Review of the International Literature

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Berger, M. M., Davadant, M., Marin, C., Wasserfallen, J. B., Pinget, C., Maravic, P., Koch, N., Raffoul, W., & Chiolero, R. L. (2009). Impact of a pain protocol including hypnosis in major burns. Burns. [E-pub Ahead of Publication]. This is a small study which utilized hypnosis to treat patients with burns in a hospital setting. The goal of treatment was to reduce the patient’s experience of pain intensity as well as the associated anxiety with having been burned. The researchers wished to examine if hypnosis, when used, would affect the overall course of wound healing and whether using hypnosis could reduce the cost of treatment. The patients were 23 burn victims admitted to the intensive care unit (ICU) from between 2006 to 2007 who volunteered to try hypnosis in addition to the standard course of treatment for their burns. The hypnotic treatment was generally administered to the patients about seven days following their admission to the ICU. These 23 patients were matched with 23 control patients who were selected on the basis of several factors including wound location. The authors reported finding that the patients who received hypnosis reported experiencing less pain and anxiety than their matched controls. The patients who received hypnosis also had a better course of recovery from their burns. The authors also reported that there was a reduction in the overall cost of treatment for these patients compared to their controls.

This study is of interest as it demonstrated that the adjunct usage of hypnosis could have some efficacy in affecting the course of treatment for burn patients even when employed seven days after the initial burn. A number of prominent clinical experts in this area, such as Dr. Dabney Ewing, have previously recommended that this type of hypnotic treatment is more successful in influencing wound healing when employed within the first hours that a patient has been burned. Future studies in this area could profit comparison to hypnotic interventions being delivered sooner, perhaps in the first hours after admission to the ICU. In this way it would be possible to examine if there are any major differences obtained when using an earlier intervention as has been previously claimed by a number of respected members of the hypnosis community. Address for reprints: M. M. Berger, Service of Intensive Care Medicine & Burns Centre, University Hospital (CHUV), Lausanne, Switzerland. Email address: Mette.Berger@chuv.ch.

This is an experiment looking at the possible differences between high and low hypnotizables on imagery tasks employing EEG based psychophysiological measures. The authors report that high and low hypnotizables demonstrate different levels of skill on a guided imagery task involving visual and somesthetic imageries. This experiment was designed to investigate the potential psychophysiological differences between highs and lows performing the imagery task. The authors also varied the type of seating that was employed in this task from an upright stance to a seated posture. The authors reported finding no task performance difference between high and low hypnotizables when they were seated. Both groups reported higher levels of imagery and less difficulty with imagery when seated. However, some psychophysiological differences were noted. The authors reported finding desynchronization differences in the alpha and theta EEG frequencies between highs and lows. The authors also reported finding other EEG differences between highs and lows involving the type of task that was used. The authors conclude that “Our results indicate that different, hypnotizability-related cognitive strategies, that are revealed by differences in EEG modulation, are responsible for the similar subjective experience associated with visual and somesthetic imageries in Highs and Lows. In addition, in both groups higher order mental representation of different sensory modalities might be subserved by a unique integrated neural network.” Address for reprints: Cavallaro, F. I., Department of Physiology, University of Siena, Italy. Email address: enricals@dfb.unipi.it.

Cox, R. E., & Barnier, A. J. (2009). Hypnotic illusions and clinical delusions: Hypnosis as a research method. Cognitive Neuropsychiatry. [E-pub Ahead of Publication]. The authors discuss how hypnosis can be used to create experimental analogues for investigations into the psychopathology of various mental conditions. In particular, this paper discusses how hypnosis can be used to model various distortions of memory-related processes. Much of this paper is devoted to reviewing the authors’ work on using hypnosis to create experimental delusions of memory in otherwise normal individuals. This is fascinating research and I highly recommend our readers to examine this paper and others by Dr. Amanda Barnier and Dr. Rochelle Cox. Address for reprints: Dr. Rochelle E. Cox, Macquarie Centre for Cognitive Science, Macquarie University, Sydney, Australia. Email Address: rcox@maccs.mq.edu.au.

