

the Behavior Therapist

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President's Message

School Shooting: A Call for Action

Stefan G. Hofmann, Boston University



On December 14, 2012, a 20-year-old gunman entered Sandy Hook Elementary School in Newtown, Connecticut. Using his mother's assault rifle, he killed 20 first graders and 6 staff members.

This incident shocked the nation and started a nationwide debate on gun control, violent crimes, and violence among individuals with psychiatric disorders.

School shootings appear to be on the rise. A study published in the *Journal of the American Medical Association* in 2001 examined school-associated violent deaths in the U.S. between the years 1994 and 1999 (M. Anderson et al., 2001). The study found that during this time period, there were 220 events, resulting in 253 deaths. The article concluded that "overall school-associated student homicide rates appears to have increased in recent years, which can be attributed to an increase in homicide rates for students killed in multiple-victim homicide events" (p. 2701). This was in 1999, before the Sandy Hook incident; before the massacre at Columbine High School in Colorado in April 1999, which left 12 students and a teacher dead; and before the shooting at Virginia Tech, where 32 people were gunned down in April 2007.

It is difficult to deal with such tragedy. I have two sons and one of them is at the age of the children killed in the recent Sandy Hook shooting. It is an unimaginable tragedy that touches us deeply and leaves us with intense and mixed emotions, ranging from sadness and fear to

[continued on p. 55]

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- 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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anger and despair. The purpose of this column is to share my personal view on school violence. I believe that ABCT shares some responsibility for preventing such tragedies in the future by educating the public about the factors that contribute to these events. Research has reliably shown that violent TV and video games breed violence. Giving disturbed people access to guns further increases the risk for students and children to be gunned down in senseless acts of violence. Let me start with the most obvious, but most controversial, issue first.

Eliminating Guns Can Save Lives

Shootings can happen anywhere and are not restricted to the U.S. For example, Anders Behring Breivik, a right-wing extremist, killed 77 people in July 2011 in Norway. As in the U.S., Norway permits the possession of semiautomatic weapons, as well as bolt-action rifles and shotguns. Other countries have a much more restricted gun control policy. For example, a very strict gun control policy exists in the United Kingdom. Interestingly, the U.K. also has a very low rate of gun homicides (0.07 per 100,000 inhabitants in the U.K. vs. 3.0 per 100,000 inhabitants in the U.S. in 2009). A comparison of other countries similarly suggests that the tighter a country's gun control, the lower the gun homicide rate. One might argue that many other cultural factors play a role in gun homicide. Therefore, countries cannot be directly compared to one another. This argument can be directly addressed by examining the change in homicide rates in the same country after gun control legislation changed. Australia is a case in point: Australia banned semiautomatic and automatic rifles and shotguns in response to the 1966 massacre in Port Arthur, Tasmania, that left 35 people dead. The gun buyback program ranked as the largest destruction of civilian firearms in any country over a period of 1991 to 2006, nearly halving the share of Australian households with one or more firearms. If this program had been implemented in the U.S., 40 million firearms would have been eliminated. A study found that, as a result of the buyback program, the firearm homicide and suicide rates fell by 59% and 65%, respectively (Leigh & Neill, 2010).

Eliminating Exposure to Violent TV and Video Games Can Save Lives

Bandura's (1973) classic social learning experiments have shown that children exposed to role models displaying aggressive

behaviors are more likely to show aggressive behaviors when given the opportunity. It is, therefore, not surprising to many experts in the field that violent TV and video games similarly increase the likelihood for violent behaviors in children. A review of the literature clearly supports the notion that violent video games in particular are positively associated with heightened levels of aggression and negatively associated with prosocial behaviors (C. Anderson & Bushman, 2001). Of note, Eric Harris and Dylan Klebold, the two killers at Columbine High School, frequently played the bloody video game *Doom*, which they had customized to approximate the actual shooting event (i.e., they customized it to have two shooters, extra weapons, and victims that could not fight back). Similarly, Adam Lanza, the killer in the Sandy Hook massacre, had an elaborate video game set up at home. He played the video game *Counter-Strike* and chose a military-style assault rifle and a handgun for his video games. During the rampage, he also used a similar military-style assault rifle and handguns.

Identifying and Providing Adequate Care to Potential Perpetrators Can Save Lives

All of us have a responsibility to make sure that the next Sandy Hook, Columbine, and Virginia Tech cannot happen. We all bear the burden to prevent it and all of us share the responsibility for what already did happen. Those of us who are practicing clinicians will have to be vigilant for any signs that might suggest that our patient might be at risk for committing an act of violence. Here is where ABCT can do the most. Adam Lanza was diagnosed with Asperger's, a condition that is not directly related to the massacre. However, it might have been indirectly related; he was described as an odd person who was bullied in the past. Similarly, Eric Harris and Dylan Klebold, the Columbine shooters, were frequently bullied. All three killers had been in contact with mental health experts prior to the massacre and some of them received pharmacotherapy. Clearly, most patients are not violent and it is difficult to predict violent behaviors. Future research needs to be conducted to specifically detect early signs of future violent behavior and identify at-risk individuals.

As mental health experts, it is our job to separate fact from fiction, to dispel myths, to expose politically motivated opinions, to assist victims, to stop potential perpetrators, and to educate the policymakers and

the general public—even if this means that we have to take a political stance.

References

- Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognitions, aggressive affect, physiological arousal, and prosocial behavior: A meta-analytic review of the scientific literature. *Psychological Science, 12*, 353-359.
- Anderson, M., Kaufman, J., Simon, T. R., Barrios L., Paulozzi, L., Ryan, G., . . . The School-Associated Violent Deaths Study Group. (2001). School-associated violent deaths in the United States, 1994-1999. *Journal of the American Medical Association, 286*, 2695-2702.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall.
- Leigh, A., & Neill, C. (2010). Do gun buybacks save lives? Evidence from panel data. *American Law and Economics Review, 12*, 509-557.

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How Mobile Apps and Other Web-Based Interventions Can Transform Psychological Treatment and the Treatment Development Cycle

Philip M. Enock and Richard J. McNally, *Harvard University*

Use of mobile devices to deliver mental health treatment has sparked great interest among clinical researchers and the public at large. Five years after Apple released the first iPhone, handheld computing is now commonplace in the United States. Nearly half of American mobile subscribers own a smartphone (Nielsen, 2011), and smartphones may constitute nearly half of mobile phone shipments worldwide by 2015, up from 28% in 2011 (Portio Research, 2012). Mobile app treatments are based on software or mobile-ready websites for smartphones, tablets, portable media devices, or other handheld devices. If we develop such treatments for mental health problems, they will surely be deliverable into the hands of many people who need help. The immense promise of web-based psychological treatments remains largely untapped by research scientists and clinicians.

In this article, we describe recent developments in computer-based treatment. We will refer to modern computer-based treatment as “web-based,” given the nearly ubiquitous use of the Internet for delivering computerized content. Mobile app treatments are a subset of web-based treatments; users invariably download apps from the World Wide Web, and apps typically interface with the web directly as well. We note how readers of *the Behavior Therapist* may flourish in a technology-driven world, and we propose a new model for how these treatments may progress from treatment development to randomized controlled trials (RCTs) to widespread clinical use. This Web-based Treatment Research Cycle (Web-TRaC; pronounced “Web Track”) will leverage unique strengths of web-based treatment at each step of the process.

Overview of Web-TRaC

Web-TRaC proceeds in these steps:

1. Development – Treatment theorists develop novel, web-based, self-directed psychotherapeutic interventions.
2. RCTs – Researchers conduct RCTs to test novel treatments against control procedures, including existing empirically supported web-based treatments. By using participants with elevated scores on symptom scales instead of structured diagnosis or other lab-based procedures, they administer large, inexpensive RCTs. If these support treatment efficacy, researchers may conduct traditional, more expensive trials with clinical populations.
3. Dissemination – Treatments are disseminated directly to patients or to clinicians who prescribe and oversee treatment, employing the same treatment packages developed and tested in Steps 1 and 2. Web-based delivery ensures that disseminated treatments maintain high fidelity to the original implementation.
4. Clinical practice and continued research – While treatments are in clinical use, researchers continually evaluate efficacy and effectiveness using large amounts of data collected automatically and anonymously from consenting patients.

This model will enable more efficient treatment development and dissemination, as well as incremental improvements in efficacy over the life cycle of a treatment that would otherwise be unobtainable under the existing model of psychotherapy development.

