

## **Study: First Effective Remote Treatment for Military with mild Traumatic Brain Injury**

SAN FRANCISCO, CA, July 27, 2021 (PR NEWSWIRE) -- With the US military winding down engagement in Afghanistan, there are still thousands of troops (and their families) for whom the battle will not end. They live with the signature injury of recent wars – persistent, life-altering effects of brain injuries. Finally, there’s some good news on that front. A new study found computerized brain exercises – the [BrainHQ app](#) from [Posit Science](#) – drove significant improvement in overall cognition and can be administered remotely in patient’s homes.

The BRAVE study was funded by the US Department of Defense, and its peer-reviewed results were just released in [Brain: A Journal of Neurology](#).

More than 413,000 US servicemembers have been diagnosed with a Traumatic Brain Injury (TBI). More than 82% are classified as “mild” TBI (mTBI) — typically arising from concussion or blast injuries. Most people experience a full recovery from mTBI – but for those who do not (some estimate up to 15 percent), cognitive consequences can persist for years, with life-altering results.

Current best practices for treatment focus on in-person, cognitive rehabilitation, which can be helpful, but is costly, time-consuming, requires travel for treatment, and relies on the craft and expertise of the healthcare provider.

BRAVE enrolled 83 participants with a history of persistent cognitive impairment for many years after mTBI diagnosis. On average, they had cognitive issues that had persisted for more than seven years.

Participants were randomized into a treatment group (BrainHQ) and an active control group (computer games). Each group trained for one hour per day, five days per week, for a twelve-week period, conducted at home via the internet, with weekly telephone calls from coaches. Cognitive assessments were performed before training, after training, and after a twelve-week (no-training) follow-up.

The study was conducted at five military and Veterans’ medical centers: NICOE/Walter Reed National Military Medical Center in Bethesda; Schofield Barracks/Tripler Army Medical Center in Honolulu; Baylor/Michael E. DeBakey VA Medical Center in Houston; Yale/VA Connecticut Healthcare System in West Haven; and Harvard/VA Boston Healthcare System in Boston.

The BrainHQ group showed statistically and clinically significant improvement on overall cognitive function (compared to the computer games group), and this benefit persisted for at least twelve weeks after training ended. Cognitive function improvements were nearly four times larger in the BrainHQ group than the control (immediately following training) and grew to nearly five times larger (when measured again 12 weeks after training ended).

On average, participants in the BrainHQ group improved on the cognitive performance composite measure by 24 percentile ranks – as though they went from the 50<sup>th</sup> percentile to the 74<sup>th</sup> percentile.

While results on the primary cognitive measure were significant, other functional and self-report measures did not show significant between group differences.

“This study provides strong evidence for deployment on a massive scale to meet our nation’s obligation to our wounded,” said [Dr. Henry Mahncke](#), CEO of Posit Science.”

Contact: [media@brainhq.com](mailto:media@brainhq.com)