intensive didactic instruction and takes place in “CBT Academy,” which includes 10 days of workshop-based instruction on specific CBT strategies most often utilized in the CBT-based treatment programs within our system (e.g., exposure therapy).

Many of the workshops require that participants engage in role-playing activities and other experiential tasks (e.g., creating a small exposure hierarchy) to further facilitate skills acquisition. The presenters are licensed clinical psychologists who have considerable training and experience within their topic areas, often including published academic articles related to the topics on which they present. Trainees complete a quiz on each of the content areas and are given two opportunities to pass each quiz with a score of 80% or higher.

The second component of the BS training program involves shadowing current BSs working within different CBT-based

Table 1. Patient Capacities of Our System’s Intensive Obsessive-Compulsive Disorder Programs Across 12 United States Programs

	Adult IOP	Adult PHP	Pediatric IOP	Pediatric PHP	Residential	Total
Programs	12	13	10	13	3	51
BSs	24	26	20	26	14	110
Slots Offered	96	104	80	104	70	454

Note. BSs = behavioral specialists, PHP = partial hospitalization program, IOP = intensive outpatient program.

Table 2. Total Patient Capacities Across Our System’s 6 CBT-Oriented Programs

	Adult IOP	Adult PHP	Pediatric IOP	Pediatric PHP	Residential	Total
Programs	32	32	18	18	9	109
BSs	64	64	36	36	37	237
Slots Offered	256	256	144	144	198	998

Note. BSs = behavioral specialists, PHP = partial hospitalization program, IOP = intensive outpatient program.

treatment programs. General trainees, or those who would like a BS role but for whom there is not yet a specific role identified, shadow within diverse programs to gain experience with different levels of care and patient populations. This includes shadowing within residential as well as partial hospitalization and intensive outpatient levels of care; shadowing within programs that provide treatment to children, adolescents, and adults; and shadowing within programs that provide specialized treatment for OCD and other anxiety disorders, EDs, mood disorders, and PTSD. At times, trainees have already been identified to fill specific roles, pending their performance throughout the training process. For these individuals, their shadowing schedule may be more targeted toward their eventual role. As the course of shadowing progresses, trainees are encouraged to increase their involvement in the facilitation of various CBT techniques as their skill proficiency allows.

Trainees are required to complete a skills checklist indicating which skills they have performed, whether or not they were observed performing the skill, and any additional notes or questions they had about the skill. Some examples of skills included on this checklist are as follows: providing psychoeducation (e.g., rationale for exposure therapy), developing an exposure or BA hierarchy, and “coaching” a patient during an exposure task. Trainees provide a confidence rating for how well they feel they can perform each of the skills included in the checklist. Further, BS trainers complete a corresponding survey to evaluate trainees’ skills. The supervising psychologist then may review these evaluations to determine additional training needs.

Finally, the third component of training includes required readings from a collection of manuals, books, and journal articles on CBT-based treatment interventions utilized across our programs. Trainees are required to read and provide a written summary for each of the required readings and are given feedback on their written summaries. With guidance from their supervising psychologist, trainees are expected to integrate key aspects of these readings into their clinical practice of CBT (e.g., discouraging avoidance of scheduled BA activities).

Ongoing Supervision

Once a BS has completed the training process and started their role within a specific program, they receive weekly group

and individual supervision from a licensed psychologist working within their program. Individual supervision covers a range of topics but typically includes discussion of patients’ progress, including relevant assessment scores and progress in the exposure/BA hierarchy; additional skills training (e.g., providing additional information about a technique, role-playing, modeling, etc.); discussion of any legal, ethical, cultural, or safety concerns; and overall clinical direction (i.e., which strategies to use with specific patients). Group supervision occurs during multidisciplinary team meetings where specific cases are discussed and guidance is provided regarding clinical direction and the use of specific interventions. The clinical practices of all nonlicensed paraprofessionals are conducted under the licenses of the program clinical psychologists.

Treatment Outcomes

Initial examinations indicate that use of this BS treatment model is associated with excellent treatment outcomes, often while working with severe and complex patient presentations. Leonard and colleagues (2016) examined outcomes within a sample of 172 adolescents who received residential treatment for OCD. Treatment primarily consisted of ERP as delivered by a BS under the supervision of a licensed psychologist. Treatment also included medication management and CBT interventions to address co-occurring symptoms (e.g., activity scheduling for depressive symptoms, interoceptive exposure for elevated anxiety sensitivity), which was necessary given the high rate of comorbidity within the sample. The majority of the sample had at least two diagnoses and nearly half had three or more diagnoses upon admission to the program. Participants experienced significant improvement in OCD symptoms, going from the severe ($M = 25.39$, $SD = 5.36$) to the mild range ($M = 13.16$, $SD = 7.57$) on the Children’s Yale Brown Obsessive-Compulsive Scale–Self Report (CY-BOCS-SR; Piacentini, Langley, & Roblek, 2007; $t(171) = 19.04$, $p < .001$). Participants also experienced significant improvement in depressive symptoms, moving from the moderate ($M = 20.22$, $SD = 12.90$) to the minimal range ($M = 7.66$, $SD = 8.12$) on the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996; $t[125] = 11.74$, $p < .001$). Benchmarking data demonstrated that these reductions in OCD symptoms were in line with those from several randomized controlled trials (RCTs) examin-

ing CBT alone or in combination with psychotropic medication (e.g., Bolton et al., 2011; Franklin et al., 2011; Piacentini et al., 2011; Pediatric OCD Treatment Study [POTS] Group, 2004; Storch et al., 2007). Further, follow-up data provided by a subsample indicated that improvement in OCD symptom severity was maintained on average 1.5 years posttreatment.

The BS treatment model has also yielded promising outcomes in the context of EDs. Simpson and colleagues (2013) examined outcomes within a sample of 56 individuals who completed a multimodal residential treatment program for co-occurring EDs and OCD. Treatment primarily consisted of exposure-based CBT provided by BSs for both the ED and the OCD. On average, patients experienced significant improvement in ED symptom severity, going from an average Eating Disorder Examination–Questionnaire (EDE-Q; Fairburn & Beglin, 2008) global score at admission of 3.8 ($SD = 1.5$) to an average score at discharge of 2.2 ($SD = 1.4$, $t[55] = 8.70$, $p < .001$). Patients also improved significantly with regard to OCD symptom severity, going from the severe ($M = 24.6$, $SD = 7.2$) to the mild ($M = 13.3$, $SD = 7.2$) range on the Yale-Brown Obsessive Compulsive Scale–Self-Report (Y-BOCS-SR; Steketee, Frost, & Bogart, 1996; $t(55) = 10.90$, $p < .001$). Body mass index (kg/m²) significantly increased as well in this sample, primarily among those underweight at admission. Lastly, recent work showed that ED treatment delivered primarily by BSs produced positive preliminary outcomes in a severe inpatient sample. In this study, despite a relatively short length of stay ($M = 23.8$ days, $SD = 12.6$), a brief food-based exposure therapy intervention was successful in reducing patients’ eating-related fear, avoidance behaviors, and feared consequences related to exorbitant weight gain (Farrell et al., in press).

This treatment model is also associated with favorable outcomes within adult samples receiving intensive treatment for OCD. Blakey, Abramowitz, Reuman, Leonard, and Riemann (2017) reported treatment outcome data for adults who received residential OCD treatment. They found that scores on the Dimensional Obsessive-Compulsive Scale (DOCS; Abramowitz et al., 2010) significantly decreased over the course of treatment, from an average score of 32.73 ($SD = 15.07$) at admission to an average score of 16.59 at discharge ($SD = 11.74$, $t[123] = 13.22$, $p < .001$). Similarly, Manos and colleagues

(2010) reported outcomes from a combined sample of adults receiving OCD treatment within either a partial hospitalization program or a residential treatment program. They found that OCD severity as measured by the Y-BOCS-SR significantly improved from the severe range ($M = 26.67$, $SD = 6.66$) to the mild range ($M = 15.24$, $SD = 7.03$, $t[106] = 16.195$, $p < .001$) following treatment.

It is important to note that these outcomes were gathered within naturalistic intent-to-treat samples; therefore, the samples were not limited to those who received a complete course of treatment. Often, due to financial concerns or other reasons, patients have to leave treatment or step down to a lower level of care earlier than providers would prefer.

Advantages and Disadvantages

There are several advantages to the BS model of treatment delivery. The primary advantage is that empirically supported CBT is much more accessible to a greater number of individuals struggling with mental illness than would be the case if this treatment was provided only by psychologists or other highly trained professionals. This is possible due to a greater number of available candidates for the position and because of the lower cost of employing them. This lower cost also allows for more robust treatment teams. For example, within residential treatment programs in our organization, each patient meets regularly with a licensed therapist and psychiatrist or advanced practice nurse practitioner in addition to their BS, with duties outside of the BS training scope delegated to these other members of the treatment team (e.g., assisting suicidal patients in creating a safety plan). The supervising psychologist often also meets with patients to assist in providing clinical direction and supervision to the BSs. Further, the use of this treatment model is associated with excellent outcomes, indicating that treatment quality is not adversely impacted by the use of novice paraprofessional treatment providers.

There are some disadvantages associated with this model compared to a traditional model using a psychologist or more highly trained treatment provider. First, some patients may lack confidence in a BS to a greater extent than they would with a psychologist. This often improves rather quickly in the treatment process but can be a barrier for some patients early on. Further, BSs are often young adults who frequently aspire to gain further education

and training in mental health or other fields. Therefore, there is greater turnover than there likely would be for a psychologist role, which adds to the training burden. The frequency and intensity of the training and ongoing supervision require a number of skilled and specialized clinical psychologists. An additional disadvantage is that, given the very specialized nature of the BS training, there often may be clinical concerns that arise outside of their scope. These concerns are often addressed by other members of the treatment team but can pose challenges to those clinicians working in the BS role.

Lessons Learned and Suggestions for Using Novice Paraprofessionals in CBT Delivery

In closing, we offer our readers a few important lessons we have learned from our experience implementing this model throughout our organization as well as some suggestions for those considering the use of novice paraprofessionals to enhance the volume of CBT availability in their clinical work setting. First, it is very important to thoroughly screen trainee candidates in this model, as selecting appropriate candidates is a critical prerequisite for the model to be successful. Suitable candidates ought to be “believers” in the CBT model and its key underpinnings as well as possess a reasonably high degree of professional maturity. As mentioned previously, individuals who occupy these novice paraprofessional positions are often relatively young and professionally inexperienced. As such, supervisors may find themselves dealing with just as many issues surrounding professionalism (e.g., wearing appropriate work attire) as they do clinical ability. We have found it beneficial to use trainees’ job shadowing as a means to evaluate not only their clinical proficiency but also their capability to bring an appropriate degree of professionalism and maturity to their role. Related to this, we recommend a thorough course of job shadowing with a range of experiences with different clinical populations as well as different clinical care settings. Such a thorough training course not only provides trainees with well-rounded clinical skill sets but also provides supervisors with ample opportunity to evaluate trainees’ clinical aptitude and conduct in order to ascertain their readiness for clinical practice of CBT.