Dell, P. F. (2010). Involuntariness in hypnotic responding and dissociative symptoms. Journal of Trauma and Dissociation. 11(1), 1-18. The author presents an excellent summary some of his recent theorizing regarding dissociation theory. The author follows up on earlier work by Janet and neo-dissociation theorists on the importance of the perception of involuntariness in dissociative phenomena. However, the author forges new ground in advancing dissociation theory by discussing recent developments in cognitive/affective neuroscience as well as utilizing an evolutionary perspective on the adaptive value of dissociative phenomena for the survival of the human species. The author discusses the clinical and experimental implications of his theory and calls for more research into the experience of involuntariness. Address for reprints: Dr. Paul F. Dell, Trauma Recovery Center, 1358 DeBree Avenue, Norfolk, VA 23517. Email address: pfellt@aol.com.
Ducrotte, F. (2009). Abdominal bloating: An Update. *Clinical Gastroenterology and Biology*. [E-pub Ahead of Publication]. The author presents a useful summary of the current medical understanding of the pathophysiology of abdominal bloating. Several underlying pathophysiological vulnerabilities are discussed such as hypersensitivity in visceral areas of the body. The author also discusses non-pharmacological treatment approaches to abdominal bloating and discusses the value of using hypnosis. Address for reprints: P. Ducrotte*, Département d’hépatogastroentérologie et de nutrition, CHU de Rouen, 1 rue de Germont, Rouen cedex, France. Email address: philippe.ducrotte@chu-rouen.fr.

Hartmann, K. E., McPheeters, M. L., Biller, D. H., Ward, R. M., McKoy, J. N., Jerome, R. N., Micucci, S. R., Meints, L., Fisher, J. A., Scott, T. A., Slaughter, J. C., & Blume, J. D. (2009). Treatment of overactive bladder in women. *Evidence Report/Technology Assessment*. 187(1):1-12. The authors present a meta-analysis of studies using pharmacological and non-pharmacological treatments for overactive bladder in women. Only 20 of the 232 studies that they found in the literature were found to be of good quality for inclusion in the study. Most of the 20 studies did not include non-pharmacological approaches although a few did use treatment methods such as acupuncture, relaxation, and hypnosis. The authors reported that none of the treatment methods achieved more than modest results and could be recommended over another one. The placebo control treatments often obtained results around 50% of the magnitude and efficacy of the pharmacological treatments. The authors report that there was not enough evidence to recommend using hypnosis at this time as a behavioral intervention. However, they did report finding some modest evidence in their analyses supporting its efficacy. The authors discuss these results as indicating that a lot more research needs to be done given the great prevalence of overactive bladder for women. Address for reprints: Dr. K. E. Hartmann, Vanderbilt Evidence-based Practice Center, Institute for Medicine and Public Health, Vanderbilt University Medical Center, 2525 West End Avenue, Nashville, Tennessee 37203-1738, USA. Email address: katherine.hartmann@Vanderbilt.Edu.

James, U. (2009). Practical uses of clinical hypnosis in enhancing fertility, healthy pregnancy and childbirth. *Complementary Therapies in Clinical Practice*. [E-pub Ahead of Publication]. This article discusses some of the clinical applications of hypnosis to help patients with fertility, pregnancy, and delivery. The author shares her clinical experience and provides some guidelines with helping patients using hypnosis. Address for reprints: Ursula James, Chair of the Medical School Hypnosis Association, Visiting Teaching Fellow Oxford University Medical School, Honorary Lecturer Bart’s and the London, Queen Mary’s University of London Medical Schools, London, UK. Email address: ursula@ursulajames.com.

Kwekkeboom, K. L., Cherwin, C. H., Lee, J. W., & Wanta, B. (2009). Mind-Body treatments for the pain-fatigue-sleep disturbance symptom cluster in persons with cancer. *Journal of Pain and Symptom Management*. [E-pub Ahead of Publication]. The authors discuss how patients commonly experience a cluster of related symptoms involving pain, fatigue, and sleep disturbance while undergoing treatment for cancer. The aim of this study was to review the previous evidence for the efficacy of mind-body treatments in helping such conditions. The authors utilized a systematic computer database search of the literature. The authors found 43 studies that matched their inclusion criteria of treatments using methods such as relaxation, imagery/hypnosis, cognitive-behavioral therapy/coping skills training, meditation, music, and virtual reality. The authors reported that only hypnosis and cognitive-
behavioral therapy treatment methods were successful in these studies for reducing all three symptoms of pain, fatigue, and sleep disturbance. However, meditation, music, and virtual reality were each found to be helpful for the alleviation of one or two symptoms in the cluster. The authors conclude that more research is necessary to find a single treatment strategy which is highly effective for reducing all three symptoms. The authors also provide recommendations to guide future researchers in their efforts. Address for reprints: K. L. Kwekkeboom, School of Nursing, University of Wisconsin-Madison, Madison, Wisconsin, Email Address: kwekkeboom@wisc.edu.

