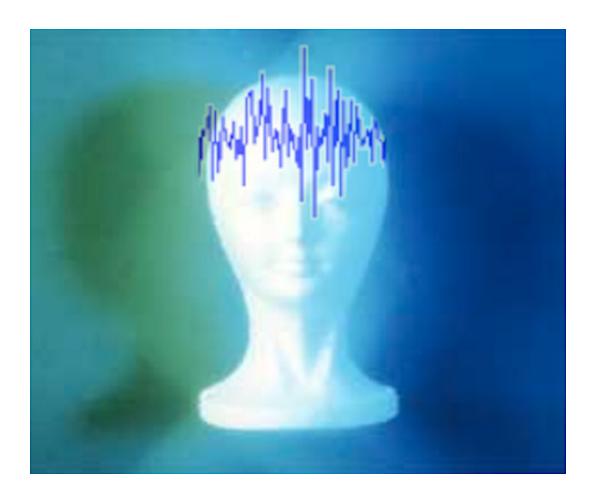
Change Your Mind ...while you sleep



HOW AND WHY IT WORKS: THE RESEARCH

BY Teri Mahaney, Ph.D.

CREATOR OF THE INTERNATIONALLY RECOGNIZED

SUPERSLEEP® PROGRAM

ISBN: 978-1-893158-63-4

Previously published in Change Your Mind 1989, Change Your Mind, revised edition, 1991,

and SuperSleep®, 2002

Published by Change Your Mind PO Box 422 Carlsbad, CA 92018

www.changeyourmind.com change@changeyourmind.com

Printed in the United States

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law.

For permission requests, email with the subject: Attention Permissions Coordinator

Dr. Mahaney's work is internationally recognized and featured in books like Supermemory and Superlearning 2000.

She is a hybrid consultant and mentor equally at home in the worlds of business / management / leadership personal transformation and spiritual deepening.

Her clients range from NFL and NBA players to international spiritual leaders to underachieving entrepreneurs to victims of abuse and trauma.

She is available for individual sessions and long term Peak Performance programs.

Though listed in the World Who's Who of Women, honored as an International Leader in Achievement and an Outstanding Woman of the Year, Teri is most passionate about supporting others to solve their issues with her brain-based strategies.



And since discovering the Change Your Mind SuperSleep program, she has been her own best client.

www.terimahaney.com

How and Why SuperSleep Works: the Research

"There's a revolution going on... The present era in neuroscience is comparable to the time when Louis Pasteur first found that germs cause disease."

Candace Pert, Neurochemist

Brain states research confirms it: the easy and automatic way to change thoughts, moods, and behaviors is during sleep. Dr. Pert's quote is as true today as it was when she wrote it decades ago, and I was in on the beginning.

I created a revolution of my own with the *Change Your Mind SuperSleep* method, which I accidentally "discovered" when I fell asleep listening to a Suggestopedia audio tape I had made to improve my goal setting, time management, and delegation behavior - and it worked. I got immediate results listening to a tape I never "heard" - that played while I was asleep.

Amazed and intrigued, I did several years of research to figure out why and how it worked, studying the research behind the different elements of the program — Brain States, Theta, Subliminals and Supraliminals, Music and Cadencing, and the magic healing statement, "Mommy and I are One".

At the same time, I worked one-on-one with hundreds of clients, observing their changes, refining my approach, and mastering what to say during sleep to create the desired changes. Then I began creating recordings for others to use on their own.

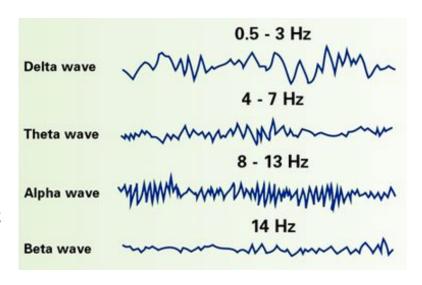
Today, there are ten separate series of MP3s: Empowerment, Money, Success, Healing and Wellness, Loving Relationships, Loving Partnerships, Spirituality, Parenting, Student Success, and Sports (Running) (www.changeyourmnd.com). In addition, there are six FREE MP3s to heal the effects of being mistreated (www.healbullying.org).

Here is a brief summary of the research - and how and why my program works.



Brainwaves are the rhythm of the brain. They are electrical signals or patterns generated by brain cells (neurons) and other brain structures. When a large number of neurons beat together in synchrony, they create a strong rhythm - pattern - signal - wave.

Electrical monitoring equipment (electroencephalograph - EEG, measures the vibrations in cycles per second (cps) called hertz (Hz) and graphically charts them - EEG brain mapping. A thin line on the graph means faster brainwaves, and a curving / spiking line on the graph means slower brainwaves.





High Beta ranges from 29 to 35 Hz: the brainwave state of anxiety and stress. This state boosts the production of adrenaline which is needed in dangerous situations that require physical action. However, it also boosts the production of cortisol, which suppresses the immune system. Experiencing long periods of High Beta leads to stress related diseases such as obesity, sleep disorders, heart disease, depression, stomach problems, and diabetes.

Beta ranges from 14 to 28 Hz: the brainwave state of normal waking consciousness -- logical thought, analysis, concentration, alertness, problem solving, and action. You are in beta most of your waking hours—when you are thinking, speaking, and doing, and when you are reading this book. In beta, you discern, compare, judge, and criticize.



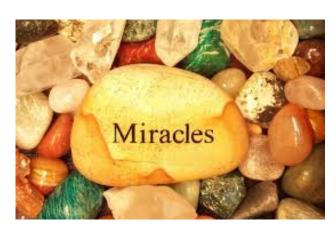


Alpha ranges from 8 to 14 Hz: the brainwave state of relaxation and rapid learning. It is your pleasant feeling states, automatic and routine activities (non-thinking activities like brushing your teeth). You are in alpha when you feel soothed and calm—relaxing, letting your mind wander, daydreaming, bathing/ showering, meditating, praying, letting go, dissolving into the environment, drifting off to sleep. You may

experience an altered sense of time, free association, and extrasensory perception.