Another important lesson we have learned about this training model is that preparing novice paraprofessionals to deliver CBT effectively necessitates an

unusually high degree of structure in developing and enduring fidelity to detailed treatment protocols. The youth and inexperience that often typifies novice paraprofessional clinicians seemingly contribute to a tendency to “drift” from established practices unless these practices are spelled out clearly in a structured protocol. We have been pleasantly surprised to observe many of our novice trainees thrive when provided this high degree of structure. However, we found it less likely that these novice clinicians will succeed when training and supervision emphasizes only broad theoretical principles of CBT that are meant to be applied flexibly to patients with a variety of symptom presentations (Kendall, Gosch, Furr, & Sood, 2008). In order to establish such a high degree of structure to maximize the effectiveness of novice paraprofessional clinicians, it seems an understatement to say that a great deal of time and resources are needed. Not only are multiple highly experienced clinical leaders needed to develop a training course/materials and facilitate ongoing supervision, but there is also considerable organizational backing that is needed in the form of financial and administrative support. As cliché as it may sound, our experience suggests that successfully implementing this training model takes a whole village working in tandem.

Conclusion

Despite good efforts in recent years to overcome barriers to disseminating CBT more effectively, a substantial number of individuals who would likely benefit from this treatment remain unable to access it. In this article, we have highlighted one particularly overlooked barrier: CBT-oriented training and supervision has seldom been available to clinicians without relatively advanced credentials and experience. We have also described one example of a broader solution to this problem, which involves using novice paraprofessionals to implement various CBT-oriented interventions (e.g., exposure therapy) for a range of common mental health conditions. Although our behavioral specialist model contains its own unique set of challenges, our experience with it over the past two decades suggests that with appropriate organizational support, it is a feasible way to increase the scalability of evidence-based CBT to meet the growing need for these services. It is our hope that this paper may inspire others in our field to undertake

similar endeavors with the global aim of improving the dissemination of CBT.

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Child-Adult Relationship Enhancement (CARE): Expanding Evidence-Based Child Behavior Management Skills to an Academic Medical Center

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Child Behavior Problems

Disruptive behavior problems in children are among the most common mental and behavioral health concerns impacting families. Prevalence estimates for disruptive behavior problems range from 4% to 16%, affecting nearly 113 million youth worldwide (Briggs-Gowan et al., 2000; Bultas et al., 2015; Polanczyk et al., 2015; Weitzman & Wegner, 2015). Specifically, disruptive behavior problems include the following: noncompliance (e.g., not listening to or following adult commands), defiance toward adults (e.g., disrespectful attitude, deliberately annoying others, frequent arguing with adults), verbal and physical aggression, hyperactivity, difficulty sustaining attention and focus, destructive behavior, lying, whining, and school behavior problems, among others. Youth with clinically significant disruptive behavior problems may meet criteria for attention-deficit/hyperactivity disorder (ADHD), oppositional-defiant disorder (ODD), or conduct disorder (CD), among other diagnoses. However, many more youth display subclinical externalizing behavior problems, which are challenging for families and frequently lead to significant family stress.

Children with disruptive behavior problems are at increased risk for various negative outcomes, including maltreatment, health problems, substance use, poor academic outcomes, peer relationship difficulties, antisocial behaviors, and risk for involvement with the juvenile justice system (Barkley et al., 1990; Burke et al., 2010; Copeland et al., 2007; Gurwitsch et al., 2016). There is also increased risk for negative family outcomes, including increased parenting stress, reduced confidence in parenting, tension in the parent-child relationship, and increased risk for marital dis-

cord (Anastopoulos et al., 1993; Burke et al., 2010; Cunningham, Benness, & Siegel, 1988; Mash & Johnston, 1983). These behaviors often contribute to significant family conflict, school suspensions, and impairment in a family's daily functioning (Burke et al., 2010; Gurwitsch et al., 2016; Kim-Cohen et al., 2005).

Treatment for Disruptive Behavior Problems

Parent behavior management training (PMT) is widely acknowledged as the gold-standard evidence-based treatment for disruptive behavior problems in children (Comer et al., 2013; Eyberg, Nelson, & Boggs, 2008). Many empirically supported PMTs for young children specifically derive from a two-phase approach first implemented by Constance Hanf to decrease disruptive behaviors within the parent-child relationship (Kaehler, Jacobs, & Jones, 2016; Reitman & McMahon, 2013). Hanf-based PMT models, such as Defiant Children (DC; Barkley, 2013), Helping the Noncompliant Child (HNC; McMahon & Forehand, 2003), Incredible Years (IY; Webster-Stratton, 2006), and Parent-Child Interaction Therapy (PCIT; Eyberg & Funderburk, 2011), similarly focus on initially developing relationship skills between parent and child, while later incorporating behavioral management approaches to build parental capacity for consistency and follow-through. When considering the essential common components of such PMT models, a meta-analysis conducted by the Center for Disease Control (CDC; 2009) indicates the following core elements lead to successful acquisition of parenting skills and decreased child disruptive behaviors: increasing positive communication and interactions between care-

giver and child, and providing caregivers with opportunities to practice skills with their child during therapeutic sessions. Additionally, the CDC concluded teaching caregivers effective methods for time-out and for consistent application of consequences and household rules contributes to decreased child misbehaviors.

Limitations of PMT

Despite ample evidence of the benefits of evidence-based PMTs to treat disruptive behavior problems in children, many families who are referred for therapy either do not pursue treatment or do not successfully complete treatment (Pavuluri, Luk, & McGee, 1996; Wang et al., 2005). There are a number of reasons for barriers to treatment and high attrition rates, including systems-based (e.g., long wait lists, fewer qualified providers) and individually based (e.g., high parenting stress, low social support, financial stressors) factors (Comer et al., 2015; Sandler et al., 2005; Weisz et al., 2005). While the problem of accessibility to treatment and attrition is common in many areas of mental health treatment (Silverman, Kurtines, & Hoagwood, 2004; Stirman, Crits-Christoph, & DeRubeis, 2004), it is especially problematic when considering a developmental and prevention lens, as untreated childhood disruptive behaviors create a trajectory of various negative outcomes, including delinquency (Broidy et al., 2003).

Further, there are many children who exhibit behavior problems but who do not meet formal criteria for a diagnosis. That is, challenging behaviors in children are extremely common and may cause substantial stress within families without meeting a clinical threshold. Not all children with subclinical symptoms require the level of intervention provided by an intensive therapy, such as one of the PMTs. Moreover, the public health model of prevention highlights various points of intermediation between children and developing behavioral problems. Specifically, Gordon (1983) indicates three levels of etiological impact: (a) primary or universal approaches to promote health before symptoms develop, (b) secondary or targeted approaches to assist those identified with emerging symptoms and at-risk for developing further symptoms, and (c) tertiary or intensive approaches to treat those with clinically significant symptomatology. When applying the framework specifically to mental health, the World Health Organization (WHO, 2001) emphasizes the

importance of integrating mental health prevention into general public health approaches.

Overview of Child-Adult Relationship Enhancement

To address a growing need for universal approaches, Child-Adult Relationship Enhancement (CARE; Messer, et al., 2017) was developed to meet community demand for training in effective and evidence-based behavior management principles and skills for use by a range of individuals expanding beyond clinicians with mental and behavioral health backgrounds. Consequently, CARE uses interaction skills drawn from Hanf-based PMT concepts and teaches caregivers and professionals a trauma-informed approach to interacting and working with children in a variety of settings (Gurwitsch, Fernandez, Pearl, & Chung, 2013; Gurwitsch et al., 2016; Pearl, 2008; Schilling et al., 2017). Therefore, while the methods are applicable to a wide range of populations, CARE also particularly targets children who are at risk for maltreatment or disruptive behaviors. The general CARE model is typically presented in a 3- to 6-hour workshop format using a combination of didactic, multimedia, and experiential activities, with the training duration contingent upon the target client population, the setting, and agency goals (Messer et al., 2017). While some extensions of the dissemination model include a series of learning sessions (e.g., initial workshop, booster workshop) and action phases (e.g., live observation, coding, and coaching in a practical setting; Warner-Metzger, 2018), the basic CARE principles remain a universal or primary intervention for “simply a way for any adult to interact with any child” (p. 4, Messer et al., 2017).

A Growing Evidence Base for CARE

CARE was developed using evidence-based parent training interventions. Demonstrative of its versatility, CARE has been implemented with military families (Gurwitsch et al., 2013), child welfare/trauma-impacted populations (Gurwitsch et al., 2016; Wood et al., 2017), and primary care medical settings (Schilling et al., 2017). Although in exploratory phases via pilot projects, CARE applications to the educational setting (“CARE in the Classroom”) suggest promising preliminary data for teacher satisfaction, knowledge, and application with students in urban neighborhoods with high rates of exposure to com-

munity violence and trauma (Warner-Metzger, 2018).

In a randomized controlled trial (RCT) examining mandated foster care training, foster caregivers who received a 6-hour CARE training used significantly more positive parenting statements during coded caregiver-child interactions at 1 month postintervention and reported fewer trauma-related anxiety symptoms at 3 months postintervention when compared to foster caregivers who received standard parent training (Messer, et al., 2018). An RCT in a medical setting examined the efficacy of CARE in Primary Care (PriCARE) using a 6-week caregiver group curriculum targeting a racially diverse sample of children with high rates of economic disadvantage (Schilling et al., 2017). The study revealed caregivers receiving PriCARE reported significantly more positive parenting attitudes for demonstrating empathy toward children’s needs, using alternatives to corporal punishment, and encouraging children’s power and independence when compared to their waitlist control counterparts. Caregivers in PriCARE also reported significantly decreased child disruptive behaviors on a parent questionnaire compared to caregivers in the waitlist control. Notably, the mean change scores in disruptive behaviors in the PriCARE study demonstrated greater gains than the mean change scores on the same measure in a study examining a 10-week IY intervention adapted for primary care (Perrin et al., 2014).

CARE in an Academic Medical Center

As a logical extension of previous CARE applications, disseminating CARE training to staff within an academic medical center seemed an optimal fit. Given the broad utility of relationship-building skills that could be used by a wide range of health care providers, CARE fits a need both for medical trainees (e.g., medical students, residents, fellows) and for staff members (e.g., nursing staff, administrative and support staff, other clinical staff) who work in departments with a pediatric population. These trainees and staff members regularly interact with children, but they infrequently have formal training in evidence-based behavior management techniques.

Within these initial 3- to 4-hour CARE trainings at an academic medical center, participants were taught how to use CARE skills with children they encounter within their respective clinical settings. Thus, CARE skills were presented with several

main aims: (a) for providers to use directly with children to build rapport, improve relationships, and reduce disruptive behaviors in the clinical encounter; (b) for providers to model directly with children while caregivers observe to illustrate the benefits of these skills for families; and (c) for providers to teach caregivers for use at home with their children. Further, because mental health services are often underutilized, CARE broadens the reach of universal evidence-based services by training other professionals with whom families are likely to encounter in medical settings (Schilling et al., 2017; Spector et al., 2012). CARE also helps to foster a culture of trauma-informed care (Gurwitsch et al., 2016), as the training flexibly includes formal psychoeducation about developmental trauma in children and how trauma responses in children may present as disruptive behaviors. Thus, CARE training helps participants become more attuned to recognize trauma reactions in children and provides effective trauma-informed skills for individual providers to use in their work with children and families. By increasing knowledge about childhood trauma, CARE facilitates a more cohesive referral system, helping providers better delineate challenging behaviors that are within typical developmental norms from more severe behaviors. In particular, because CARE is a universal approach, providers may monitor a specific child’s response to CARE-informed interactions and refer the child with more significant disruptive behaviors for specialized mental health services (such as PMTs or trauma-specific interventions).