Self-Directed Treatment

Web-based treatment is novel, but self-directed treatment is not. Indeed, Benjamin Franklin’s *Autobiography* (1793/1961) and Samuel Smiles’ *Self-Help* (1859/2002) are classic books motivating readers to apply explicit methods to improve their lives. Modern bibliotherapy is helpful for prob-

lems ranging from quitting smoking to reducing fears (Gould & Clum, 1993; Gregory, Schwer Canning, Lee, & Wise, 2004). Commercially, the broadly defined self-improvement market, including motivational seminars, self-help books, videos, websites, and more, is worth \$11 billion (according to a Marketdata research report, as cited in PRWeb, 2010). With these methods, the consumer seeks self-improvement without frequent meetings with a therapist or expert. If consumers or patients prefer new user-friendly treatments over older self-directed methods, use of web-based treatment for psychological problems will rapidly expand.

Mobile Apps: A Growing Platform for Delivering Web-Based Treatment

Fervor now surrounds handheld devices, which include smartphones (such as the iPhone and the many Android-based phones), tablets (such as the Apple iPad, Amazon Kindle Fire, and Microsoft Surface), and portable media devices (such as the iPod Touch). Businesses orient their websites and software to the “post-PC era” (Epps, 2012). Also, for treatment specifically, mobile apps on these devices are novel and important in several respects.

Within Arm’s Reach

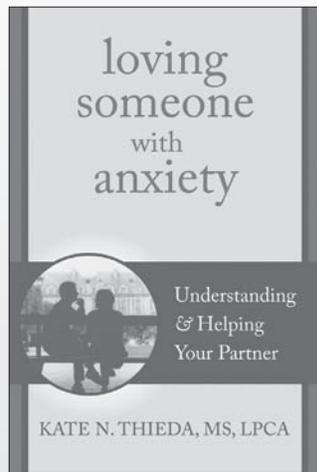
Handheld devices are often within arm’s reach for their users. This availability, in contrast to the relative inaccessibility of treatments conducted in psychotherapists’ offices or in laboratories, enables on-demand treatment in brief, frequent sessions as in our studies described below (Enock, Hofmann, & McNally, 2011; Enock & McNally, 2010). We hypothesize that this high frequency may be beneficial because frequent, distributed, short sessions facilitate learning skills more than smaller numbers of longer sessions do (e.g., Bjork & Bjork, 2011). Newman, Kenardy, Herman, and Taylor (1997) established the feasibility of mobile treatment long ago when they had patients perform frequent cognitive behavior therapy (CBT) exercises on early handheld computers.

Novel Handheld Capabilities

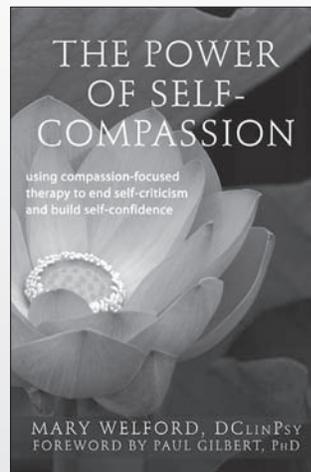
Handheld devices enable new measurement and interactive treatment possibilities with built-in tools such as cameras, audio and video playback and recording, text messaging, email, and location sensing via global positioning system, as described by Aguilera and Muench (2012).

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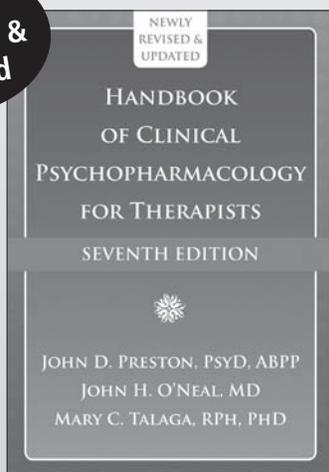


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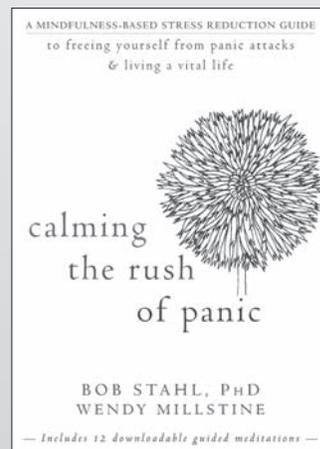
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Willingness to Try

People are trying large numbers of mobile apps. The number of mobile app downloads worldwide surpassed 18 billion in 2011, with a projection of 89 billion for 2015 (Portio Research, 2012). We suspect that apps are popular due to (a) their low cost; (b) the ease of using centralized iTunes and Google Play app stores; (c) the ease of evaluating apps with the app stores' clearly visible user ratings of one to five stars; and (d) the ease of one-click installing, uninstalling, and updating. If people learn that, for so many things, "there's an app for that" (Apple's catch phrase in 2008–2009 commercials), they may be ready to try psychotherapeutic mobile app treatments.

Democratized Market for App Developers

App stores may also allow small developers to compete with large software makers, since they need not distribute boxed software to retail stores (Epps, 2012). App stores already contain mental health treatments (Landau, 2012), some of which are made by small developers. Perhaps academic researchers, lacking marketing budgets but armed with reputation and empirical support, can and should promote public mental health by releasing free or inexpensive empirically supported treatments through app stores.

Additional Advantages for Users

Individuals uneasy about possible stigma associated with seeking mental health treatment may favor clinical apps over face-to-face sessions. Apps and other web-based treatments also transcend geographical distances and are relatively inexpensive.

Web-Based CBT:

Efficacy and Current Clinical Use

Web-based CBT usually involves self-help materials on web pages and a limited amount of human contact. Meta-analyses of computerized CBT, which encompasses delivery via both web-based and non-web computers, found large mean pre-post symptom reductions versus control conditions for anxiety (Andrews, Cuijpers, Craske, McEvoy, & Titov, 2010; Cuijpers et al., 2009) and medium (Andersson & Cuijpers, 2009) and large (Andrews et al., 2010) mean effect sizes for depression.

Overall, web-based CBT is promising, and it is already in clinical use. The National Institute for Health and Clinical Excellence (NICE), which issues clinical practice guide-

lines for the United Kingdom's National Health Service (NHS), recommends that clinicians offer computerized CBT for depression, panic disorder, and phobia to patients in primary and secondary care (NICE, 2006, 2010). For example, NICE recommends offering Beating the Blues (BTB; Proudfoot et al., 2003), a computerized self-help program, to patients with subthreshold depression symptoms or mild to moderate depression (NICE, 2010). The company Ultrasis currently sells BTB on its website both directly to users (in any country, no screening or qualifications needed) and to clinicians (in a package for use with five patients).

In the United States, the depression treatment guidelines of the Department of Veterans Affairs recommend face-to-face psychotherapy as a first-line treatment, but they also cite the NICE (2006) guidelines and suggest that clinicians consider offering computerized CBT as an adjunctive or alternative treatment if standard psychotherapeutic and psychopharmacological treatments are not readily available (The Management of MDD Working Group, 2009).

Cognitive Bias Modification: Early Findings

Cognitive bias modification (CBM) treatments are computerized training interventions designed to correct presumably pathogenic biases in attention, interpretation, memory, and approach-avoidance tendencies. Attention bias modification (ABM), pioneered by MacLeod, Rutherford, Campbell, Ebsworthy, and Holker (2002), aims to reduce attentional biases for threat in people with elevated anxiety (Bar-Haim, Lamy, Pergamin, Bakermans-Kranenburg, & van IJzendoorn, 2007). MacLeod and colleagues' (2002) popular method involves a 500 ms presentation of a pair of words, faces, or other images, one above and one below center screen. Immediately thereafter, a probe (e.g., one or two dots) replaces one of the two stimuli, and the subject presses one of two buttons to indicate which probe has appeared. For active treatment, probes consistently replace the nonthreat stimuli, whereas for control treatment, the probes replace threat and nonthreat stimuli with equal frequency, constituting a 50/50 control condition.

For treating social anxiety, early studies of computer-delivered ABM revealed impressive reductions in symptoms (e.g., Amir et al., 2009; Schmidt, Richey, Buckner, & Timpano, 2009), but later studies have

shown no superiority of active ABM treatment to 50/50 control training for reducing symptoms (Boettcher, Berger, & Renneberg, 2011; Carlbring et al., 2012; Neubauer et al., 2012; Sawyer et al., 2012). One study found greater social anxiety symptom reductions from active ABM at follow-up (though not at posttraining) compared to another variant of control training (Heeren, Reese, McNally, & Philippot, 2012). Meta-analyses exist (Beard, Sawyer, & Hofmann, 2012; Hakamata et al., 2010; Hallion & Ruscio, 2011), but they include neither the five recent studies just mentioned nor unpublished work. ABM treatment has been tested for other mental health issues besides social anxiety, but, in all domains, additional RCTs, and larger ones, must further test ABM's efficacy before it can progress from research to dissemination.

