Keeping Up to Date with Scientific Advances: A Practical Guide for Practitioners

Kimberly A. Wilson
Private Practice, Oakland CA
Jacqueline B. Persons
Oakland Cognitive Behavior Therapy Center, Oakland, CA
Robert P. Reiser
Private Practice, Kentfield, CA
Travis L. Osborne
Evidence Based Treatment Centers of Seattle
Shireen L. Rizvi
Rutgers University

Wilson, K. A., Persons, J. B., Reiser, R. P., Osborne, T. L., & Rizvi, S. L. (2019). Keeping up to date with scientific advances: A practical guide for practitioners. *the Behavior Therapist*, 42(7), 230-234.

A principal tenet of evidence-based practice is that clients are best cared for when their clinicians draw from science to inform their interventions. Although many clinicians (including ABCT members) value science, many rely on a knowledge base comprised of what they were exposed to during graduate training, supplemented by a few continuing education workshops per year. However, because science continues to evolve, the necessity of keeping up with the latest findings is integral to the delivery of evidence-based practices. Therefore, it is important to identify efficient and practical ways for clinicians to continue to learn over time.

Recent advances in the treatment of anxiety and depression provide good illustrations of the importance of this effort. For instance, many of us who were trained in the 1990s learned about different forms of exposure for treating panic and other anxiety disorders, and delivered these treatments for years with an emphasis on habituation. However, the emergence of the inhibitory learning model and its' application to exposure therapy (Craske et al., 2008; Craske, Treanor, Conway, Zbozinek, & Vervliet, 2014) has important implications for how clinicians deliver exposure-based interventions. After reading that body of research, in an effort to maximize treatment gains and reduce relapse, many of us have adjusted our delivery of exposure-based therapies. Important changes to how we practice have included de-emphasizing habituation and the use of orderly hierarchies, and instead focusing on creating opportunities for expectancy violations during exposures, promoting new learning in multiple contexts, and using active strategies to help clients remember and retrieve their new learning. Additionally, new research suggests that outcomes in the treatment of depression can be improved by targeting the

process of thinking, including rumination, in addition to its content (e.g., Hvenegaard et al., 2019; Watkins, 2016), targeting visual imagery in addition to verbal thought content (e.g., Holmes, Blackwell, Heyes, Renner, & Raes, 2016), and using explicit strategies to help patients remember what they learn in therapy sessions (e.g., Harvey et al., 2014). New approaches and refinements to existing treatments are consistently emerging and being subjected to rigorous examination. To provide state-of-the-art care, clinicians need access to the latest relevant science, and patients deserve clinicians who are well-informed about new findings in the field.

Unfortunately, those of us who work in private practice face a unique set of obstacles to obtaining up-to-date information. Private practitioners often lack library privileges, may not know which journals to read, and have time and financial constraints that can interfere. We are a group of clinicians who have been grappling with this issue for many years and we offer readers some of the solutions and strategies we have implemented in our professional lives. Table 1 lists several strategies we use, and we elaborate below on two foundational pieces that can be particularly difficult for clinicians to navigate: reading current peer-reviewed publications and attending and learning from quality, science-informed trainings.

Reading current peer-reviewed publications

Gaining access to journals and articles. For clinicians not affiliated with a university, it can be difficult and expensive to access peer-reviewed journals. Here we outline several methods that have worked for us.

A terrific first step is joining ABCT, as membership provides access to the three ABCT publications: *Behavior Therapy, Cognitive and Behavioral Practice*, and *the Behavior Therapist*. Some of the practice-oriented articles in *Cognitive and Behavioral Practice* are accompanied by how-to videos that demonstrate practical components of the treatments discussed.

One free method for accessing current research articles is ResearchGate
(www.researchgate.net), a kind of social networking website for researchers, where investigators share personal copies of their publications. For papers not yet posted on the site, a link is often available to contact authors directly. For example, one of us was interested in a paper evaluating a new app to target relationship OCD cognitions. She contacted the author through ResearchGate, and was quickly sent a copy of the paper. The results of that study were sufficiently promising that she added this tool to her repertoire for clients who might benefit from it. Furthermore she is now in touch with that researcher, who will provide updates as new data emerge. An added benefit of ResearchGate is that the site prompts users to indicate whether they would like to follow a particular research project, and if so, users are notified as that research program evolves. As a caveat, some of us have found the number of emails from ResearchGate cumbersome; thus, it is important to select preferred notifications and frequency in account settings.