Strengths and Lessons Learned From Pilot Dissemination Efforts

CARE training was completed with five cohorts as a pilot dissemination effort within a large academic medical center. Four of these trainings occurred within the department of psychiatry, including predoctoral psychology interns, child and adolescent psychiatry fellows, clinical staff (e.g., nursing staff, therapeutic aides) from the child and adolescent inpatient psychiatry unit, and clinical staff (e.g., nursing staff, therapeutic aides) from the child and adolescent psychiatry day treatment program. The fifth training was completed outside the department of psychiatry with a group of medical center staff working as consultants in child health, welfare, and early intervention. In evaluating the training program, pre- and posttraining mea-

asures were administered to participants ($N = 58$). These measures assessed knowledge of child behavior management techniques, attitudes toward training, self-efficacy, and training satisfaction.

Training Needs and Satisfaction

Several important benefits and lessons for future directions were gained from these initial implementation efforts of CARE for staff within an academic medical center. First, training was extremely well-received by both stakeholders/administrators as well as by individual CARE participants. When potential stakeholders (e.g., training directors, clinic and division directors) were approached with information about the proposed training, most commented on the distinct need for broad training in evidence-based behavioral management skills that provides concrete and practical skills. In particular, stakeholders were enthusiastic about training both medical trainees and clinical staff, as both groups typically had limited formal training in evidence-based child behavior management techniques.

Further, the participant response was also very positive. While this positive response was observed anecdotally during trainings by the engagement of participants, our posttraining surveys support this view, as 100% of participants rated the quality of the training as “excellent” or “good”; 94.4% of participants reported being “mostly” or “very” satisfied with the quality of training; and 93.6% of participants agreed they would recommend the training to a coworker. Therefore, CARE training addressed a specific gap in structured, evidence-based training on behavior management principles for a diverse group of participants in an academic medical center. It is particularly notable that CARE training was well received both by participants with relatively little experience working with children in a behavioral health setting, as well as by those with more experience. For example, one participant with previous formal training in some PMTs reflected that the novelty of activities and method by which concepts were presented in CARE were especially helpful, providing this participant with new ideas and flexibility in how to approach working with children and families in a universal manner. This participant’s observation aligned with an overarching goal of the training, which was to promote active and engaging adult learning concepts.

Session Length and Frequency

Another strength of CARE training within an academic medical center was the flexible implementation. CARE training can be completed in 3 to 6 hours over one or several sessions. The overall flexibility and relative brevity of training was key in allowing broader dissemination. In comparing and contrasting training logistics and format of workshops, one distinct benefit of multiple shorter sessions (i.e., a series of three 1-hour workshops) was the ability to schedule CARE training during existing staff didactic or meeting times. This increased accessibility and reduced logistical barriers to scheduling within a busy academic medical center. Further, spreading CARE training over multiple sessions allowed participants incremental exposure to the material over several sessions, giving natural opportunities for participants to reflect upon a subset of skills while applying them in the practical setting between workshops. One limitation of multiple learning sessions is the possibility of attrition from session to session, as all participants may not be able to attend all the sessions. This potential barrier can be addressed by clear advertising that the training includes multiple sessions and encouraging (or even requiring) attendance at all sessions. In contrast, benefits of single-session CARE trainings (i.e., one 3- to 4-hour workshop) include increased attendance (ensuring more participants receive the entire training), as well as step-wise engagement. Hence, experiencing the entire training in a single session provides an immediate additive effect and gestalt framework to increase staff buy-in. Overall, while there were legitimate pros and cons to the single- or multiple-session format of CARE training, its adaptable implementation format met the diverse training and scheduling needs within the ever-changing academic medical center environment.

Scheduling and Logistical Barriers

While CARE training was well received and initial implementation efforts were successful, several valuable lessons were learned from these efforts and can guide future dissemination. First, despite the enthusiasm of stakeholders/administrators in bringing CARE training to their units, there were often scheduling challenges to overcome. Many of these challenges were addressed due to the inherent flexibility permitted within the CARE model (as noted above); however, barriers arose when determining staff appropriate for the

training, coverage for essential roles to allow identified staff to participate, and scheduling. These barriers were often more apparent when implementing CARE with clinical staff, who typically had limited protected time on the job for continuing education experiences amid increased demands to meet productivity requirements. In this respect, scheduling among medical trainees posed fewer barriers, as training programs require some protected time for didactics and training, albeit trainee didactic schedules were set far in advance and limited immediate implementation.

Scheduling ongoing CARE trainings was an additional challenge encountered during these inaugural dissemination efforts. CARE aims to create a more lasting culture of trauma-informed care and help adults build positive relationships with children, particularly those who exhibit challenging behaviors. Although initial CARE training was a vital first step toward this goal by providing a concise overview of relationship-building and behavior-management approaches, continued booster sessions or follow-up trainings are advised to foster practical use of skills with integrity. However, scheduling proved difficult in developing consistent, ongoing training support beyond the initial core CARE concepts. Therefore, follow-up training remains an area of identified growth for the sustainability of CARE in an academic medical center.

A related limitation was how to assess participants’ actual use of CARE skills in their professional roles. While the ability to disseminate CARE broadly among various medical professionals who work with children is a distinct benefit of the training, directly assessing some outcome measures (e.g., actual use of skills, participant’s perceived competence in using skills, impact of CARE skills on child outcomes) was not feasible during our initial dissemination efforts. Comparison of such objective and subjective outcomes is necessary in future efforts to ascertain the full efficacy of CARE in a medical setting.

Future Directions

This inaugural implementation of CARE training for staff within an academic medical center suggested that this model fit well with the varied demands of the medical environment. Because the training was so well-received and fulfilled a critical need for training and education, CARE could instinctively become a sustainable part of

medical training programs in child and family medical specialties. While these initial efforts were primarily within psychiatry, future expansion to other departments with a pediatric emphasis (e.g., general pediatrics, developmental pediatrics, pediatric emergency services, family medicine) is worth exploration. Because medical trainees are in the early stages of career development, disseminating CARE skills during these formative training years is a crucial way to expand universal evidence-based behavior management skills with children and families. While specific CARE skills are helpful for trainees in their individual interactions with children and families, the training highlights how and when to refer families for PMT intervention when they present with severe behavior problems. Thus, a secondary benefit of CARE training within medical training programs is to strengthen the knowledge base of future providers regarding appropriate referrals for evidence-based behavioral therapies.

For clinical staff members working in an academic medical center with children but who lack formal training in evidence-based behavioral health techniques, CARE provided practical skills to use in their daily interactions with children. Moreover, given the perceived benefits of CARE training for those who are newly entering professional work with youth, training staff members (particularly among groups with high rates of staff turnover) is necessary to keep CARE skills active. To this end, including CARE training in the onboarding or orientation process for these units ensures that all new staff obtain similar foundational training and gain more confidence in the application of CARE skills with children.

Finally, an essential next step in CARE dissemination is to assess participants' actual use of CARE skills as well as the impact on child and family outcomes. The latter is difficult to assess in an academic medical center, as CARE is not a therapy and participants are using skills in a wide range of settings with differing goals for child and family outcomes. However, assessing participant use of skills following the initial CARE training is a feasible addition. Following a sequential roll-out including an initial CARE workshop followed by planned booster sessions creates a pathway to further assess and reinforce the use of these skills while troubleshooting difficulties related to implementation.

To summarize, CARE is a flexible and well-received model to disseminate univer-

sal evidence-based behavior management and relationship skills for use by a broad population of adults working with children. Initial dissemination efforts within an academic medical center appear very promising. There may be particular benefit for expanding CARE training within medical training programs and among staff in pediatric settings without prior training in evidence-based behavior management approaches. Future directions for growth include expansion to other departments with a pediatric focus within academic medical centers, development of ongoing and sustainable trainings, and implementation of formal assessment of CARE skills via practice in booster sessions.

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Building Collaborative Partnerships Across Professions to Implement Trauma-Focused Cognitive Behavioral Interventions After Hurricane Maria in Puerto Rico

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ON SEPTEMBER 20, 2017, Hurricane Maria devastated the island of Puerto Rico, killing thousands, destroying property, and desimating infrastructure. The hurricane left the entire island without access to electricity, water, or communication for months (and for many up to a year), resulted in an estimated 4,645 hurricane-related deaths (Kishore et al., 2018), and led to over 200,000 Puerto Ricans migrating to the mainland U.S. in search of housing, access to basic needs, and employment (Hinojosa & Meléndez, 2018). Each year an estimated 175 million children around the world will experience a natural disaster (Seballos, Tanner, Tarazona, & Gallegos, 2011), which increases their risk for developing posttraumatic stress disorder (PTSD), depression, traumatic grief, anxiety disorders, externalizing problems, and substance use disorders (Bonanno et al., 2010). Postdisaster mental health intervention guidelines recommend a three-phase, trauma-focused approach addressing the basic and socioemotional needs of children and adolescents at various stages of recovery (La Greca & Silverman, 2009). During Phase 1: Immediate Aftermath (day of disaster to a few weeks), the focus should be on restoring access to basic needs (e.g., food, water, clothing, medical attention, shelter) and promoting a sense of safety and security through interventions that are brief and present-focused (Hobfoll et al., 2007). Phase 1 interventions, such as Psychological First Aid (PFA; Brymer et al., 2006), seek to reduce or prevent long-term distress and dysfunction. During Phase 2: Short-Term Recovery and Rebuilding (1

month up to a year), interventions such as Skills for Psychological Recovery (Berkowitz et al., 2010) focus on teaching survivors evidence-based coping skills (based on CBT principles) that have been shown to bolster resiliency, increase self-efficacy, and reduce ongoing distress following a traumatic event. During Phase 3: Long-Term Recovery (1 year up to a few years), the focus is on children with moderate-to-severe levels of mental health symptoms receiving evidence-based cognitive behavioral interventions that have been shown to effectively treat these trauma-related problems in children and adolescents. Examples of Phase 3 interventions include Cognitive Behavioral Intervention for Trauma in Schools (Jaycox, Langley, & Hoover, 2018) and Trauma-Focused Cognitive Behavioral Therapy (Cohen, Mannarino, & Deblinger, 2017).

The evidence supporting the effectiveness of cognitive-behavioral interventions in diverse postdisaster contexts is encouraging (Bonanno et al., 2010), as is a guiding three-phase framework focused on primary, secondary, and tertiary interventions targeting the various needs of affected children postdisaster (La Greca & Silverman, 2009). Nevertheless, implementing evidence-based interventions postdisaster requires establishing collaborative partnerships across diverse professionals and key stakeholders, and understanding the needs of the local partners who have undergone the disaster. This is particularly salient when the researcher is not geographically located in the affected area and desires to help by establishing collaborations with

local partners. Shortly after hurricane Maria made landfall, our team established a partnership with the Puerto Rico Department of Education and local mental health professionals to implement a multiphase, trauma-focused intervention model guided by postdisaster best-practice guidelines. The current paper describes the key challenges faced by our key partners postdisaster, what they found helpful and unhelpful in working with other agencies and academic institutions, and recommendations for establishing respectful and fruitful partnerships within a postdisaster context with local partners, especially when one is not located in the affected area. The challenges and recommendations presented below are written from the perspectives of our partners themselves (third through sixth authors from the Puerto Rico Department of Education, Carlos Albizu University, and University of Puerto Rico) and are written in first-person plural format, directly quoted or paraphrased from the interviews.