Handheld ABM Treatment

Study 1: A Feasibility Trial

In 2010, we conducted the first study of handheld ABM. Via iPhone, iPod Touch, and Android smartphones, we provided treatment intended to reduce social anxiety and worry (Enock & McNally, 2010). We employed a multiple baseline across subjects single-case design (Barlow, Nock, & Hersen, 2009) with $N = 16$ anxious participants, mostly undergraduates. The stimuli and timing were similar to those of Amir et al. (2009) and Schmidt et al. (2009). Subjects received the 50/50 control ABM for 1 or 2 weeks followed by 3 weeks of active ABM. Our goals were (a) to test feasibility and preliminary efficacy of handheld ABM treatment compared with control ABM treatment; and (b) to test whether treatment delivery with frequent, distributed sessions might be especially beneficial.

The study did establish feasibility: We found that (a) a JavaScript-coded ABM task on a web page functioned in an app-like capacity across iOS and Android platforms; (b) unpaid volunteers were willing to complete 4-minute treatment sessions twice per day out of the three sessions we requested; and (c) they took advantage of portability, completing sessions in a variety of locations, including home (67% of sessions), libraries (9%), and bathrooms (6%). Measures of social anxiety and worry showed significant pre-post decrements (all $ps < .02$), but the magnitude of improvement was no greater during active ABM than during control ABM.

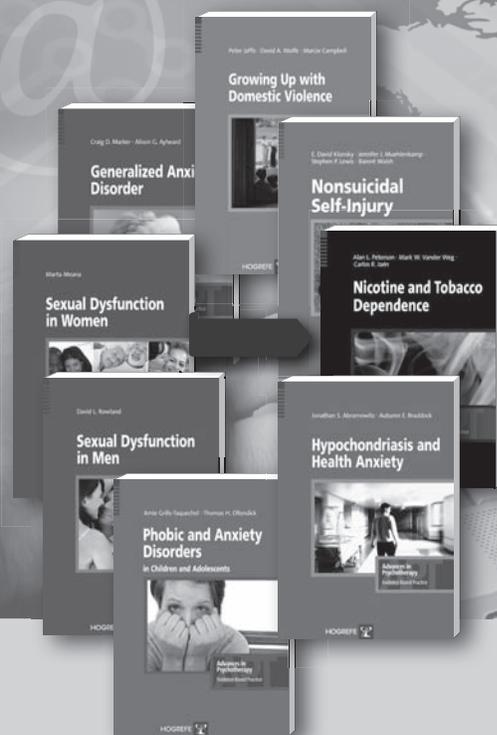
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Study 2: A Randomized Controlled Trial

We next conducted a between-groups experiment (Enock et al., 2011), randomizing anxious subjects to active ABM treatment, control ABM treatment (again with a 50/50 contingency), or a (smaller) waitlist control group. We asked unpaid volunteers ($N = 338$ completers) to perform three daily sessions, lasting 2 to 2.5 minutes each, on their handheld devices over the course of 4 weeks. They carried out 80% of the prescribed sessions.

Handheld dot-probe assessment detected the intended training effects on attention bias scores, showing feasibility of ABM training and reaction time measurement in general on handheld devices. Although we do not know whether handheld devices measure a user's taps with the same precision that a computer mouse or keyboard records input, previous analyses suggest that sizable differences in measurement precision add only minimal noise to reaction time task scores (Damian, 2010; Ulrich & Giray, 1989).

Both active and control treatment groups exhibited greater reductions on measures of social anxiety and worry than did the waitlist group (all $ps < .01$). However, there were no significant differences in symptom reduction between active and control treatment groups.

Thus, the hypothesized active ingredient of training contingency showed no effect. Given that the treatments did show benefits relative to waitlist, one option is to label any such benefits as "placebo effects." However, the 50/50 control treatment deserves probing for whether it might actively reduce symptoms in and of itself. For exam-

ple, during a discussion following a departmental talk by the first author, Professor Elizabeth Spelke suggested that for anxious subjects with a strong attentional bias for threat, the 50/50 contingency might partly neutralize this bias relative to waitlist.

Web-TRaC

Step 1: Development

Description. Treatment developers will create web-based treatments and optimize their delivery. This includes exploring avenues within web-based CBT, cognitive bias modification, other training of cognitive processing, or any other web-deliverable method.

Making treatments engaging is one treatment design goal worth highlighting. The advent of Angry Birds and other handheld games hint at possible popularity of treatment games. "Brain training" apps and websites already attempt to use games to enhance cognitive ability, and Khanna and Kendall (2008) demonstrated a game form of CBT for anxiety.

Developers will hire programmers to implement a precise treatment protocol. Much as modern psychotherapy manuals allow for flexibility and individualization of treatment (e.g., Weisz et al., 2012), web-based treatments can do the same. Web programming code will contain explicit rules for delivery and will document if, how, and why each patient receives individualized treatment.

Fidelity of treatment transmission. To illustrate fidelity, consider BTB: Proudfoot and colleagues (2003) developed the treatment as nine sessions using text, audio, video, interactive elements, and homework built

upon CBT methods. This precise package is deliverable to any user in RCTs or clinical practice. Because computers deliver sessions verbatim to any number of users, developers can be confident in the fidelity of treatment delivery. BTB remains a nine-session program today, and, whether or not it has changed, delivering the sessions exactly as they were developed (Proudfoot et al., 2003) and RCT-tested (Proudfoot et al., 2004) remains feasible.

The pathways of treatment transmission appear in Figure 1, contrasting how Web-TRaC maintains better fidelity to treatment than is possible with the traditional face-to-face psychotherapy development cycle where clinicians often deviate from protocol.

Step 2: RCTs

Description. Web-based methods make inexpensive, large RCTs feasible. Logistically, one doctoral student and one to two research assistants at a time were able to run hundreds of volunteers in our RCT (Enock et al., 2011). Total study expenditures were approximately \$2,000, mostly to pay a professional programmer. Finding a programmer may take time; researchers should search websites geared towards hiring freelancers for projects, such as odesk.com. Because RCTs are feasible at low cost, researchers can deemphasize open, no-control group trials. Although piloting is useful in treatment development, an article documenting an open trial alone is of limited value because it does nothing to establish whether the treatment outperforms waitlist, placebo treatments, or established empirically supported treatments. That said, single-case experimental designs (Barlow et al., 2009) may help to test treatment efficacy relative to within-subjects control treatment in small studies.

Researchers can recruit volunteers for RCTs, reducing the need to direct funds toward participant compensation. The Anxiety Disorders Association of America maintains a list of ongoing clinical trials for which people volunteer (visit adaa.org/clinicaltrials), and the Association for Behavioral and Cognitive Therapies (ABCT) could also create such a list. This system could become quite popular if it included web-based RCTs open to broad populations. Media coverage of treatment research (Carey, 2012; Gee, 2011), which greatly added to recruitment for our RCT (Enock et al., 2011), can also help. Finally, clinicians will refer patients to RCTs if they believe the treatments to be promising.

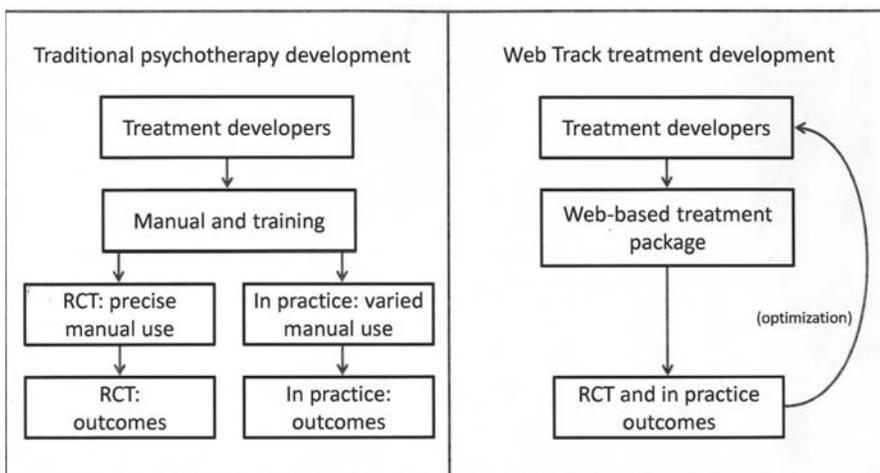


Figure 1. Treatment dissemination in traditional psychotherapy development and dissemination versus Web-TRaC. The stages of dissemination progress downward. In Web-TRaC, developers use outcome data to guide treatment optimization.



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None of these recruitment sources is bound by geographical limitations—web-based RCTs are accessible worldwide, if the patient knows the language used in treatment.

Hypothesis testing: A hypothetical example. Koster, De Lissnyder, Derakshan, and De Raedt (2011) suggested that a treatment that improves attentional control may reduce depression symptoms and ruminative brooding. As a hypothetical example of such a treatment following Web-TRaC, suppose researchers are testing a novel form of handheld-delivered cognitive control training (CCT). It involves 4 weeks with daily sessions where the user plays a game designed to enhance cognitive control involving negatively valenced material.

