

Just In Time Training:

Spreading the Reach of Behavioral
Activation for Depression with
Computer Assisted Therapy & Training



BEHAVIORAL TECH
RESEARCH, INC



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Training As Usual

Learn first...

then do (**maybe**)



Challenges with TAU

- Training post-graduate clinicians is **tough!**
 - We don't like to read textbooks or research articles.
 - CE workshops seldom change clinician performance and can sometimes produce iatrogenic effects.
 - Adequate dose of training with supervision costs a lot of money and often requires a significant loss of productivity.



And still more TAU problems...

- Even when therapists know an EST, there is no guarantee that it will show up during the session.
 - Unintentionally (e.g., drift)
 - Intentionally
- Systems (the context where treatment is provided) can also significantly interfere with the clinician delivering the treatment to fidelity.

Let's Give **Rock Solid e-Learning** a Go

- Many reasons to bet on e-Learning
 - Convenient 24/7 access
 - Paced learning > massed learning
 - Go at your own speed & linger where you want
 - Build in video modeling, performance-based practice & knowledge checks to strengthen and help generalize newly acquired knowledge
 - Eliminates direct and indirect costs associated with attending a workshop
 - **It's Green** and carbon neutral



If We Built It, Would They Come?

Results from our Nation-wide Study (N=540)

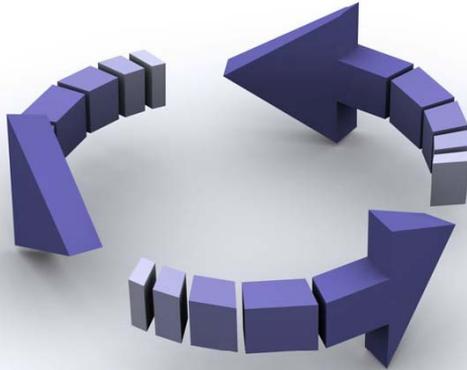
- The majority of clinicians were 'very' to 'extremely' interested in:
 - Receiving training in BA for depression
 - e-Learning as a training mode
 - No travel; take the training course at home
 - Learn when it's convenient
 - Complete at your own pace

With that, we were out the door and on our way...

3.2 Presenting Treatment Rationale

The Vicious Cycle

A common response to this imbalance between problems and rewards is to pull away from the world and stop engaging in what were once routine activities. For example, you stop returning your friends' calls, stop exercising at the gym on your way home from work, perhaps even stop going to work, and instead spend more time in bed. Although it is understandable and natural to pull away when feeling down, a **vicious cycle** can easily develop. For example, as you continue to pull away and do less, more problems accumulate. Your friends stop calling you and asking you to go out, you gain weight, you feel worse because you're not eating well. In response, you get more depressed and do even less of your usual routine, like taking out the garbage and cleaning up the kitchen after a meal. And you're having even bigger problems: your productivity at work starts to fall and now your boss is putting pressure on you to "shape up or ship out." These circumstances create the conditions for your mood to drop



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Resources

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3.2 Presenting Treatment Rationale

An Imbalance Between Problems and Rewards

In explaining the BA model of depression to clients, we emphasize the strong connection between events that occur in a person's life, how one feels, and how one responds behaviorally. Although there are many reasons why people become depressed, one common reason is having too many problems and too few rewards. In simple terms, there is an **imbalance between positives and negatives**, with far greater negatives than positives. This imbalance can result from a negative big life event, such as the loss of a job or the ending of an important relationship. In other cases, it's not a single, big event, but the accumulation of smaller daily hassles.



Negative

Positive

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1.2 Client Comments

Click on the clients below to hear how behavioral activation impacted their lives.

Clients who have done BA have expressed reactions to the therapy along the following themes:



