INTERNATIONAL LITERATURE REVIEWS

Ian Wickramasekera, II

Eisen, M.L., Oustinovskaya, M., Kistorian, R., Morgan, D.Y., & Mickes, L. (2008). The effect of question format on resistance to misleading postevent information and self-reports of events occurring during hypnosis. International Journal of Clinical and Experimental Hypnosis, 56(2):198-213. The authors present this article about how hypnosis affects memory recall and memory reporting. The authors utilized a novel approach to this topic using a standardized tape-recorded version of the Harvard Group Scale of Hypnotic Susceptibility, Form A (Harvard or HGSHS:A) as a springboard for further investigation of how misleading information received after an event (postevent information) might change a person’s memory and/or verbal memory reporting of the event. The Harvard is a highly regarded measure of hypnotic ability that assesses participants’ responsiveness to hypnotic experiences using 12 standardized hypnotic suggestions in a group format. The participants in the authors’ experiment were all given a modified version of the normal Harvard response form booklet at the end of the standardized administration of the Harvard’s main hypnotic procedures. All the participants received three additional questions asking about hypnotic phenomena and experimental hypnotic suggestions that were not actually employed during their administration of the Harvard. The questions in their response booklets were then varied in two conditions to examine the effect of questioning format on resistance to misleading postevent information. Half the participants were given the standard choices of responding which ask the participant whether they did or did not perform or experience the hypnotic suggestion. The other half of the participants was offered a third alternative response format to each question which was worded as “I do not remember this occurring.” The authors predicted that offering this third alternative choice would result in significantly less participants in this group endorsing that they experienced the three hypnotic suggestions which were never really employed in the study. The authors reported that participants who were offered the third alternative answer format were significantly less likely to endorse having experienced the false hypnotic suggestions. Interestingly, the participants in this condition in general
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were less likely to report passing any item on the Harvard than participants in the normal response booklet condition. This is an interesting finding as well given some previous studies of the Harvard have also found that the questioning format of the Harvard can change people’s scores. For instance, when the questions are altered to ask whether people felt the suggestion was successful versus whether they passed an objective behavioral scored criterion (my hands moved at least 4 inches in response to the suggestion) there can also be some differences. Occasionally, one comes upon a participant who has taken the Harvard and cannot remember whether they have passed any of the suggestions as a result of their post hypnotic amnesia not reversing or because they fell asleep during the procedure. Address for reprints: Mitchell Eisen Ph.D., Department of Psychology, California State University, Los Angeles, California 90032. Email address: meisen@calstatela.edu.

Fried, R.G. & Hussain, S.H. (2008). Nonpharmacologic management of common skin and psychocutaneous disorders. Dermatology Therapies, 21(1):60-68. The authors review the literature on studies which have shown that nonpharmacological methods can help common skin disorders such as eczema and warts. The article reviews studies which employ methods such as hypnosis, biofeedback, meditation, support groups, guided imagery and progressive muscle relaxation, and psychotherapy and discusses their efficacy and potential application in standard medical practice. Address for reprints: R.G. Fried, Yardley Dermatology and Yardley Skin Enhancement and Wellness Center, Yardley, Pennsylvania Email address: dermshrink@aol.com.

Jensen, M.P., Barber, J., Hanley, M.A., Engel, J.M., Romano, J.M., Cardenas, D.D., Kraft, G.H., Hoffman, A.J., & Patterson, D.R. (2008). Long-term outcome of hypnotic-analgesia treatment for chronic pain in persons with disabilities. International Journal of Clinical and Experimental Hypnosis, 56(2):156-69. The authors present a series of 26 cases where they utilized hypnotic analgesia to assist patients with chronic pain related complaints. The patients were followed up at 3, 6, 9, and 12-month post treatment intervals to examine the long-term efficacy of hypnotic analgesia to assist patients with chronic pain problems. The authors reported finding statistically significant decreases in average daily pain intensity compared to baseline pretreatment values at post treatment and also at the 3 and 9-month follow-up sessions. However, these differences were not significant at the 6 or 12-month follow-up sessions. The authors also reported that percentage of participants who reported experiencing a clinically meaningful decreases in their pain was 27%, 19%, 19%, and 23%, at the 3, 6, 9, and 12 month follow-up intervals, respectively. About 80% of the participants did report using the self-hypnosis skills learned in treatment at 12-months follow-up. The authors conclude, “Overall, the results indicate that about 20% of the sample obtained substantial and lasting long-term reductions in average daily pain following hypnosis treatment and that many more continue to use self-hypnosis up to 12 months following treatment.” Address for reprints: Mark P. Jensen, Ph.D., Department of Rehabilitation Medicine, University of Washington, 1959 NE Pacific Street, Box 356490, Seattle, Washington 98195. Email address: mjensen@u.washington.edu.

