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### **Electrophysiological & Behavioral Outcomes of Berard AIT**

Link to abstract and ordering info: <http://link.springer.com/article/10.1007/s10484-016-9343-z>

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An important new study on the efficacy of Berard AIT was recently published by Estate Sokhadze, Manuel Casanova, Allan Tasman, and Sally Brockett in *Applied Psychophysiology and Biofeedback* (online, 29 August 2016). Drs. Casanova and Sokhadze run one of the top psychophysiological autism research laboratories in the world, and Dr. Casanova is a well-published and highly regarded neurologist.

These researchers measured participants' evoked potentials prior to, during, and after receiving Berard AIT. Evoked potentials are brain waves that occur soon after the presentation of a stimulus. In this study, the stimulus was auditory-based.

The results revealed improvements in both early and late processing of auditory information. In addition, the researchers detected a decrease in hyperactivity, irritability, and repetitive behaviors. These results replicate the findings published by ARI in the 1990s regarding the effects of AIT on auditory processing (i.e., the P3) and behavior. Drs. Sokhadze and Casanova plan to conduct a more elaborate follow-up study.

Dr. Casanova explained that with the help of the computer and electrophysiological recordings that measure response of the brain to various stimuli at very fast recording speed, they were able to assess that autistic individuals live in a world of confusion, at least from the auditory perspective. They also showed that Berard AIT helped ease the confusion and normalize how it perceives unexpected stimuli.

In terms of real life, Dr. Casanova said that "the initial results may help explain why many autistic individuals have an insistence on sameness; otherwise, changes in their daily routine may provide unwelcome confusion. At least from the auditory perspective, we showed that Berard AIT helped clear that mounting wave of confusion brought about by an unknown stimuli."

An alternative explanation from an occupational therapist's perspective emphasizes that it is key to be able to orient to something novel and adapt your response accordingly. Filtering out what is important, and what is not important, is the foundation for focusing one's attention. If you cannot orient to the novel, you will miss important information.

Future research is needed to continue the study of these types of changes after Berard AIT is provided.