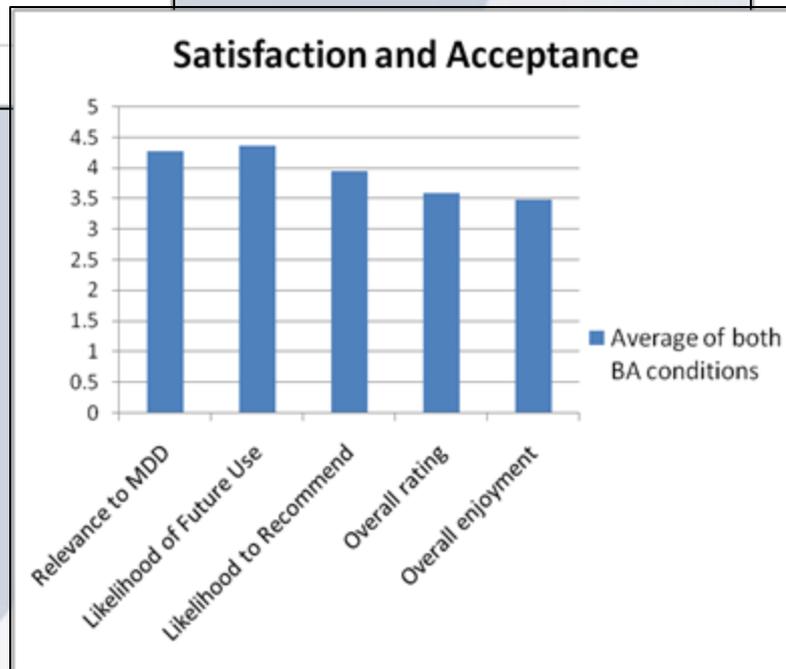
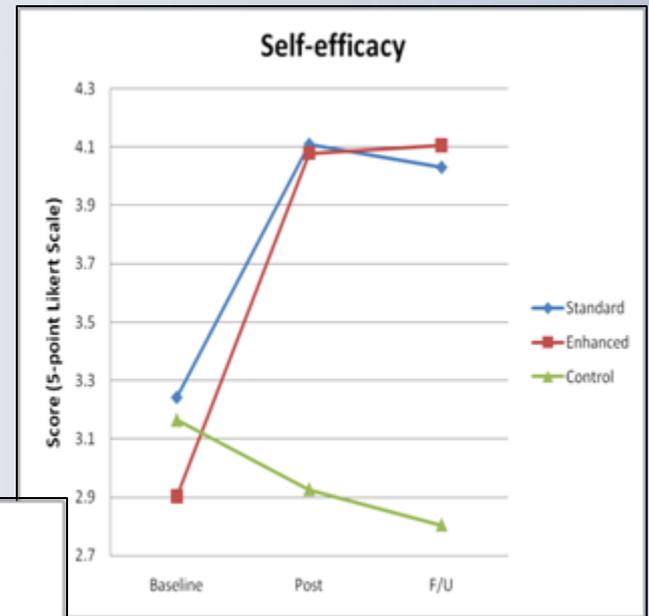
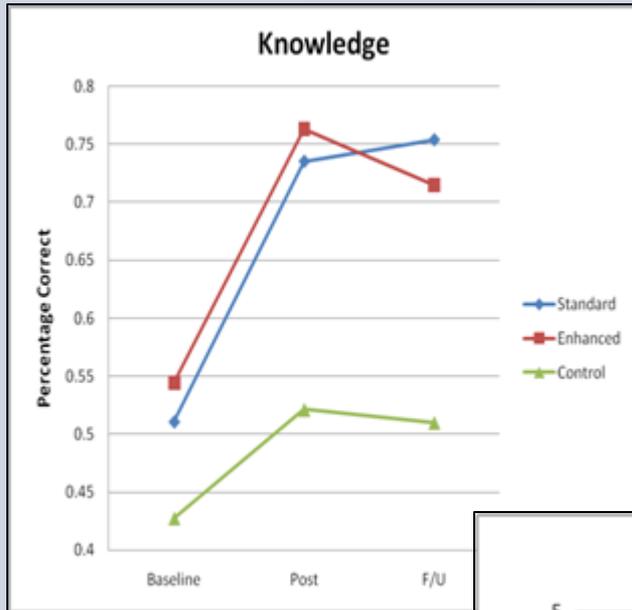
2 of 2

