

# AUSTRALIAN JOURNAL OF CLINICAL AND EXPERIMENTAL HYPNOSIS



---

MAY 1999

VOLUME 27 NUMBER 1

Published by the  
AUSTRALIAN SOCIETY OF HYPNOSIS

---

<i>Annual subscription rate:</i>	Australia:	Individuals	\$30.00
		Institutions and Libraries	\$45.00
	Overseas:	Individuals	\$35.00
		Institutions and Libraries	\$50.00
<i>Price per single copy: (including back copies)</i>		Individuals	\$20.00
		Institutions and Libraries	\$30.00

*Subscription inquiries to the Editor*

# AUSTRALIAN JOURNAL OF CLINICAL AND EXPERIMENTAL HYPNOSIS

---

May 1999

Volume 27 Number 1

FROM OUR ARCHIVES: MEDICAL HYPNOSIS IN NEW GUINEA Victor Barnes . . . . .	1
DEVELOPMENT OF THE GROUP SCALE OF HYPNOTIC ABILITY: A REVISION OF THE HARVARD GROUP SCALE OF HYPNOTIC SUSCEPTIBILITY Russell M. F. Hawkins and Lienne Wenzel . . . . .	6
THE GROUP SCALE OF HYPNOTIC ABILITY: MANUAL AND RESPONSE BOOKLET Russell M. F. Hawkins and Lienne Wenzel . . . . .	20
HYPNOSIS IN THE TREATMENT OF INSOMNIA, NIGHTMARES, AND NIGHT TERRORS David Howsam . . . . .	32
THE CONSEQUENCES OF INDIVIDUAL DIFFERENCES IN PREPARATION FOR SURGERY AND INVASIVE MEDICAL PROCEDURES Rodger Kessler . . . . .	40
AN HYPNOTIC INTERVENTION FOR MIGRAINE CONTROL Gordon Emmerson and Gitta Trexler . . . . .	54
INABILITY TO DEHYPNOTISE: IMPLICATIONS FOR MANAGEMENT Melvin A. Gravitz . . . . .	62
HYPNOSIS AND IMMUNE SYSTEM FUNCTIONING Karin Hannigan . . . . .	68
HYPNOSIS FOR SLEEP DISORDERS Robert Evans . . . . .	76
BOOK REVIEWS . . . . .	86
BOOKS AVAILABLE FOR REVIEW . . . . .	89

**AUSTRALIAN JOURNAL OF  
CLINICAL AND EXPERIMENTAL HYPNOSIS**

Copyright © The Australian Society of Hypnosis Limited 1998

---

**EDITORIAL BOARD**

*Editor*

Barry J. Evans, PhD, University of Melbourne

*Associate Editors*

Greg J. Coman, MSc, University of Melbourne

Kathryn M. Gow, PhD, Queensland University of Technology

Kevin McConkey, PhD, University of New South Wales

Wendy-Louise Walker, PhD, Sydney

Graham R. Wicks, MBBS, DOBstRCOG, FRACGP,

Women's and Children's Hospital, Adelaide

*Abstracts Editor*

Alistair G. Campbell, MCLinPsych, Launceston

*Chief Editorial Consultant*

Graham D. Burrows, AO, KSJ, MD, ChB, BSc, DPM, FRANZCP, FRCPsych, MRACMA,

DipMHLthSc(Clinical Hypnosis), University of Melbourne

*Editorial Consultants*

Peter B. Bloom, MD, Pennsylvania Hospital and University of Pennsylvania

Harold B. Crasilneck, PhD, PC, University of Texas Health Science Center,

Southwestern Medical School, Dallas, Texas

Frederick J. Evans, PhD, Carrier Foundation and UMDNJ, Rutgers Medical School

Fred H. Frankel, MD, ChB, DPM, Beth Israel Hospital and Harvard Medical School

Ernest R. Hilgard, PhD, Stanford University

Martin T. Orne, MD, PhD, University of Pennsylvania

Campbell Perry, PhD, Concordia University, Montreal

Peter W. Sheehan, PhD, Australian Catholic University, Sydney

*Editorial Assistant*

Brenda Burr

---

**FEDERAL EXECUTIVE OF  
THE AUSTRALIAN SOCIETY OF HYPNOSIS LIMITED**

*President:* Leonard Rose, MBBS

*President-Elect:* James M. Auld, BDS, MSc

*Past President:* Wendy-Louise Walker, PhD

*Federal Secretary:* Robert C. Bierman, MBBS

*Federal Treasurer:* Greg J. Coman, MSc

*Chairman — Publications:* Barry J. Evans, PhD

*Chairman — Board of Education:* Graham D. Burrows, AO, KSJ, MD

ASH Federal Secretariat, Private Bag 1, Rosanna, Victoria 3084

Fax: (03) 9243 1158 Tel: (03) 9243 1159

---

Manuscripts and editorial matter should be addressed to the Editor, Dr Barry Evans, at  
PO Box 592, Heidelberg, Victoria 3084. All journal business communications and  
subscriptions should be addressed to the Editor.

## MEDICAL HYPNOSIS IN NEW GUINEA

**Victor Barnes**

*Psychologist*

**Editor's note:** The following paper was originally published in 1974 in the precursor to the current form of *AJCEH*, the *Australian Journal of Medical Sophrology and Hypnotherapy*, under the editorship of J. Arthur Jackson. It reports on the clinical experiences of a psychologist from Adelaide who served as a medical assistant and psychologist in Papua New Guinea between 1969 and 1973.

The paper is interesting, not only as an historical record, but for its description of the use of hypnosis and suggestions in a cultural setting which includes sorcery and witchcraft.

---

Papua New Guinea is more than a territory of Australia; it has an ethos of its own and newcomers have to accustom themselves to a different set of expectations and ways of doing and thinking about things. I hope this account will be interesting and perhaps open just a small window on the structure of health activities in this country.

I arrived early in January 1962 to take up an appointment as a medical assistant, a category of health worker introduced by Dr John Gunther, the first postwar Director of Public Health and first Vice-Chancellor the University of Papua New Guinea. He took as a model the health system used by the British in Africa. A medical assistant is a paramedical auxiliary who has been given extra training in clinical medicine. He usually works on an outstation where he is known as the "lik lik dokta." His fellow expatriates on outstations facetiously dub him "The Assassin." He runs his hospital as officer in charge, both medically and administratively, and is responsible in addition for a network of village aidposts

---

Reprinted from the *Australian Journal of Medical Sophrology and Hypnotherapy* (1974) 2, 16–29.

Requests for reprints should be sent to Barry Evans, PO Box 592, Heidelberg, Victoria

which he is required to patrol regularly. This means crossing mountain ranges on foot for weeks on end. Until the 1950s medical assistants built their native material hospitals and homes with working-bee village labour.

Dr Gunther stood firmly behind his medical assistants and while he was director, ample training facilities existed for them. With the security of his backing, morale was then very high and many remarkable things were accomplished. Appendectomies and amputations were performed by kerosene lamplight with a few textbooks as the chief guide in surgery. They were not considered extraordinary events. A colleague of mine had himself circumcised by a non-medical friend while he read the instructions to him from *Pyes' Surgical Handicraft*. Even today, to a lesser extent, kitchen table surgery is a reality with self-taught planters' wives injecting antibiotics, suturing wounds and doing midwifery as a matter of daily routine.

When I arrived in Port Moresby I was completely naïve about my new position but the newspaper advertisements had promised a more challenging and adventurous life than my routine as a medical laboratory technician in Australia. After two weeks of orientation in Port Moresby I was flown to my posting at Rabaul's teaching hospital at Nonga where I was to commence training in clinical procedures. Since I had no nursing experience I was first placed in outpatients department to learn basic treatments. During the ensuing weeks I did rounds with the physicians and nursing staff and engaged in a concentrated course of study, on which I was examined. I attended lectures on both medicine and health inspection laws related to plantations. By the time I had been at Nonga three months I was giving injections, administering intravenous infusions, suturing wounds, listening to chests, palpating abdomens and delivering babies. Often I had to take a deep breath and rise to the occasion. For example, shortly after this training I was called upon to administer a general anaesthetic for a major operation with only a textbook reading as background. One of the surgeons instructed me as the operation progressed.

For a further four months I was stationed at Kokopo's Butawin Hospital — a sort of staging post between town facilities and the bush. Here I worked under a medical assistant of 18 years' experience. Outstation hospitals have beds of wooden planks without mattresses, the indigenes being accustomed to the hard floors of their own houses. At Butawin, as with the country generally, many patients coming to hospital had respiratory ailments in addition to whatever else they might be suffering from. Pneumonia, malaria, dysentery and tropical ulcers were the major diseases throughout Papua New Guinea and still are. There is very little heart disease.

While at Butawin, I was sent into the Baining Mountains without being given the advantage of first accompanying a more experienced officer of patrol duties. I spoke very little pidgin then. The experience of crossing fast rivers by forming a human chain, of drinking water drained from vines, of being greeted in villages by children singing pidgin versions of "We are Pleased to Welcome You" and "God Save the Queen," and of watching night-long fire dances

performed to the thump of *kundu* drums and the pounding of bamboos, at this point in my career more than compensated for my aching knee joints and itching leech bites.

My next posting lasted three months as officer in charge of the Goroka pathology laboratory, followed by four months supervising the non-paying general wing (i.e., “native hospital”) at Bulolo where I worked under the direction of a medical officer and further eight months at the Malahang Hospital in Lae. The medical officer in charge at Malahang was Dr Neville Henry and it was with him that I broached the subject of hypnosis in relation to patients.

Hypnosis had intrigued me since my teens when I first studied the subject — sometimes with unfortunate results. When a chronic stammerer whom I had been hypnotising at my high school suddenly became an eloquent raconteur, a deputation of mothers confronted the headmaster and my parents with their fears for the moral safety of their daughters. Now in New Guinea, I saw an opportunity to put this “wizardry” to good use in a properly sanctioned setting.

