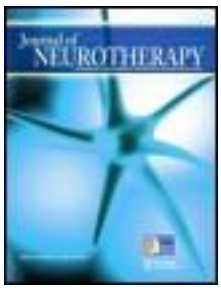

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The Transformational Power of the Peniston Protocol: A Therapist's Experiences

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COMMENTARY

The Transformational Power of the Peniston Protocol: A Therapist's Experiences

Nancy E. White, PhD

ABSTRACT. The remarkable outcomes of two studies published by Eugene Peniston (with Paul Kulkosky; 1989, 1991) using his alpha-theta protocol on chronic alcoholics and Vietnam veterans exhibiting posttraumatic stress disorder, respectively, opened up the possibility of resolving deep unconscious trauma in a relatively short period. A white paper recently published in 2008 in the *Journal of Neurotherapy* (see Sokhadze, Cannon, & Trudeau) assesses with considerable thoroughness the efficacy of the Peniston Protocol and the Scott-Kaiser Modification in substance use disorder based on research standards adopted by the Biofeedback Certification Institute of America and the International Society for Neuronal Regulation. Strict adherence to these standards seems to limit the authors to citing empirical research findings, virtually ignoring the understanding of addiction as a neurobehavioral condition and the Peniston protocol's value as a medium *through* which neurobehavioral healing can occur. The effectiveness of alpha-theta, as an essentially nonlinear process, is not well measured by empirical scientific methods.

KEYWORDS. Effectiveness, peniston protocol, scott-Kaiser modification, substance use disorder

In March 1989, when Eugene Peniston (with Paul Kulkosky) published his research popularly labeled "Alpha-Theta Training," a transformational therapy was born. The possibility of resolving deep unconscious trauma in a relatively short period appeared on the therapeutic scene. Peniston, a psychologist who trained with the fine psychophysiological team at The Menninger Clinic in Topeka, Kansas, created a protocol he thought might help his very addicted population at the Ft. Lyon VA Hospital where he worked in Colorado.

After his Menninger training Peniston returned to the VA hospital where he began

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training a group of alcoholics after hours with his newly created protocol. He discovered that not only were the men losing their craving but their personalities were becoming more harmonious and peaceful and depression was diminishing (Peniston, personal communication, 1990). With the results he was seeing, he set up a research study in this inpatient VA setting. His study showed an astonishing 85% success rate for the elimination of alcoholic behavior of the men in the experimental group. Not fully trusting this level of success, 36 months after the study, Menninger did its own private follow-up study (Walters, personal communication, 1992). They talked both to the men and to their wives and family members, discovering that the results had maintained: The men were still free of alcohol and, more important perhaps, their lives were more functional.

Peniston had thought to administer a self-report measure of depression and pre- and post-personality testing to his population. Each participant was asked to respond to the Beck Depression Inventory, the Millon Clinical Multiaxial Inventory, and the Sixteen Personality Factor. The results of the Millon Clinical Multiaxial Inventory and Sixteen Personality Factor seemed to validate the results of the reduction of depression as shown on the Beck Depression Inventory (later published in *Medical Psychotherapy*; Peniston & Kulkosky, 1990).

Intrigued by the preponderance of personality shifts, Peniston mounted a study of Vietnam veterans with posttraumatic stress disorder, again using the Alpha-Theta Neurofeedback protocol. His results were no less remarkable than his work with the alcoholics. Although all 14 patients in the control group had relapsed by 30 months after treatment, only 3 of 15 experimental group patients had relapsed by then. Peniston, using the Minnesota Multiphasic Personality Inventory (MMPI) for his pre–post assessment, produced significant MMPI-indexed personality changes in these veterans along with the resolution of their symptoms and reduction to elimination of their medications.

Over the approximately 18 years since I was fortunate enough to have been trained by Eugene Peniston, my institute in Houston has been using this protocol for multiple diagnoses and even optimal performance (White, 1995). Initially we replicated the original protocol exactly as taught by Peniston. The Quantitative EEG was not available to us at that time, so we were not at that time examining the overall brainwave patterns of the patient. We began with hand warming as Peniston had done in his original research. A temperature sensor was attached to the tip of the index finger of the patient's dominant hand with micropore tape. During the next four to five daily sessions the patient, using autogenic training and rhythmic breathing techniques, was taught to raise the temperature of the hand to 94° and hold it at that point during the session. This hand-warming technique had value in helping the patient learn to relax, to recognize that he or she had some physiological control, and to be comfortable in the session with his or her eyes closed using a nonthreatening exercise.

We found hand warming to be valuable, but once we obtained a Lexicor Neurosearch 24 Quantitative EEG and began mapping all of our patients, we were more able to correlate symptoms and history with the brainwave patterns we were seeing. From this more precise information it seemed clear to us that at least some of the few treatment failures we experienced might be due to mild traumatic brain injuries from the past. In addition, some patients whose symptoms of attention deficit hyperactivity disorder were relatively severe had considerable frontal lobe slowing. We then decided that training the motor strip first could be stabilizing and could help us get better results. Even though we thought that the hand warming had value, it seemed more important to address some of the underlying neurological patterns we believed could be contributing to the problem. Many people had limited resources of both time and money, and we wanted our treatment to be as efficient as we could offer. Originally this eyes open training was only 5 to 10 sessions before we moved to the Alpha-Theta protocol.