Resources

Main Menu

Exit

Our Outcomes Were Promising

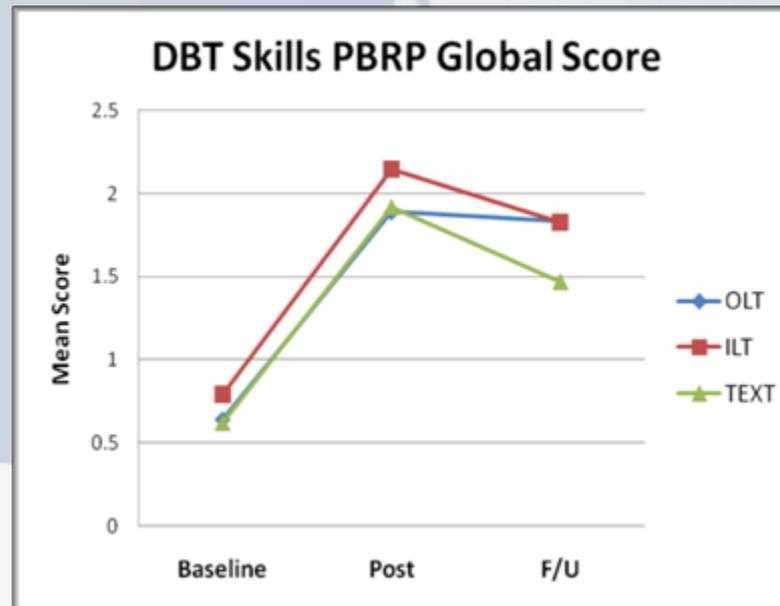
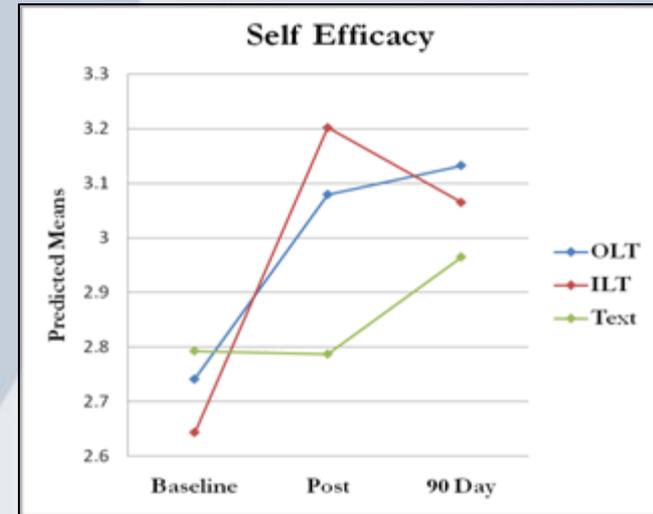
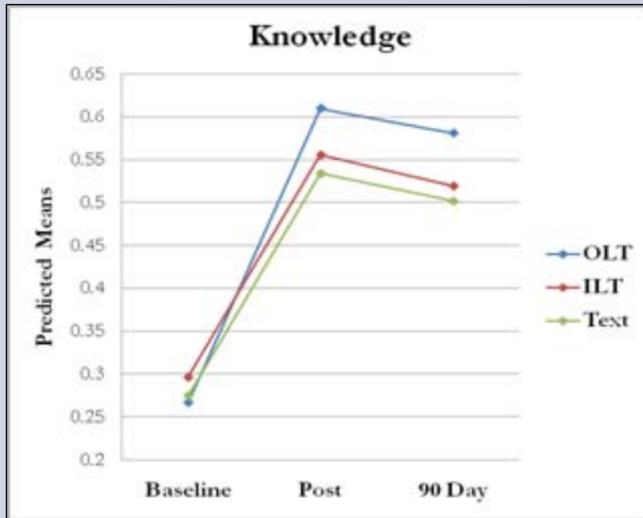


We had every intention of developing a much more comprehensive e-Learning course. Then three things happened...