Alpha is a state of healing and freedom from pain. It boosts the production of serotonin, the natural antidepressant, which supports well-being. Healing on all levels — mental, physical, emotional, and spiritual — occurs in alpha, theta, and delta.

Theta ranges from 4 to 8 Hz: the brainwave state of deep meditation, sleep and sleep-like states, and dreaming. You can be in theta awake - in deep reverie with quietness of body, mind, and emotions. This waking state is associated with creative people and long term meditators. This is the state of psycho-immunology - healing with the mind. Theta resets potassium and sodium ion ratios in the body, and boosts catecholamines which are vital for memory and learning.



Delta is below 4 Hz: the brainwave state of deep dreamless sleep, a deep trancelike nonphysical state. It stimulates the pituitary gland, which triggers the release of the human growth hormone, melatonin, and DHEA. It is a renewing and rebuilding state.

Brain States Training



The process of learning to identify and control your brainwave states is called brainwave training, biofeedback, neurofeedback, and neurotherapy. Using EEG instruments, you learn to identify your brain wave states and to change or produce them at will. Depending on the condition or change desired, treatments last from several to fifty sessions. Do-it-yourselfers can work with brainwave states through simple electroencephalography computer programs and light and sound machines (available through wellness catalogs and internet sites).

Biofeedback is best known for its stress reduction origins, but it is emerging as a tool to treat attention-deficit disorder, migraines, epilepsy, anxiety, learning disabilities, depression, head injuries, seizures, sleep disorders, chronic fatigue, headaches, post traumatic stress disorder, mood swings, alcohol abuse, and addiction.

For instance, many individuals with attention problems produce more slow brainwaves (theta) and fewer fast brainwaves (beta). Slower waves indicate daydreaming, reverie, and other forms of mental drifting, while faster brainwaves indicate concentration. Individuals trained to reduce their amount of slow brainwaves and produce larger amounts of beta increase their attention and concentration time.

I've enjoyed many biofeedback sessions and what I learned from them. I tried both Quantitative EEG work, which has dozens of inputs, and Qualitative EEG, with primarily alpha and theta inputs. I much prefer the Qualitative method, developed my Dr. Margaret Ayers. The program was easy to understand and use, and the practitioners involved were stellar in training and information.



"I believe REM sleep (functions) are in fact the Freudian unconscious." Jonathan Winson, MD, psychiatrist & noted brain researcher

> "I believe REM is where the action is for miracles." Teri Mahaney, PhD, creator of Change Your Mind

The theta REM sleep state is your *Change Your Mind* state. Sleep states are divided into two main types: Rapid Eye Movement (REM) dreaming sleep and non-Rapid Eye Movement (NREM) sleep. Mammals (except spiny anteaters) and birds have REM, while reptiles do not. About 25% of total sleep is spent in REM and 75% is spent in NREM. Adults experience four or five REM cycles per night, and infants are in REM about eight hours a day.

REM sleep is a puzzling state, because it appears paradoxical and self contradictory. While your heart rate and breathing are higher during REM sleep (which means light sleep), your muscles are more relaxed and it is harder to awaken from this state (which means deep sleep). Your eyes dart and flit, your pulse surges, your breathing is rapid and irregular, and you have fine finger movement. To observe this, watch a cat sleep. During REM sleep, a cat's whiskers, tail, ears, and paws twitch.

Neuroscientists are learning what areas of the brain and what combinations of brain cells are essential for specific tasks such as learning and encoding memory. Jonathon Winson, noted brain researcher, found theta rhythm hits the memory center when an animal is learning things essential to survival. For instance, cats display theta in their memory centers when stalking prey: rabbits display theta in their memory centers when they are afraid of a predator. Winson has shown that the very same "memory" brain cells that register animals' learning during wakefulness are reactivated when the animals go into REM sleep. He believes information processing occurs during REM sleep which merges the new information with the

old memories. He states REM is the neural process whereby, from early childhood on, strategies for behavior are being set down, consulted, or modified.

Other researchers, psychiatrists, and scientists agree the theta brainwave state is the key to changing your mind:

Thomas Budzynski, a biofeedback researcher, describes the theta state as "a zone ... in which one can absorb new information in an uncritical, non-analytical fashion." He speculated that this allows new information to bypass the critical filters of the left hemisphere and be "learned" by the right hemisphere. Therefore, information leading to a change in self concept, change in belief system, and change of habitual behaviors would occur more easily in theta. "In theta, behavior and belief systems change more easily, as we bypass the critical and logical beta state. We absorb new information in an uncritical, non-analytical fashion." (Budzynski)

Norman Dixon states emotionally determined memories are more affected by subliminal messages, making this brainwave state the most appropriate for changing emotional memories or emotional patterns subliminally (Dixon).

Gary Lynch states for memories to form, long-term potentiation (L.T.) must take place. The LT. process involves electrical and chemical changes in the neurons associated with memory, and the key to LT. is the theta brainwave pattern. "We have found the magic rhythm that makes LT. is the theta brain wave pattern." (Lynch)

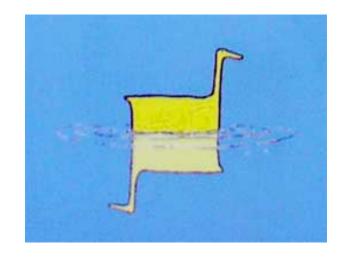
James Chalet states the theta brainwave state has specific mental processing functions, and "it seems reasonable to assume that sleep is a particularly favorable time for strengthening and consolidating memories" (Chalet).

Gene Brockopp states we may facilitate an individual's ability to allow more variations in their functioning through breaking up patterns at the neural level. This moves them away from habit patterns of behavior to develop elegant strategies of functioning (Brockopp).

By listening to your *Change Your Mind* recordings while you sleep, you mix the new learning (the statements on your recording) with your long term memories. The new messages are integrated and harmonized, and you create new ways of thinking, feeling, and acting.