Another free option is PubMed (https://www.ncbi.nlm.nih.gov/pubmed), where publications of studies funded by the NIH are available for free. Users can utilize the tool at the top of the page to search for a specific article. On the results page, look on the left for a sidebar

with filtering options, and select "Free full text" to narrow down the results to ones that are available for free.

A third free option is <u>Google Scholar</u>, which can be used to search for an author, topic, or a particular paper, and you can sometimes find full access to the paper you are seeking. If not, restricted access papers often provide direct links to author email addresses. Or you can visit the author's university website to obtain their email address and reach out directly for a copy of the article you are seeking.

One solution that costs money, but is relatively affordable, is subscribing to DeepDyve (\$50/month or \$360/year), which provides full access to articles from thousands of journals, including *Behaviour Research and Therapy, Clinical Psychology Review*, and the *Journal of Traumatic Stress*. It has a user-friendly dashboard that allows the reader to browse journals of interest or search for a particular topic, title, or author. When a paper is selected and read, recommended related papers and the reference list appear on the side of the screen. Many of these are directly linked, and this system facilitates deeper reading on the topic. DeepDyve sends members weekly updates on favorite journals, as well as regular emails on topics the reader has searched within its platform. The site has a useful tagging system that allows for internal storage of papers in personally named lists, which makes it easy to locate the paper later.

Free journal alerts. Most journals, including ABCT and APA publications, have easy online alert sign-ups, whereby anyone who provides an email address can be sent an alert when a new journal issue is published. The journal alert will provide the titles and abstracts of the articles that are appearing in the most recent issue of the journal. Researchers often state their study's main finding in the title and abstract, so that even simply reading the journal alerts can provide useful tidbits of clinically-useful information, as in the case of an article published in the *Journal of Consulting and Clinical Psychology* entitled "Mindfulness-based cognitive therapy (MBCT) reduces the association between depressive symptoms and suicidal cognitions in patients with a history of suicidal depression" (Barnhofer et al., 2015).

Selecting journals to read. In addition to the journals referenced above, the reader might consider several of the journals published by the American Psychological Association (APA) that we have found to be particularly valuable in our clinical work: *Journal of Consulting and Clinical Psychology, Journal of Abnormal Psychology, Professional Psychology: Research and Practice, Psychological Assessment, Psychotherapy,* and *Psychological Services.* Several journals published by Elsevier also provide information that is useful to the practitioner, including *Behaviour Research and Therapy, Behavior Therapy,* and *Cognitive and Behavioral Practice.* Many of these journals support at least limited open access, which means that some of the published papers are free for anyone to read. A particularly valuable strategy for keeping up to date with the literature is to ask journals you are interested in to send you an alert each time a new issue is published. You can ask for an alert even if you don't subscribe to the journal. Table 2 provides instructions on how to create journal alerts for several of the journals we value most.

<u>Finding time to read.</u> Because reading journal articles is a task that can easily drop off the busy clinician's to-do list, we have found that setting aside a specific scheduled time to read is helpful for ensuring follow-through. Another useful strategy is to take a continuum approach that includes tolerance of reading only abstracts if that fits into the time available that day. We teach

our clients the drawbacks of dichotomous thinking, and sometimes we also need the reminder to not fall in that trap ourselves! For example, one of us recently learned, after setting aside many articles for careful reading that she never actually found time to read, that simply reading the abstract sometimes gave her helpful knowledge that she could implement in her practice. For example, Erekson, Lambert, and Eggert (2015) reported that, in a large sample of patients who received psychotherapy in a naturalistic setting, those who attended weekly sessions made faster gains (as measured by the OQ-45, a self-report measure of symptoms and quality of life) than those who attended less often. This piece of information is useful when negotiating treatment plans with clients who are requesting to meet less often than weekly.

When more time can be allocated for reading, a useful approach is to browse the table of contents of journals most valued, and to search for topics that pertain to one's current caseload. For example, one of us had a client with a severe fear of looking at items that had lots of tiny holes (e.g., a sculpture with many tiny dots on it) that was not improving with standard exposure for specific phobias. The clinician searched the literature to glean what could be learned from others' work in this area. Although the literature is slim here, one fruitful paper led her to a validated measure of trypophobia. Using that measure not only assisted with proper progress monitoring over time, but also provided some relief to the client: the items on the monitoring scale included itchiness, a sensation that the client found very troubling and that the clinician had not observed in her other clients with anxiety disorders. The presence of that symptom on the monitoring scale was validating and gave the client comfort in knowing that her experience was shared.