Gholamrezai, A. & Emami, M.H. (2008). How to put hypnosis into a placebo pill? Complementary Therapies in Medicine. 16(1): 52-54. This article presents an overview of some of the basic issues involving hypnosis and difficulties in explaining its ability to help patients with various medical
problems. The authors review this area and make recommendations for better establishing the acceptance of hypnosis in medical practice and other important settings. The article stresses the importance of further establishing the efficacy of hypnotherapy using randomized control designs to help increase the number of studies that would qualify for inclusion in Cochrane Review style articles. The authors address the theoretical difficulties in understanding hypnotic phenomena as well. They discuss the theory or placebo effect as a way of approaching an understanding of how the benefits of hypnosis could occur. The article also discusses how “neutral hypnosis” might be employed as a credible placebo control in hypnotherapy designs. Address for reprints: Clinical Hypnotherapy Research Group, Medical Student Research Committee, Isfahan University of Medical Sciences, Isfahan, Iran; Poursina Hakim Research Institute, Isfahan, Iran.

Iglesias, A. & Iglesias, A. (2008). Secondary diurnal enuresis treated with hypnosis: A time-series design. International Journal of clinical and Experimental Hypnosis, 56(2):229-240. The authors present a well-designed case study of a child with secondary diurnal enuresis who was treated with hypnosis. The authors employed a unique protocol they created for hypnotherapeutic work with children which they have named the Hypnotic Trauma Narrative. The authors created the Hypnotic Trauma Narrative instrument for use with children who have experienced traumatic events and then developed either posttraumatic stress disorder or symptoms indicative of trauma-related psychophysiological disorders and/or other psychosomatic symptoms. The child in this case had developed secondary diurnal enuresis after being traumatized in a motor vehicle accident. The authors utilized an ABAB time-series design to examine the effects of their treatment of the child on the dependent measure of recorded episodes of diurnal incontinence. The authors reported finding a statistically significant relationship between the degree of change from phase to phase and the treatment. The authors conclude that “Hypnosis with the Hypnotic Trauma Narrative was deemed efficacious as a method for the treatment of secondary diurnal enuresis.” The outcome was also assessed at 6-months follow-up where the patient was reported to still be free of symptoms of secondary diurnal enuresis.

This is a very nice example of how skilled clinicians of hypnosis can make substantial contributions to the scientific literature on hypnosis through documenting their unique cases, novel applications, and their creative methods within a framework that allows scientific methods to help us to evaluate their value empirically. All that is necessary is to simply spend some time learning to understand the logic of how experimental designs can be included in your clinical work to improve its explanatory power to others. An excellent primer on how to do this was recently written (Borckardt & Nash, 2002). I highly recommend that everyone who does clinical work with patients to consider writing a similar article on the unique work that you are doing with patients. The authors article makes a very powerful argument for why the average clinician could benefit from thinking of the issues of experimental design in crafting a treatment plan with patients. Address for reprints: Alex Iglesias, Ph.D., 11211 Prosperity Farms Road, Oak Park Suite, HOC, Palm Beach Gardens, FL 33410. Email Address: phdalex@aol.com.