I first gave a demonstration of hypnosis to Dr Henry, using a house servant as the subject. He was impressed and suggested that we try hypnotic anaesthesia for the removal of tuberculous lymph glands. A ward full of patients requiring this operation had accumulated and we decided to operate on them the following day. The hypnotic anaesthesia worked spectacularly well in each case. I administered an intramuscular injection of 100 mg pethidine an hour before to a batch of patients who were to be operated on after lunch, in the hope of achieving faster inductions. This group was much easier to hypnotise. As they lay on stretchers outside the main theatre, I casually greeted them individually saying that I knew they were drowsy and that in a few moments they would be deeply asleep and as incapable of feeling pain as a dead log in a forest. Little more was necessary.

Suggestions were given in Neomelanesian according to the method I had found effective: “Sapos iu lukim ai bilong mi bai lik lik taim ai bilong iu ikama; hevi tumas. Ai bilong iu hevi nau, iliak pas. Ologeta sikim bilong iu i les bun i hevi tumas iu silip nau . . .” etc. (My translation: “If you look at my eyes, your eyes will quickly become very heavy. Your eyes are very heavy now, they want to close. Your skins feels lazy and your bones heavy. Sleep now.”) The references to skin and bones as feeling lazy and heavy are normal expressions in Neomelanesian.

During the following four years I was posted to various outstations as officer in charge. It was in these remote posts, with only the infrequent aircraft and the radio transmitter as means of communication with the outside world, that I frequently had occasion to use both hypnosis and simple suggestion.

Many minor surgical procedures were carried out with hypnosis, sometimes in conjunction with local anaesthetics. Being conscious of my lack of training and supervised experience in anaesthetics, I made use of hypnosis whenever I had an operation which required treatment at my level of functioning but for

which a local anaesthetic might not be adequate. Such cases included wounds torn by wild pigs during a hunt, superficial arrow wounds, cellulitis, lacerations, pregnancy and labour.

The use of suggestion for dealing with sorcery anxiety is known to medical assistants. One of my colleagues would render a patient unconscious with ethyl chloride, fill his own mouth with pebbles, make a small incision in the patient's skin and then, as the patient awakened, he would suck on the incision and spit the pebbles into his hand. The patient would go away satisfied.

I dealt on occasion with sorcery anxiety. One case which I recall was a patient complaining that a sorcerer had planted a crocodile's tail in his body. Placebos and suggestion tricks as a rule are temporary in effect, sorcery being more usually a scapegoat for the problem rather than its cause.

Often I found myself working in "partnership" with sorcerers. At several postings my hospital was constantly frequented by sorcerers and cargo-cult leaders (messianic-millenarian cultists). I discovered that to a great many villagers I was merely frontman for a traditional healer who claimed to be in league with me. To many indigenes a European doctor is merely a marvellous therapist of symptoms, whereas their own healers are treaters of causes. The temporary spontaneous remissions of patients who have been returned to their villages to die of terminal diseases are seized upon as proof of the efficacy of traditional methods.

After six years in the territory I visited Australia to take a degree in psychology and sociology and then returned to take up a post as acting chief executive officer and later as hospital secretary at the Lae Angau Memorial Hospital.

In June 1972 I was posted to the Division of Mental Health Headquarters as administrative officer with psychological duties. In addition to the day-to-day administration of the division and counselling work, the chief of division, Dr B. G. Burton-Bradley, encouraged me to pursue the use of hypnosis in a psychiatric setting.

My cases have included a middle-aged European woman with severe free-floating anxiety. After several months of therapy, including the deconditioning of specific phobias using Wolpe's methods and the working through of dreams retained by virtue of post-hypnotic suggestion, she was able to take up responsible employment with a senior politician. She remained, however, an anxious woman.

A rapid cure was effected in a case of psychogenic impotence in an indigenous male. He had earlier contracted gonorrhoea from an extramarital source, his lactating wife being taboo. He was very frightened of the treatment as his friends had told him that European doctors would amputate his penis. After the appropriate penicillin treatment he could not believe he was cured. At the first session I suggested his problem was caused by worry. At the second session I created a lascivious fantasy in which he undressed and examined a young girl while acquiring an erection. I suggested that he would undress his



wife in the same way with the same result. At the third interview he announced smilingly, "Emi kamap sitrong nau." He had had successful intercourse with his wife. My challenge on the question of his tribal taboo was met with ribald laughter.

Other successful cases have included trichotillomania, bruxism, and heavy smokers concerned with heart and other serious disorders.

Papua New Guinea still offers a wealth of interest and challenge, not least of which are the research opportunities in the scientific study of hypnosis.

## **REFERENCES**

- Biddulph, J. (1969). Medical Assistants. *Papua New Guinea Medical Journal*, Vol 12, March 23.
- Scragg, R. F. R. (1962). Health in the Papua New Guinea Village. *The Medical Journal of Australia*. pp. 289, March 17.

## **DEVELOPMENT OF THE GROUP SCALE OF HYPNOTIC ABILITY: A REVISION OF THE HARVARD GROUP SCALE OF HYPNOTIC SUSCEPTIBILITY**

**Russell M. F. Hawkins**

*University of South Australia*

**Lienne Wenzel**

*University of South Australia*

---

The Group Scale of Hypnotic Ability (GSHA) was developed as a shorter substitute for the Harvard Group Scale of Hypnotic Susceptibility (HGSHS:A) on which it is based. The revisions include a reduction in the number of items from 12 to 6. The language has also been revised to remove such anachronisms as the term “sleep” in the hypnotic induction and the title has used the term “ability” rather than “susceptibility” to denote a positive connotation to hypnotic responsiveness. Fifty participants received both the HGSHS:A and the GSHA in counterbalanced order. Scores correlated 0.74. The revised scale preserved the factor structure shown to underlie the Harvard Scale. The GSHA is offered as an efficient instrument for screening purposes.

A number of hypnotic scales are available to measure the relatively stable trait of hypnotic ability (Morgan, Johnson, & Hilgard, 1974; Piccione, Hilgard, & Zimbardo, 1989). To introduce the economies of group administration, Shor and Orne (1962) developed the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A). This is the most widely used instrument for measuring hypnotic susceptibility, and it is often used as a primary screening device in recruitment of participants for experimental hypnosis research (Zachariae, Sommerlund, & Molay, 1996).

Normative studies of the HGSHS:A in the U.S.A. (Coe, 1964; Shor & Orne, 1963), Australia (McConkey, Barnier, Maccallum, & Bishop, 1996; Sheehan & McConkey, 1979) and Canada (Laurence & Perry, 1982) have established its

---

Requests for reprints should be sent to Russell M. F. Hawkins, School of Psychology, University of South Australia, Magill, S.A. 5072.

reliability and validity. Norms have also been established for Germany (Bongartz, 1985), Spain (Lamas, del Valle-Inelan, Blanco, & Albo Diaz, 1989), and Denmark (Zachariae, Sommerlund, & Molay, 1996). These studies indicate that the psychometric properties of the HGSHS:A are comparable over time, and across different cultural and linguistic contexts.

### **Criticisms of Hypnotic Susceptibility Scales**

Although individual differences in hypnotic ability and responsiveness are well recognised, some authors have argued that a given subject may have more hypnotic capacity than is revealed by a standardised test (Barber, 1980; Sacerdote, 1982). According to such authors, the rigid, standardised format of experimentally based tests may inhibit individual responsiveness. In an attempt to investigate this idea, Van der Does, Van Dyck, Spinhoven, and Kloosman (1989) compared standardised and individualised suggestions by administering the Stanford Hypnotic Clinical Scale: Adult (Weitzenhoffer & Hilgard, 1959, 1962), along with an induction procedure whereby the hypnotist was free to use whatever procedure and suggestions seemed appropriate for a particular subject. The results showed no significant difference between the two methods of presentation.

Similar studies have compared the effectiveness of direct versus indirect suggestions and permissive versus authoritarian wording of suggestions, in response to the idea that the wording of hypnotic suggestions plays a significant role in determining the subject's degree of hypnotic responsiveness (Lynn, Neufeld, & Matyi, 1987). An indirect suggestion is usually delivered in a permissive style, whereby the hypnotist's words imply less control over the process and provide the subject with a range of responses (e.g., "You may recall how in winter your fingers tingle after playing in the snow"). In contrast, a direct suggestion typically involves a request for a specific response and is delivered in an authoritative and controlling manner (e.g., "Your hand will become numb") (Spinhoven, Baak, Van Dyck, & Vermeulen, 1988).

Hypnotic susceptibility scales such as the HGSHS:A and the Stanford Hypnotic Clinical Scale (SHCS; Morgan & Hilgard, 1975) have been criticised for being too authoritative and direct in their use of language, and hence, have been compared to equivalent forms of the scale which utilise a more permissive approach (e.g., Alman-Wexler Indirect Hypnotic Susceptibility Scale; Pratt, Wood, & Alman, 1984). The findings conflict, with some studies suggesting that an indirect approach enhances hypnotic responsiveness (Alman & Carney, 1980; Stone & Lundy, 1985), while others report that authoritatively and permissively worded suggestions produce minimal, if any, differences in hypnotic performance (Lynn et al., 1987; Lynn, Neufeld, & Matyi, 1993; Matthews, Bennett, Bean, & Gallaher, 1985; Spinhoven et al., 1988).

The clinical relevance of individual differences in hypnotic ability as assessed by standardised scales has also been questioned. The argument is that treatment effectiveness of hypnosis does not depend so much upon the subject's level of hypnotic susceptibility as it does upon motivation and using appropriate clinical techniques. Nevertheless, there is evidence that individual differences in hypnotic ability have a substantial impact on treatment effectiveness, and this is demonstrably true in the case of pain patients. Hilgard and LeBaron (1982) found that highly hypnotisable children and adolescents with cancer were more likely to experience greater pain reduction than those who scored low on measures of susceptibility. Positive correlations have also been reported between hypnotisability and hypnotherapy for asthma, migraine headaches, and a variety of psychosomatic conditions (Bowers & Kelly, 1979; Perry, Gelfand, & Marcovitch, 1979). For some other syndromes and behavioural disorders such as substance abuse and addictions (e.g., smoking), little or no correlations have been obtained between hypnotic susceptibility and treatment outcome (Holroyd, 1980; Perry et al., 1979).