The researchers wish to test the efficacy of two training variants: CCT with sad face stimuli versus CCT with sad word stimuli. Thus, they employ two active conditions, to which they add two control conditions: (a) control CCT involving only neutral stimuli; and (b) web-delivered BTB, if BTB's creators are willing to collaborate. Note that such a collaboration with BTB's authors avoids a problem with traditional psychotherapy research, where comparisons to an existing treatment might be criticized as failing to deliver treatment adequately due to therapist allegiance or other issues.

The four chosen conditions yield several useful hypothesis tests:

1. If active CCT reduces symptoms more than control CCT does, this would suggest that active CCT indeed contains an active ingredient lacking in control CCT. This may be informative from an experimental psychopathology perspective.
2. If the benefits of active CCT differ between the face stimuli condition and the word stimuli condition, then future CCT could always use the superior variant. If they were equivalent, future attempts might test a combination of faces and words, or patient preferences could guide the choice.
3. If active CCT were superior to BTB, this would support CCT's clinical utility and contribute to an evidence base supporting its dissemination and clinical use.
4. If active CCT showed significant but inferior benefits compared to BTB, future possibilities remain such as (a) testing CCT with patients who did not respond to a course of BTB, (b) testing CCT with

patients who refuse other treatments, (c) testing augmentation of an established treatment with CCT, (d) improving the design of CCT, or (e) abandoning CCT.

Study logistics: A hypothetical example. For screening and assessment, researchers create a handheld-capable website that administers self-report questionnaires. The primary outcome measures are (a) the depression subscale of the Depression Anxiety Stress Scales (DASS; Lovibond & Lovibond, 1995), whose psychometric properties when web-delivered are documented (Zlomke, 2009); and (b) the Ruminative Responses Scale (RRS; Nolen-Hoeksema & Morrow, 1991). With publicity and recruitment efforts, 480 people whose DASS-Depression scores are in the mild to moderate range eventually volunteer for the study. As people can participate from any geographic location, the sample shows diversity across many demographic variables.

The website randomly assigns them to a condition, yielding $n = 120$ in each of the four conditions. Participants provide informed consent online after reading study information describing the experimental nature of the treatments that they might receive. The study's web server emails participants weekly with a link to the assessment website, so that the DASS and RRS can measure symptom change. The researchers administer the study using minimal human contact to keep costs low, offering technical rather than clinical support.

Statistical power: A hypothetical example. The large study size provides highly useful statistical power. Consider comparing the DASS-Depression symptom change scores of two conditions in a study with groups of size $n = 25$, typical of small RCTs, versus comparing scores in a large trial with groups of size $n = 120$. If the true effect size separating the two conditions' symptom reductions were large (Cohen's $d = .8$), power = .87 in the small trial, which seems adequate.¹ However, if the effect were medium ($d = .5$), then power = .54, such that the small trial would have only a 54% chance of showing a significant difference between the two conditions. For a small-to-medium effect ($d = .35$), power = .34, predicting a likely failure to detect a difference.

By contrast, for a medium or large true effect (any d of .5 or higher), the large trial has power > .99, and for a small-to-medium effect ($d = .35$), power = .86, an

adequate level. Higher power also enables (a) mediation analyses to probe potential mechanisms of change, such as ruminative brooding; and (b) a search for treatment moderators using subgroup analyses of patients with certain characteristics, to see, for example, whether older adults are helped by treatment as much as young adults.

Further RCTs. If the new treatment is not promising after inexpensive RCTs, costly large trials can be avoided entirely, allowing funding agencies to facilitate development of more fruitful novel treatments. If the initial RCTs were promising, researchers may wish to conduct traditional trials with clinician assessment, diagnosis, and monitoring. Furthermore, the developers could create an interface for clinicians to oversee treatment, so that clinicians can employ clinical expertise to manage elements of the web-based treatment. The clinician-overseen version might yield additional benefits, and it could be tested against the minimal contact version. Later-stage RCTs could also compare the new treatment to traditional treatments such as face-to-face psychotherapy and medication.

Step 3: Dissemination

Description. Treatment developers will disseminate a web-based treatment by enabling access to essentially the same web programming code that ran the RCTs. Treatment developers will provide a direct-to-patient interface and a clinician-overseeing interface.

The direct-to-patient interface will allow dissemination directly to users for self-directed treatment. Treatment should be recommended only to individuals who show symptoms for which RCTs have established clinical benefits. Direct-to-patient dissemination can provide treatment to vast numbers of untreated people suffering from mental health problems. After all, a majority of Americans with a mental disorder do not receive treatment (Kessler et al., 2010), and empirically supported clinician-delivered treatments are far from universally accessible.

The clinician-overseeing interface will allow clinicians to direct treatment, thus allowing for their expertise to potentially augment treatment efficacy. Clinician-overseen treatment holds clear benefits, such as enabling monitoring of potentially suicidal patients and facilitating their access to further care.

Contrast with traditional psychotherapy dissemination. As illustrated in Figure 1, the traditional model of dissemination for

¹We performed power analyses with G*Power 3.1.2, using independent samples t -tests and the specified d effect sizes, $\alpha = .05$, with no correction for correlation of pre and post measures.

psychotherapeutic interventions often proceeds as follows:

1. A small group of treatment developers conceive of a new psychotherapeutic approach for one-on-one talk therapy.
2. The developers, using treatment manuals and other materials, train psychotherapists to deliver treatment in RCTs.
3. The developers form an organization to train disseminators who, in turn, use the manuals and other materials to train and certify practicing clinicians in workshops.
4. Practicing clinicians employ the approach, typically integrating it into their existing set of psychotherapeutic methods accumulated during their years of experience.

Dissemination using manuals and training has limited reach: In a survey of licensed psychologists from the American Psychological Association member database, most respondents did not regularly use any treatment manuals in clinical practice (Addis & Krasnow, 2000). In Web-TRaC, a computer delivers the same treatment package

directly to any number of users in both RCTs and in clinical use. Dissemination is also more cost-effective, as increasing web server capacity to accommodate additional users costs little.

Step 4: Clinical Practice and Continued Research

Description. Once large numbers of patients are using a web-based treatment, they may wish to benefit others by authorizing the collection and aggregation of their anonymized data. Whereas asking face-to-face psychotherapists to collect data can be burdensome, computers (in this case, web servers) are convenient data collectors. Any web-based treatment program should be paired with web-based self-report assessment to track patient progress and provide outcome data. Computers are the pinnacle of data collection devices, and their use in delivering treatments to large numbers of people will facilitate the automatic collection of massive data sets, a practice that may become routine.

Furthermore, patients may be willing to be randomized to variants of the same treatment, as well as alternative treatments.

These treatments and variants should be consistent with empirically validated methods. In current clinical practice, clinicians implement existing treatments with great variability; hence, we believe randomizing patients to presumably efficacious treatment variants to be ethical. If such random assignment is employed in routine treatment delivery, it will facilitate large-scale efficacy research unprecedented in the field of mental health.

These data will also enable an empirically guided treatment optimization process. Given a treatment, multiple variants are always possible. For example, dosage can be varied, components can be included or excluded (e.g., Jacobson et al., 1996), stimuli and text can be altered, and so on. Fine-grained component analyses will be more feasible than ever, especially because the statistical power of large data sets will allow researchers to identify a variant that is even slightly superior to another. Additionally, whereas updating a traditional psychotherapeutic approach requires disseminating information to practicing clinicians, web server or client software updates can easily modify web-based treatments on the fly. Clinical practice,



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Potential Concerns About Direct-to-Patient Research and Self-Directed Treatment

Formal Diagnosis

Maintaining low costs for large Web-TRaC RCTs requires mostly automated, minimal contact study administration. This precludes structured clinical assessment, and readers may be concerned about reliance on self-report and lack of diagnosis. One type of analysis that will be difficult is that of how many patients lose a diagnosis during treatment. Also, without structured diagnosis, a trial cannot be maximally rigorous in testing a treatment *for a specific disorder*.

However, self-report based RCTs may only pose serious problems for a treatment that, for example, helps patients with major depressive disorder but does not help undiagnosed people with elevated depression symptoms. Treatment developers who believe that their intervention will benefit only those subjects whose symptoms meet diagnostic criteria may opt to conduct a traditional RCT instead. Yet, a treatment that reduces both subthreshold and above-threshold depression, regardless of diagnosis, would be more broadly useful and typical. In fact, clinicians already apply treatments to undiagnosed individuals: About half of those receiving treatment do not meet criteria for a disorder (Kessler et al., 2010).