Challenges Faced in the Immediate Aftermath of the Disaster

Challenge #1: Magnitude of Impact

The entire island of Puerto Rico and all of its inhabitants were impacted by this hurricane. We had to figure out how to help over 350,000 public school students. Almost everyone on the island had suffered some type of loss or damage to their homes and were trying to find out how their family members were doing (roads were impassable, cell phone towers were down, and landlines were not functioning). The need was unprecedented. In prior hurricanes (e.g., Hurricane Georges in 1998), only part of the island had been impacted and thus there was access to electricity, water, communications, gasoline, and shelter in other parts of the island, which made it much easier to coordinate relief efforts. Hurricane Maria did not allow for this option. The first 2 to 3 weeks were the hardest. There was a sense of urgency and impotence. We had no place to meet initially as a staff. Due to roads being closed and lack of transportation (limited gasoline supply, impassable roads), the responsibility of restarting the public-school education system of an entire island fell on a few staff who were able to get to work, while also dealing with their own personal loss and needs. Most government buildings were closed and those opened had no electricity, water, or Internet. Never in the history of Puerto Rico had we had an event

like this. An entire country was destroyed. The magnitude of the impact did not allow for mobility, communications, flexibility or creativity. We kept asking ourselves, “Where do you even start?”

Challenge #2: Inability to Communicate

For weeks there was limited-to-no cell phone signal, Internet service, or ability to communicate with colleagues, family, etc. This made it difficult to coordinate academic and mental health relief efforts and to form a coordinated strategy between various agencies. We had emergency plans in place, but we could not talk to each other. This also made it difficult to coordinate roles and responsibilities that fell under the purview of a school principal versus central level administration, for instance. Messages about where relief supplies were located were not getting to the communities and schools. In many instances, social workers were going by foot and using word of mouth to relay vital information. We learned the importance of capitalizing on existing resources, such as social workers, who are trained to do community needs assessments, visit homes, and connect people in need with resources. We were humbled by the strong commitment of social workers, psychologists, school staff, graduate school students, medical residents, etc., to help community members, even while dealing with their own personal crises.

Challenge #3: Balancing Various Basic, Emotional, and Academic Needs

School social workers tasked themselves with going out into their communities, conducting a needs assessment, and providing support. However, when they arrived at the homes, families were desperate for food and water. When the social worker explained that they were there to offer emotional support and assess their needs first, the families were disappointed. This highlights the importance of sending out your team with supplies to hand out to families. That is what families need in the immediate aftermath of a disaster. After a few weeks, children had been out of school and their routines had been disrupted. We had to create a space to engage communities and families to get access to basic needs while also offering academic and recreational activities, as well as offer socioemotional support. Another challenge was balancing these basic and socioemotional needs with the academic needs of students and guidance on how to prioritize these within a postdisaster context, especially

because so many schools were completely destroyed.

Challenge #4: Lack of Protocols, Guidelines, or Information

We set up community shelters in some schools, but were not exactly sure how to set them up, what the best-practice guidelines were, what academic and socioemotional activities we should offer within that specific postdisaster period, or how this plan would evolve months or years after the disaster. A disaster of this magnitude had never impacted the island and, as such, we were unprepared. We are experts in our local context, but we needed guidance from outside experts on what they had observed after other natural disasters of this magnitude and guidelines as to how to best approach children’s needs at various stages postdisaster. We also needed to know from postdisaster experts about the challenges that were yet to come (not just in the short-term but also in the long-term recovery periods) and what interventions to implement in the immediate aftermath to help mitigate those effects. We were constantly wondering, “What can we do to help prevent lasting socioemotional and learning consequences later?”

What Did Collaborators Do That Was Helpful?

Helpful Strategy #1: Provide Respectful Expertise and Guidance

We really appreciated partners who had expertise in postdisaster and trauma and provided recommendations in a very concrete, step-by-step way, and then invited our comments and suggestions for tailoring these evidence-based guidelines to our local context. Partners who were respectful and flexible in integrating our suggestions were the best collaborations we established. These partners shared their previous experiences and lessons learned and provided suggestions, but reminded us that, ultimately, we were the experts on the local context. Some of our biggest questions were as follows: What do we need to make sure we do now, to help mitigate the impact of this natural disaster one year or two down the road? What are the challenges that we need to prepare for and prevent now? What tools can we give our staff to help themselves and our students? We needed someone to explain complex research findings in easy-to-understand bullet points. Giving us a paper to read or fact sheets was not enough. We also appre-

ciated being able to discuss ideas with each other and have ongoing communication and tailoring of the plan with our partners.

Helpful Strategy #2: Be Flexible and Adjust to Our Needs

We greatly appreciated partners who, after hearing our unique needs or concerns, adapted flexibly. For instance, our MUSC partner originally suggested implementing a PFA workshop with a certain number of teachers; however, we provided feedback that we needed larger groups and a train-the-trainer approach, and they agreed to accommodate to our needs. It’s tough for us, when we are in crisis, to hear “No, we can’t do what you are asking.” It was also hard to be asked by so many partners, “What do you need?” We were overwhelmed with so many people wanting to help and were not always able to communicate what we needed or when. This disaster was a new experience for us. We needed partners who could say to us, “This is what we have to offer, based on the best available evidence, and this is how we could do it—what are your thoughts?” We also appreciated partners who understood our reality and the limited resources we had available, who adapted protocols to the local context with feedback from local stakeholders, and who welcomed our concerns or suggestions. Collaborations that started by asking for our opinion about the needs of Puerto Rico, instead of talking about their ideas, are the collaborations that have continued to have an impact on the island today. We also appreciated partners who were willing to recognize the limits of their scope of work and willing to partner with other local or international partners in order to combine efforts and help us.

Helpful Strategy #3: Acknowledge Local Expertise and Leverage It

When we collaborated with partners who were located in the mainland U.S., we appreciated those who recognized the local expertise of mental health professionals within Puerto Rico. For example, at the University of Puerto Rico (UPR) Center for the Study and Treatment of Fear and Anxiety, we have been culturally adapting evidence-based psychotherapies since 2010. When Hurricanes Irma and María hit Puerto Rico on September 2017, we had already validated instruments in Spanish to assess for the most common posttraumatic symptoms. Based on our research, we also knew what components of cognitive-behavioral therapy (CBT) were most effective for our Puerto Rican population. In

our case, what we really needed guidance on was how to administer assessments in a postdisaster setting. How can you implement CBT in a population that has no electricity, potable water, or food? We had the benefit of being located in the major medical center of the island. This area was given a priority in terms of electricity and Internet access, which meant that 2 weeks after Hurricane María, our Center was opened, and we focused our energy on seeking the evidence on how to deliver postdisaster mental health care. In collaboration with our MUSC partners, we evaluated resources from the National Child Traumatic Stress Network and created a training on Psychological First Aid for the health professional students and faculty of the UPR Medical Sciences Campus. During those first weeks after the hurricane, those training sessions also turned into a support mechanism for those health professionals who were on the front line managing hurricane related emergencies. We appreciated partners who acknowledged our existing efforts and asked how they could help us continue or expand our efforts, rather than take over or replace them.

Helpful Strategy #4: Help Build a Network of Collaborators

As our communications system started to improve, we were able to connect with professionals outside of the UPR Medical Sciences Campus. The Puerto Rico Chapter of the American Academy of Child and Adolescent Psychiatry (AACAP) helped connect us with the Disaster Committee of AACAP, who provided information on groups from the mainland U.S. who were starting mental health initiatives in Puerto Rico. We were appreciative of partners who were willing to act as liaisons and connect us with other efforts on the island so that we would not be duplicating services, but rather uniting to achieve a common goal.

Helpful Strategy #5: Provide Experiential (and Not Just Didactic) Workshops

Our school staff were ready to gain practical skills and techniques that they could implement within their communities and schools. We appreciated partners that provided some theory and relevant research, but whose focus was primarily on providing us with concrete tools and skills that we could then use in our communities to help children and families cope with stress and loss. We also appreciated workshops that explained common reactions

following traumatic events and the various trajectories of recovery in children. For example, understanding the concept of resiliency and that not all students would experience devastating long-term mental health consequences gave us hope and a renewed commitment to help bolster resiliency in our students through utilizing the coping skills we were learning. Additionally, we appreciated learning about what to expect in the immediate aftermath, but also what to look out for in the next 6 months to 1 year so that school staff and mental health providers could be prepared and ready to identify and refer students for appropriate services across all stages of postdisaster recovery.

What Did Collaborators Do That Was Unhelpful?

Unhelpful Strategy #1: Not Listening to Our Needs First and Not Adapting Flexibly

Partners that did not ask us what we needed first and who did not adapt flexibly to our concerns made collaborations difficult. We appreciated their expertise, of course, but we were not sure they would be successful in helping achieve our goals if they first did not take into account our unique needs and situation. Additionally, partners who asked us what we needed, but did not have a menu of options for us to choose from, made it overwhelming for us.

Unhelpful Strategy #2: Asking for Acknowledgment or Publicity

Agencies or individuals who offered help but required a press release or a public announcement in return were off-putting and burdensome. We strongly encourage agencies and individuals who do postdisaster work to examine their motivations first and only engage if there is a genuine desire to help, even if it goes unrecognized.

Unhelpful Strategy #3: Asking Us to Coordinate Logistics

Partners who required our agencies or organizations to coordinate all logistics of a workshop or translate materials in times of crisis and lack of access to electricity and transportation, made things harder for us. We were more than willing to help, but would have preferred that partners assist with the coordination of such efforts and engage in creative problem-solving with us as well. Although we appreciated the international support, we had difficulties coordinating relief efforts and activities for individuals who did not speak Spanish, but

who expected an interpreter would be provided. Coordinating this level of logistical support during the aftermath of a disaster adds undue burden to the local partners. Interested partners who do not speak the local language should provide their own interpretation personnel or expand their team to include individuals who speak the local language.

Recommendations for Building Strong Partnerships Post-Disaster

Recommendation #1: Understand the Local Context and the Effects of the Disaster First

Establish respectful conversations (in the main language spoken in the area) to first understand what your local stakeholders and partners have experienced. Understand the nuances of a postdisaster context and how taxing and difficult this experience has been for your local partner.

Recommendation #2: Communicate Evidence-Based Approaches Simply and Adapt Flexibly

Learn to communicate evidence-based interventions and approaches in an easy-to-understand manner, using bullet points. Develop a potential menu of options, based on the best available evidence, that is sensitive to what you learned about the local context and unique needs. Then, listen to the local partners' feedback and concerns, be flexible, and adapt your approaches to fit the local needs, language, and culture. A one-size-fits-all approach is not likely to be fruitful.

Recommendation #3: Acknowledge Local Expertise and Leverage It

Your local partners have a plethora of existing resources, experiences, and workforce that should not only be acknowledged and respected, but incorporated into any postdisaster intervention approach.

Recommendation #4: Commit to Helping Long Term If Possible

It is common for most of the help after a major disaster to come in the immediate aftermath. However, local partners need the help in both the short- and long-term recovery phases. It is important to design postdisaster intervention plans that take into consideration the long-term mental health needs of the population as well as the long-term needs of your partnering local organization.

ABCT's Medical Educator Directory

Inclusion Criteria

1. Must teach or have recently taught CBT and/or CB interventions in a medical setting. This may include psychiatric residents, medical students, nursing, pharmacy, dentistry, or other allied health professionals, such as PT, OT, or RD. Teachers who exclusively train psychology graduate students, social workers, or master's level therapists do not qualify and are not listed in this directory.
2. "Teaching" may include direct training or supervision, curriculum development, competency evaluation, and/or curriculum administration. Many professionals on the list have had a central role in designing and delivering the educational interventions, but all educational aspects are important.
3. Training should take place or be affiliated with an academic training facility (e.g. medical school, nursing school, residency program) and not occur exclusively in private consultations or paid supervision.