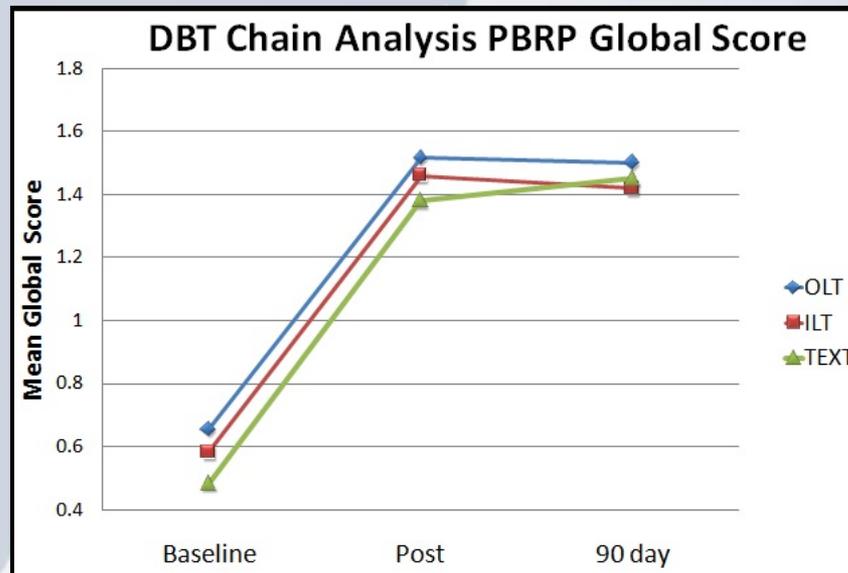
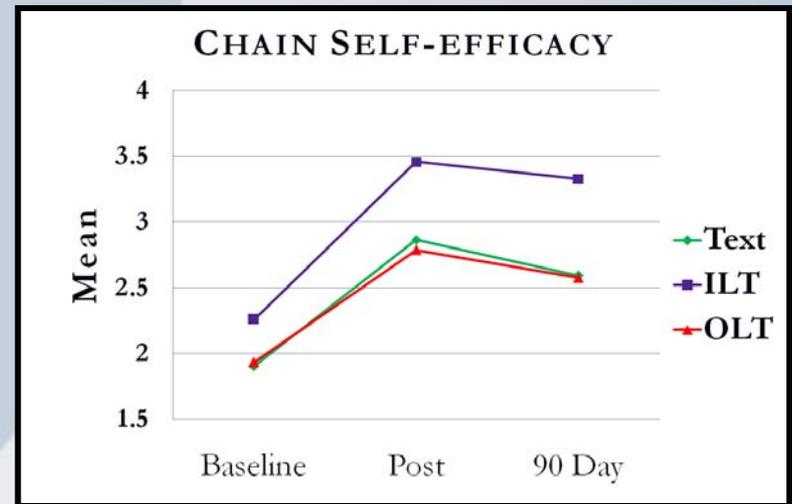
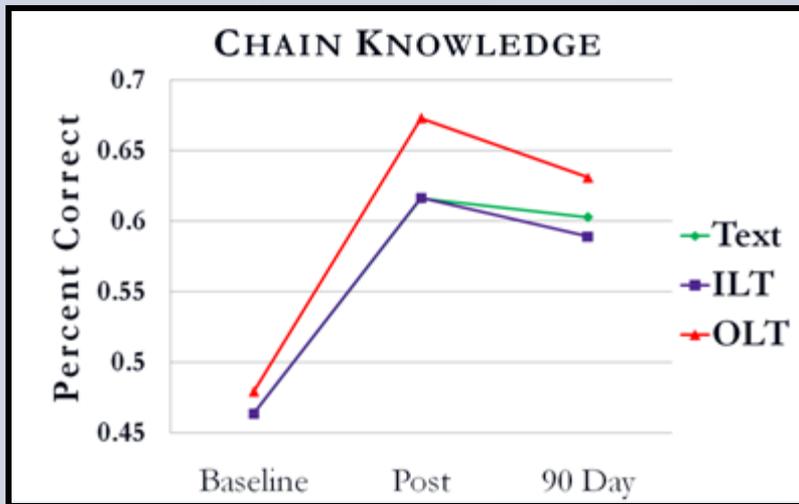
- 1. Our Data**
- 2. CALM Tools for Living**
- 3. Reflection on the essence of BA as a treatment**