REFERENCES
Marc I., Rainville P., Masse B., Verreault R., Vaillancourt L., Vallée E., & Dodin S. (2008). Hypnotic analgesia intervention during first-trimester pregnancy termination: An open randomized trial. American Journal of Obstetrics and Gynecology (Online article: volume and page numbers pending). The authors of this study present a randomized control study on the effects of hypnotic analgesia to reduce pain and anxiety during procedures for abortion while also reducing the need for intravenous sedation analgesia. The participants were 350 women who had elected to undergo a first trimester pregnancy termination (all the participants were less than 14 weeks gestation). The participants were randomly assigned to a standard of care group or to a group that received a standardized hypnotic intervention to assist with anxiolysis and analgesia. The hypnosis group received their instructions in hypnosis 20 minutes before and throughout the surgical procedure to terminate pregnancy. The authors collected data on whether each participant had required the usage of intravenous sedation analgesia during the surgical procedure. All the participants were also asked to report on their self-assessments of pain and anxiety during suction evacuation of their uterus which was the procedure utilized to accomplish the abortion. The results demonstrated that a significantly smaller percentage of the women in the hypnosis group required less intravenous sedation analgesia (108/172 participants; 63%) than the percentage of women in the control group (149/175 participants; 85%; p < .0001). Interestingly however, the authors reported that they did not find significant differences in pain report during the procedures between the two groups despite the fact that there were significant differences in intravenous sedation analgesia utilization. The authors found a difference between the procedural anxiety levels of the hypnosis and standard of care group. That outcome seemed to indicate that the hypnotic analgesia protocol they were using for the pregnancy termination procedure was more effective in reliving anxiety than pain for the average participant in the study. The authors conclude that their results taken as a whole are evidence for how “hypnotic interventions can be effective as an adjunct to pharmacologic management of acute pain during abortion.” Address for reprints: Pierre Rainville, Ph.D., Centre de recherche en sciences neurologiques, Université de Montréal, CP 6128, Succ., Centre-ville, Montréal (Que), H3C 3J7, Canada. Email address: pierre.rainville@umontreal.ca.

Perez ME & Youssef NN. Dyspepsia in childhood and adolescence: Insights and treatment considerations. Current Gastroenterology Reports, 9(6):447-455. The authors provide an overview of the treatment of functional dyspepsia in children and adolescents. The authors report that as many as 80% of children and adolescents being evaluated for chronic complaints of abdominal pain including symptoms of epigastric discomfort, nausea, or fullness will receive a diagnosis of functional dyspepsia. The authors discuss the background literature in functional dyspepsia and report that diagnosis of depression and anxiety are common in these patients. The authors review the available evidence on the pathophysiology, psychophysiology, and psychopathology associated with functional dyspepsia. They discuss evidence suggesting that functional dyspepsia can arise from psychological variables of anxiety and depression mediating the association between upper abdominal pain and gastric hypersensitivity. The authors assert that "abnormal central nervous system processing of
gastric stimuli may be a relevant pathophysiologic mechanism in functional dyspepsia.” The paper then begins to examine treatment options for functional dyspepsia and the general lack of evidence for effective approaches. The authors do assert that recent non-pharmacologically-based approaches such as hypnosis may be effective. The authors also review other novel approaches such as dietary manipulation, use of ginger, and use of Iberogast. Address for reprints: M.E. Perez, Center for Pediatric Irritable Bowel and Motility Disorders, Goryeb Children’s Hospital at Atlantic Health, 100 Madison Avenue, Internal Box 82, Morristown, NJ 07962. Email address: Nader.Youssef@atlantichealth.org.

Santarcangelo, E.L, Balocchi, R., Scattina, E., Manzoni, D., Bruschini, L., Ghelarducci, B., & Varanini, M. (2008). Hypnotizability-dependent modulation of the changes in heart rate control induced by upright stance. Brain Research Bulletin, 75(5): 692-697. This is an interesting study of the potential physiological differences between people with high and low levels of hypnotic ability. The authors were interested to examine the autonomic psychophysiological differences between high hypnotizables and low hypnotizables. The authors of this study wished to examine an advanced hypothesis regarding heart rate variability/cardiac vagal tone and hypnosis which is a topic of psychophysiological research with which many readers may not be familiar. The authors of this article have written about a very important topic that may at first appear to be esoteric to the average reader of hypnosis literature. So let me first present a small summary of the importance of heart rate variability to hypnosis.