Please note that this list is offered as a service to all who teach CBT to the medical community and is not exhaustive.

To submit your name for inclusion in the Medical Educator Directory

If you meet the above inclusion criteria and wish to be included on this list, please send the contact information that you would like included, along with a few sentences describing your experience with training physicians and/or allied health providers in CBT to **Shona Vas** at svas@uchicago.edu and include "Medical Educator Directory" in the subject line.

DISCLAIMER. Time and availability to participate in such efforts may vary widely among the educators listed. It is up to the individuals seeking guidance to pick who they wish to contact and to evaluate the quality of the advice/guidance they receive. ABCT has not evaluated the quality of potential teaching materials and inclusion on this list does not imply endorsement by ABCT of any particular training program or professional. The people in this listing serve strictly in a volunteer capacity.

Recommendation #5: Build Local Partnerships Predisaster

Oftentimes we wait to establish partnerships until after a disaster has occurred. We encourage partnerships to be built before a disaster to allow time to develop a plan, train the local mental health workforce in evidence-based CBT interventions that will be useful in the event of a disaster, and have ongoing communication established so that when a disaster does strike, protocols will be in place and a plan can be easily enacted.

Recommendation #6: Build Partnerships Across Professionals and Encourage an Active Exchange of Ideas

Social workers, psychologists, psychiatrists, counselors, teachers, doctors, and researchers can do more to improve the mental health of children postdisaster when they partner together than when they try to enact efforts in silos. The biggest lesson learned in the establishment of these partnerships post-Hurricane Maria was the value of adding unique and rich perspectives across professionals. These established partnerships and collaborations are helping inform targeted and sustainable evidence-based practices aimed at improving mental health outcomes for Puerto Rico's youth following the devastation of Hurricane Maria.

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Treating Combat-Related Posttraumatic Stress Disorder During Military Deployments: Importance, Challenges, and Special Considerations

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BEGINNING SOON AFTER September 11, 2001, U.S. military personnel who deployed to Afghanistan, Iraq, and other nearby locations have been at significant risk for the development of combat-related posttraumatic stress disorder (PTSD). After several years of sustained military conflict, several studies highlighted combat-related PTSD as one of the signature psychological wounds of war in this new generation of warfighters (Hoge et al., 2004; Institute of Medicine, 2008; Tanielian & Jaycox, 2008). These studies also highlighted combat-related PTSD in active-duty military personnel as a condition of significant military and national public health interest.

Initial research on the treatment of combat-related PTSD in military veterans began in the early 1980s by Terence Keane and colleagues and focused on imaginal flooding (Black & Keane, 1982; Keane & Kaloupek, 1982). The initial series of large PTSD randomized clinical trials focused on civilian female sexual assault victims (Foa, Rothbaum, Riggs, & Murdock, 1991; Resick & Schnicke, 1992). These studies led to the proliferation of prolonged exposure therapy (Foa, Hembree, & Rothbaum, 2007) and cognitive processing therapy (Resick, Monson, & Chard, 2017), the two most popular and thoroughly researched treatment approaches for PTSD.

Up until very recently, there has been a dearth of research on the treatment of combat-related PTSD in active-duty military personnel. To help address the impending national public health crisis of combat-related PTSD in post-9/11 military personnel, the U.S. Congress approved a 900-million dollar Department of Defense (DoD) appropriation in 2007. This appropriation helped establish the Psychological Health and TBI Research Program as part

of the Congressionally Directed Medical Research Program under the direction of the U.S. Army's Medical Research and Materiel Command at Fort Detrick, Maryland. The STRONG STAR Consortium (South Texas Research Organizational Network Guiding Studies on Trauma And Resiliency) was funded in 2008 as a 5-year award as part of the defense appropriation. The STRONG STAR Consortium included 14 research projects and 5 research cores and was focused on the assessment and treatment of combat-related PTSD and co-occurring conditions in active-duty military personnel. STRONG STAR included the collaboration of many of the nation's leading civilian, DoD, and Veterans Administration (VA) investigators and institutions.

During the past decade, more than 30 additional STRONG STAR-affiliated projects have been funded to continue the work on combat-related PTSD and co-occurring conditions (e.g., suicide, insomnia, chronic pain, substance use disorders, tinnitus, etc.) in active-duty military and veteran populations. STRONG STAR investigators have now successfully completed several of the largest clinical trials in DoD history, demonstrating that combat-related PTSD can be effectively treated in garrison (after returning from deployment) using cognitive processing therapy (Resick et al., 2015, 2017), prolonged exposure therapy (Foa et al., 2018), and an abbreviated version of prolonged exposure delivered in military primary-care settings using internal behavioral health consultants (Cigrang et al., 2011, 2015, 2017). These studies have shown that approximately half of the service members no longer meet diagnostic criteria for PTSD after the completion of treatment and that their treatment gains are maintained over a

6-month follow-up period. Although these findings are the strongest to date regarding the treatment of combat-related PTSD in active-duty military personnel, there is ample room for improvement.

One approach to potentially improve outcomes for combat-related PTSD is to intervene early, soon after exposure to combat trauma. Early interventions for combat-related acute stress disorder (3 days to 1 month after trauma exposure) or PTSD (more than 1 month after trauma exposure) delivered during military deployments have the potential to significantly reduce the long-term consequences of chronic PTSD. There are strong data from civilian populations demonstrating that early cognitive behavioral therapy (CBT) interventions soon after trauma exposure can prevent the development of PTSD. For example, several studies have shown that only about 20% of patients treated with brief CBT for acute stress disorder after trauma exposure meet criteria for PTSD at the posttreatment follow-up point (Bryant, Harvey, & Dang, 1998; Bryant, Moulds, & Nixon, 2006; Bryant, Sackville, & Dang, 1999; Shalev et al., 2012). This compares favorably, for example, with the 57% of participants who were in a wait-list condition in the Shalev et al. study who met criteria for PTSD at the 5-month follow-up point.

Although treating PTSD during military deployments is of great importance, there are a number of challenges and special considerations in treating PTSD in the military combat zone. As a result, only a few studies have been conducted on the treatment of PTSD in the combat theater, and relatively few deployed military behavioral health providers have employed evidence-based treatments for PTSD. This article provides a brief review of the importance, challenges, and special considerations in the treatment of PTSD in a nontraditional setting—the military combat theater.

The Importance of Treating PTSD During Military Deployments

If PTSD can be successfully treated while service members are still deployed, it increases the chances that they can remain with their unit to successfully complete their deployment. Undoubtedly, there are enormous psychological health benefits of remaining with one's unit to successfully complete a military deployment. Military unit cohesion has been found to be a significant protective factor related to PTSD and

psychological resiliency (Dickstein et al., 2010; Zang et al., 2017). However, for a variety of reasons, many military behavioral health providers do not believe that combat-related PTSD should be treated during deployments. Instead, they believe PTSD should only be treated in garrison, or after the service member has returned from deployment. Unfortunately, this leaves deployed military behavioral health providers in a bind regarding the appropriate disposition of PTSD patients: (a) treat patients in theater using evidence-based treatments for PTSD such as prolonged exposure or cognitive processing therapy; (b) classify service members as having combat operational stress reactions, normalize their symptoms, provide brief supportive counseling, and encourage them to continue their deployed military duties; or (c) aeromedically evacuate service members with PTSD out of the combat theater so they can be treated in garrison.

Unfortunately, research has shown that psychiatric aeromedical evacuation out of the combat theater can significantly increase the likelihood of a medical discharge from the military. The inability to complete a military deployment—arguably the most important assignment of a service member's military career—because of a psychiatric condition is a strong indication that an individual may not be fit for military service. Peterson et al. (2018) found that service members who were aeromedically evacuated from the deployment theater for a psychiatric disorder were almost four times as likely to be subsequently separated from the military. This finding has important clinical and military operational implications regarding the utility of treating psychiatric conditions in theater, when clinically appropriate, as opposed to a psychiatric aeromedical evacuation.

Challenges in Treating Combat-Related PTSD During Military Deployments

There are a number of challenges in treating combat-related acute stress disorder and PTSD during military deployments. These challenges have limited the use of evidence-based treatments for the treatment of these conditions by deployed military mental health providers. The challenges have also made it very difficult to conduct prospective, Institutional Review Board–approved research on these topics in deployed settings.

Combat Operational Stress Reactions

One challenge in treating acute stress disorder and PTSD in deployed settings is that many military behavioral health providers are reluctant to give these diagnoses in an active combat zone. Some military providers believe that acute stress disorder or PTSD cannot be diagnosed or treated while active combat operations are ongoing. Instead, the term “combat operational stress reactions” is used, which refers to transient reactions to stressors present in combat and everyday operations in deployed environments (Potter, Baker, Sanders, & Peterson, 2009).

The U.S. Army's published guidelines on Combat and Operational Stress Control (Department of the Army, 2006, 2016) support these general principles. A combat and operational stress reaction is described as “a negative adaptation to high stress events and potentially traumatic stress exposure” (Department of the Army, 2016, p. 5-3). These guidelines recommend that combat and operational stress interventions be used to treat combat and operational stress reactions. Although the use of the term *combat operational stress reactions* may help reduce the stigma of PTSD and normalize combat stress reactions, it may inadvertently also lead to confusion on how to treat this condition. Whereas several empirically supported treatments exist for acute stress disorder and PTSD, no such treatments exist for combat operational stress reactions. If acute stress disorder and PTSD are not diagnosed during military deployments, then evidence-based interventions for these disorders are not likely to be employed.

Combat Operational Stress Control

The distinctions between acute stress disorder, PTSD, and combat operational stress reactions are not clear. If combat operational stress reactions are considered subthreshold acute stress disorder and PTSD, then the DoD guidelines to use general combat and operational stress interventions makes sense. The mental health concept of operations for treating combat operational stress reactions during deployments is based on the BICEPS (brevity, immediacy, contact, expectancy, and simplicity) or PIES (proximity, immediacy, expectancy, and simplicity) models (Department of the Army, 2006, 2016). Although both models have strong face validity, minimal empirical data support their efficacy, and neither outline the use of any specific evidence-based treatments for acute stress disorder or PTSD.

The U.S. military employs many of the world's most intensive and sophisticated combat operational training methods. As a result, the majority of deployed military personnel (about 85%) exposed to combat and operational stressors manage these events exquisitely and do not require behavioral health treatment (Hoge et al., 2004). Those who experience combat operational stress reactions, or subthreshold symptoms of acute stress disorder or PTSD, may benefit from general combat and operational stress interventions, while others are likely to recover without any formal treatment. However, those who meet the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; American Psychiatric Association, 2013) criteria for acute stress disorder and PTSD may not respond to the standard combat and operational stress interventions.

Common Concerns About Treating PTSD During Military Deployments

A common concern among military clinicians and policymakers is that the use of trauma-focused therapies—such as prolonged exposure or cognitive processing therapy—in deployed locations will lead to increased distress, decompensation, increased suicide risk, and the possible need for psychiatric hospitalization or aeromedical evacuation. Unfortunately, although most of these concerns are likely to be unfounded, that lack of research conducted in deployed locations prevents a strong argument to counter these concerns.