Attending and learning from quality training workshops and webinars

To identify workshops and webinars that provide training in evidence-based content, we recommend that the clinician select trainings provided by the researchers and treatment developers who publish their work in the scientific literature. Several professional associations, including ABCT, Division 12 of APA, and the Anxiety and Depression Association of America (ADAA), are good sources for this kind of content. However, as readers may be aware, not all professional associations offer trainings that are supported by a strong evidence base; in particular, the listserv discussions for the Society for a Science of Clinical Psychology (SSCP) often point out that some of the APA-sponsored trainings lack a strong evidence base. Therefore, we recommend that the reader not rely only on the stamp of approval from a professional association when selecting a training workshop. Instead, consider selecting workshops that are provided by the investigators who are publishing their work in peer-reviewed journals. If you are receiving journal alerts (see above), the names of these scientists will be familiar to you.

Although attending a training or workshop can lead to self-reported changes in therapists' behaviors, it may not lead to the improved outcomes that would be expected from the new treatment (Miller & Mount, 2001). Ongoing supervision and consultation may be needed to get the job done. For example, Simons et al. (2010) showed that a two-day training workshop followed by one year of 16 group telephone consultation sessions (every 3 weeks) allowed community therapists to successfully adopt and implement CBT for depression. The trainees showed improvements on measures of CBT skills after the training, and their patients showed improved scores on measures of anxiety and depression as compared to patients who received

treatment as usual. These studies suggest that attending a training workshop alone is not likely to lead to implementing new therapeutic strategies or skills, and that to get sustained behavioral changes as a therapist, ongoing consultation may be needed.

Another useful strategy for keeping up to date is to participate in a monthly clinical consultation group that ends in an email share of a published peer-reviewed article. Approximately half of a sample of private practice psychologists reported using some form of peer consultation (Lewis, Greenberg, & Hatch, 1988). Peer group consultation, while offering the benefits of social support from other practitioners interested in evidence-based practice, can have limitations in terms of the lack of clear leadership and a potential to drift away from best practices (Martin, Milne & Reiser, 2018). Dorsey et al. (2018) identified 'gold standard' practices for consultation and supervision that make consultation groups of this kind effective, including role play and behavioral rehearsal, viewing recorded material together, using standardized clinical outcome measures, using standardized rating scales for fidelity assessment, and developing case formulations. However, these can create anxiety and discomfort and thus, there is potential for avoiding these methods. Without active leadership and an agreement to adhere closely to these methods, peer consultation can devolve into a chatty and enjoyable social support group.

We describe here approaches we have used to help us stay current with the latest scientific developments in our field, and hope they are helpful to others who struggle with identifying relatively easy ways to incorporate science into their work. Of course, as with any set of recommendations, it risks becoming outdated as new resources and technologies emerge. We hope that this conversation will continue and evolve, and that our colleagues keep sharing concrete strategies with each other on this important endeavor.

Acknowledgements

This manuscript stems from the work of the Committee on Science in Practice of the Society for a Science of Clinical Psychology, and we thank the SSCP for its support. We thank Connie Fee for her assistance with the work of our committee and with this manuscript.

