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Adams, P.J. (2008). Language, mysticism, and hypnotizability: A brief communication. *International Journal of Clinical and Experimental Hypnosis, 56*(1), 73-82. This study revisits the relationship between spirituality and hypnosis. A variety of researchers including Stanley Krippner, Charles Tart, Josephine Hilgard, Ted Barber, and many others have consistently found a relationship between various measures of spirituality and measures of hypnotic ability. The author of the study begins by developing a theory which discusses his model of the relationship between mystical and hypnotic experiences. He notes that the communication style and language used to describe mystical experiences is similar to the language used to describe hypnotic phenomena. The author designed an experiment to test whether persons who reported having many mystical experiences are likely to have high hypnotic ability. The 81 volunteer participants were divided into 3 equal groups based on their score categorization on the Hood measure of mysticism. The groups were thus divided into participants who reported high, medium, and low levels of mystical experiences throughout their lives. The high mysticism group scored significantly higher on the Harvard measure of hypnotic ability compared to the low mysticism group. The author concludes that “openness to mystical and religious experience and susceptibility to hypnotic suggestion warrants further investigation” based upon the evidence of this experiment. Readers who are interested in this study and the topic of hypnosis and spirituality will definitely want to read an excellent paper on this topic written by Stanley Krippner (2004) entitled, *Trance and the Trickster: Hypnosis as a liminal phenomenon*. Address for reprints: Dr. Peter Adams, Head of Section, Social and Community Health, Faculty of Medical and Health Sciences, University of Auckland, Private Bag, 92019, Auckland 1142, New Zealand. Email: p.adams@auckland.ac.nz.

Reference

Astin, J.A., Sierpina, V.S., Forys, K., & Clarridge, B. (2008). Integration of the Biopsychosocial Model: Perspectives of medical students and residents. *Academic Medicine, 83*(1):20-27. This study gives us an interesting and revealing look at the status of the field of mind/body medicine in terms of its integration within the medical education of future physicians. The authors developed a survey which was designed to sample the “attitudes toward the incorporation of psychosocial factors in diagnosis and treatment, and to identify barriers to the integration of evidence-based, mind/body methods” of medical students in training. The survey was then sent out to a random sample of medical students in training drawn from a file supplied by the American Medical Association. The response rate was 40% and a total of 661 medical students and 550 residents completed the survey from various medical institutions around the United States. The results revealed that many of the respondents possessed an intriguing pattern of ambivalence towards understanding the role of psychosocial factors in medicine. A majority of respondents did acknowledge the importance of understanding how psychosocial factors affect a patient’s medical condition. However, around 40% endorsed a belief that addressing psychosocial factors leads to minimal or no improvement in a given patient’s outcome. The results also suggested that many of the respondents felt that their training in psychosocial factors and mind/body medicine was ineffective and insufficient. Sadly however, relatively few of the respondents overall indicated that they desired further training in these areas to supplement what they perceived as a relative area of deficiency in their education. The authors of this study argue that these results are a clear indication that “there is a need for more comprehensive training during medical school and residency regarding both the role of psychosocial factors in health and the application of evidence-based, behavioral, mind/body methods.”

I found these results to be particularly important to pay attention to as we go forward as clinicians, researchers, and educators in the field of mind/body medicine and hypnosis. We need to be more focused on training the next generation of medical professionals that will be using hypnosis and other techniques of mind/body medicine. We can not expect that all of the good science that has been done to demonstrate the power of mind/body medicine in helping patients will simply find its way into medical education by virtue of the high quality of that research. This study seems to clearly demonstrate that many medical students hold negative expectations about mind/body methods being ineffectual or irrelevant in terms of treatment outcome. And yet, this belief is easily and convincingly contradicted by the growing body of evidence that techniques like hypnosis, biofeedback, psychotherapy, and yoga can help many medical patients quite substantially. I considered this study to be a wake-up call that we all need to get more involved with the training of medical professionals of the next generation. The current model of medical education still appears to inculcate students with viewpoints on hypnosis and mind/body medicine that are inaccurate and more than several generations out of date. Address for reprints: John A. Astin, Ph.D., California Pacific Medical Center, 2300 California St., Room 207, San Francisco, CA 94115. E-mail: john@integrativearts.com.