Another concern among military health providers is that it is not possible to deliver a full CBT protocol based on provider and patient availability. Standard outpatient treatment protocols for PTSD, such as prolonged exposure and cognitive processing therapy, involve weekly 60- to 90-minute sessions over the course of 3 to 4 months. This format may not be practical in deployed locations. The expectations that a service member will engage in weekly sessions and homework over a period of several months may be too demanding for deployed service members who are also managing daily occupational demands. The combination of these factors presents obstacles to adherence to the traditional formats of evidence-based PTSD psychotherapy protocols. However, research suggests evidence-based protocols can be flexibly adapted and modified for use in deployed locations.

Special Consideration for the Treatment of PTSD During Military Deployments

The first study to evaluate the use of an evidence-based treatment for combat-related PTSD was a clinical case series conducted by three military clinical psychologists (including one of the co-authors for the current manuscript; AP) deployed to Iraq during 2004–2005 (Cigrang, Peterson, & Schobitz, 2005). Each of the patients treated had experienced multiple deployment-related traumas, but there had been one recent trauma that was the most distressing trauma (i.e., the DSM Criterion A event) that led them to seek treatment.

The Posttraumatic Stress Disorder Checklist for Military personnel (PCL-M) was used to assess PTSD symptoms (Weathers, Litz, Herman, Huska, & Keane, 1993). Each of these military psychologists adapted the standard prolonged exposure protocol for use in the deployed setting. A total of four prolonged exposure therapy sessions were completed for each of the patients, referred to as Cases A, B, and C. Imaginal exposure focused on the review and processing of the traumatic event. In vivo exposure targeted avoidance, isolation, and withdrawal. Common items on an in vivo hierarchy included relatively safe activities that were being avoided by the patients that were part of normal deployment life on a Forward Operating Base. Such activities included going to the dining facility for a meal or going to the communications center to make a phone call or send an email to friends or family.

The results indicated that there were significant reductions over the four prolonged exposure treatment sessions for each of the patients. Case A's PCL-M score decreased from 69 to 24, Case B's PCL-M decreased from 59 to 39, and Case C's PCL-M decreased from 67 to 20. A 10-point reduction on the PCL-M is commonly identified as a clinically meaningful change. By this common rubric, all three patients demonstrated significant PTSD symptom reductions following a brief PTSD intervention and were able to successfully return to duty and complete their full deployment rotations.

A second case series of combat-related PTSD treatment in a deployed setting was conducted by psychologists deployed to Camp Fallujah, Iraq (McLay, McBrien, Widerhold, & Wiederhold, 2010). Ten active-duty service members were treated with a modified prolonged exposure protocol or a virtual reality-based prolonged

exposure protocol. A retrospective review of their clinical records indicated that 90% of patients no longer met criteria for PTSD at posttreatment and that both treatment modalities demonstrated significant benefits. Service members also reported decreases in depression and anxiety, and no service member had to be aeromedically evacuated from theater due to PTSD.

Pelton, Wangelin, and Tuerk (2015) delivered prolonged exposure therapy to a deployed service member with a combined face-to-face and telehealth treatment modality. Initial stages of prolonged exposure therapy were completed at a larger Forward Operating Base followed by telehealth videoconferencing to the service member's smaller, remote combat outpost. The service member reported marked improvements at posttreatment. Findings from this study highlight the benefits of prolonged exposure in a deployed setting and the utility of telehealth technology to enhance treatment accessibility to deployed service members.

The largest prospective, military Institutional Review Board–approved clinical trial to date on the treatment of PTSD in a deployed combat zone was funded by the DoD as part of the STRONG STAR Consortium, and it evaluated treatment outcomes in 12 active-duty service members deployed to Iraq or Afghanistan (Peterson et al., under review). Service members were treated by deployed military behavioral health providers using prolonged exposure ($n = 6$) or cognitive processing therapy ($n = 6$). The prolonged exposure adaptations were similar to what was described previously in the Cigrang et al. (2005) study. Cognitive processing therapy targeted unhealthy cognitions that could interfere with military duties during deployment such as “No one can be trusted!”

The results indicated that participants treated with prolonged exposure reported significant symptom reductions (average reduction of 19.2 points on the PCL-M), indicative of a large treatment effect ($d = -1.28$). Participants treated with cognitive processing therapy demonstrated a clinically meaningful mean reduction on the PCL-M (10.5 point reduction), but these changes were not statistically significant. These findings suggest that prolonged exposure and cognitive processing therapy can be safely and effectively used in deployed settings.

Summary

The deployed combat theater is an unconventional setting for the delivery of CBT interventions. Although it is often not feasible to deliver the same trauma-focused treatment protocols for PTSD that are used in traditional settings, many CBT interventions are remarkably robust and flexible and can be adapted to a variety of nontraditional settings. The initial results of case series reports and a small clinical trial for the treatment of acute stress disorder and PTSD in the combat theater are remarkably similar to the results found in civilian settings. Brief, four- to five-session treatment protocols, similar to those developed by Bryant and colleagues for acute stress disorder in civilian populations (Bryant et al., 1998, 1999, 2006), have been shown to yield similar results for military personnel in deployed settings (Cigrang et al., 2005; McLay et al., 2010; Pelton et al., 2015; Peterson et al., under review).

Evidence from these studies suggests that adapting the traditional CBT protocols for use in deployed settings does not diminish treatment outcomes. Larger clinical trials conducted in deployed settings with long-term follow-up are needed. Unfortunately, this is unlikely to occur at any time in the near future. Conducting research in deployed combat locations is extremely difficult. The specific challenges to this process are beyond the scope of the current paper. Suffice it to say that the first author of this manuscript (AP) spent over 4 years obtaining regulatory approvals (military Institutional Review Board, Joint Combat Casualty Research Team, and the Human Research Protection Office at Fort Detrick, Maryland) and then collecting data on 12 deployed service members treated by deployed military clinicians who served as individual site principle investigators at multiple locations throughout Iraq and Afghanistan (Peterson et al., 2018). With the official end date of Operation Iraqi Freedom in 2010 and Operation Enduring Freedom in 2014, the Joint Combat Casualty Research Team was disbanded and redeployed to their home military stations. As a result, research in deployed U.S. military locations is no longer permitted.

Most cognitive behavioral therapies are incredibly robust and the standard treatment protocols can be adapted or modified for use in nontraditional settings. Prolonged exposure and cognitive processing therapy are two battle-hardened CBT interventions that have been found to be

safe and effective when adapted for deployed military settings. It is essential that the U.S. military continue to train military behavioral health providers to deliver evidence-based CBT protocols in nontraditional settings across the globe.

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Task Sharing Cognitive Behavioral Therapy in Global Mental Health: Nurse- and Lay Counselor-Delivered Interventions for Depression and Substance Use in HIV Care in South Africa

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Global Mental Health (GMH) Treatment Gap

The needs for mental health and substance use treatment far overwhelm the capacity of currently available services globally, with low- and middle-income countries (LMICs) being disproportionately burdened by this treatment gap. Major depressive disorder (MDD) is now the single largest contributor to disability worldwide of any physical or mental disorder, in addition to the burden of disease attributable to all other psychiatric disorders (World Health Organization [WHO], 2017). The limited capacity of currently available services to meet this enormous need has been driven by historically limited funding available for dedicated mental health services and a dearth of health care workers with training in mental health care (DeSilva, Samele, Saxena, Patel, & Darzi, 2014; Kakuma et al., 2011). Across all types of mental health providers, low-income countries have on average 1.6 mental health providers per 100,000 population (WHO, 2018). As of 2015, these human resource shortages resulted in an estimated shortage of 1,710,000 full-time equivalent mental health providers across 144 countries (Scheffler et al., 2011). These national shortages are exacerbated by the disproportionate distribution of mental health providers in urban areas and within the private sector, meaning that ratio of mental health providers to 100,000 population can be much lower than 1–2 to 100,000 in practice (Rathod et al., 2017; Vergunst, 2017; WHO, 2018). Given the scarcity of trained mental health providers in many under-resourced settings, particularly in rural areas, there is a need not only to expand opportunities for training mental health providers but also an urgent need to understand how

to train and supervise lay health workers in behavioral interventions and extend the workforce for mental health care to address the GMH treatment gap. These efforts rely on intensive ongoing supervision in combination with training (Lund, Caldas de Almeida, Whiteford, & Mahoney, 2013; Monson et al., 2018; Smith et al., 2017). Given its relatively straightforward, time-limited, efficient and evidence-based approach, cognitive behavioral therapy (CBT) may be a good candidate for efficient and effective delivery using task-sharing models in resource-limited settings globally. CBT's structured, time-limited approach is also appealing in that it can improve the ease of training (Papas et al., 2010) and offers a clear model for ongoing structured support.

Indeed, there are increasing efforts to develop and evaluate effective training, supervision, and delivery methods for CBT when implemented by lay health workers using “task shifting” or “task-sharing” models. Task-shifting models have been defined as delegating tasks to less specialized health care workers, whereas task sharing represents a further development in that it focuses on use of existing specialists to provide ongoing support, consultation, and training to less specialized providers, instead of merely shifting additional clinical responsibilities to lay health workers without ongoing monitoring and support (Padmanathan & De Silva, 2013). The models of task shifting and task sharing originated outside of mental health care in response to the HIV epidemic, particularly in settings such as sub-Saharan Africa that faced the greatest burden of HIV/AIDS with limited resources to meet the biomedical and behavioral needs of the epidemic (Mwai et al., 2013). The high HIV burden combined with severe health care

workforce shortages forced the need to expand and upskill the available workforce to appropriately address the disease-management needs related to the HIV epidemic (WHO, 2008). Task sharing has been a key implementation strategy for increasing access to antiretroviral therapy (ART), the life-saving medications now available there to treat HIV/AIDS across sub-Saharan Africa (Trickey et al., 2017; WHO, 2013). Indeed, in the past 10 years, given the high prevalence of HIV/AIDS, various countries in sub-Saharan Africa have dramatically scaled up the availability and accessibility of ART (Joint United Nations Programme on HIV/AIDS, 2017).

Applying Task-Sharing Models From HIV Care to the GMH Treatment Gap

Similar to the shortage of trained medical providers in sub-Saharan Africa, there is also a shortage of trained mental health providers in LMICs, including many countries in sub-Saharan Africa. Among the world's regions, countries within Africa report the largest shortages of mental health providers (Bruckner et al., 2011; Scheffler et al., 2011; WHO, 2018). While on average LMICs have 1.6 mental health provider per 100,000 population, African countries have on average 0.9 mental health providers per 100,000 population (WHO, 2018). This ratio ranges between countries and some, such as Sudan, have as little as 0.06 psychiatric specialists per 100,000 population (Bruckner et al.). Compared to other world regions, Africa also reports the largest shortage of psychiatrists and psychologists within its mental health workforce, with the bulk of the African mental health workforce made up of psychiatric nurses and other paid mental health workers (WHO, 2018). In South Africa as of 2014, there were only a total of 207 psychiatrists and 364 psychologists in the employment of the entire South African National Department of Health (South African Minister of Health, 2014). With a current population of over 56 million, this amounts to only 0.39 psychiatrists per 100,000 and 0.7 psychologists per 100,000 in the public health system. Further, national shortages for African countries may even be underestimated due to a lack of quality data on workforce numbers in many of the continent's countries (Bruckner et al.; Upadhaya et al., 2016). Like in many other LMICs, the distribution of available mental health providers is clustered in urban areas, with little to no coverage in rural areas, which is, in many cases,

where the majority of the population lives (Rathod et al., 2017; Vergunst, 2017; WHO, 2018). In combination with the HIV epidemic and the frequency of comorbidities between psychiatric disorders and HIV (Moore & Posada, 2013; Nedelcovych et al., 2017; Thames & Jones, 2017), there are clear needs for task sharing of mental health care for individuals with HIV/AIDS in sub-Saharan Africa.

