Automated Neurofeedback Brain-training as a Primary Addictions Intervention

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Abstract

Neurofeedback brain-training has a significant presence in the literature for its efficacy in alleviating the symptoms and behavioral manifestations that significantly challenge recovery from addictive disorders, with no enduring negative side-effects. It is considered a behavioral intervention in that it teaches the brain to better manage its own brain-wave activity, leading to reduction of 80-85% of symptoms in the first 30-40 training sessions. Brain-training has shown efficacy in alleviating symptoms of ADHD, depression, PTSD, insomnia and many other neurological conditions that co-occur with addicted populations. Barriers to broad-based implementation clinical and subclinical settings include cost of equipment, lengthy, in-depth training requirements, and a lack of clear guidance in developing and implementing brain-training protocols specific to each individual's brain-phenotype. Automated Psychophysiological assessment and EEG Biofeedback training systems demonstrate equal efficacy as clinician-guided EEG Systems. We propose that Automated EEG Biofeedback systems have evolved to differentiate and train a multiplicity of brain-phenotypes related to symptoms of addictive disorders as well as many other co-occurring psychophysiological symptoms. These systems decrease the cost of brain-training significantly, reduce the training and experience requirements for brain-trainers, and will increase recovery potential in nearly all addiction treatment models. The aim of this report is to illuminate the broad understandings of automated neurofeedback brain-training as an essential primary intervention in addictions treatment.

Keywords—Brain-training, *EEG Biofeedback, neurofeedback, phenotype*

Professional Biography

Dr. Don began his career in mental health as a US Navy Substance Abuse Program manager. With over two decades in the field as a private practitioner, university professor, and innovater, he brings his understanding of psycho-physiology to bear on treatment modalities that directly address the underlying brain-rhythms that drive nearly all mental health disorders. Dr. Don is a full-time professor at National University, teaching addictions, psychology, and human behavior courses. He has recently published several articles articulating the broader application of Automated Neurofeedback Brain-Training as a primary mental health intervention. He has "brain-trained" hundreds of individuals under psychiatric/psychological care with outstanding results.

Recent Publications (up to 5)

- Posson, D. (2019, January). *Automated Neurofeedback as a Primary ADHD Intervention*. International Journal of Education and Social Science. 6(1), 1-6. http://dx.doi.org/10.13140?RG.2.2.14305.97124

- Posson, D. (2019, February). *Automated Neurofeedback as a Primary PTSD Intervention*. International Journal of Education and Social Science. 6(2), 1-6.

- Posson, D. (2019, February). *Automated Neurofeedback as a Primary Addictions Intervention*. International Journal of Education and Social Science. 6(2), 21-27

- Posson, D. (2019, April), *Automated Neurofeedback as a Primary Addictions Intervention*. Paper presented at the meeting of the Innovations in Recovery conference, San Diego, CA

- Posson, D. *Automated Neurofeedback as a Primary ADHD Intervention* [abstract]. In: Proceedings of the Spring 2019 Meeting of the International Organization of Social Science and Behavioral Research; 2019, Mar 26-27. New Orleans, LA: IOSBR; Spring 2019. Abstract nr 41.



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