References

- Barnhofer, Thorsten, Crane, Catherine, Brennan, Kate, Duggan, Danielle S., Crane, Rebecca S., Eames, Catrin, . . . Williams, J. Mark G. (2015). Mindfulness-based cognitive therapy (MBCT) reduces the association between depressive symptoms and suicidal cognitions in patients with a history of suicidal depression. *Journal of Consulting and Clinical Psychology*, 83(6), 1013-1020.
- Craske, M. G., Kirkanski, K., Zelikowsky, M., Mystkowski, J., Chowdhury, N., & Baker, A. (2008). Optimizing inhibitory learning during exposure therapy. *Behaviour Research and Therapy*, 46, 5-27.
- Craske, M. G., Treanor, M., Conway, C. C., Zbozinek, T., & Vervliet, B. (2014). Maximizing exposure therapy: An inhibitory learning approach. *Behaviour Research and Therapy*, 58, 10-23.
- Dorsey, S., Kerns, S. E., Lucid, L., Pullmann, M. D., Harrison, J. P., Berliner, L., ... & Deblinger, E. (2018). Objective coding of content and techniques in workplace-based supervision of an EBT in public mental health. *Implementation Science*, 13(1), 1-12.
- Erekson, D. M., Lambert, M. J., & Eggett, D. L. (2015). The relationship between session frequency and psychotherapy outcome in a naturalistic setting. *Journal of Consulting and Clinical Psychology*.
- Harvey, A. G., Lee, J., Williams, J., Hollon, S. D., Walker, M. P., Thompson, M. A., & Smith, R. (2014). Improving outcome of psychosocial treatments by enhancing memory and learning. *Perspectives on Psychological Science*, *9*(2), 161-179.
- Holmes, E. A., Blackwell, S. E., Heyes, S. B., Renner, F., & Raes, F. (2016). Mental imagery in depression: Phenomenology, potential mechanisms, and treatment implications. *Annual Review of Clinical Psychology*, *12*, 249-280.
- Hvenegaard M., Moeller, S. B., Poulsen, S., Gondan, M., Grafton, B., Austin, S. F., Kistrup, M., Rosenberg, H. H., & Watkins, E. R. (2019). Group rumination-focused cognitive-behavioural therapy (CBT) v. group CBT for depression: phase II trial. *Psychological Medicine*, 1–9.
- Lewis, G.J., Greenberg, S.L., & Hatch, D.B. (1988). Peer consultation groups for psychologists in private practice: A national survey. *Professional Psychology*, 19, 81-86.
- Miller, W. R., & Mount, K. A. (2001). A small study of training on motivational interviewing: Does one workshop change clinician and client behavior? *Behavioural and Cognitive Psychotherapy*, 29(4), 576-471.
- Martin, P., Milne, D. L., & Reiser, R. P. (2018). Peer supervision: International problems and prospects. *Journal of Advanced Nursing*, 74(5), 998-999.
- Simons, A. D., Padesky, C. A., Montemarano, J., Lewis, C. C., Murakami, J., Lamb, K., DeVinney, S., Reid, M., Smith, D. A., & Beck, A. T. (2010). Training and dissemination of cognitive behavior therapy for depression in adults: A preliminary examination of therapist competence and client outcomes. *Journal of Consulting and Clinical Psychology*, 78(5), 751-756.
- Watkins, E. R. (2016). *Rumination-focused cognitive behavioral therapy for depression*. New York: Guilford Press.

Table 1. Strategies for staying engaged with the science in our field

Regularly attend professional conferences that promote clinical science, such as Association for Behavioral and Cognitive Therapies (ABCT), Anxiety and Depression Association of America (ADAA), and World Congress of Cognitive and Behavioral Therapies (WCBCT).

Listen to interviews sponsored by the Society for a Science of Clinical Psychology (SCCP) and posted at http://sscpweb.org/SciPrac in which Jacqueline B. Persons conducts interviews about the clinical implications of their research with several important clinical scientists: Michelle Craske on the inhibitory learning model of exposure, Ed Watkins on rumination focused CBT, Emily Holmes on visual images in depression, and Michael Lambert on using feedback to reduce treatment failure.

Join or start a monthly case consultation group in which sharing relevant research papers is a regular norm. Or add that component if it is not a norm in the consult groups you attend.

Say yes to invitations to consult on research grants to keep your finger on the research pulse.

Seek out colleagues who also work hard to keep up with new findings, value evidence, and share articles. Meet them for in-person coffee dates and chat with them in Google groups, on a CBT Facebook page, on a professional association listsery, and on Twitter.

Use cue-based prompts, such as phone reminders, index cards, or post-its placed strategically on your desk, to remind you of key strategies you are trying to implement from the literature.

Establish and lead your own virtual or IRL journal club.

Subscribe to science-informed podcasts for clinicians, with guests who publish in the field. Examples include: CBT Radio, Psychologists Off The Clock, and The OCD Stories.

Table 2. Steps to follow to receive journal alerts

To receive alerts for APA journals:

- Visit the APA website (www.apa.org)
- Click "Publications & Databases"
- Click "Journals"
- Scroll down to a box on the right titled "Journals Information"
- Click "Email Alerts"
- You'll be prompted to log in, or click "create account" if you do not yet have one
- Follow instructions to create a free account, which will land on your profile page
- On the left menu, click "Journals" under "Alerts" in order to customize alerts.

To receive alerts from Elsevier:

- Go to ScienceDirect.com
- Scroll down to the bottom, to the section entitled "Keep Up to Date"
- Click "Create and manage alerts" which will bring you to a Sign In page
- If you do not already have an account, click "create an account"
- After creating an account, click "Done"
- You will then be directed to a page that allows you to search for journals of interest. Useful Elsevier journals include *Behavior Therapy*, *Cognitive and Behavioral Practice*, and *Behaviour Research and Therapy*. Type in the journal name and click on the link. On the right hand side, select "Follow Journal."