As such, researchers have suggested that one way to meet the dire mental health needs in this setting is to leverage the lessons learned from task sharing in HIV care in sub-Saharan Africa to noncommunicable diseases (Rabkin & El-Sadr, 2011), including behavioral health problems. Evidence on the effectiveness of task-sharing models for delivering biomedical HIV care and adherence support in sub-Saharan Africa has informed ongoing efforts to use task-sharing models to deliver evidence-based CBT interventions for adherence, mental health, and substance use, for people living with HIV (PLWH) and beyond. As the global disease burden from noncommunicable diseases, including psychiatric disorders such as depression and substance use disorders, continues to grow (Vos et al., 2017, 2016; WHO, 2017), it is an important time to utilize and evaluate innovative models such as task sharing CBT interventions that have been used to expand access to HIV services to also increase access to evidence-based mental health and substance use treatment (Magidson et al., 2017).

In this article, we provide examples from our work task sharing CBT in HIV care in sub-Saharan Africa. We provide case examples of implementing task sharing models of CBT for medication adherence, and integrated CBT-based interventions to address depression and adherence, and substance use and adherence in HIV. We discuss considerations when adapting and implementing CBT using a task-sharing model in this population and discuss important future directions and priorities, including an emphasis on implementation science methods to promote sustainable treatment models.

Addressing Adherence, Depression, and Substance Use in South Africa

Within sub-Saharan Africa, South Africa has the largest number of people living with HIV/AIDS in the world, with over 7 million PLWH and high rates of mental health comorbidity, including depression and co-occurring substance use

(Southern African HIV Clinicians Society, 2013; Woollett & Hatcher, 2016), which are both associated with poorer HIV treatment outcomes (Nakimuli-Mpungu et al., 2012; Uthman, Magidson, Safren, & Nachega, 2014). Globally, rates of depressive symptoms among PLWH have been shown to range from 12.8% to 78% (Uthman et al., 2014), and do not vary by country income group. Among PLWH in sub-Saharan Africa, a meta-analysis focused on depression and alcohol use disorders found an 18% pooled estimate rate of major depression, and 31% of individuals across studies had elevated depressive symptoms (Nakimuli-Mpungu et al.). Although documented less frequently than depression, rates of alcohol use disorders also reached up to 31% (Nakimuli-Mpungu et al., 2012). In South Africa specifically, a recent study of a cohort of 1,482 PLWH presenting at health services in South Africa found depression rates to be approximately 33% (using the PHQ-9; Rane et al., 2018). Another recent study examining the prevalence of alcohol use among PLWH initiating ART in sub-Saharan Africa ($n = 401$) found that rates of harmful alcohol use measured using a biomarker phosphatidylethanol (PEth) were approximately 31.6% in South Africa (Magidson et al., 2018). This was consistent with rates of self-reported harmful alcohol use in this sample (30%) and in other work examining alcohol use among PLWH in South Africa (Huis in t' Veld, Pengpid, Colebunders, Skaal, & Peltzer, 2016). When untreated, substance use and depression are associated with poor antiretroviral adherence across multiple studies and contribute to worse HIV/AIDS treatment outcomes (Nakimuli-Mpungu et al.; Uthman et al., 2014).

CBT has been used to address a range of behavioral health needs among individuals living with HIV/AIDS, including to improve HIV medication nonadherence, reduce symptoms of depression, and problematic substance use (Magidson et al., 2017). CBT also has empirical support for improving adherence in combination with other evidence-based CBT interventions for co-occurring conditions. Prior research (Safren et al., 2001) has demonstrated that to achieve improvements in adherence when co-occurring behavioral health problems, such as depression symptoms, are present, it is important to address both the symptoms of depression and the self-care problems in the same intervention. There is support for treatment approaches that integrate CBT for adherence and depres-

sion in diabetes (Safren et al., 2014), HIV/AIDS (Safren et al., 2009; Safren et al., 2016), and among individuals with co-occurring depression, substance use, and HIV (Daughters et al., 2010; Safren et al., 2012). Although the majority of empirical support for CBT interventions among individuals living with HIV/AIDS is from the U.S. and other developed countries, there is accumulating empirical support for CBT interventions in sub-Saharan Africa, including using task-sharing models (Abas et al., 2018; Andersen et al., 2016; Bere et al., 2017; Myers et al., 2018; Nyamayaro et al., 2019; Papas et al., 2011; Papas et al., 2010). CBT's structured, time-limited approach has been viewed as particularly suitable for the demands of task sharing (i.e., to improve ease of training, supervision; Papas et al., 2010).

Our team has conducted a series of studies aiming to task share evidence-based CBT interventions to address the mental health treatment gap in South Africa at the intersection of HIV/AIDS. We first led a series of studies to task share CBT for HIV medication adherence (known as Life-Steps; Case #1), followed by task-sharing integrated CBT models to address depression and ART adherence simultaneously using nurse-led delivery ("Ziphamandla"; Case #2), and a peer-delivered integrated behavioral activation intervention for adherence and substance use ("Khanya"; Case #3). In the following section, we briefly describe the relevance of CBT models applied to the behavioral aspects of HIV-related self-care and adherence and the need to address co-occurring depression and substance use, followed by a description of our efforts to task share CBT in this setting.

Case Studies: Task Sharing CBT in the South African Context

Case Example 1: Adapting "Life-Steps" to Improve ART Adherence in South Africa

The primary strategy for ART adherence support in South Africa is through individual counseling sessions provided by lay counselors known as adherence counselors. Historically adherence counselors, employed by nongovernmental organizations, were trained in Egan's skilled helper model of counseling (Dewing et al., 2013). Adherence counselors would typically administer three counseling sessions over a 3- to 4-week period before the patient was initiated on ART. Several challenges with

this approach emerged, including lack of structure in the counseling sessions, counseling content consisting mainly of advice- and information-giving (often with some degree of moralizing), and suboptimal retention in care rates of patients prior to ART initiation (Dewing et al.).

To address these challenges and improve ART initiation rates, a working group led by Médecins Sans Frontières (MSF; "Doctors Without Borders"), which included members of our team, designed a revised counseling model (Andersen, Joska, & Safren, 2013; Wilkinson et al., 2015). The revised counseling model was designed to allow ART initiation to occur within a week of being deemed eligible for ART. The new model proposed that the first adherence counseling session would take place when the patient is deemed eligible for ART. The second adherence counseling session would take place a week later when ART is prescribed. The third counseling session would take place a week after ART initiation to check in on the patient's experience with ART and to problem-solve any difficulties that had arisen. Furthermore, the content of the adherence counseling sessions needed to be replaced with an empirically supported adherence intervention to strengthen the adherence counseling program. A culturally adapted CBT intervention for ART adherence called Life-Steps (Safren, Otto, & Worth, 1999) was chosen to serve as the content in the revised counseling model.

Life-Steps is a structured ART adherence intervention that has a strong evidence base in the U.S. (Safren et al., 1999) and in a number of LMICs (Abas et al., 2018; Andersen et al., 2016; Bere et al., 2017; Simoni et al., 2011). It consists of 10 informational, problem-solving, and cognitive-behavioral steps; each step addresses a potential barrier to medication adherence. A structured format is employed in each step: (a) set the goal; (b) identify potential barriers to accomplishing the goal; and (c) formulate a plan and back-up plan to overcome the barriers. Our team conducted formative research and consulted with local health providers and stakeholders to customize Life-Steps to the South African context. Three locally relevant adherence barriers were incorporated into Life-Steps: (a) plan for accessing ART when traveling outside Cape Town for extended periods; (b) plan for taking ART when under the influence of substances; and (c) plan for accessing social support (Andersen et al., 2013). Additional modifications included using culturally appropri-

ate examples, using comprehensible vocabulary, and translating the manual into isiXhosa (Andersen et al., 2016).

MSF piloted the revised counseling model, including the culturally adapted Life-Steps adherence intervention, with 449 patients at a primary care clinic run by the City of Cape Town in a peri-urban area (Wilkinson et al., 2015). The revised counseling model produced promising outcomes. High ART initiation rates (96%) were documented, and of those patients, the majority ($n = 273$; 63%) were initiated within a week of being deemed eligible. Of those initiated, 86% were retained in care after 6 months and 94% of those retained obtained viral suppression. Due to the success of the pilot project, this revised counseling model became official Western Cape Provincial policy in 2015 and was endorsed in the national adherence guidelines (MSF, 2015). This example depicts a local adaptation of an evidence-based CBT intervention to support adherence that included plans for sustainability and scale up.

The above case example suggests that task sharing CBT for adherence may be a feasible, sustainable solution for addressing adherence in resource-limited settings. Lay counselors' abilities to deliver more complicated integrated interventions that focus on both behavioral health problems and self-care outcomes in chronic conditions needed to be examined next to clarify the complexity of interventions that lay counselors can deliver. These ongoing efforts need to weigh the advantages and disadvantages of incorporating multiple treatment targets into an integrated treatment protocol (i.e., improved efficiency yet also added complexity that may hinder feasibility or acceptability for training and supervision).

Following from the research pointing to depression and substance use being two of the most commonly comorbid psychiatric disorders in HIV/AIDS that also interfere with successful treatment outcomes (Nakimuli-Mpungu et al., 2012; Uthman, Magidson, Safren, & Nachega, 2014), our team has ongoing work in South Africa to evaluate task sharing models for integrated treatments to address depression and substance use (currently in separate protocols) and also improve HIV treatment adherence. In this next section, we provide examples of our ongoing work task sharing evidence-based, integrated CBT interventions to address comorbid psychiatric disorders and improve ART adherence among individuals living with HIV/AIDS in sub-Saharan Africa. Following these

examples, we discuss considerations for future efforts when adapting and implementing CBT using a task sharing model in this population.

Case Example 2: Ziphmandla—Integrated CBT Intervention for Depression and HIV Medication Adherence

There are ongoing efforts to integrate CBT for depression with an evidence-based CBT intervention for adherence (Life-Steps; Safren, Gonzalez, & Soroudi, 2008; Safren et al., 1999). Andersen et al. (2012) evaluated a task-shared CBT treatment for depression and HIV medication adherence in South Africa. The nurse-delivered treatment was a 6- to 8-session intervention based on CBT for adherence and depression (CBT-AD; Safren et al., 2012, 2009). Primary modifications to the original treatment included cultural adaptations and the removal of the cognitive restructuring module due to its complexity. Treatment modules included psychoeducation, motivational interviewing, problem solving, behavioral activation, relaxation training, and Life-Steps. Initial evidence suggests the adapted, task-shared treatment was acceptable to participants (Everitt-Penhale et al., 2019) and associated with significant improvements in depression, functioning, and modest improvements in HIV medication adherence (Andersen et al., 2016). Yet, implementation was challenging, requiring extensive weekly supervision, initial training (88 hours), supplemented with regular ongoing training (Andersen et al.).