Aviv A., Dalia G., Gaby G., & Kobi P (2008). Examining hypnosis legislation: A survey of the practice in Israel. *International Journal of Clinical And Experimental Hypnosis, 56* (1), 47-62. The authors of this survey present their findings on the nature of hypnosis practice in Israel. The authors explain that hypnosis practice in Israel has been restricted to licensed professionals by legislative action. The survey was meant to sample what impact the legislation had had upon the actual practice of hypnosis in Israel. The survey was sent to a
large population of health professionals that was thought likely to include both licensed practitioners as well as non-licensed practitioners of hypnosis. The survey was sent out to 1720 health professionals and around 25% of the participants completed and returned the survey. There were a total of 478 respondents with 249 (51.8%) reporting that they had been licensed and 232 (48.2%) reporting that they had not been licensed. About 45% of the unlicensed respondents reported using hypnosis to some extent in their work despite not being licensed. Furthermore, about 70% of these unlicensed professionals reported working in a public or government healthcare setting. This comes across as an interesting fact given that one might presume that a government healthcare setting would normally have been better at enforcing the relevant licensing regulations. Government organizations frequently report receiving a higher level of public scrutiny than private institutions do around compliance with government mandates and it is interesting to see that 70% of the unlicensed hypnotists are nevertheless practicing at a government healthcare setting. The authors discuss the importance of proper enforcement of the hypnosis legislation in Israel. They make a number of suggestions to improve the compliance of the healthcare community with the hypnosis licensing legislation that is in effect currently. This article provides a useful glimpse into the future of hypnosis in other countries that may wish to restrict the practice of hypnosis to licensed healthcare providers. It appears that the Israeli experience indicates a need to remain vigilant around issues of the enforcement of whatever legislation that might be enacted since a large number of persons providing hypnosis in Israel still appear to be unlicensed. Address for reprints: Alex Aviv, MD, Abarbanel Mental Health Center, 15 Keren Kayemet St., Bat Yam 59100, Israel. Email: alexaviv@gmail.com.

**Bryant, R.A. & Sindicich, N. (2008). Hypnosis and thought suppression - more data: A brief communication. International Journal of Clinical and Experimental Hypnosis, 56 (1), 37-46.** This is another interesting study from the lead author and his colleagues on phenomena related to post-hypnotic amnesia and thought suppression. In this study 28 low hypnotizable and 29 high hypnotizable participants were asked to perform a cognitive loading task that consisted of learning a 6-digit serial number after the induction of hypnosis. The participants were then either asked to suppress, or not-asked-to-suppress, a memory of an event in which they experienced a sense of failure. The investigators examined the effect of the thought suppression suggestions by asking the participants about their phenomenological experiences, querying the participants using a sentence unscrambling task, and by examining their electromyography (EMG) from facial muscle groups. The results indicated that the low hypnotizable participants exhibited a type of post-thought suppression rebound on the sentence unscrambling task which was not evident in the high hypnotizable participant’s group. The authors interpreted their results as being indicative of the possibility that hypnosis facilitates thought suppression. Address for reprints: Dr. Richard A. Bryant, Scientia Professor, School of Psychology, University of New South Wales, Sydney, NSW 2052, Australia. Email: R.Bryant@unsw.edu.au.

**Denner, S.S. (2008). The evolving doctrine of informed consent for complementary and integrative therapy. Holistic Nursing Practice, 22(1):37-43.** This article discusses the need for mind/body professionals to develop a model of care that fully implements informed consent within the relationship between the patient and the clinician. The articles discusses the ethics of many common situations that medical professionals of all disciplines might commonly find themselves in regarding informed consent. The field of mind/body medicine
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in general can present clinician with many possible ethical quandaries, and I enjoyed the author’s discussion of the importance of the principle of informed consent within the therapeutic relationship.

For instance, consider the ethics of informed consent regarding placebo based interventions such as patients with chronic knee pain in sham surgery conditions. In one study of sham surgery patients (for debridement of the knee; Moseley et. al., 2002), it was found that the sham surgery patients received a better outcome than those who had received the actual surgery. The logic of informed consent tells us that we should let the sham surgery patients know that they received a placebo based intervention at some point. However, following the principle of informed consent might also lead us introduce a negative expectancy that the positive results are not real since they did not receive the actual debridement procedure. This might actually deteriorate the quality of the placebo based outcome that they had previously received. This is an extreme example, of course, but all clinicians in mind/body medicine do need to remain vigilant of the unique ethical situations that we can encounter. Address for reprints: Sallie Stoltz Denner, BSN, CRNA, c/o Holistic Nursing Practice, 16522 Hunters Green Parkway, Hagerstown, MD 21740-2116.