A major drawback of the HGSHS:A and other scales (even the recently developed Waterloo-Stanford Group Scale; Bowers, 1998) which measure general hypnotic ability (e.g., Stanford Hypnotic Susceptibility Scales, Forms A & B), as opposed to clinical scales, is the length of their procedures. Although the Harvard Group Scale of Hypnotic Susceptibility, Form A, was intended as a time-saving instrument by introducing group administration and employing a self-scoring system, it still requires 45 minutes to an hour to complete.

Many scales were developed over 30 years ago and contain language no longer regarded as appropriate to modern practice. For example, the HGSHS:A repeatedly makes reference to the word "sleep" throughout the hypnotic procedure. Despite the superficial similarities between hypnosis and normal sleep, it is now widely recognised that the two states are quite different.

On the basis of the inadequacy of current group administered scales which measure general hypnotic susceptibility, a revised and modified version of the HGSHS:A has been developed. This involved omitting certain items from the scale and modifying lengthy sentences to make the procedure shorter. In addition, the wording of the HGSHS:A was altered slightly, in order to reflect the language of modern practice. For example, all references to "sleep" were replaced with the term, "relax." The new scale is called the Group Scale of Hypnotic Ability (GSHA).

The purpose of the present study was to compare the GSHA with the HGSHS:A. It was hypothesised that the new scale would produce hypnotic performances consistent with those of the HGSHS:A, thus establishing the scale as a valid and reliable instrument for assessing hypnotic responsiveness.

## METHOD

### Participants

Sixty university undergraduates volunteered to participate in the study. However, nine of these were unable to attend the second session of hypnosis, and one set of data was deemed unreliable as the subject fell asleep during both sessions. Thus, the experiment was completed by 50 participants from the University of South Australia, 9 males and 41 females (mean age 29.3 years). None of the participants received any financial reward or credit points for their participation. Information sheets and consent forms were used, as required by the university ethics committee.

### Measures

The HGSHS:A was used as the reference hypnotic susceptibility scale.

**Development of the GSHA** The GSHA was produced by omitting certain items and words from the HGSHS:A to make the procedure shorter, and altering the language of the scale. Despite the changes made, the new scale remains consistent with the original HGSHS:A in many respects. For example, both the HGSHS:A and the GSHA include a balance of easy, moderate, and difficult items, in order to avoid ceiling and floor effects.

**Item omission** The decision as to which items should be omitted from the HGSHS:A was based on reports of the percentage of participants passing each item, and on a factor analytical study of the structure of the HGSHS:A by McConkey et al. (1996) (see Tables 1 and 2).

**Table 1:** Percentage of Participants Passing Each Item. Numbers in Parentheses Represent Rankings for Items from Least Difficult/Most Passed (1) to Most Difficult/Least Passed (12).  $N = 4,752$  (McConkey et al., 1996, p. 7)

	Item	Percentage passed	Difficulty ranking
1	Head falling	70	(4)
2	Eye closure	73	(3)
3	Hand lowering	76	(2)
4	Arm immobilisation	48	(8)
5	Finger lock	63	(5)
6	Arm rigidity	52	(6)
7	Hands moving	79	(1)
8	Communication inhibition	52	(6)
9	Hallucination	25	(12)
10	Eye catalepsy	45	(10)
11	Post-hypnotic suggestion	26	(11)
12	Post-hypnotic amnesia	46	(9)

**Table 2:** Rotated Factor Loading Matrix for Principal Components Analysis (McConkey et al., 1996, p. 9)

Item		Communality	Factor		
			1	2	3
1	Head falling	.349	.12	.56	.16
2	Eye closure	.294	.18	.50	.09
3	Hand lowering	.434	-.07	.65	-.08
4	Arm immobilisation	.487	.69	-.07	-.01
5	Finger lock	.459	.63	.24	.06
6	Arm rigidity	.489	.69	.07	.09
7	Hands moving	.369	.18	.57	.13
8	Communication inhibition	.492	.68	.18	.00
9	Hallucination	.498	.16	.09	.68
10	Eye catalepsy	.468	.63	.27	.06
11	Post-hypnotic suggestion	.599	-.06	.12	.76
12	Post-hypnotic amnesia	.351	.43	-.32	.26

Three factors emerged from the principal components analysis, consisting of challenge items (e.g., “arm rigidity,” “eye catalepsy”), ideomotor or direct suggestions (e.g., “hand lowering,” “hands moving apart”), and cognitive/delusory items (e.g., “post-hypnotic amnesia,” “hallucination”) (McConkey et al., 1996). These results are consistent with previous factor analytical results (McConkey, Sheehan, & Law, 1980; Peters, Dhanens, Lundy, & Landy, 1974), thus supporting the existence of three dimensions underlying the HGSHS:A. To remain consistent with the HGSHS:A, the new scale incorporated items from each of the three factors.

Two of the five suggestions classified as challenge items were retained due to their higher loadings and because they represent items of moderate difficulty. These were “arm immobilisation” and “arm rigidity,” both of which had a loading value of .69 on Factor 1.

In relation to Factor 2, labelled ideomotor items, two of the four items were kept. The first item of the scale, “head falling,” was disregarded on the basis of its low value (.56) on the factor analysis. Furthermore, it is regarded as a relatively easy item with McConkey et al. (1996) reporting that 70% of the participants responded to this suggestion.

The “hands moving” item was also omitted from the new scale, as it too had quite a low loading (.57) on Factor 2. This decision was also based on reports by McConkey et al. (1996), who showed it was the easiest item to pass, with 79% of the participants successfully responding to the suggestion.

Despite the fact that the “eye closure” task had the lowest loading (.50) of all the four ideomotor items, it was retained. This item involves the subject focusing their eyes on a particular point of the hand while the examiner repeatedly makes suggestions of their eyes becoming heavier and heavier,

eventually closing by themselves. It is regarded as a relatively easy item to pass, with 73% of the sample meeting the behavioural criterion (McConkey et al., 1996) This suggestion is common to most hypnotic susceptibility scales, and it is often a precedent for the following items. “Eye closure” is considered an important aspect of the hypnotic induction, and was therefore retained.

“Hand lowering” was the only other ideomotor item kept, as it had the highest loading (.65) on Factor 2. In addition, it was reported as being the second easiest response by McConkey et al. (1996), with 76% of the participants passing the item.

Factor 3, labelled cognitive or delusory items, consists of two items — “hallucination” with a loading of .68, and “post-hypnotic suggestion” which produced a value of .76 on the factor analysis. Apart from their moderately high loadings, both the “hallucination” and “post-hypnotic suggestion” were considered the most difficult items to pass, with only 25% and 26% of the participants respectively reporting a response that met the behavioural criterion (McConkey et al., 1996). Both items were retained on the basis of their difficulty and because they represent a class of items that are quite distinct from the rest. The “hallucination” item and the “post-hypnotic suggestion” involve a distinct cognitive component.

Item 12 (“post-hypnotic amnesia”) was excluded from the new scale. It loaded moderately on all three factors and its highest loading was only .43 (on Factor 1).

The new scale consists of six items which represent each of the three different dimensions (two challenge items, “arm immobilisation” and “arm rigidity”), two ideomotor items (“eye closure” and “hand lowering”), and two cognitive items (“hallucination” and “post-hypnotic suggestion”). The items included in the new scale vary in their degree of difficulty from relatively easy (e.g., “hand lowering”) to difficult (e.g., “hallucination”).

**Changes made to the wording of the scale** The title of the new scale includes the word “ability” rather than “susceptibility” to harness the positive connotations of the former word while dispensing with the negative implications of the latter. Certain items from the HGSHS:A were omitted and many long-winded sentences and repetitive suggestions were shortened.

The induction procedure of the HGSHS:A was also altered to reflect the current concepts of hypnosis. All references to “sleep” and “awake” which appear in the HGSHS:A were replaced with the terms “relaxation” and “alert.” For example, the following suggestion is made during the “eye closure” task of the HGSHS:A: “Soon you will be deep asleep but you will continue to hear me. You will not awaken until I tell you to do so.” This was modified in the following way: “Soon you will be in a state of deep relaxation but you will continue to hear me. You will not become alert until I tell you to do so.”

Other changes were made to the wording of the HGSHS:A in relation to the “hand lowering” item. The instructions of the HGSHS:A read as follows:

“Please extend your left arm straight out in front of you, up in the air, with the palm of your hand down.” The words “on purpose” were added to this statement to read as follows: “Please extend your left arm straight out in front of you on purpose, up in the air, with the palm of your hand down.”

This modification was based on long experience using the HGSHS:A. Since “and lowering” is the first item of the scale which requires a motor response, participants are often unsure as to whether the extension of the arm should occur as an involuntary response, or as a deliberate action. Hence, many participants fail to extend their arm, perceiving it as a hypnotic suggestion rather than a specific instruction. In order to avoid this confusion, the words “on purpose” were added.

The second change to the “hand lowering” item involved the inclusion of the word “notice” to replace the word “watch” during the introductory paragraph of the “hand lowering” test instructions. This change was made because the term “watch” implies that the subject has his or her eyes open during the procedure. Furthermore, upon hearing the words “. . . watch what happens,” a subject may become confused as to whether or not he or she should still have their eyes open at this point. Thus, the following modification was made to the scale: “Pay close attention to what I tell you and notice what happens.”

Several changes to the concluding paragraphs of the HGSHS:A were necessary because, unlike the HGSHS:A, the GSHA does not include a suggestion for “post-hypnotic amnesia.” Thus, any references to the idea that the subject will have difficulty remembering *all* of the things experienced during hypnosis were omitted. Because the new scale retained the “post-hypnotic suggestion” for touching the left ankle, it was important to modify the existing instructions for cancelling this suggestion, as this too makes reference to the idea that the subject will not remember anything until told otherwise (“When you hear the tapping noise, you will reach down and touch your left ankle. You will touch you left ankle, but forget that I told you to do so, just as you will forget the other things, until I tell you, ‘Now you can remember everything’”). The instructions were modified in the following way: “When you hear the tapping noise, you will reach down and touch your left ankle. You will touch your left ankle, but will not remember that I told you to do so until later, when you open your response booklet.”