Subliminals and Supraliminals

Subliminal perception -- the concept of discrimination by the brain without conscious awareness by the person -- is a scientific fact. Your brain takes in messages below your level of conscious awareness, and it responds to those messages. "Subliminal perception is not just a 'watered down' version of normal perception but different in kind" as well (*Some*). Laboratory research projects have repeatedly demonstrated



that subliminal messages affect your dreams, memory, verbal behavior, emotional responses, drive-related behavior, conscious perception, and perceptual thresholds.

But laboratory research is difficult to decipher because it is loaded with academic stiffness, technical jargon, personal bias, and controversy. Many researchers are arguing about what subliminal research is, while others are using questionable research models to prove their points (flashing obscene drawings to young women and monitoring their dreams for sexual reenactments). Reading the research often reveals more about the researcher than your mind/brain!

Among the subliminal researchers, Silverman, Dixon, and Shevrin provide useful and significant findings. Norman Dixon, noted expert in the field of preconscious processing, finds the controversy over subliminal perception within the psychological community to be based on (1) fear of the existence of an unconscious, (2) the threat to personal liberty that subliminal programming implies, and (3) confusion over the specific words used in the research.

For research purposes, the word subliminal means sub-limen, or below the limen. But the limen is a statistical concept technically defined as below the 50% point of classical psychophysics (*Zenhausern*), or that stimulus value which gives a response exactly half the time (*McConnell*). This research definition has little meaning in non-laboratory settings and does not fit research models for subliminal tapes/CDs/MP3s.

In everyday language, the words subliminal and supraliminal are commonly used for sub-threshold (below the threshold) and supra-threshold (above the threshold). Your threshold

is your point of conscious awareness. For instance, if you are listening to an audio tape with a spoken message on it, and you can consciously hear the words and understand them, you are receiving a message above your threshold. This is popularly called a supraliminal message. If you can't hear the words, you are receiving a message below your threshold, popularly called a subliminal message.

Most laboratory subliminal research is based on visual experiments which are conducted using a tachistocope, a device which flashes words or pictures onto a screen at intervals of four milliseconds or less. Very little research has been done on verbal subliminal messages (subaudible messages) in which a voice is embedded under music, ocean waves, or nature sounds so that it cannot be heard.

Some research has been done on the effectiveness of subliminal versus supraliminal messages, however, and on the effectiveness of using the two together. Shevrin presents words both above and below conscious awareness - supraliminally and subliminally - and analyzes the response of brainwaves recorded at the moment each stimulus is delivered. Both supraliminal and subliminal messages cause brainwave activity, but this does not mean behavior change will follow. One study showed perception could be altered with subliminal messages, but supraliminal messages were necessary to change physical performance such as learning a new sport. To change a sensory task required a combination of subliminal and supraliminal messages. (*Zenhausern and Hansen*)

In addition, research shows that "emotionally laden messages must be shown longer than neutral messages before a subject will respond to them". (*Garner*) In addition, each of us has a unique subconscious which gives different affective and motivational meaning to the same messages. (*Poetzl*) While this can be strikingly demonstrated in individuals, it has been difficult to repeat in experimental settings. (*Westerlundh*)

Simply stated, we are each unique with a different set of experiences, beliefs, feelings and thoughts stored in our brains. These interact with new messages and create responses unique to us, making it difficult to generalize about results from any research model that looks for sameness.

One thing is the same for all of us, however. If we want to change old patterns, we must change them in the subconscious, specifically in the theta brain wave state.

Music and Cadencing



Ancient cultures used the natural power of sound and music to influence states of consciousness for religious ceremonies and to increase psychological and physical health.

Several 17th and 18th century composers encoded certain harmonics into their pieces, which are tones that resonate high above the audible music. Current rain research shows the neurons of the brain resonate to these harmonics, leading to a state of health, healing and greater personal awareness.

Georgi Lozanov, a Bulgarian physician and psychologist, incorporated this music into his system of learning called

Suggestopedia or Suggestology in Europe and Superlearning® in the U.S. Lozanov found that people performing supernormal feats of memory had a relaxed state of body during their heightened state of mind. Their brain waves were in alpha, He experimented with classical music to induce that relaxed state (which was much easier than having his subjects practice years of mental yoga, meditation, and mind control to get the same results).

Lozanov studied the baroque composers—Vivaldi, Telemann, Corelli, Handel—and found that the slower sections (largo) of their music induces a meditative state. Each of these sections of music has 60 beats to the minute which slows the heartbeat and relaxes the body while leaving the mind alert.

Lozanov's next step was to study rhythm and learning. Material presented at one second intervals was retained at a rate of 20%. Using five second intervals, the retention rate jumped to 30%. Going to ten seconds intervals, the retention rate rose to 40%. Americans using the Lozanov system found that the eight second cadencing was most effective.

Your *Change Your Mind* recordings are based on this research. The music is created from the largo sections of baroque symphonies, and the suggestion statements are repeated three times to an eight second cadencing. This assures their effectiveness.

Mommy and I Are One

Dr. Lloyd Silverman of New York University blazed the trail for psychologically sound subliminal "therapy." Working with the idea that conflicting wishes in the subconscious often underlie mental problems, he began using subliminal messages with schizophrenics. He found he could increase or decrease their symptoms dramatically by using different subliminal messages. He eventually discovered one simple five word sentence which had universal effects when given subliminally, yet lost its effectiveness when given supraliminally. This sentence became the subject of hundreds of subliminal research projects and has proven effective with programs for weight loss, smoking cessation, alcoholism, academic achievement, etc.



The sentence—

Mommy and I are one.

Dr. Silverman believes Mommy and I are one is a symbiotic fantasy or fantasy of merging, and that merging with the "good mother of infancy" is a sort of archetypal experience that paradoxically allows us to become self-sustaining individuals.

Mommy and I are one seems to fulfill a number of psychological needs, but its strength may lie beyond psychology. Fantasies of oneness have been interpreted psychologically as an unconscious desire to return to the womb—the pre-birth state of safety and comfort—when we were one with the mother. This state of preexistence (before the pain of birth and the agony of a separate existence) is considered the unconscious source of religious myths about a lost paradise. Conditions such as alcoholism, drug addiction, violence, and suicide are viewed psychoanalytically as stemming from the unresolved desire to return to this "oneness."