As our field became more sophisticated, we gained reference databases we could use to compare our acquired patient EEG data

to an age-related normative population, better ascertaining patterns of dysfunction. Thus, when we thought it beneficial to the patient outcome, we began training toward resolution of dysfunctional brain wave patterns (QEEG results) before starting the Alpha-Theta protocol. This approach has given us remarkable results.

As I read the white paper (Sokhadze, Cannon, & Trudeau, 2008) published in Volume 12, Number 1, of this journal, I must first comment on the extraordinary thoroughness of review and exploration that is shown in most aspects of substance abuse disorder. At the same time I am concerned by the lack of attention given to the psychological aspects of EEG biofeedback treatment of addiction (the Peniston protocol of Alpha-Theta training). I believe it demonstrable that the foundation of neurofeedback's use with substance abuse disorder was built on the shoulders of Eugene Peniston. Consequently, if I consider that the majority (if not all) of the successful treatment of addiction with neurotherapy has been based on some aspect of the Peniston protocol (White, 1996), I would have to comment that the structure of this efficacy paper limits the authors to citing empirical research reports and precludes examination of the psychological healings and personality shifts that take place with this protocol. The value of the Peniston protocol, as I have experienced it, has been in facilitating these healings and shifts. This core competency of the protocol is only alluded to in the report of the changes and normalizations of the testing (MMPI and Millon).

The unspoken assumption behind this article seems to be that because each drug of abuse has a different EEG effect that the correction of abuse is associated with an alteration of that specific EEG pattern. This has not been shown, either in the research or in clinical practice, to be the case: Addiction is addiction, and the drug of choice, as well as its EEG pattern, is secondary to the pattern of craving. The EEG pattern may or may not be associated with the underlying conditions being medicated by the drugs, but this underlying condition is the primary target of the Peniston treatment.

The National Institutes of Health, in its survey of addiction treatment programs and associated literature, concluded that successful treatment must address both craving and the underlying pathological disorders that drive one to medicate. Both must be addressed to achieve a lasting outcome; the EEG patterns in and of themselves are secondary (Continuum, 1993).

In my experience the power of the Peniston protocol is based on what is carried within it: a combination of the procedure, the therapist's empathic involvement, the intention toward a positive and healthy outcome, and an ambiance of safety and support (White, 1994, 1999). Consequently, the hand warming can be there or not, the Sensorimotor Rhythm training there or not, and so on. I see these as adjuncts that can affect the outcome in certain individual situations. From this same point of view, I do not see that filtering methods or equipment is that critical to outcomes. My institute has used several different computer programs with several different manufacturers' EEGs to offer this protocol over our 18 years of experience, and I do not see that the outcomes have been significantly affected by these differences.

I think that the use of the QEEG to ascertain the possibility of such prior conditions as attention deficit hyperactivity disorder or traumatic brain injury can strongly affect the outcomes of the therapy. In the past, before many were using the QEEG with reference databases, I think unrecognized comorbidities may have been a cause of quite a few treatment failures. The remediation of these problems does not preclude going on to the Peniston protocol as a completion of the treatment.

The paper tends to confuse the reader, if not the researchers, by failing to differentiate standards of research quality from the efficacy of the protocol being researched, which is quite a different thing. As I understand the meaning of the authors, the past research of the Peniston protocol does not meet particular standards of good research and the publication results have been found only in the *Journal of Neurotherapy*. It would seem to me that the venue of the publication

neither enhances nor diminishes the outcomes of the research.

The paper has failed to address the core element of the effectiveness of the Peniston protocol, which is the alteration of unconscious process (both the clearing of early trauma effects and dropping in a new program of behavior) leading to profound changes in attitude and behavior (White, 1999). These outcomes frequently reduce to eliminate the patient's need to medicate by means of a substance.

With respect to the Scott-Kaiser modification, its value is, in my opinion, to get the brain's EEG patterns and nervous system better prepared to receive benefit from the deep state therapy, similar in purpose to procedures other clinicians have developed as well. None of this is adequately addressed in the paper. It seems to be glossed over in favor of the mechanics (EEG frequencies and locations). This is a very thorough paper of the research and the mechanics of the different drugs and the EEG effects but does not address the necessary access to the unconscious that actually provides the healing of the addiction. Changing the frequencies of the EEG does not necessarily normalize a pathological psychological measure on a test such as the MMPI or Millon.

The Peniston protocol is not the healing element in and of itself. As previously noted, it is the medium by which the healing element—relevant visualization of desired outcome delivered by an empathetic therapist and with the nervous system in a receptive state—can create a positive outcome. The Peniston protocol encourages the receptive state within which the healing element is delivered. It is heuristic (nonmeasurable), nonlinear, and difficult to control. For example, at one point Ken Graap tried to control the elements and nullified the outcome.