A large proportion of the HGSHS:A script which explains the procedure for establishing rapport prior to the initial induction remains the same in the new scale. However, the paragraph which discusses the use of hypnosis among various professions (dentists, obstetricians, psychiatrists) was altered slightly. The label “health professionals” was used to replace the term “physicians,” since this is not a term which is commonly used in Australia. In addition, it was felt that the profession of psychology deserved a mention in this paragraph, although it is not included in the HGSHS:A. It is important that people are aware that psychologists use hypnosis, and that it is a technique employed for a variety of purposes, not just for reducing anxiety, as is implied by the following



statement from the HGSHS:A: “Hypnotism is being used more and more by physicians; for example, by dentists to relieve pain, by obstetricians to make childbirth easier, by psychiatrists to reduce anxiety.”

The testing instructions which are to be followed by the examiner on completion of the hypnotic procedure are somewhat shorter than those of the HGSHS:A, given that the “post-hypnotic amnesia” item was omitted from the new scale. Hence, the paragraphs which make reference to this item (suggestions of being unable to remember anything until told otherwise) were omitted from the instructions and now read as follows: “Now please take your response booklet and answer the questions inside. Use your own judgement where questions are ambiguous.”

**Response booklet** The last page of the response booklet of the HGSHS:A, titled “Section on inner, subjective experiences,” was deleted, because the results of this section are often considered to be of little value, as they do not contribute to a subject’s score. Although in some instances, depending on the purpose of the study, it may be of interest to obtain this information, on the whole it remains a time-consuming task and was therefore omitted.

As with the HGSHS:A, a self-scoring format is employed, with responses being scored on a pass–fail basis. For all of the items, a score of 1 is awarded if participants report a response that meets the behavioural criterion for the response in question, and a score of 0 is awarded if the subject fails to meet the criterion. The scores on all of the items are summed to yield a scale score with a maximum of 6. Since the scale consists of only 6 items, compared to the 12 items of the HGSHS:A, it takes half the time to complete (25 to 30 minutes).

## **Procedure**

The HGSHS:A and the GSHA were administered to each subject in a group format. The order of presentation of the hypnotic susceptibility scales was counterbalanced. The time between the first and second sessions was one week. Both sessions were conducted by the same experimenter and an observer was also present to monitor the subject’s behaviour during and after the session. An opportunity to discuss personal feelings and ideas about hypnosis was offered during each session.

Prior to administering the test, all participants were briefly informed about the purpose and nature of the study. Participants then received one of the hypnotic susceptibility scales, either the HGSHS:A or the new revised version of the HGSHS:A. Once testing was completed, the participants were instructed to fill out their self-scoring booklet, and were then given the opportunity to discuss their experience. Of the 50 participants, 21 received the HGSHS:A and 29 received the modified version as the first scale. In a post-experimental enquiry, participants were asked to indicate their preference for either the HGSHS:A or the GSHA.

**RESULTS**

The mean hypnotisability scores for all participants, regardless of order of presentation, were as follows:

HGSHS:A	5.82	( <i>SD</i> = 3.35)	(max. score = 12)
GSHA	2.78	( <i>SD</i> = 1.64)	(max. score = 6)

The Pearson product-moment correlation coefficient between the HGSHS:A and the GSHA was 0.74.

**Item Difficulty**

Table 3 presents the percentage of participants passing each of the six items of the GSHA, and the percentage of participants passing each of the same six items of the HGSHS:A reported by McConkey et al. (1996).

**Table 3:** Percentage of Participants Passing each item of the GSHA and the Percentage of Participants passing each item of the HGSHS:A (McConkey et al., 1996, p. 7)

Item	Sample	
	Present study ( <i>N</i> =50)	McConkey et al. ( <i>N</i> =4,752)
	%	%
1 Eye closure	70	73
2 Hand lowering	68	76
3 Arm immobilisation	42	48
4 Arm rigidity	50	52
5 Hallucination	26	25
6 Post-hypnotic suggestion	22	26

The results show that the “eye closure” and “hand lowering” items were the easiest to pass, with 70% and 68% of the participants, respectively, reporting a response that met the behavioural criterion. In contrast, however, the “hallucination” item and “post-hypnotic suggestion” were considerably more difficult to pass, with only 26% of the participants successfully responding to the suggestion of a fly buzzing around them (hallucination), and 22% responding appropriately to the post-hypnotic suggestion for touching the left ankle. “Arm immobilisation” and “arm rigidity” represent items of moderate difficulty, with 42% and 50% of the participants successfully responding to these suggestions respectively.

The overall pattern of results remains consistent with those obtained by McConkey et al. (1996). Considering the McConkey et al. study employed a much larger sample of participants, and used the HGSHS:A which consists of 12 items, the percentages reported for both studies were very similar.

## Order Effects

The effect of order of presentation was not significant (ANOVA). The mean score obtained on the HGSHS:A for participants who received this scale first was 5.57, while those who received it as their second scale obtained a mean score of 6.00. Similarly, the mean score obtained on the GSHA for participants who received that scale first was 3.14, while those who received it as their second scale obtained a mean score of 2.29.

## Scale Preference

At the end of the experiment, participants were asked to indicate which hypnotic susceptibility scale they preferred. Of the 50 participants, 19 preferred the HGSHS:A and 19 preferred the new scale. Twelve failed to respond to the question. Order of presentation did not affect scale preference and scale preference did not significantly affect the subject's score (ANOVA).

## Structural Analysis of the New Scale and the HGSHS:A

A factor analysis conducted on all six items of the new scale with Varimax rotation revealed a 3-factor solution, with all factors obtaining an eigen value greater than 1.0. Table 4 presents the factor loading matrix.

**Table 4:** Factor Analysis with Varimax Rotation of the New Scale

Item		Communality	Factor		
			1	2	3
1	Eye closure	.630	.41	-.14	.67
2	Hand lowering	.766	-.12	.20	.84
3	Arm immobilisation	.816	.90	.05	-.06
4	Arm rigidity	.766	.81	.26	.22
5	Hallucination	.695	.26	.79	.00
6	Post-hypnotic suggestion	.757	-.01	.87	.09

Overall, the three factors accounted for 79.8% of the total variance. Factor 1 accounted for 35.6% of the variance, and consisted of two items — “arm immobilisation” and “arm rigidity.” These items represent challenge items. Factor 2 accounted for 20.3% of the variance. Both the “hallucination” and the “post-hypnotic suggestion” were representative of Factor 2. These items are classified as cognitive/delusory items. Factor 3 accounted for 17.9% of the variance, and consisted of two ideomotor items — “eye closure” and “hand lowering.”

The emergence of these three factors is consistent with previous factor analytic results (e.g., McConkey et al., 1980; 1996).

## DISCUSSION

The emergence of a 3-factor solution which accounted for 79.8% of the total variance remains remarkably consistent with previous factor analytic results of the HGSHS:A (McConkey et al., 1980; 1996; Peters et al., 1974). This is true for the types of factors which emerged (e.g., challenge, cognitive/delusory, or ideomotor/direct), and the loading of each item.

The percentage of participants who passed each item of the new scale showed a remarkable resemblance to the findings reported for the HGSHS:A by McConkey et al. (1996). The results of both studies indicate that “eye closure” and “hand lowering” were the two easiest items to pass, with over 70% of the participants responding successfully to each. On the other hand, “arm immobilisation” and “arm rigidity” represented moderate difficulty, with 42% and 50% passing each respectively. Previous studies (McConkey et al., 1980; 1996) have consistently shown that the cognitive/delusory items are the most difficult to pass — a finding confirmed by the present study, with only 25% passing the “hallucination” item and 26% responding correctly to the “post-hypnotic suggestion.”

At the conclusion of the experiment, participants were asked to indicate which of the two hypnotic susceptibility scales they preferred. Of those who responded, 50% preferred the HGSHS:A and 50% reported a preference for the new scale. Informal discussion revealed many of the participants preferred the HGSHS:A because it was longer and thus allowed subjects to become more relaxed and to “get into it” more easily. Participants also reported they enjoyed the greater variety of items offered in the HGSHS:A, in contrast to the new scale which consists of 6 items. Those participants who indicated a preference for the new scale argued the HGSHS:A was too long, and hence they were easily distracted and became bored during the procedure. Scale preference did not significantly affect scores. The order in which the scales were presented did not affect subject scale preference.

## Summary

Based on the results of the factor analysis and the relatively high correlation obtained between the new scale and the HGSHS:A scores, it can be concluded that the GSHA is a valid and efficient tool for assessing hypnotic susceptibility. The new scale was preferred as often as the HGSHS:A. As well as its sound psychometric properties, the new scale has several other important features which make it a useful and much improved assessment device.

The new scale remains a group-administered scale, yet only takes half the time of the HGSHS:A to complete (approximately 30 minutes). This is particularly important for research purposes, which often involve the assessment of a large number of participants.

Another important aspect of the new scale is its avoidance of anachronistic language. Many of the more commonly used scales of hypnotic susceptibility were developed over 30 years ago and often contain terms which are no longer regarded as appropriate to modern practice. The changes made to the wording of the script also help to clarify misconceptions which people tend to have about hypnosis. For example, many people incorrectly think that being hypnotised is like being asleep, and hence avoid the situation out of fear that they will become under the control of the hypnotist. Eliminating the word “sleep” may help to correct this long-standing misconception, which in turn may help to decrease people’s fears about hypnosis.

The Group Scale of Hypnotic Ability is a valid and effective instrument for obtaining a measure of hypnotic responsiveness. A combination of features including its sound psychometric properties, brevity, and use of modern language make the scale an attractive alternative to the HGSHS:A.