Spiritually, mystics maintain that meditation creates oneness with a cosmic consciousness, and the merging or reconnecting with spirit (God) is at the heart of all major religions. Perhaps Mommy and I are one sparks this oneness as well. Clearly, including this statement in a *Change Your Mind* recording is important for complete healing.





The *Change Your Mind* program synthesizes all these proven elements -

brain states, theta, subliminals, music and cadencing, and Mommy and I are One -

to create an easy and effective strategy to transform old programming and patterns.

Who knew I would discover a revolutionary method —

by falling asleep!!!

Akpinar, S., G.A. Uleft, and M. Itil, Hypnotizability Predicted by Computer-Analyzed EEG Pattern, *Biological Psychiatry*, 3: 387-392.

Albert, I., G.A. Cicala, and J. Siegel, The Behavioral Effects of REM Sleep Deprivation in Rats, *Psychophysiology* 6, 1970: 550-560.

Anch, A.M., C.P. Browman, M.M. Mitier, and J.K. Walsh, Sleep: A Scientific Perspective, Prentice-Hall, 1988.

Atwater, F.H., The Hemi-Sync Process, The Monroe Institute, 1997: http://www.monroeinstitute.org/research.

Albrecht, Karl, Brain Power, Prentice Hall, 1980.

Amato, I., Muscle, Melodies and Brain Refrains. Science News: 202, 1989

Barabasz, A. and M. Barabasz, Attention Deficit Hyperactivity Disorder: Neurological Basis and Training Alternatives, *Journal of Neuropathy*, Summer 1995.

Bateson, Steps to an Ecology of Mind. Ballantine, 1972.

Beasley, Victor, Your Electro-Vibratory Body. Christopher Hills, ed,. University of the Tree Press, 1975.

Beningron, J.H. and H.C. Heller, Does the Function of REM Sleep Concern non-Rem Sleep or Waking? *Progress in Neurobiology* 44, 1994: 433-449.

Beningron, J.H. and H.C. Heller, Restoration of Brain Energy Metabolism as the **Function** of Sleep, *Progress in Neurobiology* 45, 1995: 347-360.

Benson, Herbert, The Relaxation Response, Morow, 1975.

Bentov, Itzhak, Stalking the Wild Pendulum, Dutton, 1977.

Blakeslee, Thomas R., The Right Brain: A New Understanding of the Unconscious Mind and Its Creative Powers, Berkley Books, 1983.

Bloch, V., E. Hennvin, and P. Leconte, Relationship Between Paradoxical Sleep and Memory Processes, In Brain Mechanisms in Memory and Learning: From the Single Neuron to Man, ed. M.A. Brazier, Raven Press, 1979.

Brown, Mark, Left Hand, Right Hand, David and Charles, 1978.

Brady, D. Brian, "Binaural-Beat Induced Theta EEG Activity and Hypnotic Susceptibility," Northern Arizona University, May 1997.

Bryant-Tuckett, R. and L.H. Silverman, Effects of Subliminal Stimulation of Symbiotic Fantasies on the Academic Performance of Emotionally Handicapped Students. *Journal of Counseling Psychology* 31(3), 1984: 295-305.

Budznski, Thomas, Tuning in on the Twilight Zone, *Psychology Today*, August 1977.

Buzan, Tony, The Evolving Brain, Holt, Reinhart, and Winston, 1978.

Cade, C.M. and N. Coxhead, The Awakened Mind, Element Books, 1979.

Carter, G., Healing Myself, Hampton Roads, 1993.

Castaldo, V., Krynicki and J. Goldstein, Sleep Stages and Verbal Memory, *Perceptual and Motor Skills* 39, 1974: 1023-1030.

Caton, R., The Electrical Currents of the Brain, *British Medical Journal* 2, 1875: 278.

Chance, Paul, Music Hath Charms to Soothe a Throbbing Head, *Psychology Today* 21: 14: 1987.

Changeux, Jean-Pierre, Neuronal Man: The Biology of Mind, Oxford University, 1985.

Chopra, Deepak, Quantum Healing, Bantum, 1989.

Cousins, Norman, Head First, The Biology of Hope, E.P. Dutton, 1989.

Crane, R. Adam BCIA, NRNP and Richard Soutar, Ph.D., Mindfitness Training: Neurofeedback and the Process, Writers Club Press, 2000.

Davidson, Keay, Subliminal Learning or Wishful Thinking? San Francisco Examiner A-1: 1990.

Davidson, R.J., G.E. Schwartz, and D. Shapiro, Consciousness and Self-Regulation, *Advances in Research*, Vol. 3, Plenum Press, 1980.

Davis, Joel, Endorphins: New Waves in Brain Chemistry, Dial Press, 1984.

deQuincey, C., Consciousness All the Way Down? Journal of Consciousness Studies 1 (2), 1994: 217-229.

DeMoss, Robert T., Dr., Brain Waves Through Time: 12 Principles for Understanding the Evolution of the Human Brain and Man's Behavior, Plenum Trade, 1999.

Dixon, N.F., Subliminal Perception, The Nature of a Controversy, McGraw-Hill, 1971.

Dixon, Norman, Preconscious Processing, John Wiley & Sons, 1981.

Dixon, Norman, Subliminal Perception and Parapsychology, Points of Contact, *Parapsychology Review* 10(3) May/June, 1979: 1-6.

Dossey, Larry, Healing, Energy, and Consciousness: Into the Future or a Retreat Into the Past?, *Subtle Energies* 5 (1): 1-33.

Dossey, Larry, M.D., Where in the World is the Mind? Unpublished paper presented at the Third International Empathy Conference, Guadalajara, Mexico, 1989.

Dryden, Gordon and Jeanette Vos, Ed.D., The Learning Revolution, Jalmar Press, 1994.

Dujardin, K., A. Guerrien, and P. Leconte, Sleep, Brain Activation, and Cognition, Physiology & Behavior 47, 1990: 1271-1278.

