



Fact Sheet

# Clinical Research Demonstrates The Effectiveness of Digital Cognitive Behavioral Therapy



**The application of clinical research findings has a profound impact on individuals suffering from mental health problems.**

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Learn to Live evaluates its research findings to develop a better understanding of digital CBT-based methods to:

- Increase engagement
- Improve psychotherapeutic outcomes
- Reduce the cost of care

## Published Study #1

### Topic: Supplementing College Counseling Centers with Online Mental Health Programs

#### Internet-Based Cognitive-Behavioral Therapy for College Students With Anxiety, Depression, Social Anxiety, or Insomnia: Four Single-Group Longitudinal Studies of Archival Commercial Data and Replication of Employee User Study

Attridge, M. D., Morfitt, R. C., Roseborough, D. J., & Jones, E. R. (2020).

*JMIR Formative Research* (a division of *Journal of Medical Internet Research*); 4(7): e17712.

<https://formative.jmir.org/2020/7/e17712/>.

#### About the Study:

College students used digital cognitive behavioral therapy (CBT)-based programs to manage depression, anxiety, insomnia, and stress. The Learn to Live online mental health platform provided an interactive, multi-modal experience (including video, animation, and highly interactive resources) of learning and used self-help skills that are core to CBT.

### Study Findings

Digital resources are effective at reducing the clinical symptoms of these behavioral health problems. More than a third of the individuals showing risk for clinical depression and anxiety had their symptoms reduced to non-clinical levels. Self-directed, internet-based CBT programs can play a significant role in helping college students manage their moods and cope with the stresses of college life.

#### Summary:

- » Digital resources are effective for managing behavioral health problems.
- » 1/3 of participants with risk for depression and anxiety had symptoms reduced to non-clinical levels.
- » Digital CBT programs can help college students reduce the impact of stress on depression and anxiety.



## Published Study #2

### Topic: Improving Employee Mental Health with Online CBT

#### Internet-Based Cognitive-Behavioral Therapy for Employees With Anxiety, Depression, Social Phobia, or Insomnia: Clinical and Work Outcomes

Attridge, M. D. (2020). SAGE Open, 10(1). <https://doi.org/10.1177/2158244020914398>.

#### About the Study:

Employees across multiple organizations accessed a digital self-care platform for behavioral health problems including depression, anxiety, insomnia, and stress. A CBT-based interactive, multi-modal experience (including video, animation, and highly interactive features) supported learning and use of self-help skills.

### Study Findings

Digital resources supported significant, validated reductions in the clinical symptoms of: depression; insomnia; social anxiety; social phobia; and stress, anxiety, and worry. Self-directed, digital CBT-based clinical programs can play a significant role in helping employed adults manage their moods and cope with the stresses of everyday life.

#### Summary:

- » Digital resources significantly reduce clinical mental health symptoms.
- » Self-directed CBT programs can help employed adults manage stress.



## Published Study #3

### Topic: Comparison of Outcomes for Outpatient Psychotherapy and Online CBT

#### Effectiveness For Online Cognitive Behavioral Therapy Versus Outpatient Treatment: A Session by Session Analysis

Brown, J. S., Jones, E., & Cazauvieilh, C. (2020, May). Society for the Advancement of Psychotherapy. [Web article]. Retrieved from <http://www.societyforpsychotherapy.org/effectiveness-for-online-cognitive-behavioral-therapy-versus-outpatient-treatment>.

#### About the Study:

Large sample sizes of two distinct data sets were examined to understand differences in client self-reported outcome questionnaires for individuals participating in outpatient (in-person) and online CBT-based interventions.

### Study Findings

Both groups—outpatient and online—showed a significant improvement after five sessions. There were ongoing clinical gains with each additional use of the online platform, and these digital users outpaced the gains of individuals receiving psychotherapy in the final three sessions completed.

#### Summary:

- » Online CBT is as effective as in-person therapy.
- » Clinical gains continued with additional use of the online platform beyond the first five lessons.
- » Digital users' results outpaced in-person results for lessons 6-8.



## Published Study #4

### Topic: The Impact of Clinician Coaching on Psychotherapy Outcomes

#### Impact of Coaching on Rates of Utilization and Clinical Change for Digital Self-Care Modules Based on Cognitive Behavioral Therapy

Brown, J.S., & Jones, E. (2020, December). Society for the Advancement of Psychotherapy. [Web article]. Retrieved from <http://www.societyforpsychotherapy.org/impact-of-coaching-on-rates-of-utilization-and-clinical-change-for-digital-self-care-modules-based-on-cognitive-behavioral-therapy>.

#### About the Study:

Psychometric assessment questionnaires were used to compare outcomes of individuals who engaged with a clinician coach while completing online CBT-based therapy, versus those who only used the CBT programs, for depression, social anxiety, and general stress and worry. Individuals received coaching support via phone, email, or text communication, and utilization was relatively equally divided among these modalities.

#### Study Findings

Digital CBT improves psychometric outcomes, particularly for users who completed more lessons. Furthermore, people who gain the guidance and support of a coach complete more online CBT-based clinical lessons and achieve better outcomes compared to those who do not engage with a clinician coach. Participants displayed significantly greater improvement in earlier lessons, and they had a higher retention rate after each lesson.

