Empowering emotional regulation: Boston Children's innovation with Mightier

ⓘ About Mightier and IDHA

Mightier is a bioresponsive video game platform that helps children learn to manage their emotions. Created as a spinout of technology developed at Boston Children's Hospital, the Innovation and Digital Health Accelerator (IDHA) worked with clinicians to validate and build out the initial iteration of Mightier.

◎ The opportunity

- Millions of children experience emotional dysregulation, particularly anger and aggression, impacting their academic, social, and behavioral development.

- Existing treatments, like cognitive behavioral therapy (CBT) and medication, face challenges such as high dropout rates and limited skill transfer to daily life.

- Based on validated scientific research out of Harvard Medical School, IDHA recognized the potential to leverage digital health solutions to provide engaging, scientifically validated tools.

💬 The challenge

- To create an innovative intervention, it is imperative to strike a balance where solutions are grounded in rigorous scientific research while remaining intuitive and appealing to children.

- Platforms capable of delivering measurable behavioral outcomes and scalable for widespread use are challenging to develop.

- Designing technology that integrates biofeedback into a seamless, child-friendly experience.

⚙ The approach

To transform emotional regulation through game-based biofeedback, IDHA and Boston Children's:

- Collaborated with Boston Children's Psychiatry Department to develop RAGE-Control, a video game that integrates heart rate monitoring to teach emotional regulation.

- Conducted a randomized controlled trial, showing significant improvements in anger management, oppositional behaviors, and overall behavioral severity compared to a sham version.

- Spunout what would become Mightier, a platform offering families an easy-to-use biofeedback gaming system based on RAGE-Control.

The success

✔ Mightier has reached over 100,000 families globally, demonstrating its broad appeal and effectiveness.

✔ Clinical studies validate the platform's ability to reduce aggression and oppositional behaviors while fostering behavioral change in real-world settings.

✔ The initiative highlights the power of digital health to scale evidence-based therapeutic practices and transform pediatric care.

" The team at IDHA helped us expand our reach beyond the clinic to 100,000s of kids. Too many kids don't have access to on-demand evidence-based care. Our collaboration has helped change that

— Jason Kahn, PhD

Co-founder, Mightier

Learn more

Boston Children's Hospital's IDHA is a global leader in advancing pediatric care through cutting-edge digital health solutions. By collaborating with clinicians, researchers, and external partners, IDHA focuses on translating groundbreaking research into scalable, impactful technologies that improve the lives of children and their families. Learn more about IDHA's work.