Dumas, R.A., EEG Alpha-Hypnotizability Correlations: A Review, *Psychophysiology*, 14: 431-438.

Edrington, D., A Palliative for Wandering Attention (Available from the Monroe Institute), 1985.

Empson, J., Human Brainwaves: The Psychological Significance of the Electroencephalogram, Stockton Press, 1986.

Empson, J.A.C. and P.R.F. Clark, Rapid Eye Movements and Remembering, *Nature* 227, 1970: 287-288.

Fehmi, Lester F. and George Fritz, Open Focus: The Attentional Foundation of Health and Well-Being, *Somatics*, Spring 1980.

Ferguson, Marilyn, The Aquarian Conspiracy, Tarcher, 1987.

Ferguson, Marilyn, The Brain Revolution, Bantam Books, 1973.

Fishbein, W., Interference With Conversion of Memory from Short-Term to Long-Term Storage by Partial Sleep Deprivation, *Communications in Behavioral Biology* 5, 1970: 171-175.

Fishbein, W., Disruptive Effects of Rapid Eye Movement Sleep Deprivation on Long-Term Memory, *Physiology & Behavior* 6, 1971: 279-282.

Fishbein, W., Sleep and Memory: A Look Back, A Look Forward, *Sleep Research Society Bulletin* 1, 1996: 55-56.

Fishbein, W., Memory Consolidation in REM Sleep: Making Dreams Out of Chaos, *Sleep Research Society Bulletin* 2, 1995: 53-58.

Fishbein, W. and B.M. Gutwein, Paradoxical Sleep and Memory Storage Processes, *Behavioral Psychology* 19, 1977: 425-464.

Foulkes, D., L. Bradley, C. Cavallero, and M. Hollifield, Processing of Memories and Knowledge in REM and NREM Dreams, *Perceptual and Motor Skills* 68, 1989: 365-366.

Garfield, Lael M., Sound Medicine: Healing With Music, Voice and Song, Celestial Arts, 1987.

Giannitrapani, D., The Electrophysiology of Intellectual Functions, Karger, 1985.

Glaser, G.H., EEG and Behavior, Basic Books, 1963.

Gleick, James, Chaos: Making a New Science, Penguin Books, 1987.

Green, Elmer and Alyce Green, Beyond Biofeedback, Knoll Publishing, 1989.

Greenstein, Y.J., C. Pavlides, and J. Winson, Long-Term Potentiation in the Dentate Gyrus is Preferentially Induced by Theta Rhythm Periodicity, *Brain Research* 438, 1988: 331-334.

Gutwein, B.M. and W. Fishbein, Paradoxical Sleep and Memory 1, Selective Alterations Following Enriched and Impoverished Environmental Rearing, *Brain Research Bulletin* 5, 1980: 9-12.

Gutwein, B.M. and W. Fishbein, Paradoxical Sleep and Memory 2, Sleep Circadian Rhythmicity Following Enriched and Impoverished Environmental Rearing, *Brain Research Bulletin* 5, 1980: 105-109.

Hartmann, E. and W.C. Stern, Desynchronized Sleep Deprivation: Learning Deficit and Its Reversal by Increased Effects of Amitriptyline, *Psychopharmacologia* 33, 1972: 585-587.

Henley, Sue, Cross-Modal Effects of Subliminal Verbal Stimuli, *Scandinavian Journal of Psychology* 16, 1975: 30-36.

Hennevin. E., B. Mars, C. Maho, and V. Bloch, Processing of Learned Information in Paradoxical Sleep: Relevance for Memory, *Behavioral Brain Research* 69, 1995: 125-135.

Hennevin. E., B. Mars, and C. Maho, Memory Processing in Paradoxical Sleep, *Sleep Research Society Bulletin* 1, 1995: 44-50,

Herman, Art, Interview, May 1990, President, Teachnology, Santa Barbara, CA.

Hobson, J.A., The Dreaming Brain, Basic Books, 1988.

Hobson, J.A., R. Stickgold and E.F. Pace-Schott, The Neuropsychology of REM Sleep Dreaming, *NeuroReport* 9, 1998:R1-R14.

Hord, D.J., A. Lubin, M.L. Tracy, B.W. Jensma, and L.C. Johnson, Feedback for High EEG Alpha Does Not Maintain Performance or Mood During Sleep Loss, *Psychophysiology* 14, 1976: 58-62.

Horne, J.A. and M.J. McGrath, The Consolidation Hypothesis for REM Sleep Functions: Stress and Other Confounding Factors -a Reveiw, *Biological Pyschology* 18, 1984: 165-184.

Hurley, Thomas J. Jr., Inside the Black Box: New Cognitive View of the Unconscious Mind, *Noetic Sciences Review*, Winter 1987: 22-25.

Hutchison, Michael, Megabrain: New Tools and Techniques for Brain Growth and Mind Expansion, Ballantine Books, New York, 1986.

Hutchison, Michael, Megabrain Power, Hyperion, 1994.

Johnson, Harold and Charles W. Eriksen, Preconscious Perception: A Reexamination of the Poetzl Phenomenon, *Journal of Abnormal and Social Psychology* 62(3), 1961, 497-503.

Johnson, R.K. and R.G. Meyer, The Locus of Control Construct in EEG Alpha Rhythm Feedback, *Journal of Consulting and Clinical Psychology* 42. 1974: 913.

Jones, B.E., The Neural Basis of Consciousness Across the Sleep-Waking Cycle, Consciousness: in At the Frontiers of Neuroscience, *Advances in Neurology* 77, 1998.

Joseph, Lawrence E., Gaia: The Growth of an Idea, Bantam, 1990.

Joudry, Patricia, Sound Therapy for the Walkman, Sound Therapy, 1978.

Jourdain, Robert, Music, the Brain, and Ecstasy, William Morrow and Co., Inc. 1997.

Kalat, James, W., Biological Psychology, Wadsworth Publishing Company, 1984.