#### Summary:

- » Digital CBT improves psychometric outcomes.
- » Combining digital CBT with clinician coaching achieves better outcomes.
- » Engaging with a coach resulted in greater content retention compared to those who did not engage a coach.



## Published Study #5

### Topic: Strategies to Improve Outcomes by Targeting Users for Clinician Coaching

#### Improving Clinical Outcomes for Digital Self-Care

Brown, G. S., & Jones, E. (2021, March). Society for the Advancement of Psychotherapy. [Web article]. Retrieved from <http://www.societyforpsychotherapy.org/improving-clinical-outcomes-for-digital-self-care>.

#### About the Study:

Psychotherapy research literature was used to develop an algorithm that identifies users of online CBT-based programs who are at-risk for premature termination due to a poor response. The optimal point for intervention with coaching support was identified.

### Study Findings

Previous research has determined that the use of clinician coaches increases engagement with self-care tools for a longer period of time, and attainment of better clinical outcomes. This application of at-risk criteria for premature termination by digital CBT users who were not receiving personalized coaching identified that 17% of individuals would benefit from proactive intervention to reconsider coaching. The authors recommend implementing a process to contact these high-risk individuals to achieve a higher retention rate and associated enhanced outcomes.

#### Summary:

- » Algorithms can be used to identify digital CBT users that are at-risk for premature program termination.
- » 17% of users can benefit from outreach by a clinician coach to nurture continued program participation and ultimately improve clinical outcomes.



## Published Study #6

### Topic: Synergistic Effect of Text Messages with CBT to Achieve Greater Outcomes

#### Improving Results for Digital Therapeutics

Brown, J., & Jones, E. (2022, May). Society for the Advancement of Psychotherapy. [Web article]. Retrieved from <http://www.societyforpsychotherapy.org/improving-results-for-digital-therapeutics>.

#### About the Study:

Psychometric assessment questionnaires were used to compare outcomes across four digital CBT platform user groups:

- Users who decline any supportive personal contact
- Users who accept supportive contact through Mindfulness Moments™ clinical text messages
- Users who accept support from a clinician coach
- Users who accept both Mindfulness Moments™ clinical text messages and clinical coaching support

#### Study Findings

Platform users receiving personal support through a clinician coach experienced more improvement per session than those that did not connect with a coach. The combination of personal coaching and clinical texts appears to have an additive effect to the coaching results alone.

**Noteworthy Finding:** People receiving minimal support through Clinical text messages improved to the highly effective range. This poses the question of how much personal supportive contact is needed to achieve highly effective outcomes. Text messages are significantly less costly than coaching, and so the answer has important implications for providing the most cost-effective services.

Summary:

- » Users receiving clinician coaching while enrolled in online CBT improved more than those who did not.
- » Combining coaching and Mindfulness Moments™ clinical text messages is more effective than coaching alone.



## Published Study #7

### Topic: The Effect of Social Support on Mental Health Outcomes

#### Improving Results for Digital Therapeutics with Social Support

Brown, J., & Jones, E. (2022, July). Society for the Advancement of Psychotherapy. [Web article]. Retrieved from <http://www.societyforpsychotherapy.org/improving-results-for-digital-therapeutics-with-social-support>.

#### About the Study:

People were provided the option to invite up to two individuals as “Teammates™” at the time of enrollment to support them during their use of the digital CBT-based platform. There was no mechanism for knowing how much support any teammate provided. Teammates were contacted after the user enrollment process to notify them that their friend or family member will begin using one of the therapeutic programs. They were also contacted when lessons within the program were completed.



#### Study Findings

People who selected up to two friends or family members (“Teammates”) to support them during use of the CBT platform had significantly better results. There was also an additive effect of combining Teammates with clinician coaching. While coaching seems to help people complete more lessons, Teammates provides better results without impacting the number of lessons completed.

#### Summary:

- » Program participants who had the support of a friend or family member (“Teammate”) had better clinical outcomes.
- » Combining Teammates with clinician coaching had an additive impact on results.



## Published Study #8

### Topic: CBT Homework Practice Adds to Clinical Improvement

#### The Impact of “Homework” Practice on Results for Digital Therapeutics

Brown, J., & Jones, E. (2022, October). Society for the Advancement of Psychotherapy. [Web article]. Retrieved from <https://societyforpsychotherapy.org/the-impact-of-homework-practice-on-results-for-digital-therapeutics/>.

#### About the Study:

The clinical outcomes of individuals who completed homework practice exercises while participating in digital CBT programs were compared with CBT participants who did not complete homework assignments. The completion of practice exercises was included in a statistical analysis that took into account support received from coaching, texting, and teammates.

#### Study Findings

Results suggest that homework practice adds to clinical improvement, over and above the improvement gained from receiving support. While the number of lessons completed in a clinical program is the strongest predictor of change, the second strongest predictor is completion of practice exercises.

