Review of the International Literature

Ian Wickramasekera II
Associate Editor

Ball, T. S. (2006). Reassessment of hypnotic symptom removal by Freud and Bernheim. *International Journal of Clinical and Experimental Hypnosis, 54*(4), 480-487. This article examines some of the case reports of Sigmund Freud and Hippolyte Bernheim from the classic literature on hypnosis. The author is particularly interested in evaluating Freud and Bernheim’s uses of the direct symptom removal approach with hypnosis for treating psychosomatic and psychophysiological disorders. The author attempts to present Freud and Bernheim’s cases within the experimental framework of controlled case study designs. He argues that these cases do provide some insights into the potential benefits of using a direct symptom removal approach since they may be more time efficient and have other related benefits. Address for reprints: Thomas S. Ball, 1637 Butternut Way, Diamond Bar, CA, 91765, USA. Email address: orocue@earthlink.net.

Benham, G., Woody, E. Z., Wilson, K., & Nash, M. R. (2006). Expect the unexpected: Ability, attitude, and responsiveness to hypnosis. *Journal of Personality and Social Psychology, 91*(2), 342-350. This is another important recent article which demonstrates how factors related to expectancy and ability may interact in shaping hypnotic experiences. The authors administered the Stanford Hypnotic Susceptibility Scale: Form C to 90 undergraduate students. The authors asked the participants at various times throughout the experiment how responsive to hypnosis they thought they would be on a 1 to 20 scale. This question was designed to elicit expectancy ratings prior to the experience of the Stanford Hypnotic Susceptibility Scale which could then be repeated throughout the experiment to examine the data for changes in the participants expectancy ratings based upon their further experiences with hypnosis during the hypnotic testing. The authors reported finding that both ability and expectancy variables were significant predictors of hypnotic responsiveness although expectancy was not as strong a predictor as has been seen in some previous studies done by Dr. Irving Kirsch and others. The authors used structural equation modeling to develop a model of hypnotic responsiveness which tends to support integrative theoretical models of hypnotic phenomena. The authors thus reach a fairly similar conclusion to that of some recent work done
by Dr. Ronald Pekala and Dr. Krishna Kumar who employ psychophenomenological methods (the Phenomenology of Consciousness Inventory - Hypnotic Assessment Protocol). Dr. Pekala and Dr. Kumar have published a number of similar studies that reached the same conclusion that expectancy and ability variables are both reliable predictors of hypnotic responsiveness. Address for reprints: Michael R. Nash, Department of Psychology, University of Tennessee, 307 Austin Peay Building, Knoxville, TN 37996-0900. E-mail address: mnash@utk.edu.

Bryant, R. A., & Wimalaweera, S. (2006). Enhancing thought suppression with hypnosis. *International Journal of Clinical and Experimental Hypnosis, 54*(4), 488-499. This study examines the question of whether hypnosis can be employed to enhance thought suppression. The classic literature of hypnosis on repression and dissociation as well as experimental findings on posthypnotic amnesia and neodissociation theory would all seem to predict hypnosis could be used to accomplish thought suppression. There is very well demonstrated empirical finding in the literature of cognitive psychology that intentional thought suppression usually leads to a paradoxical increase in the occurrence of the intended thought to be suppressed (E.g.: Try not to think of a pink elephant). The paradoxical effect of intentional thought suppression has been demonstrated to be enhanced under conditions when additional cognitive load is present. The authors hypothesized that hypnosis might be able to encourage thought suppression more efficiently by better managing the cognitive load that normally enhances the paradoxical reminiscence. Thirty-nine high and forty low hypnotizable participants took part in an experiment where they were hypnotized and either instructed to suppress or not suppress thoughts of an embarrassing emotional experience. The participants then completed sentence-unsrambling task that allowed the researchers to assess the success of the participants thought suppression and accessibility of the embarrassing thoughts. The authors interpreted the results of the experiment to indicate that hypnosis did enhance their ability to suppress thoughts. Another interesting result of this study was that the high hypnotizables also reported more intrusive thoughts of the suppressed material compared to the low hypnotizables. This result is consistent with earlier findings of the lead author on intrusive thoughts and hypnotic ability as well as observations by Dr. Etzel Cardeña and Dr. David Spiegel on the association between high hypnotic ability and intrusive imagery in PTSD. Address for reprints: Richard A. Bryant, Ph.D., School of Psychology, University of New South Wales, NSW 2052, Sydney, Australia. Email address: r.bryant@unsw.edu.au.