## REFERENCES

- Alman, B. M., & Carney, R. E. (1980). Consequences of direct and indirect suggestions on success of posthypnotic behavior. *American Journal of Clinical Hypnosis, 23*, 112–118.
- Barber, J. (1980). Hypnosis and the un hypnotisable. *American Journal of Clinical Hypnosis, 23*, 4–9.
- Bongartz, W. (1985). German norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 33*, 131–139.
- Bowers, K. S. (1998). Waterloo-Stanford group scale of hypnotic susceptibility, Form C. *International Journal of Clinical and Experimental Hypnosis, 46*, 250–268.
- Bowers, K. S., & Kelly, P. (1979). Stress, disease, psychotherapy, and hypnosis. *Journal of Abnormal Psychology, 88*, 490–505.
- Coe, W. C. (1964). Further norms on the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 12*, 184–190.
- Hilgard, J. R., & LeBaron, S. (1982). Relief of anxiety and pain in children and adolescents with cancer: Quantitative measures and clinical observations. *International Journal of Clinical and Experimental Hypnosis, 30*, 417–442.
- Holroyd, J. (1980). Hypnosis treatment for smoking; An evaluative review. *International Journal of Clinical and Experimental Hypnosis, 28*, 341–357.
- Lamas, J. R., del Valle-Inelan, F., Blanco, M. J., & Albo Diaz, A. (1989). Spanish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 37*, 264–273.
- Laurence, J.-R., & Perry, C. (1982). Montreal norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 30*, 167–176.

- Lynn, S. J., Neufeld, V., & Matyi, C. L. (1987). Induction versus suggestions: Effect of direct and indirect wording on hypnotic responding and experience. *Journal of Abnormal Psychology, 96*, 76–79.
- Lynn, S. J., Neufeld, V., & Matyi, C. (1993). Direct versus indirect suggestions: A conceptual and methodological review. *International Journal of Clinical and Experimental Hypnosis, 41*, 124–152.
- Matthews, W. J., Bennett, H., Bean, W., & Gallagher, M. (1985). Indirect versus direct hypnotic suggestions — an initial investigation: A brief communication. *International Journal of Clinical and Experimental Hypnosis, 33*, 129–223.
- McConkey, K. M., Barnier, A. J., Maccallum, F. L., & Bishop, K. (1996). A normative and structural analysis of the HGSHS:A with a large Australian sample. *Australian Journal of Clinical and Experimental Hypnosis, 24*, 1–11.
- McConkey, K. M., Sheehan, P. W. & Law, H. G. (1980). Structural analysis of the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 28*, 164–175.
- Morgan, A. H., & Hilgard, E. R. (1975). Age differences in susceptibility to hypnosis. *International Journal of Clinical and Experimental Hypnosis, 21*, 78–85.
- Morgan, A. H., Johnson, D. L., & Hilgard, E. R. (1974). The stability of hypnotic susceptibility: A longitudinal study. *International Journal of Clinical and Experimental Hypnosis, 22*, 249–257.
- Perry, C., Gelfand, R., & Marcovitch, P. (1979). The relevance of hypnotic susceptibility in the clinical context. *Journal of Abnormal Psychology, 88*, 592–603.
- Peters, J. E., Dhanens, T. P., Lundy, R. M., & Landy, F. J. (1974). A factor analytic investigation of the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 22*, 377–387.
- Piccione, C., Hilgard, E. R., & Zimbardo, P. G. (1989). On the degree of stability of measure hypnotisability over a 25-year period. *Journal of Personality and Social Psychology, 56*, 289–295.
- Pratt, G. J., Wood, D. P., & Alman, B. M. (1984). *A clinical hypnosis primer*. La Jolla, CA: Psychology & Consulting Associates Press.
- Sacerdote, P. (1982). A non-statistical dissertation about hypnotisability scales and clinical goals: Comparison with individualised induction and deepening procedures. *International Journal of Clinical and Experimental Hypnosis, 30*, 354–376.
- Sheehan, P. W., & McConkey, K. M. (1979). Australian norms for the Harvard Groups Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis, 27*, 294–304.
- Shor, R. E., & Orne, E. C. (1962). *Harvard Group Scale of Hypnotic Susceptibility, Form A*. Palo Alto, CA: Consulting Psychologists Press.
- Shor, R. E., & Orne, E. C. (1963). Norms on the HGSHS:A. *International Journal of Clinical and Experimental Hypnosis, 11*, 39–48.

- Spinhoven, P., Baak, D., Van Dyck, R., & Vermeulen, P. (1988). Effectiveness of an authoritative versus permissive style of hypnotic communication. *International Journal of Clinical and Experimental Hypnosis*, *36*, 182–191.
- Stone, J. A., & Lundy, R. M. (1985). Behaviour compliance with direct and indirect body movement suggestions. *Journal of Abnormal Psychology*, *94*, 256–263.
- Van der Does, A. J. W., Van Dyck, R., Spinhoven, P., & Kloosman, A. (1989). The effectiveness of standardised versus individualised hypnotic suggestions: A brief communication. *International Journal of Clinical and Experimental Hypnosis*, *37*, 1–5.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1959). *Stanford Hypnotic Susceptibility Scale, Forms A and B*. Palo Alto, CA: Consulting Psychologists Press.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1962). *Stanford Profile Scales of Hypnotic Susceptibility, Forms I and II*. Palo Alto, CA: Consulting Psychologists Press.
- Zachariae, R., Sommerlund, B., & Molay, F. (1996). Danish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, *44*, 140–152.

## **THE GROUP SCALE OF HYPNOTIC ABILITY: MANUAL AND RESPONSE BOOKLET**

**Russell M. F. Hawkins**

*University of South Australia*

**Lienne Wenzel**

*University of South Australia*

---

The manual and response booklet for the Group Scale of Hypnotic Ability (GSHA) are presented. The GSHA is a revision of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor and Orne, 1962) and the manual for the Group Scale (below) is heavily derivative of HGSHS. The revisions, which preserve the factor structure of the HGSHS (Hawkins and Wenzel, 1999), allow group screening for hypnotisability to be achieved in 30 minutes or less.

### **GROUP SCALE OF HYPNOTIC ABILITY (GSHA)**

#### **ESTABLISHING RAPPORT PRIOR TO THE INITIAL INDUCTION**

It is assumed that subjects have been notified of the hypnotic testing and that their presence is an implicit agreement to be hypnotised. An effort should be made to discourage a lack of seriousness in subjects and to prevent the presence of casual onlookers. Provisions should be made to prevent persons from entering the room once the examiner begins the introductory remarks. The gist of the following remarks should be memorised, but the conversation should flow naturally: hence, these initial remarks should *not* be read from the printed page. (The main procedures that follow in the later sections are intended to be read verbatim).

---

Requests for reprints should be sent to Russell M. F. Hawkins, School of Psychology, University of South Australia, Magill, S.A. 5072.



Subjects are to be seated. Physical arrangements should be moderately comfortable and relatively non-disturbing. For example, subjects should not be seated so close to a table that they hit against it when carrying out the tasks.

### **Preliminary Remarks by the Examiner**

In a few minutes I am going to administer a standard procedure for measuring susceptibility to hypnosis. At the end of the procedure you will report on what the experience was like in the response booklet which has been distributed to you. Do *not* open the booklet until I specifically ask you to do so. On the cover page of the response booklet are spaces for your name, address, and some other general information. Please fill in this information now. Again, please do *not* open the booklet yet. Fill in the information on the cover page only. *[Allow a minute or two for the subjects to record this information.]*

Now before we start, it may help if I answer a few of your questions first, I am assuming that for some of you this is the first time you are experiencing hypnotism. *[In presenting the following remarks the examiner may find it useful in establishing rapport to elicit some questioning and participation from members of the group. Questions are to be answered by paraphrasing the points made below.]*

People experiencing hypnosis for the first time are sometimes a little uneasy because they do not know what the experience will be like, or because they may have a distorted notion of what it is like. It is very natural to be curious about a new experience. Your curiosity will be satisfied before we are finished, but you can best get the answers by just letting yourself be a part of what goes on, and by not trying to monitor the process in detail.

Some people, however, have a tendency to allay their initial uneasiness in a new situation by laughing, giggling, or whispering. We must request that you refrain from this type of response for the duration of the procedure, so as not to disrupt the concentration of others.

To allow you to feel more at ease, let me reassure you on a few points. First, the experience, while a little unusual, may not seem so far removed from ordinary experience as you have been led to expect. Hypnosis is largely a question of your willingness to be receptive and responsive to ideas. These ideas we call suggestions.

Second, you will not be asked to do anything that will make you look silly or stupid, or that will prove embarrassing to you.

Third, and finally, I shall not probe into your personal affairs, so there will be nothing personal about what you are about to do, or say, during the hypnotic state.

You may wonder why we are doing this experiment. Hypnotism is being used more and more by health professionals: for example, by psychologists and psychiatrists in therapy, by general practitioners for medical purposes, by dentists to relieve pain, and by obstetricians to make childbirth easier. If we

can understand the process involved, we will know more about the relationship between ideas and action, more about the way in which personality operates. So in participating, you are contributing to scientific knowledge of a kind that can be used to help other human beings. Most people can be hypnotised, but some are much more susceptible than others, and it is these differences which we are interested in.

Have you any questions or comments before we go ahead? [*Answer questions by paraphrasing the above points.*]

Now please make yourself comfortable in your chair. Clear your lap of books and papers, and prepare to begin. Those who wear glasses should keep them on. However, if you wear contact lenses, it may be more comfortable to remove them. [*The examiner should also communicate the following if the main procedures are tape-recorded.*] In order to help keep our procedures constant, they have been put onto a tape-recording. In a moment I shall turn on the tape-recorder.

## MAIN PROCEDURES

The following instructions are to be presented *verbatim*.

### 1. Eye Closure

Now I want you to seat yourself comfortably and rest your hands in your lap. Now look at your hands and find a spot on either hand and just focus on it. It doesn't matter what spot you choose; just select some spot to focus on. I shall refer to the spot that you have chosen as the target. That's right . . . hands relaxed . . . look directly at the target. I am about to give you some instructions that will help you to relax and gradually to enter a state of hypnosis. Just relax and make yourself comfortable. I want you to look steadily at the target and while keeping your eyes upon it, listen to what I say. Your ability to be hypnotised depends partly on your willingness to cooperate and partly on your ability to concentrate upon the target and upon my words. You can be hypnotised only if you are willing. Concentrate on the target and listen to my words, letting happen whatever you feel is going to take place. Just let it happen. There is nothing fearful or mysterious about hypnosis. It is merely a state of strong interest in some particular thing. In a sense you are hypnotised whenever you see a good show and forget you are part of the audience, but instead feel you are part of the story. Hypnosis is an individual experience and is not just alike for everyone. All I ask of you is that you keep up your attention and interest and continue to cooperate as you have been cooperating. Nothing will be done that will cause you any embarrassment. Most people find this a very interesting experience.