To further examine the efficacy of the treatment, a randomized controlled effectiveness trial of this treatment with depressed ART-users with unsuppressed viral loads is currently under way (clinicaltrials.gov identifier: NCT02696824). As before, nurses are the interventionists, trained in the assessment of depression as well as the delivery of the manualized CBT-AD intervention and supervised weekly by a clinical psychologist with CBT expertise who is based in South Africa (LA). Additionally, we moved from a written manual to a “flip-chart” style manual that the nurse interventionists bring with them to the sessions and go through with the participant. This is designed to enhance fidelity to the treatment and delivery of the intervention components, as we have found that in this context, there is a need for balancing the perceived need for providing supportive counseling with present-focused skills-based treatment that directly addresses

self-care and depression. The study will help determine whether this nurse-delivered CBT treatment is associated with long-term improvements in key health and psychological outcomes, and is feasible and sustainable for delivery in this setting.

Case Example 3: Task Sharing an Integrated Intervention for Substance Use and HIV Medication Adherence in South Africa: Project Khanya

To improve health outcomes alongside efforts to reduce alcohol use among HIV-infected patients, efforts are under way in South Africa to evaluate a primary health clinic-delivered behavioral activation-based intervention for both substance use and HIV medication adherence. A qualitative formative stage on barriers, facilitators, and preferences for substance use treatment within HIV care with clinic patients struggling with both substance use and HIV medication adherence and varied clinic providers produced key feedback for intervention adaptation. This included feedback from patients that they would prefer delivery of substance use treatment by peer interventionists, in part due to experiences of stigma of substance use (Magidson et al., in press). Providers also recommended leveraging existing community health worker cadres conducting household assessments to engage substance using PLWH who had fallen out of care, an approach that will be tested in future work. The adapted intervention currently being evaluated, locally named “Khanya,” is being delivered by a peer interventionist in the health clinic where patients access HIV treatment.

The Khanya intervention includes Life-Steps, behavioral activation adapted for substance use in this setting, and relapse prevention skills (behavioral and mindfulness-based skills adapted for this setting). The intervention is delivered over six sessions, with the option for an additional six monthly booster sessions to allow patients time for additional support and practice of skills. Like in Ziphmandla, the interventionist also has a flip-chart style manual for use in sessions. The flip-chart outlines key components in each session, while also including some prompts for the interventionist to share her own personal examples when relevant, for instance, in how she has applied skills in her own life, which is discussed regularly in supervision. Supervision is provided via videoconferencing by a U.S.-based licensed clinical psychologist with substantial experience working in South Africa (JM), supplemented by in-

person visits approximately three times per year, both to ensure fit of supervision to the local context. A randomized, hybrid Type 1 effectiveness-implementation trial of the Khanya intervention compared to enhanced treatment as usual with patients with HIV who are struggling with both adherence and substance use is currently under way (clinicaltrials.gov identifier: NCT03529409). This trial will help determine whether this peer-delivered CBT intervention is feasible and acceptable for delivery in this setting, and associated with improvements in HIV medication adherence (measured using real-time electronic adherence monitoring, self-report, and biomarkers), and improvements in substance use (also measured using self-report and biomarkers).

Summary: Considerations for Task Sharing CBT in Resource-Limited Settings

These case examples of task sharing CBT for behavioral health needs among HIV-infected individuals in sub-Saharan Africa present a promising approach for not only improving adherence but also co-occurring psychiatric disorders. In some cases, lay counselor or peer delivery, as illustrated in formative qualitative work in South Africa to develop alcohol/adherence interventions (Magidson et al., in press; Morojele et al., 2014), may even be preferable, which can be understood in the context of other leading peer-led addiction programs globally, such as Alcoholics Anonymous. Across our case examples and other studies adapting CBT techniques for resource-limited settings, often key considerations in the adaptation are cultural modification and adaptation for lay counselor delivery, while also maintaining the core components of the intervention (Chibanda, Cowan, Healy, Abas, & Lund, 2015; Ekers, Richards, McMillan, Bland, & Gilbody, 2011; Magidson et al., 2015; Murray et al., 2013; Patel, Chowdhary, Rahman, & Verdelli, 2011; Patel et al., 2017; Purgato et al., 2018; Richards et al., 2016). Given that many CBT approaches are tested and developed using highly trained academic therapists in high-income countries, adaptations to training and supervision methods are essential. Often these modifications include (a) focusing on how training is conducted; (b) simplifying terms and avoiding clinical jargon; and (c) adapting the structure of supervision. Regarding cultural adaptations, changes may include ensuring appropriate delivery

within a local context, linguistic modifications, and including local idioms, metaphors, and stories, as well as adapting for low-literacy populations.

CBT has been considered a good candidate for lay counselor delivery, given its structured format. Although easier for training purposes, the structured format may be challenging in learning how to maintain a primary focus on the key intervention target (e.g., adherence), particularly when patients may also request addressing other health behaviors in the context of the intervention or other urgent psychosocial stressors (Morojele et al., 2014). Further, it is necessary to understand how to adapt CBT interventions to also incorporate the unique identities of peers and CHWs while maintaining fidelity. As mentioned above, our team has utilized a flipchart manual to promote fidelity (with some prompts to share aspects about oneself and allow for flexibility of delivery, e.g., in Case #3). Technology can also be useful to promote fidelity for CBT delivery in task-sharing models, for instance by providing multimedia platforms to increase fidelity to intervention delivery (Remien et al., 2013; Robbins et al., 2015). Additional research is needed to demonstrate how multimedia-based platforms may be a potentially sustainable strategy when sharing models of CBT. Yet, alongside these efforts to promote fidelity, it also is important to note that the more flexible the delivery of an intervention, the greater the likelihood for ultimate adoption in clinical settings (Damschroder et al., 2009; Glasgow, Vogt, & Boles, 1999; Thorpe et al., 2009). As such, finding a balance between providing structure and allowing for some flexibility in delivery—for instance, using a modular approach (Safren et al., 2012, 2009)—is necessary.

Alongside the promising results of effectiveness trials of CBT using task-sharing models, clear implementation challenges emerge from these examples of task sharing CBT in this setting. Primary implementation challenges identified in previous work (Petersen, Fairall, Egbe, & Bhana, 2014) include poor role definition or clarity on scope of work for lay counselors, lack of standardized training, and inadequate supervision, support, and compensation. For long-term sustainability, a primary consideration is whether interventions delivered as part of research studies would be feasible if conducted in a clinic-based setting without any additional research resources. For instance, the amount of training and supervision described in each

of the examples may likely not be sustainable in a real-world clinical setting. Further, it also is essential to always consider how we can promote capacity building for the trainers and supervisors as to not rely solely on outside experts to promote long-term sustainability. When we reach a later stage of implementation outside the context of a research study, ongoing evaluation is needed as to when clinic-based counselors, as opposed to lay counselors hired for research purposes, are feasibly and competently able to deliver the CBT intervention. Efforts in South Africa are ongoing to understand the barriers and facilitators to using designated vs. dedicated clinic-based staff (Myers et al., 2018).

Another important consideration when examining efforts to implement CBT in clinical settings outside of a research context will be how to standardize selection of lay counselors. Preliminary work has been done to develop metrics of lay counselor competence in implementing task-shared psychological interventions (Kohrt et al., 2015; Singla et al., 2014), but more work is needed to guide the selection of lay counselors for these roles. If task sharing CBT for behavioral health problems proves to be feasible and effective in the ongoing work, it may be a particularly appealing approach for expanding access to evidence-based mental health care and CBT interventions at scale globally.

In summary, numerous lessons can be learned from responses to meeting the behavioral treatment needs in the HIV epidemic in sub-Saharan Africa that can inform efforts to expand access to evidence-based care for mental health among PLWH and beyond. Addressing ART adherence concerns and the co-occurring psychiatric disorders which disrupt ART adherence are key to the success of biomedical treatment as prevention efforts to curbing the HIV/AIDS epidemic in sub-Saharan Africa. Given the ways in which psychiatric disorders such as depression and substance use interfere with HIV self-care, task sharing of biomedical ART programs may only succeed in the context of also task sharing evidence-based interventions to promote ART adherence and viral suppression. This work offers important lessons for expanding access to evidence-based mental health care globally using task sharing of evidence-based CBT interventions.

There are many pressing implementation science priorities in global mental health that are specific to task sharing CBT. More research is needed regarding what

types of training and supervision methods are most efficient and effective (Dorsey et al., 2018; Lucid et al., 2018; Pullmann et al., 2018), and what types of CBT interventions are most suitable for lay counselor delivery. These decisions will likely need to consider the advantages and disadvantages of incorporating multiple treatment targets in a unified treatment protocol—for instance, following the innovative, important work examining task sharing an adapted unified protocol intervention in LMICs (Bolton et al., 2014; Bonilla-Escobar et al., 2018; Dorsey, Berliner, Lyon, Pullmann, & Murray, 2016; Murray et al., 2014). Preliminary work suggests that task sharing CBT interventions may be a promising solution for increasing access to evidence-based mental health care worldwide.

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► Champions of Evidence-Based Interventions

This award recognizes outstanding individuals who have shown exceptional dedication, influence, and social impact through the promotion of evidence-based interventions and who have thereby advanced the mission of ABCT.

Champions may not be members of ABCT at the time of their nomination.

Potential Candidates

When considering making a nomination, think about decision-makers, funders, government officials, business people, consumers, or well-known people who have shared their struggles and benefited from CBT treatment.

Nominees should demonstrate the characteristics of champions, broadly construed, as recognized in the implementation science literature (see Knudsen, Gutner, & Chorpita, 2019, for examples relevant to ABCT; <http://www.abct.org/docs/PastIssue/42n1.pdf>). Briefly, ideal candidates should have demonstrated one or more of the following: (1) an enduring commitment to the application and impact of one or more evidence-based intervention; (2) the promotion of innovation, even in the face of social or organizational indifference or resistance, (3) a willingness to risk reputation as a result of a commitment to change, (4) leadership in the service of the broad mission of positive social change, and (5) a willingness to go above and beyond their regular professional duties.

Recognition

Nominees will be reviewed in March, June, and October by the ABCT Awards Committee and those meeting criteria will be forwarded to the ABCT Board of Directors for approval. Recipient will be notified by the ABCT President, and their names and photographs will be posted on the ABCT website, along with the rationale for their recognition. Each year's champions will also be acknowledged at our annual awards ceremony at the ABCT Convention.

How to Nominate

Email your nomination to 2019ABCTAwards@abct.org (nomination form available at http://www.abct.org/Awards/docs/2019_Champions_Nomination_Form.pdf). Be sure to put "Champions Nomination" in the subject line. Once a nomination is received, an email will be sent from staff, copying the Awards and Recognition Committee Chair. The nomination will be reviewed by the Awards and Recognition Committee and if deemed appropriate for our program, will be forwarded to the ABCT Board of Directors for final approval. Once reviewed and approved by the Board of Directors, the nominee will be contacted directly by the President and followed up with an ABCT staff member for a final review of the copy to be posted on the ABCT website.

► Nominate a Mentor — Spotlight on a Mentor Program

ABCT's Academic Training and Education Standards Committee is currently soliciting nominations for the Spotlight on a Mentor program. The purpose of the Spotlight on a Mentor program is to highlight the diversity of excellent research mentors within the membership ranks of ABCT. Its goal is to spotlight promising early career and well-established mentors across all levels of academic rank, areas of specialization, and type of institution.

Nomination Form www.abct.org/Resources/?m=mResources&fa=MentorNominationForm

To submit a nomination, please complete the nomination form and email it to abctmentor@gmail.com by June 1, 2019 at 23:59 EST/20:59 PST. Nominations from multiple mentees are encouraged.

Deadline for Nominations: June 1, 2019

Questions? email aleksandra.foxwell@utsouthwestern.edu

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ABCT candidates' biographical
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