Reference


The authors present an important new study on the psychophysiology of hypnosis using event related potentials. Event related potentials (ERPs) are derived from a research paradigm that utilizes electroencephalography (EEG) in a very structured fashion. Participants in ERP experiments are presented with hundreds of presentations of very specific stimuli such as specific sound frequencies or visual stimuli under highly controlled conditions. The participants’ EEG data is recorded for each trial and it is time locked to the onset of the stimuli and then added and averaged together with the other identical stimulus presentations (trials). The resulting averaged waveform thus represents a good picture of the EEG associated with a participant’s neural processing of a given stimuli. ERP paradigms have the advantage of being relatively cheap and easy to use while yielding a temporal resolution in milliseconds. In this way, it is possible to examine how a participants EEG has changed from one moment to the next as they were processing the stimuli under investigation. The temporal resolution of EEG allows researchers to gain perspectives on the precise series of steps that occur in the brain as a person processes different stimuli such as sound, visual, and tactile sensations. Over the years, a number of different components in the ERP waveforms have been identified such as the P300 component that many people may know is useful for investigating phenomena of memory and stimulus categorization.

The authors of this study wished to examine the ERPs associated with how people can use hypnosis to reduce their phenomenological experience of pain. They employed a somatosensory ERP paradigm (SERP) where the participants were presented with painful tactile sensations derived from an apparatus that delivered standardized electrical stimuli.
The experimental procedure that was employed in this experiment is referred to as the “oddball paradigm” in the general literature of psychophysiology. The oddball paradigm is often useful for exploring novelty and selective attention related effects. The researchers found 12 high hypnotizable, 12 medium hypnotizable, and 12 low hypnotizable participants who were each exposed to the painful electrical stimuli under waking, hypnotic, and a cued eyes-open posthypnotic condition. The participants were instructed to produce “an obstructive imagery of stimulus perception” as a form of hypnotic analgesia in each condition. There was a “no-analgesia treatment” which was designed to serve as a control in the waking and hypnotic conditions. The investigators also asked the participants to count the number of target stimuli that they were exposed to throughout the experiment.

The results indicated that the highly hypnotizable participants experienced significant reductions in pain and distress during posthypnotic analgesia condition over the hypnotic analgesia condition. However, both conditions effectively produced analgesic effects that were superior to the two control conditions. Another interesting result was that the high hypnotizables memories of the painful stimuli appeared to be affected by whether or not they were experiencing hypnosis at the time. The highly hypnotizable participants tended to rate the stimuli as being less painful and distressing outside of hypnosis. The authors also reported that in general the high hypnotizables detected a smaller number of target stimuli while exhibiting significant amplitude reductions in the midline frontal and central N140 and P200 SERP components. The N140 and P200 SERP components have been studied in other SERP experiments and are generally thought to represent SERP components that are related to phenomena of selective attention, stimuli detection, novelty, and stimulus categorization. No significant differences in SERP components were detected in the medium and low hypnotizable groups. The authors conclude that their findings are seen as evidence “that hypnotic analgesia can affect earlier and later stages of stimulus processing.

This is an important study as it provides a glimpse into the fundamental neural mechanisms underlying hypnotic analgesia and hypnosis in general. The evidence of this study and others suggests that hypnotic analgesia can occur through multiple pathways occurring at various levels in neural processing. Some of these processes could be rather fast in nature. These processes may involve sensory gating and phenomena of selective attention that directing the incoming painful stimuli away from the neural processes that later converge into a person’s experience of their body, mind, and world around them. In this way, a person using hypnotic analgesia could use these gating mechanisms to gate out the painful stimuli. Their findings also suggest, however, that there may be late-occurring neural processes operating that involve stimulus categorization and content meaning manipulations. This may involve unique perceptions that each participant crafted in the experiment that allowed them to ignore the pain. An example of this might be imagining that your hand has turned wooden, and that all sensations in your hand had become dull, irrelevant, or meaningless. I highly recommend that anyone interested in hypnotic analgesia read this study. In a way these findings complement the excellent spatial resolution studies that we have seen with positron emission tomography and functional magnetic resonance imaging which have also shown us that there are a number of different processing components that accomplish hypnotic pain analgesia. It certainly demonstrates the value of well designed EEG and ERP experiments even in this day when we have fMRI and PET paradigms that can offer us much better data on the spatial location of the neural processes underlying the workings of the human mind. Address for reprints: University of Rome ‘La sapienza’, Department of Psychology, Via dei Marsi 78, 00185 Rome, Italy. Email: v.depascalis@caspur.it.
Karlin R.A., Hill, A., & Messer, S. (2008). Responding and failing to respond to both hypnosis and a kinesthetic illusion, Chevreul’s Pendulum. International Journal of Clinical and Experimental Hypnosis, 56 (1), 83-98. The authors of this study wished to test the relationship between the phenomena of Chevreul’s Pendulum and hypnotic experiences. They administered a standardized Chevreul’s Pendulum task and the Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A) to a group of participants. The results indicated that participants who did not experience the motion effect of the Chevreul’s Pendulum task were also likely to score in the low range on the Stanford measure of hypnotic ability. The authors noted that intensity scores on a measure of the depth of phenomenological experiences during hypnosis (Shor’s Personal Experiences Questionnaire: PEQ) did not differ between participants who experienced or did not experience the Chevreul’s Pendulum task. However, the authors did find that there was a positive correlation between the PEQ intensity scores for those who passed the Chevreul’s Pendulum task while there was a negative correlation for those who did not. The authors conclude by noting that their findings are consistent with the idea that a person’s failure to experience the Chevreul’s Pendulum task may reflect “a situation-specific unwillingness to become imaginatively involved rather than a general inability to do so.” Address for reprints: Robert A. Carlin, Ph.D., Associate Professor, Psychology Department, Psychology Building, Busch Campus, 152 Frelinghuysen Road, Piscataway, NJ 08854-8020. Email: rakarlin@rci.rutgers.edu.