Furthermore, diagnosis is not essential for studying transdiagnostic phenomena such as rumination. The Research Domain Criteria (RDoC) program of the National Institute of Mental Health supports the study of such phenomena that cut across traditional diagnostic categories (Insel et al., 2010); thus, treatments that target these phenomena are congruent with the spirit of RDoC.

Patient Safety

In the Web-TRaC model, treatment developers disseminate both to clinicians and directly to patients. People with mental health issues frequently employ self-help treatments already, such that the ethical situations faced by Web-TRaC are not novel. Self-help books typically include exercises where the reader writes down sensitive information, such as records of stressful events and negative thoughts. In the digital realm as well, deeply personal disclosures occur in many contexts on the web, including email

and Facebook. Researchers and treatment providers must implement the strongest of protections for personal data, drawing on all applicable security measures.

The concern that patients who self-treat do not receive clinician care is valid. People with severe mental health issues, particularly suicidality, require direct professional attention. Santucci, McHugh, and Barlow (2012) advocate increasing direct-to-patient dissemination, and they hypothesize that a patient may be more likely to use existing psychological treatments if the patient first has a positive personal experience with self-directed treatment. In this way, greater use of direct-to-patient treatments could lead to more people receiving clinician care, not fewer.

Imagine a smartphone-delivered self-report assessment that, if a user endorses suicidal thinking, pops up buttons to dial a clinician, a suicide hotline, or 911 with one tap. We believe that such access, literally at someone's fingertips, could help overcome barriers to urgent help for those who do not know exactly where to turn and cannot muster the effort during such distress to find out. Keeping costs low may preclude individualized professional attention integrated into self-directed treatment, but providing users with information about professional help seems viable.

The Private Sector's Impact

Researchers may welcome the wide dissemination of empirically supported treatments by the private sector. However, we are also concerned about private companies' interests. Private sector interest in treatment is not new; entrepreneurs have long marketed self-help treatments. Yet, its scale may grow. For example, the "brain training" market involving computerized methods for remediating cognitive deficits and enhancing cognitive abilities was already worth \$295 million in 2009 and may grow to \$1–\$5 billion by 2015 (as cited in Hayden, 2012).

Because their primary motivation is presumably profit, private companies may only value empirical evidence insofar as the evidence base is recognized by consumers and thus augments bottom-line sales. Hence, educating the public on the value of empirical evidence and promoting empirically supported treatments are paramount.

Conflicts of Interest

Given the increasing use of direct-to-patient psychological treatments, ABCT may wish to address previously raised (Rosen,

1987) ethical issues. For example, what measures can address conflicts of interest in treatment research? Should researchers' financial ties to treatment sales restrict their publishing or grant-seeking capabilities, or is disclosure sufficient to guard against bias? If the mission of funding agencies that facilitate treatment development is to advance science and the public interest, must funded developers therefore provide treatments free of charge to promote public mental health? We hope that the ABCT community will provide ethical guidelines for the sale of web-based treatments and for researchers' involvement with private enterprises.

Conclusions

Web-TRaC methods constitute a new approach for developing, testing, disseminating, continually evaluating, and optimizing web-based treatments. Web-TRaC offers benefits that the traditional psychotherapeutic treatment development cycle lacks. Kazdin and Blase (2011) highlighted a wide gulf between the amount of treatment deliverable through face-to-face psychotherapy and the larger amount of mental health treatment actually needed. Web-based treatments delivered on computers, handheld devices, or future web-capable devices may help bridge the gap. They may be useful for many people suffering from common but serious problems such as depression and anxiety. However, their usefulness will surely be limited for some populations, such as low-functioning patients and those unable to access the delivery platforms.

Consumers have difficulty identifying truly efficacious treatments from the many available. The massive sales of *The Secret* (Byrne, 2006), following its endorsement by Oprah Winfrey, starkly shows the popularity of non-empirically-supported self-help. To guide the public at large, ABCT could apply the existing "ABCT Self-Help Book Recommendation" initiative (see abct.org/SHBooks) to web-based treatments. In the long run, other organizations concerned with public mental health, including the American Psychological Association, the Association for Psychological Science, the American Psychiatric Association, and the U.S. Department of Health and Human Services, could also steer consumers toward empirically supported web-based treatments. Much as NICE provides guidelines for disorder-specific treatment, organizations could serve the public interest by providing direct-to-

patient recommendations after evaluating existing evidence and perhaps sponsoring RCTs.

A further step would be to *provide* free empirically supported web-based treatments to the public. This could be feasible, as the costs of delivering already implemented, automated web-based treatments to additional users are small. Such initiatives, combined with effective treatment development and research strategies, could reduce the global burden of mental health problems.

References

- Addis, M. E., & Krasnow, A. D. (2000). A national survey of practicing psychologists' attitudes toward psychotherapy treatment manuals. *Journal of Consulting and Clinical Psychology, 68*, 331-339. doi: 10.1037/0022-006X.68.2.331
- Aguilera, A., & Muench, F. (2012). There's an app for that: Information technology applications for cognitive behavioral practitioners. *the Behavior Therapist, 35*(4), 65-73.
- Amir, N., Beard, C., Taylor, C. T., Klumpp, H., Elias, J., Burns, M., & Chen, X. (2009). Attention training in individuals with generalized social phobia: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 77*, 961-973. doi: 10.1037/a0016685
- Andersson, G., & Cuijpers, P. (2009). Internet-based and other computerized psychological treatments for adult depression: A meta-analysis. *Cognitive Behaviour Therapy, 38*, 196-205. doi:10.1080/16506070903318960
- Andrews, G., Cuijpers, P., Craske, M. G., McEvoy, P., & Titov, N. (2010). Computer therapy for the anxiety and depressive disorders is effective, acceptable and practical health care: A meta-analysis. *PLoS one, 5*. doi:10.1371/journal.pone.0013196
- Bar-Haim, Y., Lamy, D., Pergamin, L., Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2007). Threat-related attentional bias in anxious and nonanxious individuals: A meta-analytic study. *Psychological Bulletin, 133*, 1-24. doi: 10.1037/0033-2909.133.1.1
- Barlow, D. H., Nock, M. K., & Hersen, M. (2009). *Single case experimental designs: Strategies for studying behavior change* (3rd ed.). Boston, MA: Allyn and Bacon.
- Beard, C., Sawyer, A. T., & Hofmann, S. G. (2012). Efficacy of attention bias modification using threat and appetitive stimuli: A meta-analytic review. *Behavior Therapy, 43*, 724-40. doi:10.1016/j.beth.2012.01.002
- Bjork, E. L., & Bjork, R. A. (2011). Making things hard on yourself, but in a good way: Creating desirable difficulties to enhance learning. In M. A. Gernsbacher, R. W. Pew, L. M. Hough, & J. R. Pomerantz (Eds.), *Psychology and the real world: Essays illustrating fundamental contributions to society* (pp. 56-64). New York, NY: Worth.
- Boettcher, J., Berger, T., & Renneberg, B. (2011). Internet-based attention training for social anxiety: A randomized controlled trial. *Cognitive Therapy and Research, 36*, 522-536. doi:10.1007/s10608-011-9374-y
- Byrne, R. (2006). *The secret*. New York, NY: Atria Books.
- Carey, B. (2012, February 13). Feeling anxious? Soon there will be an app for that. *The New York Times*. Retrieved February 6, 2013, from <http://www.nytimes.com/2012/02/14/health/feeling-anxious-soon-there-will-be-an-app-for-that.html?pagewanted=all>
- Carlbring, P., Apelstrand, M., Sehlin, H., Amir, N., Rousseau, A., Hofmann, S., & Andersson, G. (2012). Internet-delivered attention bias modification training in individuals with social anxiety disorder: A double blind randomized controlled trial. *BMC Psychiatry, 12*, 66. doi:10.1186/1471-244X-12-66
- Cuijpers, P., Marks, I. M., Van Straten, A., Cavanagh, K., Gega, L., & Andersson, G. (2009). Computer-aided psychotherapy for anxiety disorders: A meta-analytic review. *Cognitive Behaviour Therapy, 38*, 66-82. doi:10.1080/16506070802694776
- Damian, M. F. (2010). Does variability in human performance outweigh imprecision in response devices such as computer keyboards? *Behavior Research Methods, 42*, 205-11. doi:10.3758/BRM.42.1.205
- Enock, P. M., Hofmann, S. J., McNally, R. J. (2011, November). Attention bias modification treatment via iPhone and other handheld devices to reduce social anxiety and worry: A randomized controlled trial. In C. Beard (Chair), *Cognitive bias modification: Dissemination and expansion to new populations*. Symposium conducted at the meeting of the Association for Behavioral and Cognitive Therapies, Toronto, Canada.
- Enock, P. M., & McNally, R. J. (2010). *Feasibility and efficacy of attention bias modification via iPhone and other handheld devices to reduce social anxiety and worry*. Unpublished data, Department of Psychology, Harvard University, Cambridge, MA.
- Epps, R. (2012). *The rise of post-pc productivity*. Cambridge, MA. Retrieved from [vhttp://blogs.forrester.com/sarah_rotman_epps/12-08-01-the_rise_of_post_pc_productivity](http://blogs.forrester.com/sarah_rotman_epps/12-08-01-the_rise_of_post_pc_productivity)
- Franklin, B. (1793/1961). *The autobiography and other writings*. New York, NY: Signet.
- Gee, A. (2011, March). Therapist-free therapy: Cognitive-bias modification may put the psychiatrist's couch out of business. *The Economist*.
- Gould, R. A., & Clum, G. A. (1993). A meta-analysis of self-help treatment approaches. *Clinical Psychology Review, 13*, 169-186. doi:10.1016/0272-7358(93)90039-O
- Gregory, R. J., Schwer Canning, S., Lee, T. W., & Wise, J. C. (2004). Cognitive bibliotherapy for depression: A meta-analysis. *Professional Psychology: Research and Practice, 35*, 275-280. doi:10.1037/0735-7028.35.3.275
- Hakamata, Y., Lissek, S., Bar-Haim, Y., Britton, J. C., Fox, N. A., Leibenluft, E., ... Pine, D. S. (2010). Attention bias modification treatment: A meta-analysis toward the establishment of novel treatment for anxiety. *Biological Psychiatry*. doi:10.1016/j.biopsych.2010.07.021
- Hallion, L. S., & Ruscio, A. M. (2011). A meta-analysis of the effect of cognitive bias modification on anxiety and depression. *Psychological Bulletin, 137*, 940-58. doi:10.1037/a0024355
- Hayden, E. (2012). Treating schizophrenia: Game on. *Nature, 483*, 24-26.
- Heeren, A., Reese, H. E., McNally, R. J., & Philippot, P. (2012). Attention training toward and away from threat in social phobia: Effects on subjective, behavioral, and physiological measures of anxiety. *Behaviour Research and Therapy, 50*, 30-39. doi: 10.1016/j.brat.2011.10.005
- Insel, T., Cuthbert, B., Garvey, M., Heinssen, R., Pine, D. S., Quinn, K., ... Wang, P. (2010). Research domain criteria (RDoC): Toward a new classification framework for research on mental disorders. *American Journal of Psychiatry* (July), 748-751.
- Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K., ... Prince, S. E. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64*, 295-304. doi:10.1037/0022-006X.64.2.295
- Kazdin, A. E., & Blase, S. L. (2011). Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspectives on Psychological Science, 6*, 21-37. doi:10.1177/1745691610393527
- Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., ... Zaslavsky, A. M. (2010). US prevalence and treatment of mental disorders: 1990-2003. *New England Journal of Medicine, 352*, 2515-2523. doi: 10.1056/NEJMsa043266. US
- Khanna, M. S., & Kendall, P. C. (2008). Computer-assisted CBT for child anxiety: The Coping Cat CD-ROM. *Cognitive and Behavioral Practice, 15*, 159-165. doi: 10.1016/j.cbpra.2008.02.002
- Koster, E. H. W., De Lissnyder, E., Derakshan, N., & De Raedt, R. (2011). Understanding depressive rumination from a cognitive science perspective: The impaired disengagement hypothesis. *Clinical Psychology Review, 31*, 138-45. doi:10.1016/j.cpr.2010.08.005

