MIGHTIER
Scientific Overview

SUMMARY

- The technology behind Mightier has been tested in four trials, including two double-blind, randomized controlled trials.
- The Mightier technology has consistently improved behavior symptoms.
- The Mightier technology consistently outperforms the current best-available therapeutic options.
- Gains in Mightier consistently transfer beyond the screen, leading to decreased parent stress and better participation in classroom activities.

THE MIGHTIER LEARNING LOOP

Our science directly validates the Mightier learning loop. Mightier builds off of the established theory that people learn best when they can construct meaning for themselves. Therefore, Mightier technology works to make emotions visible and actionable when they matter most, during moments of challenge. Children practice in a safe environment that presents the same type of challenges kids face every day, just in miniature.

1. **Make emotions visible.** The Mightier Gizmo, always on the screen, gives kids real-time feedback on their heart rate. The Blue is safe but drift out and The Red can come down and catch you.

2. **Scale difficulty with emotions.** When in The Red the difficulty of Mightier games increases, but the games never become impossible.

3. **Reward invention.** There’s no one right way to regulate. Let kids see what works for them and make it tangible in the games.

4. **Give support.** Sometimes, kids need a bit of extra help. The Mightier gizmo lets kids opt into a deep breathing exercise, showing them that they are in control.

MIGHTIER TRIALS

**Key finding:** Children using Mightier technology and therapy reduced symptoms aggression, oppositional behavior, and parent stress compared to children receiving control treatment.

<table>
<thead>
<tr>
<th>Trial</th>
<th>Participants</th>
<th>Design</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40 children, ages 10-18, Elevated anger</td>
<td>Open-label compared to treatment as usual</td>
<td>Boston Children’s Hospital</td>
</tr>
<tr>
<td>2</td>
<td>40 children, ages 10-18</td>
<td>Double-blinded randomized sham-controlled trial</td>
<td>Boston Children’s Hospital</td>
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</tbody>
</table>
### Elevated aggression and anger

<table>
<thead>
<tr>
<th>Replication</th>
<th>Description</th>
<th>Control Strategy</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>40 children, ages 10-18, elevated aggression and ADHD</td>
<td>Double-blinded randomized sham-controlled trial</td>
<td>Massachusetts General Hospital</td>
</tr>
<tr>
<td>4</td>
<td>8 children, ages 8-12 Referred by teachers</td>
<td>Open-label pre-post-comparison</td>
<td>Brookline (MA) and Montreal (QC) public schools</td>
</tr>
</tbody>
</table>

#### Graphs:

- **MOAS (Aggression)**
- **DBDRS (Disruptive behavior)**
- **PSI (Parent stress)**
- **FAD (Family atmosphere)**

#### Times out of classroom

<table>
<thead>
<tr>
<th>Frequency per week</th>
<th>Pre</th>
<th>Post</th>
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<tbody>
<tr>
<td></td>
<td>6.2</td>
<td>2.1</td>
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References