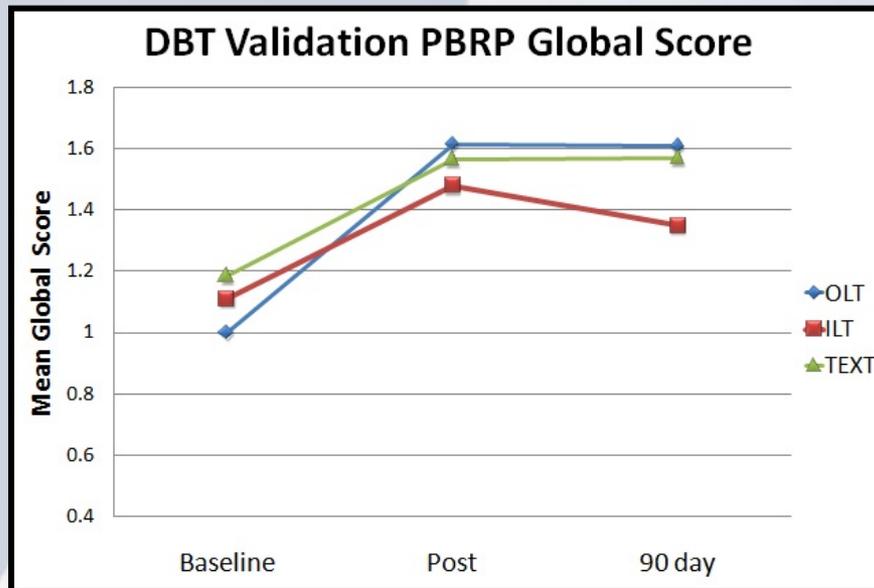
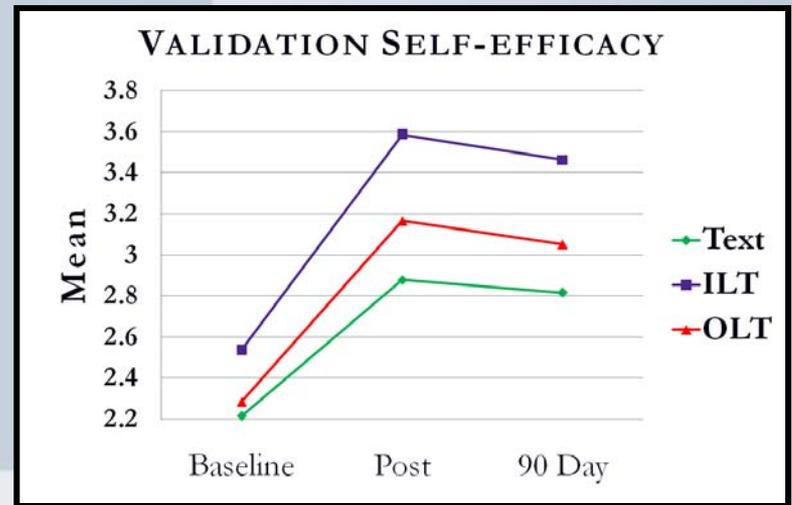
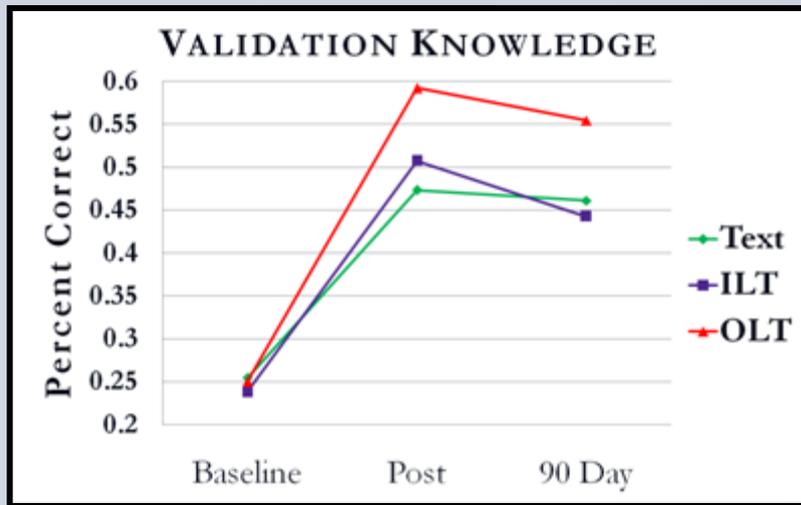
DBT Skills Study



Chain Study



Validation Study



It wasn't a fluke...there was a clear pattern to the data

e-Learning

- improves knowledge
- self-efficacy
- saves \$, is carbon-neutral
- was often the preferred training mode

But...

There was **no difference** between training conditions on **performance** (everyone improved)

CALM Tools for Living in Primary Care

M. Craske & R. Rose, et al

The screenshot displays the CHAMMP website interface. At the top left is the CHAMMP logo with the text "Center for Healthcare Improvement for Addictions, Mental Illness and Medically Vulnerable Populations". To the right of the logo is a navigation menu with links: "Our People", "Our Partners", "Projects & Publications", "Clinical-Services at HMC", "Methods Core", and "Current Initiatives". Below the logo is a search bar with a "Go" button. The main content area features a "CALM Tools for Living Video" player showing two women in a meeting. On the left side, there is a "Training & Dissemination" section with a list of offerings: "TRAININGS OFFERED", "CHAMMP ANNUAL CONFERENCE", "FELLOWSHIPS", "RESOURCES" (including "Assessment Tools" and "CALM Tools for Living Video"), and "CHAMMP TRAINING FAQ". A "REGISTER FOR TRAINING" button is located at the bottom of this section. The footer contains the site's home page link and copyright information: "©2009 CHAMMP Seattle web design by Gravitite."

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CALM is JITT

Just in Time Training

=

Any process (usually involving computers) in which a person receives training "just-in-time" when it is needed for a particular purpose. (wikipedia)



Computer-Facilitated Just In Time Training

The JITT process may change the entire process of education and training, because the focus may become how to effectively access and utilize JITT rather than how to teach students and/or employees technical details that have to be memorized long before they are needed in practice. (Wikipedia, November 20, 2010)



JITT is Consistent with BA model

- Emphasis on learning through DOING
- One of Sona's first clients described the contrast between BA and other therapies as others being "head teach the hands" and BA being "hands teach the head" ... we decided that the same principle applied to TRAINING therapists to use BA.
- JITT = Hands teach the head!