Just relax. Keep your eyes on the target. Look at it as steadily as you can. Should your eye wander away from it, that will be all right . . . just bring your eyes back to it. After a while you may find that the target gets blurry, or

perhaps moves about, or changes colour. That is all right. Whatever happens, let it happen and keep staring at the target for a while. There will come a time, however, when your eyes will feel so heavy that you will be unable to keep them open any longer and they will close, perhaps quite involuntarily. When this happens, just let it take place.

As I continue to talk you will find that you will become more and more relaxed, but not all people respond at the same rate to what I have to say. Some people's eyes will close before others. When the time comes that your eyes have closed, just let them remain closed. You may find that I shall still give suggestions for your eyes to close. These suggestions will not bother you. They will be for other people.

You will find that you can relax completely but at the same time sit up comfortably in your chair with little effort. You will be able to shift your position to make yourself comfortable as needed without it disturbing you. Now just allow yourself to relax completely. Relax the muscles of your legs . . . Relax the muscles of your feet . . . Relax the muscles of your arms . . . Relax the muscles of your hands . . . of your fingers . . . Relax the muscles of your neck, of your chest . . . Relax all the muscles of your body . . . Let yourself be limp. Relax more and more. Relax completely. Relax completely.

As you relax more and more, a feeling of heaviness perhaps comes over your body. A feeling of heaviness is coming into your legs and your arms . . . into your feet and your hands . . . into your whole body. Your legs feel heavy and limp, heavy and limp . . . Your arms are heavy, heavy . . . Your whole body feels heavy, heavier and heavier. Like lead. Your eyelids feel especially heavy. You are beginning to feel more and more relaxed. Your breathing is becoming slow and regular, slow and regular. You are becoming more and more relaxed while your eyelids become heavier and heavier.

Your eyes are tired from staring. The heaviness in your eyelids is increasing. Soon you will not be able to keep your eyes open. Soon your eyes will close of themselves. Your eyelids will be too heavy to keep open. Your eyes are becoming wet from straining. The strain in your eyes is getting greater and greater. It would be so nice to close your eyes, to relax completely, and just listen to my voice talking to you. You will soon reach your limit. Your lids will become so heavy, your eyes will close of themselves.

Your eyelids are getting heavy, very heavy. You are relaxed, very relaxed. There is a pleasant feeling of warmth and heaviness all through your body. Pay attention to nothing else but my voice. Your eyes are getting blurred. You are having difficulty seeing. Your eyes are strained. The strain is getting greater and greater, greater and greater.

Your lids are heavy. Heavy as lead. Getting heavier and heavier, heavier and heavier. They are pushing, down, down, down. Your eyelids seem weighted, weighted with lead, heavy as lead . . . Your eyes are blinking, blinking . . . closing . . . closing.

Your eyes may have closed by now, and if they have not, they *would* soon close of themselves. But there is no need to strain them more. Even if your eyes have not closed fully yet, you have concentrated well upon the target, and have become relaxed. At this time you may just let your eyes close. Close your eyes now.

You are now comfortably relaxed, but you are going to relax even more, much more. Your eyes are now relaxed. Your eyes are now closed. Keep your eyes closed until I tell you otherwise. Just keep listening to my voice. Pay close attention to it. Keep your thoughts on what I am saying . . . just listen. Soon you will be in a state of deep relaxation but you will continue to hear me. You will not become alert until I tell you to do so. I shall now begin to count. At each count you will feel yourself going down into a deep, comfortable state of relaxation. A state in which you will be able to do all sorts of things I ask you to do. One . . . you are going to become deeply relaxed . . . Two . . . down, down into a deep sound relaxation . . . Three, four . . . more and more, more and more relaxed . . . Five, six, seven . . . you are sinking, sinking into a deep relaxation. Nothing will disturb you. Pay attention only to my voice and only to such things as I may call to your attention. Eight, nine, ten, eleven, twelve . . . deeper and deeper . . . Thirteen, fourteen, fifteen . . . although deeply relaxed you can clearly hear me. You will always hear me no matter how relaxed you may feel . . . Sixteen, seventeen, eighteen . . . fully relaxed. Nothing will disturb you. You are going to experience many things that I will tell you to experience . . . Nineteen, twenty. You will not become fully alert until I tell you to do so. You will wish to relax and have the experiences I shall presently describe.

## **2. Hand Lowering (Left Hand)**

*[Introduction]* As you become even more relaxed, it will not disturb you to make yourself comfortable in your chair and put your head in a comfortable position.

Now that you are very relaxed, listening without effort to my voice, I am going to help you learn more about how your thoughts affect your actions in this state. Not all people experience just the same things in this state, and perhaps you will not have all the experiences I will describe to you. That will be all right. But you will have at least some of the experiences and you will find these interesting. Experience whatever you can. Pay close attention to what I tell you and notice what happens. Just let happen whatever you find is happening, even if it is not what you expect.

*[Instruction Proper]* Please extend your left arm straight out in front of you on purpose, up in the air, with the palm of your hand down. Left arm straight out in front of you . . . straight out, up in the air, with the palm of your hand down. That's it. I want you now to pay close attention to this hand, the feelings in it, and what is happening to it. As you pay attention to it you

are more aware of it than you have been . . . you notice whether it is warm or cool, whether there is a little tingling in it, whether there is a tendency for your fingers to twitch ever so slightly . . . That's right, I want you to pay close attention to this hand because something very interesting is about to happen to it. It is beginning to get heavy . . . heavier and heavier . . . as though a weight were pulling the hand and arm down . . . you can picture a weight pulling on it . . . and as it feels heavier and heavier it begins to move . . . as if something were forcing it down . . . a little bit down . . . more and more down . . . down . . . and as I count it gets heavier and heavier and goes down more and more . . . one, down . . . two, down . . . three, down . . . four, down, more and more down . . . five, down . . . six, down . . . seven . . . eight . . . heavier and heavier, down more and more . . . nine . . . down . . . ten . . . heavier and heavier . . . down more and more. [*Allow 10 seconds.*]

That's fine . . . just let your hand now go back to its original resting position and relax. Your hand back to its original resting position and relax. You may have noticed how heavy and tired the arm and hand felt; much more so than it ordinarily would if you were told to hold it out that way for a little while; you probably noticed how something seemed to be pulling it down. Now just relax . . . your hand and arm are quite comfortable again. There . . . just relax. Relax.

### 3. Arm Immobilisation (Right Arm)

You are very relaxed. The general heaviness you have felt from time to time you now feel all over your body. Now I want you to pay close attention to your right arm and hand . . . Your right arm and hand share in the feeling of heaviness . . . how heavy your right hand feels . . . and note how as you think about this heaviness in your hand and arm the heaviness seems to grow even more . . . Now your arm is getting heavy . . . *very heavy*. Now your hand is getting heavy . . . *so heavy* . . . like lead . . . perhaps a little later you would like to see how heavy your hand is . . . it seems much too heavy to lift . . . but perhaps in spite of being so heavy you could lift it a little, although it may now be too heavy even for that . . . Why don't you see how *heavy* it is . . . *Just try to lift your hand up, just try. Just try to lift your hand up, just try.* [*Allow 10 seconds*]

That's fine . . . stop trying . . . just relax. You noticed that when you tried to lift it, there was some resistance because of the relaxed state you are in. But now you can just rest your hand again. Your hand and arm now feel normal again. They are no longer heavy. You could lift them now if you wanted to, but don't try now. Just relax . . . relax completely. Relax. Just relax.

#### **4. Arm Rigidity (Left)**

Please extend your left arm straight out in front of you, up in the air, and make a fist. Arm straight out in front of you. That's right. Arm straight out, a tight fist . . . make a tight fist. I want you to pay close attention to this arm and imagine that it is becoming stiff . . . stiffer and stiffer . . . very stiff . . . and now you notice that something is happening to your arm . . . you notice a feeling of stiffness coming into it . . . It is becoming stiff . . . more and more stiff . . . rigid . . . like a bar of iron . . . and you know how difficult . . . how impossible it is to bend a bar of iron like your arm . . . See how much your arm is like a bar of iron . . . test how stiff and rigid it is . . . *try* to bend it . . . *try*. [*Allow 10 seconds*]

That's good. Now just stop trying to bend your arm and relax. Stop trying to bend your arm and relax. I want you to experience many things. You felt the creeping stiffness . . . you had to exert a good deal of effort to do something that would normally be very easy. But your arm is not stiff any longer. Just place your arm back in resting position . . . back in resting position. Just relax and as your arm relaxes, let your whole body relax. As your arm relaxes, let your whole body relax.

#### **5. Hallucination (Fly)**

I am sure that you have paid such close attention to what we have been doing that you have not noticed the fly which has been buzzing about you . . . But now that I call your attention to it you become increasingly aware of this fly which is going round and round about your head . . . nearer and nearer to you . . . buzzing annoyingly . . . hear the buzz getting louder as it keeps darting at you . . . You don't care much for this fly . . . You would like to shoo it away . . . get rid of it . . . It annoys you. Go ahead and get rid of it if you want to . . . [*Allow 10 seconds*]

There, it's going away . . . it's gone . . . and you are no longer annoyed . . . no more fly. Just relax, relax completely. Relax . . . just relax.