Casiglia, E., Rossi, A, Tikhonoff, V., Scarpa, R., Tibaldeschi, G., Giacomello, M., Canna, P., Schiavon, L., Rizzato, A., Lapenta, A. (2006). Local and systemic vasodilatation following hypnotic suggestion of warm tub bathing. *International Journal of Psychophysiology, 62*(1), 60-65. The authors present an interesting study of the specific autonomic correlates of hypnotic suggestions to imagine immersion in warm water. The authors hypothesized that the measured psychophysiological changes might be similar to changes that would be observed during actual conditions of immersion in warm water. The participants were 18 volunteers who had been previously selected for their high hypnotizability. The experimental procedure began with a hypnotic induction followed by 30 minutes of exposure to a hypnotic suggestion to experience one’s forearm immersed in warm water. Next the participants
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experienced a 30 minute hypnotic suggestion of having their whole body immersed in warm water followed by 30 minutes of experiencing hypnosis without any thermal suggestion. Blood pressure, heart rate, body temperature, forearm flow and resistance, stroke volume, cardiac index and total peripheral resistance were monitored during all three experimental conditions. The authors report that the psychophysiological changes were fairly consistent with what they hypothesized actual local or complete bodily immersion in water would produce. During the first condition local vasodilation was recorded with a decrease of forearm resistance (-18%, \( p<0.01 \)) and increase of forearm blood flow (+43%, \( p<0.01 \)) when the participants were imagining their arms warming. There was also evidence of systemic vasodilation with decrease of total peripheral resistance (-29%, \( p<0.01 \)) and increase of cardiac index (+54%, \( p<0.01 \)) when the total immersion imagery was employed. Interestingly, body temperature, arterial blood pressure and heart rate were unchanged across all conditions. The authors also report that during the basic hypnosis condition no hemodynamic variations were observed. Address for reprints: Casiglia, Edoardo, Department of Clinical and Experimental Medicine, University of Padova, Via Giustiniani No. 2, 35128, Padova, Italy. Email address: edoardo.casiglia@unipd.it.

Eitner, S., Wichmann, M., Schultze-Mosgau, S., Schlegel, A., Leher, A., Heckman, S., & Holst, S. (2006). Neurophysiologic and long-term effects of clinical hypnosis in oral and maxillofacial treatment: A comparative interdisciplinary clinical study. International Journal of Clinical and Experimental Hypnosis, 54(4), 457-479. This study examines the neurophysiological correlates and long term effects of hypnosis in oral surgery and other dental related procedures. The participants were 45 highly anxious or less-anxious patients that were randomly assigned into either a hypnosis or a non-hypnosis group and were assessed as either highly anxious or less-anxious using the Dental Anxiety Scale. The hypnosis subjects were instructed in the uses of hypnosis to control anxiety and other unpleasant emotional experiences during their upcoming oral and maxillofacial surgery. The participants’ subjective experience of anxiety was assessed as well as objective psychophysiological responses using EEG, ECG, heart rate, blood pressure, blood oxygen saturation, respiration rate, salivary cortisol concentration, and body temperature. The hypnotic intervention was attended with a variety of subjective and objective psychophysiological benefits such as decreased anxiety and psychophysiological benefits (decreased systematic reactivity, lower frequency EEG in the alpha and theta frequency range, and diminished salivary cortisol levels at surgery). The authors interpreted their findings to indicate that the beneficial results of hypnosis on can be demonstrated in both subjective and objective measures for oral and maxillofacial surgery patients. Address for reprints: Dr. S. Eitner, Department of Prosthodontics, Friedrich-Alexander-University Erlangen-Nuremberg, Erlangen, Germany. Email address for reprints: seitner@prothetik-erlangen.de.

