

“An introduction to neurofeedback, for therapists” by Silvia Costales, MFT, BCN

RECAMFT Presentation, September 1, 2017

Further reading:

Cohn, Ruth. "Old Dog, New Tricks: Enter Neurofeedback." *Coming Home to Passion | Articles*. January 1, 2010.

http://www.cominghometopassion.com/articles_18.html

Interesting, brief online article by an Oakland, CA psychotherapist on how she came to integrate neurofeedback into her practice.

Doidge, Norman. *The Brain that changes itself: stories of personal triumph from the frontiers of brain science*. Viking Press, 2007. Illustrates novel approaches to neuroplastic change in a wide variety of issues.

Fisher, Sebern F. *Neurofeedback in the Treatment of Developmental Trauma: Calming the Fear-driven Brain*. New York: W.W Norton & Company, 2014. A deeply thoughtful, sage, and pioneering therapist gives a comprehensive account of the integration of psychotherapy and neurofeedback.

Robbins, Jim. *A Symphony in the Brain: The Evolution of the New Brain Wave Biofeedback*. Grove Press, 2008. General overview of the history and application of neurofeedback.

Simkin, D. and Lubar, J. "Neurofeedback: significance for psychiatry." *Psychiatric Times*. November 2016.

<http://www.psychiatrictimes.com/neurofeedback-significance-psychiatry>

Psychiatrists and physicians can earn CME credit for reading this continuing education article online.

Swingle, Paul G. *Biofeedback for the Brain: How Neurotherapy Effectively Treats Depression, ADHD, Autism, and More*. New Brunswick, N.J.: Rutgers University Press, 2008. Excellent overview and fascinating read for lay people and practitioners alike.

van der Kolk, Bessel. *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. S.I.: Penguin Books, 2015. A wonderful book that also contains a chapter on neurofeedback for treatment of trauma.

Research:

Type "neurofeedback" or "EEG biofeedback" plus whatever the issue (eg. depression) into the National Library of Medicine database online.

<https://www.ncbi.nlm.nih.gov/pubmed>

A slightly dated bibliography plus other resources are available here:
<https://www.isnr.org/resources>

[*book] Tan, G, Shaffer, F, Lyle, R., and Teo, I., Eds. *Evidence Based Practice in Biofeedback and Neurofeedback*. Association for Applied Psychophysiology and Biofeedback, 3rd edition (2016). aapb.org.

Pigott, H. E. "The Crisis in Psychopharmacology Provides an Opportunity for NeuroRegulation Treatments to Gain Widespread Acceptance" *Neuroregulation*, Vol. 4, No. 1 (2017).

<https://www.researchgate.net/publication/315301664>

Pigott, H.E.; De Biase, L.; Bodenhamer-Davis, E.; & Davis, R.E.. "The Evidence-Base for Neurofeedback as a Reimbursable Healthcare Service to Treat Attention Deficit/Hyperactivity Disorder." *International Society for Neurofeedback Research*. 2013 <<http://www.isnr.org/uploads/nfb-adhd.pdf>> White Paper commissioned by ISNR which details the research on neurofeedback for ADHD.

Ros T, Baars BJ, Lanius RA and Vuilleumier P (2014) "Tuning pathological brain oscillations with neurofeedback: a systems neuroscience framework." *Front. Hum. Neurosci.* 8:1008. <<https://doi.org/10.3389/fnhum.2014.01008>>

Shouse, M. N., and J. F. Lubar. "Operant conditioning of EEG rhythms and ritalin in the treatment of hyperkinesis.." *National Center for Biotechnology Information. National Institutes of Health*, n.d. Web. 06 Apr. 2015. <<http://www.ncbi.nlm.nih.gov/pubmed/526475>>. Lubar uses neurofeedback to decrease hyperactivity, then increase it, then decrease it once again. Lays to rest the question of placebo.

van der Kolk, B. A., Hodgdon, H., Gapen, M., Musicaro, R., Suvak, M. K., Hamlin, E., & Spinazzola, J. (2016) A Randomized Controlled Study of Neurofeedback for Chronic PTSD. *PLoS ONE* 11(12): e0166752. <https://www.ncbi.nlm.nih.gov/pubmed/27992435>

Videos:

This TED talk video provides a wonderful introductory overview of neurofeedback in plain English: <https://youtu.be/4zyt0LCwbYI>

CNN ran this short clip on neurofeedback for anxiety and ADHD in October 2015: <https://youtu.be/Zt6lclnkxg>

"Tuning Pathological Oscillations with EEG Neurofeedback and Self-Organized Criticality": <https://youtu.be/ZDzGH1qX0n0>
Published Dec, 2015. This lecture by neuroscientist Tomas Ros describes a theoretical framework for neurofeedback, and its potential mechanism as a therapy for ADHD, PTSD, depression, and other brain disorders.

Finding Clinicians:

The Biofeedback Certification International Alliance or BCIA is the only institute recognized worldwide that grants certification to biofeedback and neurofeedback practitioners. Look under "find a practitioner" at bcia.org.

The International Society for Neurofeedback and Research also maintains a directory of its members at isnr.org.

You can also find many of these links plus further resources at my website resource page: silviacostalesmft.com/resources.