

The Study of Cognitive Rehabilitation Effectiveness

The SCORE clinical trial is a randomized controlled treatment trial evaluating the effectiveness of cognitive rehabilitation in post-deployment military service members who sustained a concussion.

*Chapter 5:
Integrated
Behavioral Health
and Cognitive
Rehabilitation
Interventions for
Persistent
Symptoms
Following Mild
Traumatic Brain
Injury
(SCORE Arm 4)*

*Part VII:
Mindfulness*

Acknowledgements

The SCORE study team would like to express our sincere gratitude to the men and women in uniform who participated in this study. We are humbled by the trust you placed in us to provide the best care possible and to learn more about how to help those with traumatic brain injuries (TBIs) who follow you.

We would like to acknowledge the special contributions and leadership skills of Janel Shelton, the SCORE study coordinator, and the dedication and professionalism of her staff, Sylvia Davis and Gina Garcia. Their efforts were essential to the success of the study.

Finally, we would like to thank the Defense & Veterans Brain Injury Center (DVBIC) who, under the leadership of Col. Jamie Grimes in 2010, identified and entrusted us to execute this congressionally mandated study, and provided us with additional staffing and research facilitation.

Congress established DVBIC in 1992 after the first Gulf War in response to the need to treat service members with TBI. DVBIC's staff serves as the Defense Department's primary TBI subject matter experts. DVBIC is part of the U.S. Military Health System and is the TBI operational component of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE). Learn more about DVBIC at dvbic.dcoe.mil.

SCORE Grant Acknowledgements

(Heather Belanger, Tracy Kretzmer, and Rodney Vanderploeg) This material is based upon work supported by the Department of Veterans Affairs, Veterans Health Administration, Office of Research and Development, Health Services Research and Development Service (VA HSR&D IIR 13-196-1), and Clinical Sciences Research and Development (VA CSRD W81XWH-13-2-0095).

This work was supported by a Department of Veterans Affairs Rehabilitation Research and Development Career Development Award to Dr. Jacob Kean (CDA IK2RX000879).

(David Tate, Jan Kennedy, Douglas Cooper) This work is supported in part by the Defense and Veterans Brain Injury Centers and the Telemedicine and Advanced Technology Research Center.

SCORE Disclaimer

The view(s) expressed herein are those of the author(s) and do not reflect the official policy or position of Brooke Army Medical Center, the U.S. Army Medical Department, the U.S. Army Office of the Surgeon General, the Department of the Army, the Department of Defense, the Department of Veterans Affairs, or the U.S. Government.

Chapter 5: Integrated Behavioral Health and Cognitive Rehabilitation Interventions (SCORE Arm 4)

Part VII: Mindfulness

What is Mindfulness?

With origins in the Eastern practice of meditation, mindfulness has been described as a set of skills that focus primarily on self-regulation of attention, that is, “paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally.”¹

More recently, mindfulness has been introduced into Western psychological practice with the intent of reducing psychological distress by promoting engagement with the present (as an alternative to nonconstructive rumination about the past or future). When integrated with traditional cognitive-behavioral therapy, this improved attentional awareness also can be used to help clients learn to more effectively manage distracting thoughts, thereby potentially improving cognitive performance.

A Different Approach

Traditional Western culture has conditioned many of us from a very young age to expect that we can exercise control over much of the world around us through effective problem-solving. In the external (material) world, these control-oriented strategies generally work well. For many of our material problems, we can often figure out ways either to solve or avoid them.

Unfortunately, we cannot simply solve or avoid most thoughts, memories, feelings, urges and sensations that we do not like. Applying this expectation of control to our internal (psychological) world is often not only ineffective, but also frustrating and distracting from important life tasks.

Mindfulness is an alternative approach that involves learning to recognize, accept and let go of unhelpful and distracting thoughts and emotions so they no longer dominate our attention. This, in turn, allows us to more fully engage in the present moment to accomplish more important life tasks. Researchers have found ways to gauge mindfulness, and have found approaches for incorporating mindfulness as a practice, an outcome and a long-lasting trait.²

SCORE Mindfulness skills

Special SCORE mindfulness skills include the following:

- **Defusion.** Accepting unhelpful thoughts and emotions while utilizing specific techniques to redirect attention toward more important life activities.
- **Cognitive distortions.** Recognizing common thinking errors that tend to perpetuate unhelpful thinking. Incorporated from more traditional cognitive-behavioral therapy approaches.
- **Schema.** Identifying core beliefs about ourselves, others and the world that tend to perpetuate unhelpful thinking. Incorporated from more traditional cognitive-behavioral therapy approaches.
- **Attention training exercises.** Using guided audio exercises that help with the practice of improving self-regulation of attention. Please note, these exercises are not intended as relaxation exercises.

The MP3 audio files are Mindfulness of the Breath, Mindfulness of the Body, and The Observing Self. The therapist will provide instruction on using them.

References

1. Kabat-Zinn, Jon. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion Books.
2. Black, D.S. (2011). A brief definition of mindfulness. *Mindfulness Research Guide*. Accessed from <http://www.mindfulexperience.org>