#### Summary:

- » Practicing new skills with homework exercises is associated with greater improvement in digital CBT-based outcomes.
- » Completing homework was the second strongest predictor of psychometric score improvement.



## Published Study #9

### Topic: Comparing the Value of Digital Mental Health Programs with In-person Psychotherapy

#### Value as a Construct for Comparing Psychotherapy with Digital Therapeutics

Brown, J., Jones, E., & Simon, A. (2023, July). [Web article]. Retrieved from <https://societyforpsychotherapy.org/value-as-a-construct-for-comparing-psychotherapy-with-digital-therapeutics/>.

#### About the Study:

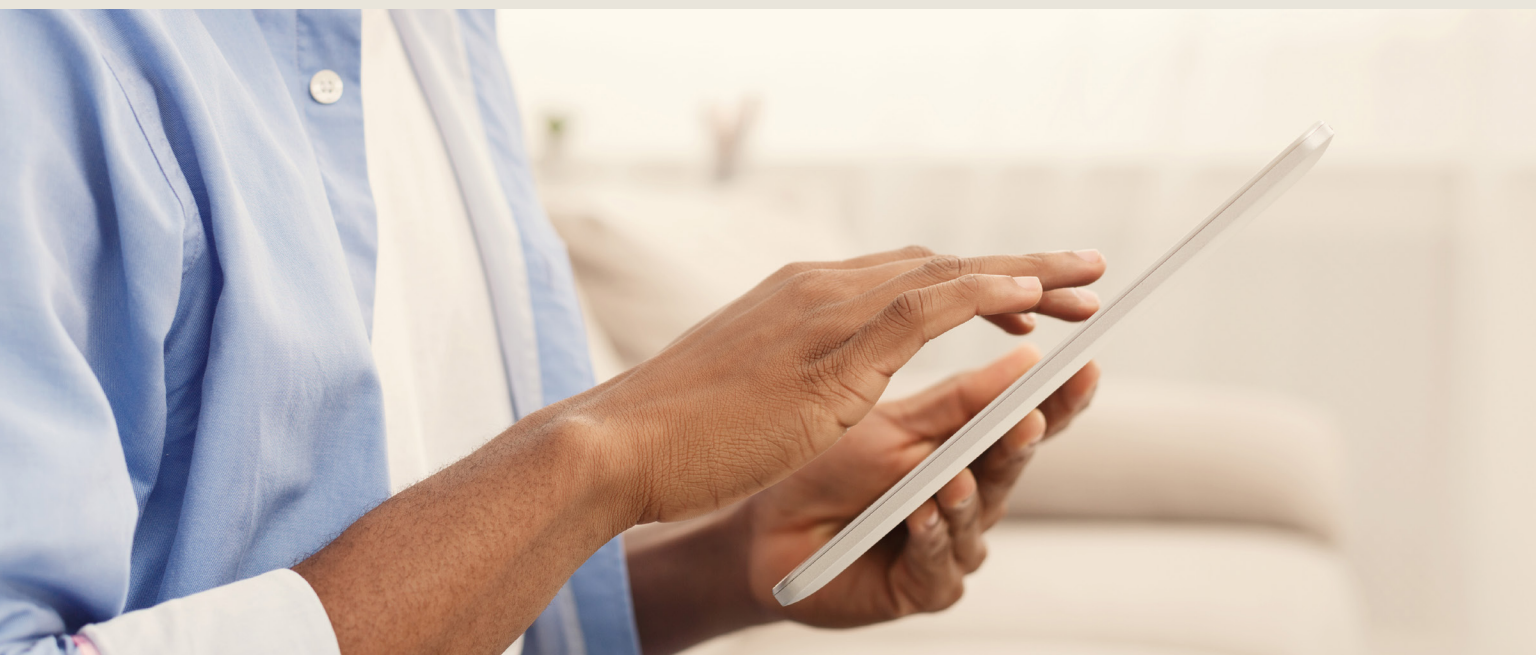
There is increasing interest in evaluating the value (clinical outcomes relative to cost) of behavioral health care services. This study aimed to define a Value Index to allow comparison of psychotherapy and digital therapy. In this study, the authors introduced a Value Index methodology to quantify and compare the clinical outcomes achieved relative to the costs of different mental health care services.

#### Study Findings

Both digital CBT and traditional psychotherapy demonstrated effectiveness, especially for those who completed the full course of treatment. Learn to Live generated six times the value of psychotherapy because clinical outcomes are comparable, but the cost of digital services is much less. This digital CBT-based program proved to be a high-value option for employers and health plans to consider.

#### Summary:

- » Both digital CBT and traditional psychotherapy are effective.
- » Digital CBT delivers 6 times the value of psychotherapy since clinical outcomes are similar, but the cost is much less.



## About Learn to Live

Learn to Live offers customized online programs based on the proven principles of cognitive behavioral therapy (CBT). The programs are confidential, accessible anywhere, and based on years of research showing online CBT programs to be as effective as face-to-face therapy.

Programs include:

- Depression
- Stress, Anxiety & Worry
- Social Anxiety
- Panic
- Insomnia
- Substance Use
- Resilience