The primary cardiac measure that is used to index the effect of the parasympathetic nervous system on heart rate activity is called heart variability and/or cardiac vagal tone. The vagus nerve is thought to be the main enervator of most parasympathetic activity upon the heart. Its primary function is to help modulate heart rate activity in a fashion that allows the heart to recover from sympathetic activity and to maintain a healthy level of variability in the frequency of heart rate activity. It is advantageous for us to vary our heart rates as a continuous and non-varying heart rate would not be good for longterm cardiac health. The input of the vagus nerve to the heart causes it to become more variable in its fluctuation of heart rate activity. Strong and healthy signs of heart rate variability are an important sign of an individual’s overall cardiac health. It is even possible to predict mortality following a myocardial infarction based upon the degree of heart rate variability that is present in the patient. Heart rate variability can be easily measured using standardized psychophysiological assessment methods and even used clinically with inexpensive biofeedback devices such as the Heart Math Freeze-Framer package.

A number of years ago Dr. Stephen Porges and his colleagues published an article in this journal (Harris, Porges, Carpenter, & Vincenz, 1993) which offered some important new evidence that high hypnotizables may possess an autonomic nervous system that works in fundamentally different ways than that which we see in other people. In particular, there have been a number of replications of their original finding that high hypnotic ability can be predicted by the way in which a person’s parasympathetic nervous system appears to modulate their heart rate activity. More recently Solomon Diamond and his colleagues have demonstrated that heart rate variability can also be used to gauge depth of trance in hypnosis (Diamond, Davis, & Howe, 2007). Thus, it now appears that heart rate variability is one of the most important emerging areas of psychophysiological research in clinical and experimental hypnosis.
This study takes the previous research much further by examining the basic psychophysiological processing differences in heart rate variability between high and low hypnotizables. A number of previous studies and theories led the authors to develop a theory that highs and lows might differ in their heart rate variability in response to changes in their posture as they shifted the gravity of their body weight. The authors measured heart rate variability in the high and low hypnotizable participants in a seated and also in an upright position. The authors were predicting that there would be position related changes in heart rate variability between the high and low hypnotizable participants as they shifted from sitting to the upright position. The heart rate data was collected and analyzed across time with statistical indexes and Poincare Plot. The heart rate variability data was also examined in the frequency domain by performing a Fast Fourier Transform (FFT) procedure which examined the spectral components of the heart rate variability signal. Previous research in this area has indicated that the “high frequency” components of the heart rate variability signal exhibit the most reliable index of parasympathetic nervous system activity while the “very low frequency” signal components are an index of sympathetic activity. The authors reported finding no difference in overall heart rate activity between the groups. However, they did find heart rate variability related changes in very low frequency components of the heart rate variability changes due to body positioning changes. The authors asserted that their data might be consistent with the hypothesis that there is a “natural protection of Highs against cardiovascular events and suggest that the Highs’ cardiac function might be less impaired by microgravity than the Lows’ one.” The reasoning here regards the fact that there were differences in how high and low hypnotizable participants in this study managed the output of their sympathetic nervous system (the stress based “fight or flight” aspect of the autonomic nervous system) and their parasympathetic nervous system (the relaxation based aspect of the autonomic nervous system) upon their heart rate variability which were apparent in the very low frequency band. High hypnotizables demonstrated better management of their very low frequency components as they shifted body positions than low hypnotizables did.

The results of this experiment are important given that the whole area of heart rate variability and hypnosis is currently one of the most promising areas of psychophysiological research in hypnosis. Some researchers are already predicting that eventually it will be easy and practical for all of us to measure a clients hypnotic depth covertly using their heart rate variability as an objective measure of trance. This will be a great advance given that I’m sure that there are clients who have trouble accurately reflecting the depth of their phenomenological experience to us in therapy. These clients difficulties with giving us accurate verbal reports of their phenomenological experiences with hypnosis can be due to a host of contextual, social psychological, or personality related factors like repressive coping or brain-based neuropsychological impairments such as Broca’s Aphasia due to neuro-trauma of many varieties.