#### **6. Post-Hypnotic Suggestion (Touching Left Ankle)**

Remain deeply relaxed and pay close attention to what I am going to tell you next. In a moment I shall begin counting backwards from twenty to one. You will gradually become more and more alert; but for most of the count you will still remain in the state you are now in. By the time I reach "five" you will open your eyes, but you will not be fully aroused. When I get to "one" you will be fully alert, in your normal state of wakefulness. After you open your eyes, you will feel fine. You will have no headache or other after-effects. I shall now count backwards from twenty, and at "five," not sooner, you will open your eyes but not be fully aroused until I say "one." At "one" you will be fully alert . . . A little later you will hear a tapping noise like this.

*[Demonstrate]* When you hear the tapping noise, you will reach down and touch your left ankle. You will touch your left ankle, but will not remember that I told you to do this until later, when you open your response booklet. Ready, now: 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, halfway . . . 9, 8, 7, 6, 5, 4, 3, 2, 1. You are now fully alert! Fully alert in your normal state of consciousness! *[A distinct tapping noise is now to be made. Then allow 10 seconds before continuing.]*

## **TESTING**

Now please take your response booklet and answer the questions inside. Use your own judgement where questions are ambiguous.

## **SCORING**

The scale may be self-scored by asking subjects to simply count up the number of A responses circled (see response booklet) and writing that number on the cover sheet of the response booklet.

(Collect booklets at the end of the session).

Scores range from 0 to 6. Scores of 0–2 may be considered Low, 3–4 Medium, and 5–6 High. While such broad categorisations should be sufficient for screening purposes, comparisons with HGSHS:A, Australian norms (McConkey, Barnier, Maccallum, & Bishop, 1996), U.S.A. norms (Coe, 1964), Canadian norms (Laurence & Perry, 1982), German norms (Bongartz, 1985), Spanish norms (Lamas, del Valle-Inclan, Blanco, & Diaz, 1989), or Danish norms (Zachariae, Sommerlund, & Molay, 1996) may be approximated by first doubling the GSHA score.

**RESPONSE BOOKLET**  
**GROUP SCALE OF HYPNOTIC ABILITY**

Name \_\_\_\_\_

Date \_\_\_\_\_

Age \_\_\_\_\_

Sex \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_

Have you ever been hypnotised ? Circle    Yes    No

If so, please cite the circumstances and describe your experience.

Please be brief \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SCORE (to be calculated after completion of the scale)**



## OBJECTIVE, OUTWARD RESPONSES

Listed below in order are the six specific happenings which were suggested to you during the standard hypnotic procedure. We wish you to estimate whether or not you *objectively* responded to these six suggestions, that is, whether or not an *onlooker* would have observed that you did or did not make certain definite responses by certain specific, pre-defined criteria. We are interested in your estimates of your *outward behaviour*. Refer only to the outward behavioural responses irrespective of what the experience may have been like subjectively.

It is understood that your estimates in some cases may not be as accurate as you might wish them to be and that you might even have to guess. But we want you to make whatever you feel to be your *best estimates* regardless.

Beneath a description of each of the six suggestions are sets of two responses, labelled "A" and "B." Please circle "A" or "B" for each question, whichever you judge to be the more accurate. Please answer *every* question. Failure to give a definite answer to every question may lead to disqualification of your record.

### 1. Eye Closure

You were first told to rest your hands in your lap and pick a spot on either hand as a target and concentrate on it. You were then told that your eyelids were becoming tired and heavy. Would you estimate that an *onlooker* would have observed that your eyelids had closed (before the time you were told to close them deliberately)?

- Circle one :   A.    My eyelids had closed by then  
                   B.    My eyelids had *not* closed by then

### 2. Hand Lowering (Left Hand)

You were next told to extend your left arm straight out and feel it become heavy as though a weight were pulling the hand and arm down. Would you estimate that an *onlooker* would have observed that your hand lowered at least six inches (before the time you were told to let your hand down deliberately)?

- Circle one:    A.    My hand had lowered at least six inches by then  
                   B.    My hand had lowered less than six inches by then

### 3. Arm Immobilisation (Right Arm)

You were next told how heavy your right hand and arm felt and then told to try to lift your hand up. Would you estimate than an *onlooker* would have observed that you did *not* lift your hand and arm up at least one inch (before you were told to stop trying)?

- Circle one:
- A. I did *not* lift my hand and arm at least one inch by then
  - B. I did lift my hand and arm an inch or more by then

### 4. Arm Rigidity (Left)

You were next told to extend your left arm straight out and make a fist, told to notice it becoming stiff, and then told to try and bend it. Would you estimate that an *onlooker* would have observed that there was less than two inches of arm bending (before you were told to stop trying)?

- Circle one:
- A. My arm was bent less than two inches by then
  - B. My arm was bent two or more inches by then

### 5. Experiencing of Fly

You were next told to become aware of the buzzing of a fly which was said to become annoying, and then you were told to shoo it away. Would you estimate that an *onlooker* would have observed you make any grimacing, any movement, any outward acknowledgment of an effect (regardless of what it was like subjectively)?

- Circle one:
- A. I did make some outward acknowledgment
  - B. I did *not* make any outward acknowledgment

### 6. Post-Hypnotic Suggestion (Touching Left Ankle)

You were next told that after you were alerted you would hear a tapping noise at which time you would reach down and touch your left ankle. You were further informed that you would do this but forget being told to do so. Would you estimate that an *onlooker* would have observed either that you reached down and touched your left ankle, or that you made any partial movement to do so?

- Circle one:
- A. I made at least an observable partial movement to touch my left ankle
  - B. I did *not* make even a partial movement to touch my left ankle, which would have been observable

*THANK YOU FOR YOUR COOPERATION!*

## REFERENCES

- Bongartz, W. (1985). German norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 33, 131–139.
- Coe, W. C. (1964). Further norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 12, 184–190.
- Hawkins, R. M. F. and Wenzel, L. (1999). Development of the group scale of hypnotic ability: A revision of the Harvard group scale of hypnotic susceptibility. *Australian Journal of Clinical and Experimental Hypnosis*, 27, 6–19.
- Lamas, J. R., del Valle-Inclan, F. Blanco, M. J. and Diaz, A. (1989). Spanish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 37, 264–273.
- Laurence, J.-R., and Perry, C. (1982). Montreal norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 30, 167–176.
- McConkey, K. M., Barnier, A. J., Maccallum, F. L., and Bishop, K. (1996). A normative and structural analysis of the HGSHS:A with a large Australian sample. *Australian Journal of Clinical and Experimental Hypnosis*, 24(1), 1–11.
- Shor, R. E., and Orne, E. C. (1962). *Harvard Group Scale of Hypnotic Susceptibility, Form A*. Palo Alto, CA: Consulting Psychologists Press.
- Zachariae, R., Sommerlund, B., and Molay, F. (1996). Danish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *The International Journal of Clinical and Experimental Hypnosis*, 44 (2), 140–152.

## **HYPNOSIS IN THE TREATMENT OF INSOMNIA, NIGHTMARES, AND NIGHT TERRORS**

**David G. Howsam**

*General Practitioner*

---

This case study illustrates the use of hypnosis to alleviate insomnia, nightmares, night terrors, and fear of the dark in an 11-year-old boy, Tom, which occurred as a result of severe injury and hospitalisation causing separation anxiety disorder. It demonstrates the matching of hypnotic interventions with the individual needs and preferences of the client.

### **PRESENTING COMPLAINT**

Tom's first consultation with me was in October 1995. He was brought to my surgery by his mother, Mary, who self-referred Tom on the recommendation of a former client whom I had helped with hypnosis.

At first I interviewed Tom, an 11-year-old boy, after which I talked to Mary alone. In Mary's words the problem was that "Tom can't sleep properly." To this she added that Tom did not like to be alone in his room at night, he had bad nightmares which could wake him in fear, and that he frequently came into his parents' room in obvious terror. She mentioned these sleep problems were worse when his father was away on business. Tom had always been a poor sleeper but these problems really began after an accident in May 1994. At the time Tom was playing on a grassy hilltop while his father played tennis. Running down the hill, he tripped and fell, fracturing his left femur. He was treated in the Children's Hospital with pin and traction for eight weeks.

This was a very difficult time for Tom, Mary and the whole family. Tom had a lot of pain and muscle spasms that required frequent injections. Initially he was unable to eat or use the bedpan and he vomited frequently. After this settled, Tom developed bedsores and put on a great deal of weight. Finally, as he was improving, he passed a kidney stone with agonising pain. At the beginning of

---

Requests for reprints should be sent to David G. Howsam, 2 Macaulay Street, Leichhardt, N.S.W. 2040.

his hospitalisation, the degree of Tom's pain and fear necessitated Mary staying close by his side every day. As he improved, he grew bored and the situation for Mary became worse as his dependence on her visits increased. When Tom left hospital he could not walk. He was "flabby" and severely overweight, "lazy" and "negative." He tended to stay at home playing video games and watching television. He was frustrated, bored, miserable, and having bad dreams. Tom did not seem to want to do anything and no longer contacted his friends as much as he had done before the accident. Because of his sleeping problems he was tired in the mornings and often late for school. He complained of frequent headaches. These generalised, non-specific headaches had begun while he was hospitalised.

Tom agreed with his mother — the main problem was his sleep. His goal in coming to see me was "to be able to sleep and stop having nightmares." Tom believed the nightmares began after his accident but he did not know why they had started. On more detailed questioning, Tom told me he was very interested in inexplicable events in the world such as "supernatural stuff." These and "scary stuff" would often fill his mind when he was alone at night. His nightmares were usually about someone or something chasing him, "getting me" and "me being killed." He called the nightmares that caused him the greatest distress his "Freddy Krueger dreams." Some time previously he had seen the horror movie, *Nightmare on Elm Street 4*. In this movie, the main terror protagonist, Freddy Krueger, attacks his victims through their dreams. These victims try to stay awake but they become so tired they lose contact with reality. They slip in and out of their dream world unsure which world is real and not knowing when they will meet Mr Krueger. In Tom's nightmare, Freddy Krueger is after him and he can't get away because Freddy is everywhere. In this nightmare he thinks he has woken up (but he has not really) and that his dad is there. Suddenly he realises he is still dreaming, his dad is not present, and Freddy kills him with his razor-sharp, knife-like fingernails. Terrified, Tom wakes up screaming and goes to find his parents. Sometimes, he reported, he could wake up feeling terrified but have no recollection of the nightmare that he felt must lie behind the feeling.