Lynch, A., Webb, C., & Sams, R. (2008). What are the most effective nonpharmacologic therapies for irritable bowel syndrome? Journal of Family Practice, 57(1), 57-58. This article summarizes recent advances in the care of patients with irritable bowel syndrome (IBS) utilizing self management and non-pharmacological approaches. The authors note that there is evidence for the effectiveness of hypnosis, herbal formulations, certain probiotics, elimination diets based on immunoglobulin G antibodies, cognitive behavioral therapy, and self-help books in helping patients, which all have been shown to decrease the global symptoms of patients with IBS and to improve their overall quality of life. The authors highlight the uses of hypnosis for patients with severe refractory IBS. This may be a very useful brief summary article to give to medical professionals that you know who may treat IBS patients regularly. Articles such as this may well stimulate interest in hypnosis amongst medical professionals that do not have training yet in hypnosis (especially when you follow-up the article with a brief personal meeting) since it is so practical and helpful to patients with IBS. Address for reprints: Dr. A. Lynch, Madigan Army Medical Center, Bldg 9040 Fitzsimmons Drive, Tacoma, WA. 98431.

Raz, A. (2008). Genetics and neuroimaging of attention and hypnotizability may elucidate placebo. International Journal of Clinical and Experimental Hypnosis, 56 (1), 99-116. This is an important article which presents evidence and theory regarding the neural mechanisms underlying hypnosis as well as the possible genetic determinants that may underlie the heritability of hypnotic ability. The author presents a fascinating paper which integrates many basic findings in the neuroscience of attention and other fields with the research literature on hypnosis. An interesting part of his theory holds that the experience of hypnosis may chiefly be a function of at least three distinct modules of neural activity in the human brain. The author advances the theory that these biological markers of hypnotic ability may also be useful in identifying placebo responders which is a central feature of a number of theories of hypnosis and its relationship to placebo phenomena such as Ian
Wickramasekera’s (I) high risk model of threat perception (HRMTP) or Irving Kirsch’s response expectancy theory. Address for reprints: Dr. Amir Raz, Clinical Neuroscience and Applied Cognition Laboratory, Institute of Community & Family Psychiatry, SMBD Jewish General Hospital, 4333 Cote Ste-Catherine Rd., Montreal, Quebec H3T 1E4.

Xu, Y. & Cardena, E. (2008). Hypnosis as an adjunct therapy in the management of diabetes. International Journal of Clinical and Experimental Hypnosis, 56(1), 47-62. This paper presents a very nice review of the general literature on psychosocial approaches for managing diabetes. The authors begin by first providing some good background information on the nature of diabetes and its enormous costs to the health of individuals, and its healthcare costs to the society at large. The paper discusses empirical findings which suggest that hypnosis can be effective in the management of diabetes “including regulation of blood sugar, increased compliance, and improvement of peripheral blood circulation.” The paper contains some suggestions for future research on hypnosis and diabetes management and discusses the limitations of previous studies in this area. The authors conclude that “despite some methodological limitations, the literature shows promising results that merit further exploration.” Address for reprints: Dr. Etzel Cardena, Thorsen Professor of Psychology, Department of Psychology, University of Lund, P.O. Box 213, SE-221 00 Lund, Sweden. Email: Etzel.Cardena@psychology.lu.se.