- Landau, E. (2012, September). Smartphone apps become "surrogate therapists." *CNN*.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33, 335–343. doi:10.1016/0005-7967(94)00075-U
- MacLeod, C., Rutherford, E., Campbell, L., Ebsworthy, G., & Holker, L. (2002). Selective attention and emotional vulnerability: Assessing the causal basis of their association through the experimental manipulation of attentional bias. *Journal of Abnormal Psychology*, 111, 107–123. doi:10.1037/0021-843X.111.1.107
- National Institute for Health and Clinical Excellence. (2006). *Computerised cognitive behaviour therapy for depression and anxiety*. London: Author. Retrieved from <http://guidance.nice.org.uk/TA97>
- National Institute for Health and Clinical Excellence. (2010). *The treatment and management of depression in adults*. London, United Kingdom: The British Psychological Society and The Royal College of Psychiatrists.
- Neubauer, K., Von Auer, M., Murray, E., Petermann, F., Helbig-Lang, S., & Gerlach, A. L. (2012). Internet-delivered attention modification training as a treatment for social phobia: A randomized controlled trial. *Behaviour Research and Therapy*, 51, 87–97. doi:10.1016/j.brat.2012.10.006
- Newman, M. G., Kenardy, J., Herman, S., & Taylor, C. B. (1997). Comparison of palm-top-computer-assisted brief cognitive-behavioral treatment to cognitive-behavioral treatment for panic disorder. *Journal of Consulting and Clinical Psychology*, 65, 178–183. doi:10.1037/0022-006X.65.1.178
- Nielsen. (2011). *Mobile Media Report: State of the Media Q3 2011*. Retrieved from <http://www.nielsen.com/us/en/insights/reports-downloads/2011/state-of-the-media-mobile-media-report-q3-2011.html>
- Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and post-traumatic stress symptoms after a natural disaster: The 1989 Loma Prieta Earthquake. *Journal of Personality and Social Psychology*, 61(1), 115–21.
- Portio Research. (2012). *Mobile factbook – April 2012*. Retrieved from <http://www.portioresearch.com/en/free-mobile-factbook.aspx>
- Proudfoot, J., Goldberg, D., Mann, A., Everitt, B., Marks, I., & Gray, J. A. (2003). Computerized, interactive, multimedia cognitive-behavioural program for anxiety and depression in general practice. *Psychological Medicine*, 33, 217–227. doi:10.1017/S0033291702007225
- Proudfoot, J., Ryden, C., Everitt, B., Shapiro, D. A., Goldberg, D., Mann, A., ... Gray, J. A. (2004). Clinical efficacy of computerised cognitive-behavioural therapy for anxiety and depression in primary care: Randomised controlled trial. *British Journal of Psychiatry*, 185, 46–54. doi:10.1192/bjp.185.1.46
- PRWeb. (2010). *\$11 billion self-improvement market moves online*. Retrieved from <http://www.prweb.com/releases/2010/12/prweb4847314.htm>
- Rosen, G. M. (1987). Self-help treatment books and the commercialization of psychotherapy. *The American Psychologist*, 42(1), 46–51.
- Santucci, L. C., McHugh, R. K., & Barlow, D. H. (2012). Direct-to-consumer marketing of evidence-based psychological interventions: Introduction. *Behavior Therapy*, 43, 231–235. doi:10.1016/j.beth.2011.07.003
- Sawyer, A. T., Whitfield-Gabrieli, S., Gabrieli, J. D. E., Amir, N., Fang, A., Richey, A., & Hofmann, S. G. (2012, November). Attention Retraining in SAD: Treatment outcome and neurobiological correlates. In A. Asnaani & A. T. Sawyer (Chairs), *Modifying cognitive biases: Emerging data on applications and effects on clinical disorders*. Symposium conducted at the meeting of the Association of Behavioral and Cognitive Therapies, National Harbor, MD.
- Schmidt, N. B., Richey, J. A., Buckner, J. D., & Timpano, K. R. (2009). Attention training for generalized social anxiety disorder. *Journal of Abnormal Psychology*, 118, 5–14. doi:10.1037/a0013643
- Smiles, S. (1859/2002). *Self-help*. Oxford, UK: Oxford University Press.
- The Management of MDD Working Group. (2009). *Clinical practice guideline Management of major depressive disorder (MDD)*. Retrieved from http://www.healthquality.va.gov/Major_Depressive_Disorder_MDD_Clinical_Practice_Guideline.asp
- Ulrich, R., & Giray, M. (1989). Measuring reaction times: Effects on reaction time measurement: Good news for bad clocks. *British Journal of Mathematical and Statistical Psychology*, 42, 1–12.
- Weisz, J. R., Chorpita, B. F., Palinkas, L. A., Schoenwald, S. K., Miranda, J., Bearman, S. K., ... Gibbons, R. D. (2012). Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: A randomized effectiveness trial. *Archives of General Psychiatry*, 69, 274–82. doi:10.1001/archgenpsychiatry.2011.147
- Zlomke, K. R. (2009). Psychometric properties of internet administered versions of Penn State Worry Questionnaire (PSWQ) and Depression, Anxiety, and Stress Scale (DASS). *Computers in Human Behavior*, 25, 841–843. doi:10.1016/j.chb.2008.06.003

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For the past year, the ABCT Central Office has been working on a proprietary database for membership, convention registration, and much more. Read the April issue of *tBT* for further details.