So what if we...

SWITCHED from e-Learning
to enhanced JITT ...



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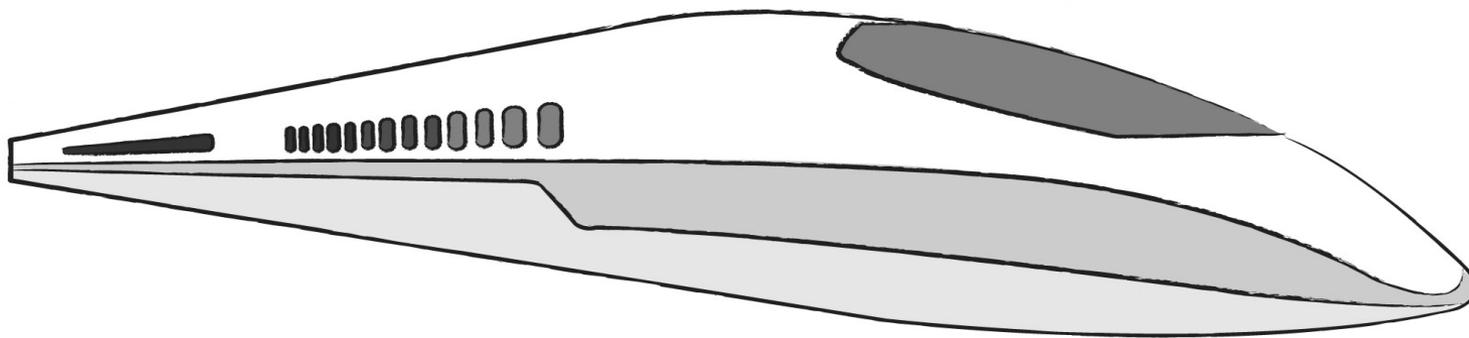
"Disruptive research of evidence based therapies, dedicated to effective acquisition"

The potential benefits were **monumental...**

- Therapists learn while **on-the-job**
 - No loss of productivity
 - No “training” budget
- Computer **doesn’t “drift”**
 - Treatment is delivered to fidelity
- Efficacious treatment available **anytime and anywhere** there is Internet
 - Including clinics in rural & underserved areas
 - As self-help in areas where there are no clinicians.



Dissemination Bullet Train



*From Lab and...
Immediately into Routine Practice*

Bottom Line

The patient
actually receives
the EST.



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"Dissemination research of evidence based therapies, dedicated to effective commission"

But... Can We Ensure if We Build it They *Will Come*?

- Develop additional tools to **save clinicians time** so they are **motivated** to use it
 - Automatic notes and reports generator
 - Automatically administers relevant measures, scores, and tracks client outcomes
- Design for **flexible use** (clinician keeps control)
- Build **one integrated system** for *many* disorders
 - So people and systems are **motivated to invest** (e.g., BA, MAP, PE, CBT for EDs, CBT for Insomnia)
- Conduct effectiveness RCT to test efficacy and cost-effectiveness.



CAT System **Functionality**

In-session functions

- Guides the therapist and client through the EBP by:
 - Helping build and adhere to the agenda
 - Prompting specific discussion topics
 - Providing interactive videos that explain key concepts