I invite the readers to pay special attention to all the basic research that is coming out now in this area due to the high likelihood that it will have clinical relevance to our understanding and techniques of hypnosis. Address for reprints: Enrica L. Santarcangelo MD, PhD, Department of Human Physiology and Biochemistry, University of Pisa, Via San Zeno 31, 56127 Pisa, Italy. Email Address: enricals@dfb.unipi.it.

REFERENCES
Shenefelt, P.D. (2008). Therapeutic management of psychodermatological disorders. *Expert Opinion in Pharmacotherapy, 9*(6):973-85. This article presents an overview of the treatment of skin disorders which are thought to have a psychological and psychophysiological focus in their etiology and prognosis for treatment. The author begins by discussing some of the background literature on how the skin and the brain interact through psychoneuroimmunoendocrine mechanisms and through behaviors that can strongly influence the initiation or flaring of skin disorders. This is a fascinating area of the emerging medical literature that is beginning to help us understand why hypnosis has been so gainfully employed for many years in the treatment of skin disorders such as eczema and warts. They reviewed the literature in psychocutaneous disease (skin disorders thought to have a psychological and psychophysiological component to them) and identified studies during the past 80 years for inclusion in his review of the literature. The author asserts that a number of therapeutic options exist for psychodermatological disorders and include standard psychotropic drugs, alternative herbs, dietary supplements, the placebo effect, suggestion, cognitive-behavioral methods, biofeedback, and hypnosis. The author suggests that based on his reading of the literature that “when simple measures fail to produce the desired results, combinations of drugs or addition of nonpharmacological therapies may produce better results.” The author also asserts that psychophysiological skin disorders may respond well to nonpharmacological therapies since they can counteract the physiology of stress and may enhance the psychoneuroimmunoendocrine mechanisms and behaviors that create, exacerbate, and maintain the pathophysiology of psychodermatological disorders. The author discusses that the treatment of co-morbid psychiatric disorders needs to be considered and he outlines a treatment approach that includes the usage of psychopharmacological agents such as anxiolytic and antidepressant medications. The author asserts that the pattern of causation seen in these disorders may have a circular nature to them. He therefore asserts that some primary psychiatric disorders may be affecting a patient’s skin condition while other patients’ skin disorders may be causing enough distress and embarrassment to produce a psychiatric disorder secondary to the patients’ skin disorder which may also require treatment. The paper also discusses how nonpharmacological approaches can be integrated with standard medical care to achieve the maximum benefit for these patients. Address for reprints: Philip D. Shenefelt M.D., Department of Dermatology and Cutaneous Surgery, University of South Florida, Tampa, FL 33612, USA. Email Address: pshenefe@health.usf.edu.


The authors of this study present a meta-analysis of 28 randomized controlled trials studying the effects of hypnosis and other psychological interventions to assist children and adolescents with needle related pain and distress during medical procedures. The authors systematically reviewed the previous literature looking for studies which met their inclusion criteria.
Criteria. Studies were found which utilized a variety of psychological approaches besides hypnosis such as cognitive behavior therapy, psychoeducative approaches, distraction, among other primarily psychologically-based interventions. The outcome measures in the studies assessed each participant's pain and distress through examining their verbal report, observer report, behavioral/observational measures, and physiological correlates. The data from the results of the 28 studies which met the inclusion criteria were pooled together resulting in a data set with 1,039 participants. The authors then computed effect sizes for the various approaches to examine which methods appeared to have the most efficacy in helping children and adolescents with needle related pain and distress during medical procedures. The authors reported that the most reliable and robust treatment effects were seen in trials where distraction, combined cognitive-behavioral interventions, and hypnosis were used. The authors also discussed the "promising but limited evidence" for a number of other psychological interventions that had been used in the 28 randomized controlled trials. The authors conclude by providing some useful methodological recommendations for future randomized control studies of psychological interventions to assist children and adolescents with needle related pain and distress during medical procedures. Address for reprints: Lindsay S. Uman, Dalhousie University, Department of Psychology, Life Sciences Centre, 1355 Oxford Street, Halifax, Nova Scotia, Canada. Email address: luman@dal.ca.