What Really Matters: Learning From, Not Being Limited by, Empirically Supported Treatments

Arnold A. Lazarus, *The Lazarus Institute for Wellness and Renewal*

Simon A. Rego, *Montefiore Medical Center*

[DR. SIMON REGO]

In May of 1990, Dr. Arnold A. Lazarus suggested in a provocative *Journal of Clinical Psychology* article (“Can Psychotherapists Transcend the Shackles of Their Training and Superstitions?”) that “Formal education and training in psychological diagnosis and treatment often undermine the talents and skills with which many trainees are endowed naturally.”

In the more than 20 years since this article was published, the field of clinical psychology has witnessed tremendous change. The movement towards empirically supported treatments and evidence-based practice was born and took off. Treatment manuals were developed for a substantial number of psychological disorders and then rigorously tested in efficacy and effectiveness trials around the world, often with impressive results (e.g., Chambless et al., 1998; Foa, Keane, Friedman, & Cohen, 2009; Nathan & Gorman, 2007; Woody & Sanderson, 1998).

The strong growth in empirical support of psychosocial therapies (especially those employing cognitive behavioral strategies) ultimately led to their inclusion on many expert consensus lists of first-line treatments for various psychological disorders (e.g., American Psychiatric Association, 2006; National Institute for Health and Clinical Excellence, 2011). This in turn generated a great deal of interest from health insurance companies looking to manage their service utilization in more efficient ways. Thus, real opportunities in the HMO-era of private practice were created for psychologists who had experience in delivering empirically supported treatments. Nevertheless, it cannot be denied that we have been limited by treatment parameters imposed on us by third-party payers.

In response to these developments, many graduate schools offering doctoral-level training in clinical psychology began to adjust their curricula to meet the grow-

ing interest—and demand—from students wanting to be trained in these protocols (Woody, Weisz, & McLean, 2005). As such, a growing number of doctoral-level students were exposed to courses and training to maximize their familiarity with and experience in delivering these evidence-based treatments.

So what’s wrong with that?

As the director of a highly competitive psychology internship training program in New York City, over roughly the past decade I have had the privilege of working with many gifted young professionals, who have come for internship from many of the top graduate programs in the nation. In so doing, I have supervised their diagnostic intake evaluations and therapy sessions, sat on their multidisciplinary treatment teams, lectured them on psychopathology and psychotherapy, and engaged them in casual discussions on topics such as evidence-based protocols versus principles, clinical versus actuarial judgment, efficacy versus effectiveness, etc.

Despite my own training in, and penchant for, manualized treatments and evidence-based practice, I found myself beginning to worry. Have we been creating a generation of therapists who understand the nuances of various treatment manuals for different disorders without understanding the *theory* that led to their development? How many therapists can describe in great detail the sequence of steps suggested for treating a disorder without being able to generate a case *formulation* for that disorder? In other words, are our young professionals now being trained to deliver scientific *treatments* at the expense of understanding how to take a scientific *approach* to psychotherapy? What really matters?

Questions such as these left me feeling somewhat confused and disheartened, so I thought I would turn to the person who posed questions such as these long before I was confronted with them, to see if he could

shed some light on the situation. I am so pleased that my mentor and friend, Dr. Arnold Lazarus, agreed to help me try to make sense of all of this. As a result, I am honored and excited to present below some highlights of our interchange on this important topic, so that you might benefit from his wisdom as I have.

Most readers of *tBT* will likely be familiar with Dr. Arnold Lazarus’ vast body of scholarly work. He was the third president of the AABT (1968–1969) and originator of the term “behavior therapy.” In other words, he is a major figure in the field of modern psychological therapy in general, as well as behavioral and cognitive behavioral therapy in particular.

[DR. ARNOLD A. LAZARUS]

As Dr. Simon Rego underscored, the field of behavior therapy has made much headway and has developed a far more impressive format than existed two decades ago. Evidence-based methods and empirically supported treatments have brought far more science and rigor into the domain. Emphasis is now placed on actuarial findings over clinical impressions. As Simon stressed, lists of first-line treatments for various psychological disorders now exist. Expertise is now highly favored over experience.

Nevertheless, as impressive as these changes and new developments have been, it is my opinion that they cover only a small segment of the issues that motivate people to seek clinical attention. The huge panorama of problems, issues, untoward thoughts, negative emotions, conflicts, sensory dysphoria, interpersonal ineptitude, and intrusive images that bring most people to therapists far outweigh the relatively small number of complaints that are thus far amenable to empirical methods and manualized therapy.

For example, I vividly recall a woman in her early twenties who had been sexually abused and compromised by several traumatic events. In her first session she stated that she needed to “get it all out” and was ready to reveal things that she had never before shared with anyone. This called for the development of rapport and trust, which took a long time to achieve, and required patience and delicate handling. She feared that many of her revelations would shock and disgust me, and she was slow to understand that I could sympathize with what she had gone through without demeaning her. At this juncture I gradually introduced various behavioral methods that were ex-

tant at that time: relaxation, desensitization, and assertiveness training. I also used methods that Dr. Albert Ellis applied when dealing with people who were self-denigrating and harbored misconceptions. By analogy, there had been a very long runway before we were airborne. The eventual outcome was most positive. In essence, however, this case required a precisely timed, sequential process of supportive, nondirective alliance building before segueing into more active, directive therapeutic interventions.

I have included the foregoing anecdote as a prelude to some important points I wish to make. While supervising a student in the Rutgers University doctoral program who was well versed in manualized therapy, we ran into a difficulty. Her client complained that she felt she was being treated like an *entity*, not a *person*. The client said that the trainee knew very little about her as a wife, mother, or a daughter, but saw her as *someone with an eating disorder*. The trainee said to me that what the client wanted was idle chit-chat wherein she could go into her background and overall feelings. The student said this would merely be a waste of time because there are no data to show that this would abate her serious eating disorder.

Is it necessary for me to underscore why this robotic student was dead wrong? Why had she apparently not been taught the significance of a therapeutic relationship, the value of empathy, the path to rapport, and the need at times to set aside the manual and interact in a human-to-human mode? One of the mistakes I recall making as a neophyte was jumping in prematurely with my bag of techniques and not allowing the sufficient development of a bond of caring, understanding, and acceptance to precede it.

In 1999, when I retired from Rutgers University I was encouraged by several graduate students to form a discussion and supervision group so that they could benefit from exposure to my professional ideas. About a dozen students (including Simon) met with me at approximately monthly intervals for 2.5 hours. The group is still in existence, except now, all the participants are licensed practitioners with several years of additional experience under their belts. As the years rolled by, several people left the group for positions or practices in other cities or states and were replaced by new members. It was interesting as well as disconcerting to see how many important gaps in their repertoires existed despite their completion of a doctorate, internship, and other postdoctoral work. To list and discuss

all the gaps would constitute a separate publication, so I will focus on one of the major issues that concerned and troubled me.

I assert that the client-therapist relationship is the soil that enables the techniques to take root. Those who allow an overriding fear of attorneys and licensing boards to determine the course of therapy are inclined to neglect important clinical concerns. Therapists who act defensively and erect barricades are unlikely to promote the type of working alliance that fosters emotional growth. A good therapeutic relationship calls for the genuine meeting of persons. Without adequate rapport, the application of empirically established methods and the best of manuals will be diluted if not erased. I have long contended that without developing adequate rapport, understanding, and an awareness of the client's hopes, wishes, and sensitivities, therapeutic progress is unlikely to ensue.

Thus, as far back as 1966 in the book *Behavior Therapy Techniques* that Dr. Joseph Wolpe and I had coauthored, I wrote: "Whatever the measures decided upon, it is of the first importance to display empathy and establish a trustful relationship. . . . It may be desirable to defer the use of specific counterconditioning procedures when there is reason to think that the patient needs to unburden himself or requires enlightenment or reassurance. At this point we take leave to chide some fellow behavioral scientists who, espousing notions of rigid behavioral engineering, imagine that one can do without such personal influencing processes. Considerable skill is required to tune the therapeutic relationship into the right key with diverse individuals."

We must make sure that trainees will acquire good functional analysis skills as well as the artistry of case formulations and never allow the proliferation of manuals to eclipse these clinical necessities. I might also emphasize that many practitioners slavishly follow a lengthy list of ethical proscriptions that often diminish their clinical effectiveness (see Lazarus & Zur, 2002). Books that list ethical regulations have grown larger over the years. I try to impress on all the people I have taught that there are less than 10 rules worth upholding. Never exploit, disparage, abuse or harass a client, and steer clear of sexual contact. Appreciate the significance of confidentiality, integrity, respect, and informed consent. All the rest of the rules, codes, and regulations are negotiable.