Although I admire the work done on this white paper, it must go further to address the full picture of neurofeedback as a treatment for substance abuse disorders. Empirical science as we know it seeks to understand reality from the point of view of the five senses, however, Peniston's Alpha-Theta protocol is a therapy that, although it contains elements of the five senses, by its very nature takes one beyond the five senses to personal healings and to abilities that may lie latent within us all. The Peniston protocol seems to represent a technology designed for the induction of higher states of consciousness and insight, helping to alter ones relationship to self and the world as the result of what is seen and understood in the higher states.

Toward the end of his life, Abraham Maslow, a major pioneer in humanistic psychology, called attention to possibilities beyond self-actualization in which the individual transcended the customary limits of identity and experience. In 1968 he concluded, "I consider Humanistic, Third Force Psychology, to be transitional, a preparation for a still 'higher' Fourth psychology, transpersonal, transhuman, centered in the cosmos, rather than in human needs and interest, going beyond humanness, identity, self-actualization, and the like" (Maslow, 1968; Walsh & Vaughan, 1980). This protocol, originally structured by Eugene Peniston, seems to follow Maslow's prediction. It is a transpersonal therapy that has been shown to be effective both for addictions and its many comorbidities (White, 1995).

In summary, addiction is primarily a neurobehavioral condition—an underlying compulsion to medicate by one means or another leading to neurochemical imbalances evidenced by cycles of craving behavior—with varying brain wave effects secondary (White, 1996). The Peniston protocol, with its varying specifics, is showing itself to be the first, and so far the best, way to approach the healing of this condition. It is transpersonal and nonlinear in its operation and is not well measured in a linear way. That is, scalp placements, equipment differences, and measuring modification of specific brain wave patterns per se are unlikely to be the best method of testing the protocol's effectiveness, although their study can be helpful. Perhaps the application of developmental systems theory better explains what may be going on inside the head. Systems theory, as applied to the brain, recognizes that the brain is in a constant state of change, even as it is stabilized at any one moment, and that it can be directed in that

process of change by appropriate interventions (Buonomano & Merzenich, 1998a, 1998b; Cozolino, 2002). Peniston's protocol, in my view, was prescient in that it made use of this process long before research defined it. As a result, we have to find a more relevant way of measuring its effectiveness than that offered by the current linear methods of medical science.

REFERENCES

Buonomano, D. V., & Merzenich, M. M. (1998a). Cortical plasticity from synapses to maps. *Annual Review of Neuroscience*, *21*, 149–186.

Buonomano, D. V., & Merzenich, M. M. (1998b). A neural network model of temporal codegeneration and position-invariant pattern recognition. *Neural Computation*, *11*, 103–116.

Continuum. (1993, October–November). Dual disorders: High recidivism presents challenge to professionals. *Hazelton Educational Materials*.

Cozolino, L. (2002). *The neuroscience of psychotherapy* (p. 100). New York: Norton.

Maslow, A. (1968). *Toward a psychology of being* (2nd ed.). New York: Van Nostrand Reinhold.

Peniston, E. G., & Kulkosky, P. J. (1989). Alpha-theta brain wave training and beta-endorphin levels in alcoholics. *Alcoholism, Clinical and Experimental Research*, *13*, 271–279.

Peniston, E. G., & Kulkosky, P. J. (1990). Alcoholic personality and alpha-theta brain wave training. *Medical Psychotherapy*, *3*, 37–55.

Peniston, E. G., & Kulkosky, P. J. (1991). Alpha-theta brain wave neuro-feedback for Vietnam veterans with combat-related post-traumatic stress disorder. *Medical Psychotherapy*, *4*, 47–60.

Sokhadze, E. M., Cannon R. L., & Trudeau, D. L. (2008). EEG biofeedback as a treatment for substance use disorders: Review, rating of efficacy, and recommendations for further research. *Journal of Neurotherapy*, *12*, 5–43.

Walsh, R., & Vaughan, F. (1993). Introduction. In R. Walsh & F. Vaughan (Eds.), *Paths beyond ego* (pp. 1–10). Los Angeles: J. P. Tarcher.

White, N. (1994) *Alpha-theta brain wave biofeedback: The multiple explanations for its clinical effectiveness*. Presented at the annual meeting of the Association for Applied Psychophysiology and Biofeedback, March, Atlanta, GA.

White, N. (1995). Alpha-theta training for chronic trauma disorder. *Journal of Mind Technol. Optimal Performance. Megabrain Report*, *11*(4), 44–50.

White, N. (1996). Alpha–theta feedback in the treatment of alcoholism. *Presented at the annual meeting of the Association for Applied Psychophysiology and Biofeedback*, Albuquerque, NM.

White, N. (1999). Theories of the effectiveness of Alpha-Theta training for multiple disorders. In J. Evans & A. Abarbanel (Eds.), *Introduction to quantitative EEG and neurofeedback* (pp. 341–367). New York: Academic.