Kamiya, J., Operant Control of the EEG Alpha Rhythm and Some of its Reported Effects on Consciousness, In C.T. Tart (ed.), Altered States of Consciousness (pp. 519-529), Anchor Books, 1969.

Karni, A., D. Tanne, B.S. Rubenstien, B.S. J.J.M. Askenasy, and D. Sagi, Dependence on REM Sleep for Overnight Improvement of a Perceptual Skill, *Science* 265, 1994: 679-682.

Kenyon, Tom, M.A., Brain States, United States Publishing, 1994.

Key, Wilson Bryan, Ph.D., The Age of Manipulation: The Con in Confidence and the Sin in Sincere, Madison Books.

Kihlstrom, J.F., The Cognitive Unconscious, Science 237, 1987: 1445-1452.

Koob, George and Floyd E. Bloom, Behavior Effects of Neuropeptides: Endorphins and Vasopressin, *Annual Review of Physiology*, 1982.

Kupfer, D.J., and M.B. Bowers, Jr., REM Sleep and Central Monoamine Oxidise Inhibition, *Psychopharmacologia* 27, 1972: 183-190.

Larson, J. and G. Lynch, Patterned Stimulation at the Theta Frequency is Optimal for the Induction of Hippocampal Long-Term Potentiation, *Brain Research* 368, 1986: 347-350.

Leconte, P., E. Hennevin and V. Bloch, Duration of Paradoxical Sleep Necessary for the Acquisition of Conditioned Avoidance in the Rat, *Physiology and Behavior* 13, 1974: 675-681.

Lester, Henry A., The Response to Acetylcholine, *Scientific American*, February 1977.

Lindsley, D.B., Psychological Phenomenon and the Electroencephalogram, *Electroencephalography and Clinical Neurophysiology* 4, 1952: 443.

Locke, Steven M.D. and Douglas Colligan, The Healer Within: The New Medicine of Mind and Body, New American Library, 1986.

London, P., J.T. Hart, and M.P. Leibovitz, EEG Alpha Rhythms and Susceptibility to Hypnosis, *Nature* 219, 1968: 71-72.

Lubar, J.F., Discourse on the Development of EEG Diagnostics and Biofeedback for Attention-Deficit/Hyperactivity Disorders, *Biofeedback and Self-Regulation* 10(8), 1991: 201-225.

Lynch, Gary and Michael Baudry, The Biochemistry of Memory: A New and Specific Hypothesis, *Science* 224, 1984: 1057-63.

McAuliffe, Kathleen, Brain Tuner, Omni, January 1983.

McAuliffe, Kathleen, Get Smart: Controlling Chaos, Omni, February 1990: 42-92.

McConnell, James V., Richard L. Cutler, and Elton B. McNeil, Subliminal Stimulation, *American Psychologist* 12, 1958: 229-242.

Martindale, C., Creativity, Consciousness, and Cortical Arousal, *Journal of Altered States of Consciousness* 3, 1978: 69-87.

Maquet, P., J. Peters, J. Aerts, G. Delfiore, C. Degueldre, A. Luxen, and G. Frank, Functional Neuroanatomy of Human Rapid-Eye Movement Sleep and Dreaming, *Nature* 383, 1996: 163-166.

Mikuriya, T.H., Interhemispheric Alpha Rhythm Synchronization: A Voluntary Altered State of Consciousness, *American Journal of Clinical Biofeedback* 2, 1979: 22-25.

Miller, Mark Crispin, Hollywood: The Ad, *Atlantic Monthly*: 1-54, 1990.

Monroe, R., The Hemi-Sync Process, Monroe Institute Bulletin #PR31380H, 1982.

Moore, Timothy E., Subliminal Advertising: What You See is What You Get, *Journal of Marketing* 46, Spring 1982: 38-47.

Moss, Thelma, The Probability of the Impossible, New American Library, 1974.

Muzio, J.N., H.P. Roffwarg, C.B. Anders, and L.G. Muzio, Retention of Rote Learned Meaningful Verbal Material and Alteration in the Normal Sleep EEG Pattern, *Psychophysiology* 9, 1972: 108.

Nadel, L. and M. Moscovitch, Memory Consolidation, Retrograde Amnesia and the Hippocampal Complex, *Current Opinions in Neurobiology* 7, 1997: 217-227.

Natale, Jo Anna, Are You Open to Suggestion? *Psychology Today*, September 1988: 28-30.

Ochs, L., Electroencephalographic Disentrainment Feedback (EDF), 1993, (electronically published manuscript available from author: Len Ochs, Ph.D., 3490 Silver Spur Court, Concord, CA 94518 or by email at 72040.3433@compuserve.com).

O'Regan, Brenda, The Hidden Mind: Charting Unconscious Intelligence, *Noetic Sciences Review*, Winter 1987: 21.

Ornstein, Robert E., The Psychology of Consciousness, W.H. Freeman & Co., 1972.

Ostrander, Sheila and Lynn Schroeder, Superlearning, Dell Publishing Company, 1979.

Ostrander, Sheila and Lynn Schroeder, Superlearning 2000, Delacorte Press, 1994.

Ostrander, Sheila and Lynn Schroeder, Supermemory: The Revolution, Carroll & Graf, Inc.

Parker, Jonathan, Bibliography of Subliminal Research, Gateways Research Institute, 1990.

Parker, K.A., Effects of Subliminal Symbiotic Stimulation on Academic Performance: Further Evidence on the Adaptation-Enhancing Effects of Oneness Fantasies, *Journal of Counseling Psychology* 29(1), 1982: 19-28.

Pearlman, C., Latent Learning Impaired by REM Sleep Deprivation, *Psychonomic Science* 25, 1971: 135-136.

Pearlman, C., REM SLeep and Information Processing: Evidence from Animal Studies, *Neuroscience & Biobehavioral Reviews* 3, 1979: 57-68.

Pearlman, C. and M. Becker, Brief Posttrial REM Sleep Deprivation Impairs Discrimination Learning in Rats, *Physiological Psychology* 1, 1973: 373-376.