There is one final point I wish to make. As I have been stating, in many instances a

thorough assessment usually needs to precede therapy to maximize the likelihood that specific problems are properly prioritized. Since the 1970s I have been working on a roadmap or blueprint to achieve these ends. Whereas most cognitive behavioral approaches rest on an "ABC" model (focusing on affect, behavior, and cognitions), I have argued that it is important to also include imagery, sensory stimuli, interpersonal relationships, and biological factors. This lends itself to the simple acronym BASIC I.D. (B = Behavior; A = Affect; S = Sensation; I = Imagery; C = Cognition; I = Interpersonal relationships; D = Drugs/Biology). By traversing a client's "BASIC I.D.," one can determine strengths and weaknesses in all seven areas, which can facilitate the creation of a more complex and nuanced case formulation and ultimately lead to the selection of more refined treatment interventions. I have named this process Multimodal Therapy (e.g., Lazarus, 1989; Lazarus, 1997; Lazarus, 2008). The interested reader may wish to Google "Multimodal Therapy" and "Multimodal Behavior Therapy" for additional information.

When I wrote the article on shackles and superstitions more than two decades ago, CBT was nowhere near center stage. The psychodynamic contingent pretty much ruled the roost, and many trainees gravitated to an unfortunate eclectic bimodal approach wherein they tried to integrate psychoanalytic and social learning theories. This led to the notions that I politely called the "superstitions" of which they had to battle to rid themselves. Today, fewer trainees face this hurdle, but different shackles have arisen (e.g., being tied to manualized therapy when it may be inappropriate or ineffective and following the book on needless, if not harmful, ethical proscriptions). These points have been dealt with in this paper.

I would like to reiterate the artistry involved in synthesizing supportive/nondirective and active/directive therapeutic processes into an optimal, unique treatment plan that transcends the potential effectiveness of the very best manualized protocols in the hands of even highly experienced clinicians. I strongly recommend Dr. Gordon Paul's (1967) profound directive as a major guiding principle: "What treatment, by whom is most effective, for this individual, with those specific problems, and under which set of circumstances?" (p. 118). Serious consideration of what-is-truly-best-for-this-individual (or for these individuals in the case of couples, families,

or groups) should enable us to be of far-reaching service to the people who ask for our help.

Controversy and Limitations

[DRS. ARNOLD A. LAZARUS AND SIMON REGO]

We anticipate that there may be some readers of *IBT* who will assert that many of our observations are no longer as valid as they once were. For example, some readers may claim that while clinical psychology trainees 10 to 15 years ago may have adhered to rigidly manualized treatments at the expense of the therapeutic alliance and the development of individualized treatment plans, today's trainees are far more flexible in the implementation of manualized treatments and emphasize the need for a strong relationship.

Other readers may claim that if it is true that trainees take too much of a rote approach to treatment and pay insufficient attention to individual clients, this may partly be due to their lack of experience, which would lead some trainees to favor a more simplified, manualized approach to therapy, in contrast to less structured—and more anxiety provoking—alternatives. Clearly, the higher-order skills required to flexibly apply empirically supported treatments to individual clients come with time and experience.

We also acknowledge that many prominent CBTers (e.g., Castonguay, Constantino, & Holtforth, 2006; Gilbert & Leahy, 2007; Goldfried & Davila, 2005; Lambert & Barley, 2001), who have published a number of empirical studies and chapters on the impact of the client-therapist relationship over the past 15 years, and that even the American Psychological Association's (2006) report on evidence-based practice in psychology stressed not only using the best available research but also the importance of clients' individual characteristics.

Our contention, however, is that what appears in the literature must either be glossed over by those training programs that place a heavy emphasis on evidence-based treatments (i.e., many trainees are not taught about these findings in their classes, internship sites, and/or postdoctoral settings) or is somehow misinterpreted and/or minimized by trainees, perhaps as an unfortunate consequence of their quest to learn as many empirically supported treatment protocols as possible.

For example, we surveyed several interns, postdoctoral trainees, and licensed

CBT practitioners and inquired whether they were familiar with the aforementioned writers on the impact of the client-therapist relationship. While most stated that they could recognize the names, many could not cite what they had published. We also mentioned an important book published in 2008 by Dr. Jacqueline Persons, *The Case Formulation Approach to Cognitive-Behavioral Therapy*, which explains the basic theories of cognition, learning, and emotion that underlie available ESTs and shows how the theories can be used to guide systematic case formulation. Again, none of the CBT practitioners in our (albeit informal) survey knew anything about it. How widespread is this lacuna? Given the diverse range of trainees with whom we work, we are inclined to feel that it is pervasive.

Finally, we acknowledge that "evidence" we have provided is anecdotal and therefore not be taken as conclusive. Instead, we hope that this article will at least serve to generate creative, constructive, and stimulating discussions on the topic (e.g., Kazdin & Blase, 2011), and perhaps even serve as an invitation to a more rigorous scientific study of this phenomenon that we have observed. That's what really matters.

References

- American Psychiatric Association. (2006). *American Psychiatric Association Practice Guidelines for the Treatment of Psychiatric Disorders: Compendium 2006*. PsychiatryOnline.com Online.
- American Psychological Association. (2006). Evidence-based practice in psychology. *American Psychologist*, 61(4), 271-285.
- Chambless, D.L., Baker, M., Baucom, D.H., Beutler, L.E., Calhoun, K.S., Crits-Christoph, P., . . . Woody, S. R. (1998). Update on empirically validated therapies, II. *The Clinical Psychologist*, 51(1), 3-16.
- Castonguay, L.G., Constantino, M.J., Holtforth, & M.G. (2006). The working alliance: Where are we and where should we go? *Psychotherapy: Theory, Research, Practice, Training*, 43(3), 271-279.
- Foa, E.B., Keane, T.M., Friedman, M.J., & Cohen, J.A. (2009). *Effective treatments for post-traumatic stress disorder: Practice guidelines from the International Society for Traumatic Stress Studies* (2nd ed.). New York, NY: Guilford Publications.
- Gilbert, P., & Leahy, R.L. (2007). *The therapeutic relationship in the cognitive behavioral psychotherapies*. New York, NY: Routledge Press.
- Goldfried, M.R., & Davila, J. (2005). The role of relationship and technique in therapeutic change. *Psychotherapy: Theory, Research, Practice, Training*, 42(4), 421-430.
- Kazdin, A.E., & Blase, S.L. (2011). Rebooting psychotherapy research and practice to reduce the burden of mental illness. *Perspectives on Psychological Science*, 6(1), 21-37.
- Lambert, M. J., & Barley, D.E. (2001). Research summary on the therapeutic relationship and psychotherapy outcome. *Psychotherapy: Theory, Research, Practice, Training*, 38(4), 357-361.
- Lazarus, A.A. (1989). *The practice of multimodal therapy: Systematic, comprehensive, and effective psychotherapy*. Baltimore, MD: Johns Hopkins University Press.
- Lazarus, A.A. (1990). Can psychotherapists transcend the shackles of their training and superstitions? *Journal of Clinical Psychology*, 46(3), 351-358.
- Lazarus, A.A. (1997). *Brief but comprehensive psychotherapy: The multimodal way*. New York, NY: Springer.
- Lazarus, A.A. (2008). Multimodal therapy. In R.J. Corsini & D. Wedding (Eds.), *Current psychotherapies* (8th ed., pp. 368-401). Belmont, CA: Thomson/Brooks Cole.
- Lazarus, A.A., & Zur, O. (Eds.). (2002). *Dual relationships and psychotherapy*. New York, NY: Springer.
- Nathan, P.E., & Gorman, J.M. (2007). *A guide to treatments that work*. Oxford: Oxford University Press.
- National Institute for Health and Clinical Excellence. (2011). *Anxiety (CG113)*, London: Author.
- Paul, G.L. (1967). Strategy of outcome research in psychotherapy. *Journal of Consulting Psychology*, 31, 109-118.
- Persons, J.B. (2008). *The case formulation approach to cognitive-behavioral therapy*. New York, NY: Guilford Press.
- Wolpe, J., & Lazarus, A.A. (1966). *Behavior therapy techniques*. Oxford: Pergamon Press.
- Woody, S.R., & Sanderson, W.C. (1998). Manuals for empirically supported treatments: 1998 update. *The Clinical Psychologist*, 51(1), 8-19.
- Woody, S.R., Weisz, J., & McLean, C. (2005). Empirically supported treatments: 10 years later. *The Clinical Psychologist*, 58(4), 5-11.

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Smith, Duax, & Rauch, in press
Cognitive and Behavioral Practice
doi:10.1016/j.cbpra.2012.12.002

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“To think of oneself doing x, y, or z is not as valuable as actually *picturing* the events.”

Lazarus, A., 1977
In the Mind’s Eye

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internship told us in the
first day of group process,
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you and your patients.”*

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