Macleod, C. M. (2009). Hypnosis and the control of attention: Where to from here? Consciousness & Cognition. [E-pub Ahead of Publication]. The author reviews the literature on how hypnosis can affect cognitive processes like attention. This article highlights some of the Stroop interference task work done by Dr. Amir Raz and his colleagues. The author poses a number of interesting questions to help guide future research in this area. Address for reprints: Dr. C. M. Macleaod, Department of Life Sciences, University of Toronto at Scarborough, 1265 Military Trail, Scarborough, Ontario, Canada M1C 1A4. Email: cmacleod@uwaterloo.ca.

Naish, P. L. (2009). Hypnosis and hemispheric asymmetry. Consciousness & Cognition. [E-pub Ahead of Publication]. The author of this study revisits the issue of whether there are processing differences between the right and left hemispheres of the brain associated with hypnotic ability. People often claim in hypnosis workshops that high hypnotic ability is associated with right hemisphere activation and then follow with examples of right hemisphere-like tasks that high hypnotizables should be better at than low hypnotizables. Curiously, the evidence for these kinds of claims has not been particularly strong up until this point despite a rather widespread acceptance among people in the hypnosis community that hypnosis is somehow a right hemisphere dominated process.

In this study high and low hypnotizables were presented with visual stimuli in patterns to their right and left hemispheres. The stimuli were presented in conditions both in and out of hypnosis. The author reports finding some differences between the right and left hemispheres processing of visual stimuli for high hypnotizables. Specifically, it was reported that high hypnotizables “exhibited a faster-acting left hemisphere in the waking state, but faster right when hypnotized.” This certainly appears to be an important study given the implications that suggest cerebral asymmetry may be involved with the brain’s processing of hypnotic phenomena. Address for reprints: P. L. Naish, Dept. of Psychology, The Open University, Briggs Building, Walton Hall, Milton Keynes MK7 6AA, United Kingdom. Email Address: p.naish@open.ac.uk.

Posner, M., & Rothbart, M. K., (2010). Brain states and hypnosis research. Consciousness & Cognition. [E-pub Ahead of Publication]. This article presents a synthesis of research and theory on the topic of hypnosis and neuroscience. The authors point out that the phenomena of hypnosis seems to allow one to change their brain state and their brain’s ability to allow “external input to dominate over internal goals.” Address for reprints: Michael Posner, Ph.D., University of Oregon, Eugene, OR 97403, United States. Email address: mposner@oregon.uoregon.edu.
Wasan, A. D., Kong, J., Pham, L. D., Kaptchuk, T. J., Edwards, R., & Gollub, R. L. (2010). The impact of placebo, psychopathology, and expectations on the response to acupuncture needling in patients with chronic low back pain. *Journal of Pain*. [E-pub Ahead of Publication]. The authors of this study wished to examine whether a patient’s response to a mind-body treatment could be explained by their overall level of psychopathology and their expectancies regarding the efficacy of that treatment. Previously, there has been a lot of research in this area demonstrating that expectancy is, in fact, usually a significant predictor of clinical outcome using a variety of mind-body treatments such as acupuncture, biofeedback, and hypnosis. However, the authors point out that psychopathology has not yet been examined in any previous research as a potential predictor of response to acupuncture.

The authors utilized a blinded randomized control design with forty patients who received either sham acupuncture needling or standard acupuncture procedures for chronic pain. The forty patients were all treated for chronic low back pain and were categorized as either low or high in comorbid psychopathology.

Many previous theories proposed by classic hypnosis researchers such as Dr. Jean Martin Charcot have tended to identify psychopathology with responsiveness to mind-body treatments such as hypnosis. However, in this study the authors reported finding no relationship between the patients level of psychopathology and their responsiveness to treatment. Meanwhile it was found that subjects in both the experimental and sham needling groups received a similar level of clinical benefit from acupuncture. This benefit was also significantly predicted by the patients’ level of clinical expectancy prior to the intervention which is consistent with a large body of previous research.

This study seems to further demonstrate the relative independence of psychopathology from responsiveness to mind-body treatments like acupuncture and hypnosis. So perhaps this is yet another line of evidence demonstrating that mind-body phenomena are relatively normal abilities despite the early theories of Charcot and others. However, more research needs to be done in this area to replicate this work and to examine whether psychopathology may nevertheless be a significant modifier of treatment responsiveness in some other way. Address for reprints: Dr. A. D. Wasan, Department of Anesthesiology, Women’s Hospital and Harvard Medical School, Boston, Massachusetts; Department of Psychiatry, Brigham and Women’s Hospital and Harvard Medical School, Boston, Massachusetts.