Pearlman, C. and M. Becker, REM Sleep Deprivation Impairs Bar-Press Acquisition in Rats, *Physiology & Behavior* 13, 1974: 813-817.

Pelletier, K.R. and E. Peper, Developing a Biofeedback Model: Alpha EEG Feedback as a Means for Pain Control, *The International Journal of Clinical and Experimental Hypnosis* 25, 1977: 361-371.

Penfield, W., The Mystery of the Mind, Princeton University Press, 1975.

Peniston, E.G. and P.J. Kulkowski, Alcoholic Personality and Alpha-Theta Brainwave Training, *Medical Psychotherapy* 3, 1990: 35-37.

Peniston, E.G. and P.J. Kulkowski, Alpha-Theta Brainwave Training and Beta-endorphin Levels in Alcoholics, *Alcoholism: Clinical and Experimental Research* 13(2), 1989: 271-79.

Pines, Maya, The Brain Changers: Scientists and the New Mind Control, Harcourt Brace Jovanovich, 1973.

Pinker, Steven, How the Mind Works, W.W. Norton & Co., Inc., 1997.

Plotkin, W.B., The Alpha Experience Revisited: Biofeedback in the Transformation of Psychological State, *Psychological Bulletin* 86, 1979: 1132-1148.

Plotkin, W.B. and R. Cohen, Occipital Alpha and the Attributes of the "Alpha Experience," *Psychophysiology* 13, 1976: 16-21.

Poole, W., The Healing Power of Music, in K. Buttler & E. Fox (eds), The Heart of Healing, Turner Publishing, 1993, 130-135.

Pribram, Karl, Languages of the Brain, Prentice-Hall, 1971.

Prigogine, Ilya and Isabelle Stengres, Order Out of Chaos: Man's New Dialog With Nature, Bantam, 1984.

Rao, K.R. and J. Freola, Electrical Activity of the Brain and ESP: an exploratory study of alpha rhythm and ESP scoring, *Journal of Indian Psychology* 2, 1979: 118-133.

Rechtschaffen, A., Current Perspectives on the Function of Sleep, *Perspectives in Biology and Medicine* 41, 1998:359-390.

Roney-Douglas, Serena, The Interface Between PSI and Subliminal Perception, *Parapsychology Review* 12(4), July/August 1981: 12-18.

Russell, Peter, The Brain Book, E.P. Dutton, 1979.

Sackein, H.A., I.K. Packer, and R.C. Gur, Hemisphericity, Cognitive Set, and Susceptibility to Subliminal Perception, *Journal of Abnormal Psychology* 86(6), 1977: 624-630.

Sagales, T. and E.F. Domino, Effects of Stress and REM Sleep Deprivation on the Patterns of Avoidance Learning and Brain Acetycholine in the Mouse, *Psychopharmacologia* 29, 1973: 307-315.

Saul, J.J., H. David, and P.A. Davis, Psychologic Correlations with the Electroencephalogram, *Psychosomatic Medicine* 11, 1949: 361.

Schacter, D. L., EEG Theta Waves and Psychological Phenomena: A Review and Analysis, *Biological Psychology* 5, 1977: 47-82.

Schacter, D. L., Searching for Memory: The Brain, the Mind, and the Past, Basic Books, 1996.

Schroeder, Lynn and Sheila Ostrander, Subliminal Report: What You Don't Know Can Help You -- or Hurt You (010), Superlearning, 1985.

Schurtman, R., J.R. Palatier, and E.S. Martin, On the Activation of Symbiotic Gratification Fantasies as an Aid in the Treatment of Alcoholics, *The International Journal of Addictions* 17(7), 1982: 1157-1174.

Schwartz, G.E. and D. Shapiro, eds., Consciousness and Self-Regulation: Advances in Research, Volume 1, Plenum Press, 1976.

Schwartz, Marvin and Michael A. Rem, Does the Averaged Evoked Response Encode Subliminal Perception? *Psychophysiology* 12(4), July 1975: 390-394.

Sheldrake, Rupert, The Presence of the Past: Morphic Resonance and the Habits of Nature, 1988.

Shevrin, H., Subliminal Perception and Dreaming, *The Journal of Mind and Behavior* 7, 1986.

Shevrin, Howard, Brain Wave Correlates of Subliminal Stimulation, Unconscious Attention, Primary and Secondary Process Thinking, and Repressiveness, *Psychological Issue*, Monograph 8(2), 1971: 149-162.

Shevrin, Howard, Does the Average Evoked Response Encode Subliminal Perception? Yes, a Reply to Schwartz and Rem, *Psychophysiology* 12(4), July 1975: 395-398.

Shevrin, Howard, William H. Smith, and Dean E. Fitzler, Average Evoked Response and Verbal Correlates of Unconscious Mental Processes, *Psychophysiology* 8(2), 1971: 149-162.

Shiromani, P., B.M. Gutwein, and W. Fishbein, Development of Learning and Memory in Mice After Brief Paradoxical Sleep Deprivation, *Psysiology & Behavior* 22, 1979: 971-978.

Shulman, Lee M., Ph.D., Joyce Shulman, Ph.D., and Gerald P. Rafferty, Subliminal: The New Channel to Personal Power, Infobooks, 1990.

Silverman, L. and F. Lachmann, The Therapeutic Properties of Unconscious Oneness Fantasies: Evidence and Treatment Implications, *Contemporary Psychoanalysis* 21(1), 1985: 91-115.

Silverman, L.H., A Comprehensive Report of Studies Using the Subliminal Psychodynamic Activation Method, *Psychological Research Bulletin* 20(3), 1980: 1-22.

Silverman, L.H. and Doris K. Silverman, A Clinical-Experimental Approach to the Study of Subliminal Stimulation, *Journal of Abnormal Social Psychology* 69(2), 1964: 158-172.

Silverman, L.H., A. Martin, R. Ungaro, and E. Mendelsohn, Effect of Subliminal Stimulation of Symbiotic Fantasies on Behavior Modification Treatment of Obesity, *Journal of Consult. Clinical Psychologists* 46(3), 1978: 432-51.