indicate that hypnosis not only assisted with pain and anxiety management but also may show promise in reducing procedure time, untoward medical events like vasovagal events, and the recovery time. The authors argue that their data warrants further investigation using a group randomized clinical trials design. This initial study does seem to offer a lot of promise given that previous research has shown that early screening could reduce the estimated 60,000 deaths which occur due to colorectal cancer. Address for reprints: Gary Elkins, Ph.D., ABPP, ABPH, Department of Psychology and Neuroscience, Baylor University, One Bear Place 97334, Waco, TX 76798-7334, USA. Email address: Gary_Elkins@baylor.edu.

**Libet, B. (2006).** The timing of brain events: Reply to the ‘Special Section’. *Consciousness and Cognition: An International Journal, 15*(3), 540-547. This is an interesting “reply” paper in which Dr. Libet addresses some of the criticisms of his groundbreaking neurophysiological studies of unconscious mental phenomena. In this paper he discusses some methodological and theoretical criticisms of an earlier experiment he conducted where he reported finding that it took repetitive activations at .5 seconds for the sensory cortex to produce a conscious detection and perception of the sensation. He argues that the interpretation that a facilitatory buildup hypothesis is incompatible with the accumulated experimental evidence. He also makes some reference to hypnosis in further delineating his theory on the role of unconscious mental processes in human perception and volition. Address for reprints: Benjamin Libet, Center for Neuroscience, University of California, 809 Plum Lane, Davis, CA, US, 95616.

**Grindstaff, J. S., & Fisher, L. A. (2006).** Sport psychology consultant’s experiences of using hypnosis in their practice.: An exploratory investigation. *The Sport Psychologist, 20*(3), 368-386. This study presents the results of six in depth semi-structured interviews with doctoral level sports psychology consultants about the use of hypnosis in improving athlete performance. All six of the consultants also had advanced training in the use of hypnosis in sports psychology. The authors discuss their findings in terms of the potential desirability of using hypnosis with athletes as well as certain challenges that exist due to the common misconceptions about hypnosis and cultural considerations. Address for reprints: Jason Grindstaff, 1914 Andy Holt Ave. 336 HPER, University of Tennessee, Knoxville, TN 37996-2700. Email address: jgrinds1@utk.edu.

**Jensen, M. P., McArthur, K. D., Barber, J., Hanley, M. A., Engel, J. M., Romano, J. M., Cardena, D. D., Kraft, G. H., Hoffman, A. J., & Patterson, D. R. (2006).** Satisfaction with, and the beneficial side effects of, hypnotic analgesia. *International Journal of Clinical and Experimental Hypnosis, 54*(4), 416-431. This study examines the positive long term side effects of employing hypnotic analgesia with chronic pain patients. The participants were 33 persons with a chronic pain related disability who had previously participated in a study of the effectiveness of hypnotic analgesia to manage pain. The authors were able to follow-up with 30 of the original 33 participants 16 months after the conclusion of the previous experiment. The results indicated that most of the studies participants continued to experience the benefits of hypnosis after the experiment. Feelings of satisfaction with hypnosis, decreases in pain intensity, increased feelings of control over their chronic pain, increased relaxation,
decreased stress, an enhanced sense of well being were all reported although there was a wide variance in the participants’ experiences of these positive continued benefits. Address correspondence to Mark P. Jensen, Ph.D., Department of Rehabilitation Medicine, Box 356490, University of Washington, Seattle, WA, 98195-6490, USA. Email address: mjensen@u.washington.edu.

Palsson, O. S., Whitehead, W. E. (2006). Hypnosis for non-cardiac chest pain. Gut, 55 (10), 1381-1384. This paper examines the potential use of hypnosis to control non-cardiac related chest pain. The authors report that a study determined 80% of patients were able to use hypnosis to reduce non-cardiac chest pain that previously had been unresponsive to other medical interventions. Address for reprints: Olafur Palsson, Psy.D., Center for Functional Gastrointestinal and Motility Disorders, University of North Carolina, Chapel Hill, Chapel Hill, North Carolina, USA. Email address: palsson2000@yahoo.com.