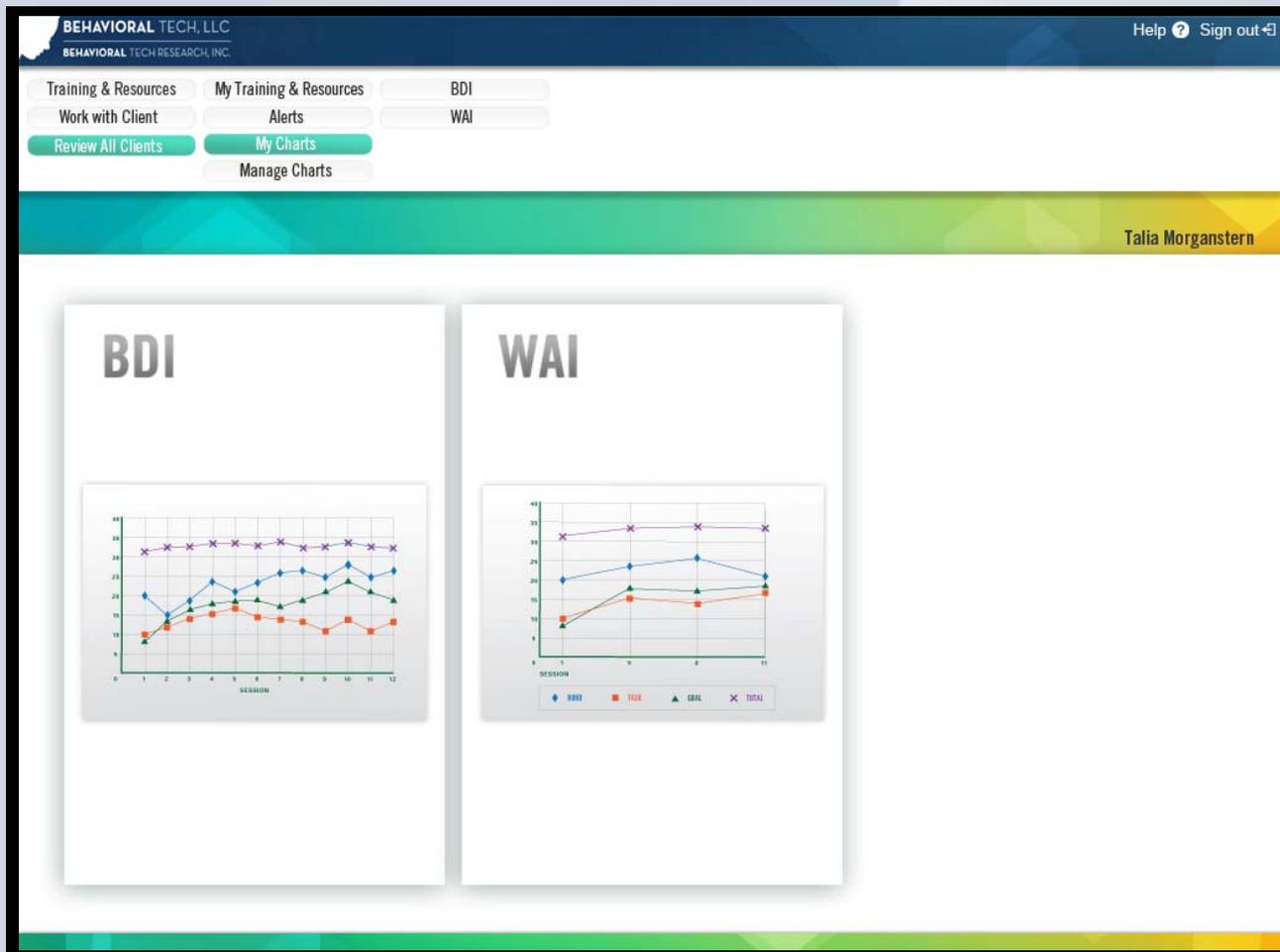
CAT System **Functionality**

- Between-session functions
 - Therapists
 - Manage client outcomes and homework progress
 - Plan sessions
 - Receive training
 - Clients
 - Complete measures
 - View resources
 - Track homework and overall progress

CAT System: Therapist Dashboard

The screenshot displays the CAT System Therapist Dashboard. At the top left, the logo for BEHAVIORAL TECH, LLC and BEHAVIORAL TECH RESEARCH, INC. is visible. On the top right, there are links for Help and Sign out. Below the logo, a navigation menu includes buttons for Training & Resources, My Training & Resources, Work with Client, Alerts, Review All Clients (highlighted in green), My Charts, and Manage Clients. A green and yellow header bar on the right side identifies the user as Talia Morganstern. The main content area is divided into three panels: 'MY TRAINING & RESOURCES' featuring a notebook icon, 'ALERTS' featuring three 3D bar charts in yellow, red, and blue, and 'MY CHARTS' featuring several 3D arrows in blue, yellow, and red. A right-pointing arrow button is located on the right side of the 'MY CHARTS' panel.