Silverman, Lloyd H., Unconscious Oneness Fantasies: Experimental Findings and Implications for Treatment, Ph.D. Dissertation, 1984.

Silverman, Lloyd H., Frank M. Lackmann, and Robert H. Milich, The Search for Oneness, International University Press, Inc. 1982.

Smith, C., Sleep States and Learning: A Review of the Animal Literature, *Neuroscience & Biobehavioral Review* 9, 1985: 157-168.

Smith, C., Sleep States and Memory Processes, *Behavioral Brain Research* 69, 1995: 137-145.

Smith, C., Sleep States, Memory Processes and Synaptic Plasticity, *Behavioral Brain Research* 78, 1996: 49-56.

Smith, C. and S. Butler, Paradoxical Sleep at Selective Times Following Training is Necessary for Learning, *Physiology and Behavior* 29, 1982: 469-473.

Smith, C. and G. Kelley, Paradoxical Sleep Deprivation Applied Two Days After the End of Training Retards Learning. *Physiology & Behavior* 43, 1988: 213-216.

Smith, C. and L. Lapp, Increases in Number of REMS and REM Density in Humans Following an Intensive Learning Period, *Sleep* 14, 1991: 325-330.

Smith, C. and G.M. Rose, Evidence for a Paradoxical Sleep Window for Place Learning in the Morris Water Maze, *Physiology & Behavior* 59, 1996: 93-97.

Smith, C. and G.M. Rose, Posttraining Paradoxical Sleep in Rats is Increased After Spatial Learning in the Morris Water Maze, *Behavioral Neuroscience* 111: 1997: 1197-1204.

Somekh, D.E. and J.M. Wilding, Perception Without Awareness in a Dichoptic Viewing Situation, *British Journal of Psychology* 64(3), 1973: 339-349.

Starr, Douglas, Brain Drugs, Omni, February 1983.

Staubli, U. and G. Lynch, Stable Hippocampal Long-Term Potentiation Elicited by "Theta" Pattern Stimulation, *Brain Research* 435, 1987: 227-234.

Stern, W.C., Acquisition Impairments Following Rapid Eye Movement Sleep Deprivation in Rats, *Physiology & Behavior* 7, 1971: 345-352.

Swann, R. S. Bosanko, R. Cohen, R. Midgley, and K.M. Seed, The Brain - A User's Manual, G.P. Putnam's Sons, 1982.

Tart, C.T., (ed.), Altered States of Consciousness, Anchor Books, 1969.

Tart, C.T., States of Consciousness, E.P. Dutton & Co., 1975.

Taylor, Eldon, Subliminal Communication: Emperor's Clothes or Panacea? Just Another Reality, R.K. Books, 1990.

Therapeutic Effect of Oneness Fantasy, Perspective (4), A.R.E. Press, December 1985.

Tilley, A.J. and J.A.C. Empson, REM Sleep and Memory Consolidation, *Biological Psychology* 6, 1978: 293-300.

Tomatis, Alfred A., The Conscious Ear, Station Hill Press, 1991.

Trevisan, Louise Ann, Beyond the Sound: A Technical and Philosophical Approach to Music Therapy, Nowicki/Trevisan, 1987.

Vertes, R.P., An Analysis of Ascending Brain Stem Systems Involved in Hippocampal Synchronization and Desynchronization, *Journal of Neurophysiology* 46, 1981: 1140-1159.

Vertes, R.P., Brainstem Control of the Events of REM Sleep, *Progress in Neurobioloby* 22, 1984: 241-288.

Vertes, R.P., A Life-Sustaining Function for REM Sleep: A Theory, *Neuroscience & Biobehavioral Reviews* 10, 1986: 371-376.

Vertes, R.P., Memory Consolidation in REM Sleep: Dream On, *Sleep Research Society Bulletin* 1, 1995; 27-32.

Watson, Audrey, Movement and Drama in Therapy: the Therapeutic Use of Movement, Drama, and Music, Plays, Inc., 1973.

Weinstein, Sidney, A Review of Brain Hemisphere Research, *Journal of Advertising Research* 22(3), June/July 1982: 59-63.

Weinstein, Sidney, Curt Weinstein, and Ronald Drozkenko, Brain Wave Analysis, *Psychology and Marketing* 1(1), Spring 1984: 1742.

Weinstein, Sidney, Valentine Appel, and Curt Weinstein, Brain Activity Responses to Magazine and Television Advertising, *Journal of Advertising Research* 20(3), June 1980: 57-63.

Westerlundh, Bert, Subliminal Influence on Imagery: Two Exploratory Experiments, *Psychological Research Bulletin* XXV(6-7), Lund University, Sweden, 1985.

Williams, P., EEG Alpha Feedback: A Comparison of Two Control Groups, *Psychosomatic Medicine* 39, 1977: 44-47.

Winson, J., The Biology and Function of Rapid Eye Movement Sleep, *Current Opinion in Neurobiology* 3, 1993: 243-248.

Winson, J., Interspecies Differences in the Occurrence of Theta, *Behavioral Biology* 7, 1972: 479-487.

Winson, J., Loss of Hippocampal Theta Rhythm Results in Spatial Memory Deficit in the Rat, *Science* 201, 1978: 160-163.

Winson, Jonathan, Brain and Psyche: The Biology of the Unconscious, Anchor Press, 1985

Winson, Jonathan, The Meaning of Dreams, Scientific American, November 1990: 42-48.

Wise, Anna, The High Performance Mind: Mastering Brainwaves for Insight, Healing and Creativity, Jeremy P. Tarcher/Putnam, 1997.

Wittrock, M.C. et al, The Human Brain, Prentice Hall, 1977.

Yates, A.J., Biofeedback and the Modification of Behavior, Plenum Press, 1980.

Zaidel, E., Academic Implications of Dual-Brain Theory, Guilford Press, 1985.

Zenhausen, Robert and Karen Hansen, Differential Effect of Subliminal and Supraliminal Accessory Stimulation on Task Components in Problem-Solving, *Perceptual and Motor Skills* 38, 1974: 375-378.