Polczyk, R., & Pasek, T. (2006). Types of suggestibility: Relationships among compliance, indirect, and direct suggestibility. International Journal of Clinical and Experimental Hypnosis, 54(4), 392-415. The authors of this study examined the relationship between direct and indirect suggestions during a person’s experience of hypnosis. Over the years there has been much controversy as to the effectiveness of indirect suggestion over direct suggestion and even questions regarding whether the two types of hypnotic suggestibility are related at all. The authors administered direct and indirect suggestions to 103 participants and examined the data using regression and spectral analytic methods. They reported finding several relationships between indirect and direct forms of hypnotic suggestions in their participants’ responses. Measures of indirect suggestion and compliance were both found to predict direct suggestibility as indexed by the Barber Suggestibility Scale. The authors also noted that indirect suggestibility was more related to the performance of difficult items while direct suggestibility was more associated with easier hypnotic tasks. The authors discuss a number of limitations in their study’s methodology and the inconsistency of some of their data with previous work done related to dissociated-control theories of hypnosis. Address for reprints: Romuald Polczyk, Institute of Psychology, Jaiellonian University, Al. Mickiewicza 3, 31-120, Krakow, Poland. Email address: polczyk@apple.phils.uj.edu.pl.

Robinson, R. C., Crasilneck, H., Garofalo, J. P., & Whitfill, T. (2006). Examining sympathetic nerve activity with microneurography during hypnosis: Untangling the effects of central command. International Journal of Clinical and Experimental Hypnosis, 54(4), 448-456. This study presents the results of a psychophysiological investigation into the activity of the sympathetic nervous system during hypnosis. The activity of 5 participants’ sympathetic nervous system was assessed using microneurography which is a procedure that implants electrodes directly into skin nerves. The electrode sites chosen for this study were in the legs of the participants while EKG and respiration were also monitored to assess for artifact that might alter the microneurographic measurements. A hand dynamometer was also employed to measure the force exerted by the participants while they were asked to complete a sustained muscle grip task for 2 minutes. Two subjects completed the muscle task under
hypnosis under 3 trial conditions. In the second trial the subjects received a hypnotic suggestion that the task would be more difficult while in the third trial they were told it would be easier to complete. Two subjects simply completed the task three times without any hypnotic instructions whatsoever. The results indicated that the hypnotic suggestions did increase the activity of the sympathetic nervous system in the condition where the hypnotic suggestion was administered to experience increased difficulty by 25% compared to only a 6% increase for the participants who did not experience the suggestion on their second trial. The results also indicated that the hypnosis participants’ sympathetic reactivity decreased to baseline levels during the hypnotic suggestion to experience decreased difficulty while the non-hypnotic subjects’ sympathetic reactivity was increased to 13% at the third trial. The authors conclude that their evidence is consistent with the central command hypothesis and also possibly indicative of specific physiological correlates of hypnotic experience using microneurographic methods to examine the sympathetic nervous system. Address for reprints: Richard C. Robinson, Baylor University Medical Center, 3600 Gaston Avenue, Wadley Tower #360, Dallas, TX 75246, USA. Email address: RichardR@BaylorHealth.edu.