CAT System: Therapist Dashboard



CAT System:

Review Individual Client Data & Client Portal

The screenshot displays the Behavioral Tech, LLC CAT System interface. At the top, the header includes the company name and logo, a 'Help' icon, and a 'Sign out' button. Below the header is a navigation bar with buttons for 'Training & Resources', 'Choose Client', 'Choose Session', 'Plan', and 'View Dashboard'. A secondary bar contains 'Work with Client' and 'Review All Clients' buttons, along with 'Do' and 'Review' buttons, and a 'Previous Sessions' link with a lock icon. A status bar indicates 'Working with John Thomas - Session 1 of 24'. The main content area is divided into three columns: 'GOALS', 'WORKSHEETS', and 'RESOURCES'. The 'GOALS' column lists three items: '1 Lorem ipsum...', '2 Curabitur nec...', and '3 Sed tellus...'. The 'WORKSHEETS' column shows three items with placeholder text and images: 'Lorem ipsum dolor' (mountain), 'Lorem ipsum dolor' (sun), and 'Lorem ipsum dolor' (path). The 'RESOURCES' column shows six items with placeholder text and images: 'Lorem ipsum dolor' (mountain), 'Lorem ipsum dolor' (sun), 'Lorem ipsum dolor' (path), 'Lorem ipsum dolor' (water), 'Lorem ipsum dolor' (tree), and 'Lorem ipsum dolor' (rock). Navigation arrows are present on the left and right sides of the main content area, and a 'page 1/2' indicator is at the bottom right.

CAT System: In-Session Tool

The screenshot shows the Behavioral Tech CAT System In-Session Tool interface. At the top left, the logo for Behavioral Tech, LLC and Behavioral Tech Research, Inc. is displayed. On the top right, there are links for 'Help' and 'Sign out'. Below the logo, a navigation bar contains several buttons: 'Training & Resources', 'Work with Client', 'Review All Clients', 'Choose Client', 'Choose Session', 'Plan', 'Do', 'Review', 'Follow Agenda', 'Tasks', and 'Edit Agenda'. A green and yellow gradient bar below the navigation bar indicates the current session: 'Working with John Thomas - Session 1 of 24'. The main content area is titled 'ACTIVITY STRUCTURING' and 'INTRODUCTION - PAGE 1 OF 13'. It features two paragraphs of placeholder text. To the right of the text is a video player showing a woman speaking, with a play button, a progress bar at 00:05, and a right arrow. Below the video player is the title 'DOLOR SIT AMET' and another paragraph of placeholder text. A 'Notes' button is located at the bottom right of the content area.

BEHAVIORAL TECH, LLC
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Help Sign out

Training & Resources Choose Client Choose Session Plan Follow Agenda
Work with Client Do Tasks
Review All Clients Review Edit Agenda

Working with John Thomas - Session 1 of 24

ACTIVITY STRUCTURING

INTRODUCTION - PAGE 1 OF 13

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Notes

CAT System: In-Session Tool

The screenshot shows the Behavioral Tech CAT System In-Session Tool interface. At the top left, the logo for Behavioral Tech, LLC is displayed. The top right corner features a 'Help' icon and a 'Sign out' button. Below the header is a navigation bar with several buttons: 'Training & Resources', 'Work with Client', 'Review All Clients', 'Choose Client', 'Choose Session', 'Plan', 'Do', 'Review', 'Follow Agenda', 'Tasks', and 'Edit Agenda'. A green banner below the navigation bar indicates the current session: 'Working with John Thomas - Session 1 of 24'. The main content area is divided into two columns. The left column features a section titled 'ACTIVITY STRUCTURING' with a sub-header 'INTRODUCTION - PAGE 1 OF 13'. Below this, there are two paragraphs of placeholder text. A blue box labeled 'LOREM IPSUM' contains another paragraph of placeholder text. The right column features a video player showing a woman speaking. Below the video player is a section titled 'DOLOR SIT AMET' with two paragraphs of placeholder text. A 'Notes' button is located at the bottom right of the main content area.

BEHAVIORAL TECH, LLC
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Help Sign out

Training & Resources Choose Client Choose Session Plan Follow Agenda
Work with Client Do Tasks
Review All Clients Review Edit Agenda

Working with John Thomas - Session 1 of 24

ACTIVITY STRUCTURING

INTRODUCTION - PAGE 1 OF 13

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Notes

CAT System: In-Session Tool

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Help Sign out

Training & Resources Choose Client Choose Session Plan Follow Agenda
Work with Client Do Tasks
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Working with John Thomas - Session 1 of 24

NOTES
DINNER WITH SISTER

Save Cancel

Notes

Our Immediate **Research Agenda**

- Pilot testing with goal to refine BA-CAT
 - Focus groups with:
 - Clinicians
 - Clients
 - Administrators
 - Trainees testing BA-CAT with depressed clients
- Evaluate feasibility, satisfaction, and patient outcomes associated with BA-CAT use in routine clinical practice settings

Acknowledgements

- Adam Haim, PhD (NIMH)
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