Sadler, P., & Woody, E. Z. (2006). Does the more vivid imagery of high hypnotizables depend on greater cognitive effort? A test of dissociation and social-cognitive theories of hypnosis. *International Journal of Clinical and Experimental Hypnosis, 54*(4), 372-392. This article presents an interesting psychophysiological investigation of the role that effort plays in hypnotic imagery. The authors employed heart rate acceleration as an objective measure of the degree to which effort and voluntary processes account for the experience of hypnotic imagery. The authors also collected subjective measures of the vividness of the imagery as well as measures of absorption, effort, and control. Twenty-five high hypnotizable and twenty-three low hypnotizable participants were asked to produce emotionally neutral imagery in response to hypnotic suggestions were worded in either an effortful or effortless fashion. The high hypnotizable participants experienced a higher degree of vividness of imagery which was coupled with lower heart rate acceleration compared to the low hypnotizables. The effortful wording of suggestions did not increase the heart rate acceleration of the high hypnotizables but did increase the heart rate of the low hypnotizable participants. The authors argue that their findings support a dissociated-control theory of hypnosis rather than a dissociated-experience or social cognitive theory of hypnosis. However, one might argue that the increased parasympathetic activity that is commonly seen in the psychophysiological data of high hypnotizables may have interfered with the ability of heart rate acceleration to serve as reliable measure of effort during hypnosis. The resulting suppression of sympathetic reactivity may therefore have shown up in highs while lows remained reactive and displayed predictable heart rate acceleration which indexed there effort as predicted by the literature in the autonomic psychophysiology of cognitive processes. This is a very interesting experiment in any event, and I highly recommend that anyone interested in the latest scientific findings on social cognitive vs. special state theories of hypnosis should read this article. Address for reprints: Pamela Sadler, Department of Psychology, Wilfrid Laurier University, 75 University avenue West, Waterloo, Ontario, Canada N2L 3C5. Email address: psadler@wlu.ca.
Sharav, Y., & Tal, M. (2006). Focused hypnotic analgesia: Local and remote effects. Pain, 124(3), 280-286. The authors of this study wished to examine the specific effects of hypnotic analgesia in response to painful electrical stimulation. In particular, they were interested to learn if hypnotic analgesic suggestions to reduce pain at one location would equally reduce pain at another somatic location. In this experiment they study “focused hypnotic analgesia” using targeted hypnotic analgesic suggestions to either the face or leg. Pain intensity ratings were collected from 12 high hypnotizable and 13 low hypnotizable participants. The ratings were collected under a “local” experimental condition where analgesia and stimulation were applied to the same area and also a “remote” condition where analgesia was applied to one location and stimulation was delivered to a different area. The authors report that for high hypnotizables that the hypnotic analgesia was stronger at the local site than at the remote site. However, there was no difference in pain intensity ratings for the low hypnotizable participants between the remote and local body locations. The effect of hypnotic analgesia rose as the pain stimuli increased for both high and low hypnotizable participants. The authors did discover some evidence that focused hypnotic analgesia could affect remote as well as local body sites. Significant reductions in pain intensity occurred with hypnosis in the 3 highest stimulation intensities employed in the local and remote locations of the high hypnotizable participants. The authors concluded that focused hypnotic analgesia does appear to have mainly local effects for high hypnotizables although some remote effects were detected. They speculate that the noceceptive processing of hypnotic analgesia at remote and local sites may be different with placebo mechanisms accounting for remote hypnotic analgesia and attentional based mechanisms accomplishing local hypnotic analgesia. The authors approach to studying remote and local hypnotic analgesia may prove a very interesting experimental paradigm for investigating the neurophysiological mechanisms hypnosis if FMRI and other neuro-imaging techniques could be added to future studies. It would be particularly interesting to see if there were differences in the activity of the somatosensory and anterior cingulate cortex for hypnotic analgesia at local and remote locations. Address for reprints: Yair Sharav, Hadassah-HU School of Dentistry, P.O. Box 1172, Ein Kerem, Jerusalem 91010. Email address: sharav@cc.huji.ac.il.

Tan, G., Alvarez, J. A., & Jensen, M. P. (2006). Complementary and alternative medicine approaches to pain management. Journal of Clinical Psychology, 62(11), 1419-1431. This article discusses the possible benefits of employing hypnosis with other complementary and alternative medical traditions such as cranial electrotherapy stimulation (CES). The authors present 2 case studies where hypnosis was paired with CES in the treatment of chronic pain. The authors interpret their findings to indicate that this combination approach with hypnosis may have a number of benefits such as increasing patient’s confidence in their treatment approach and lowering the overall costs and time demands of the patient’s therapy. Address for reprints: Gabriel Tan, Michael E. DeBakey Veterans Affairs Medical Center, 2002 Holcombe Boulevard, Houston, TX 77030. Email address: TAN.GABRIEL@med.va.gov.