I asked Tom why it was now important to come and see me and get help to sleep. Tom told me about his forthcoming school Year 5 camp. It was clear he was very worried about what would happen at night. He was concerned he would not be able to sleep, and that he would wake up yelling and feeling scared from his nightmare. He was both afraid of his parents' absence and concerned about the potential embarrassment in front of his peers. The camp was to be held three weeks from this initial visit.

## **PERSONAL HISTORY**

Tom was the first child of Mary and John, who had been married three years before he was conceived; their second child Alicia was born four years later.

This was the first marriage for both parents. Mary was 29 years of age when she was pregnant with Tom. The pregnancy was normal for obstetric events. However, in the first trimester, Mary was involved in an armed hold-up near her workplace. She was then, as now, working with her sister as a dance teacher. Even after Alicia's birth she remembered times when John was away when she would, in a state of fear, pack up the children and go to her mother's house. This went on for many years until the problem settled somewhat after counselling (apparently mostly using a cognitive approach). These fearful feelings still remained to a lesser degree and she was concerned that she may have passed this fear on to Tom.

Tom was born through a normal vaginal delivery with good apgar scores at 39 weeks of pregnancy. Mary described him as "always being difficult." As a baby he was a poor sleeper and was generally "hard work," being described as easily irritable, hard to please, and strong-willed. His early development and milestones were normal. He had a reputation as one of the difficult pupils in his first years at school. He was disruptive, aggressive, poorly motivated in class, and was therefore generally unpopular with his teachers and had few friends. These school problems reached a peak in Year 4 (9 years of age). A particular teacher found him impossible to deal with in class and he was sent for special counselling and psychological assessment. Mary thought he was mostly bored and that an intense dislike of the teacher was being acted out. The assessment surprised all, in that it showed Tom to be of above average intelligence. This resulted in him being referred to a paediatrician with expertise in child development. Tom was diagnosed as suffering from attention deficit disorder and placed on Ritalin. He was kept on Ritalin throughout his ninth year. Mary described the effect on his school life as "like a miracle." Teachers were praising him and his school work improved. "All of a sudden, he was this wonderful boy." She, however, could see no difference in his behaviour at home. Both Mary and John did not like Tom "taking drugs" and so stopped the Ritalin before he was ten years of age, electing instead to change schools. They hoped a more disciplined school would help Tom. He was transferred to a private religious school where he maintained his former progress. In this new school he was happy, had more friends, and his work improved. Later that year he suffered the accident that fractured his leg.

John, Tom's father, had his own business in the clothing industry. This required many trips each year — both interstate and to the country. Mary told me that John was a gentle, kind man and that they had a happy, stable marriage. It was with sadness that Mary revealed her sense of guilt about the way she felt in relation to Tom. She feared she did not love him as much as she did her daughter. Mary was dreading Tom's approaching teenage years as he was already "so strong-willed and self-opinionated." She felt Tom was rude to her and often untruthful. He frequently "pushed her to the edge," and was unable to show her love. Tom apparently had always related well to other adults and constantly wanted to try things much in advance of his years.

Examination revealed an overweight 11-year-old, weighing 55 kg (> 97th percentile for age) while his height was 146 cm (at the 50th percentile for age). The rest of the clinical examination was unremarkable. Tom was initially somewhat shy but a good rapport was developed as the interview progressed.

## **DIAGNOSIS**

Tom's marked sleep disturbance was considered to have arisen from a separation anxiety disorder subsequent to him suffering a fractured femur and difficult hospitalisation.

## **HYPNOTIC SUITABILITY**

Hammond (1990) states that research and clinical literature on hypnosis with children suggests that they are usually good hypnotic subjects and typically more easily hypnotised than adult subjects. He goes on to say that much research shows this hypnotic talent reaches a peak of responsiveness between the ages of 8 and 12. Gardner & Olness (1981) put forward five absolute contraindications to hypnosis in children:

1. risking physical endangerment,
2. risking aggravation of emotional problems,
3. hypnosis for fun or entertainment,
4. treatment better effected by non hypnotic treatment and
5. misdiagnosis.

The same authors describe a wide variety of uses of hypnosis with children, including sleep disturbance, nightmares and night terrors. In fact, the potential of hypnosis to rapidly and powerfully influence unconscious progress requires its consideration as a first-line therapy in such a case.

Tom was keen to try hypnosis and his mother supported this. As choice of appropriate hypnotic induction for any given child depends on the needs and preferences of the child, Tom's likes, dislikes and hobbies were obtained. He told me he mostly liked to watch television, go to movies, and read books. His favourite spare-time occupation was playing his video games. He had some interest in electronics and wanted to learn chess. Tom was especially interested in learning "about stuff people can't explain," hence his interest in "supernatural stuff." Tom's favourite television show was "The Simpsons," his favourite character Bart Simpson, his current best video game was "Aladdin," and his current favourite movies were the "Star Wars" trilogy.

A child can be considered a suitable candidate for hypnotherapy if

1. the child is responsive to hypnotic induction methods,
2. the problem is responsive to hypnotic induction methods,
3. the child can relate positively to the therapist,
4. the child has some motivation to solve the problem,

5. the parents agree to the treatment, and
6. the use of hypnosis therapy would not harm the client.

In this case my assessment indicated no contraindications and nearly all indications for the use of hypnosis were present. It was left to discover Tom's response to hypnotic induction methods.

## **GOALS OF HYPNOTHERAPY**

1. To end or ameliorate the nightmares and night terrors.
2. To help Tom relax and decrease his fear of night-time and sleep.
3. To increase his confidence and ease with being alone at night.
4. To decrease his anxiety over his forthcoming camp.

## **HYPNOTIC SESSIONS**

### **Session 1**

I saw Tom in the company of Mary on four occasions. Due to the time limitations I decided to attempt hypnotic induction at the first interview to gauge his response. Tom was already somewhat intrigued about hypnosis. I told him that "hypnotic ability is something you already have but you may not yet know how you can use it to solve your problems." To maintain his curiosity I added, "actually, no-one knows exactly why hypnosis works but I can show you how to use your own trance-mind." Next I told Tom about a young girl who had had almost the same problems as he did and who had really been helped by hypnosis. I followed this with, "she was advanced for her age so she could easily follow my suggestions."

After seating Tom in the "trance chair," we talked about imagination and the pictures we can make in our heads. Induction had already begun as Tom concentrated on his breathing while I counted. This was followed by a muscle relaxation sequence for his arms and legs. Tom was then asked about where he watched television, where his favourite seat was, and what time "The Simpsons" started. "Can you see the TV room better with your eyes open or closed?" was my next question. Tom closed his eyes. I suggested it was just before 7 p.m. and he was seated in front of the television. Tom indicated when he had turned on the television and adjusted the sound. He was told he was going to do something amazing. He was going to walk into the TV and meet Bart Simpson. When he had completed this task, he and Bart were to go to a very special place (Tom chose Bart's tree-house) to have a special talk about all that had happened to Tom since his accident. Bart was going to help Tom make his dream world safe. They were both to search the known and unknown universe for the person, animal or thing that would defeat (scare the pants off) Freddy Krueger. Tom picked "Spawn," a huge invincible alien creature. I informed him that "Spawn is to become your new dream friend and protector. In a moment Bart will show



you how to change the channel to visit Spawn's secret home." When he indicated that he was there, I suggested he ask Spawn to be his friend and protector. The monster agreed.

At this stage I asked Tom to have the Freddy Krueger dream, summoning his new friend Spawn to create a new ending. He was to run this new dream over and over until he had it just right, feeling powerful and in control. This was followed by prolonged ego-strengthening; stressing confidence, safety, normal sleep, letting the past go and looking forward to the future. Suggestions were also given for relaxation and calm, and waking up in the mornings feeling refreshed and energetic. Towards the end of the session, before leaving Spawn, he was to decide on which finger he would wear the ring that would call Spawn. Tom would recognise this ring when he went shopping with his mother and, from then on, whenever he needed Spawn he only had to touch this ring to summon him. Tom was brought out of trance after I gave the post-hypnotic suggestion for his trance state to deepen with each visit.

I noted during the session that Tom readily went into hypnosis, his upper eyelids rhythmically contracting continuously while rapid eye movements occurred throughout the trance. After coming out of hypnosis, Tom and Mary were sent shopping for the right "summoning-ring."

## **Session 2**

I saw Tom two weeks later — one week before the camp. He told me he had only experienced one nightmare. This was on a night when his father went away on one of his interstate trips. Tom proudly showed me the ring on his left little finger and Mary joked about how many stores they went to in order to find exactly the right one. Both were pleased and thought things were going well. I informed Tom that his abilities would further improve and just as he had learnt to end his sleep problems, he could also learn how to relax about his forthcoming camp.

Hypnosis was induced by eye fixation and eye closure. This was followed by Tom visualising his "TV room" and visiting the "Genie's Cave" in "Aladdin." Here he found his magic carpet. Further deepening was developed by "a magic carpet ride." Eventually he was to visualise a rainbow to the future and "pick the colour he wanted to fly through which would take him to a new world, on the other side of the rainbow." (Hunter, 1994) Here in the future (some time after a great camping experience) he would meet a 10-year-old boy who was just out of hospital after breaking his right leg and was having nightmares. Tom was to have a deep talk with this boy as he could be of help to him by explaining how he, Tom, had become fully free from all those old problems. When the young boy understood and expressed thanks, Tom was to wave goodbye and fly back through the rainbow to a beautiful bush camping area. At this site he was to leave his magic carpet and walk down a path beside a creek to a lake. Here he was to find a canoe and while he was exploring the lake by canoe, I began

making suggestions about having empowering dreams and peaceful sleep. Ego-strengthening, together with positive suggestions for his forthcoming camp, were offered. Post-hypnotic suggestions were given as in the first session, and Tom was taught a self-hypnotic technique for bedtime.

### **Session 3**

I saw Tom again with his mother some four weeks later. He told me he was sleeping well, with no nightmares or night terrors. The camp had been “excellent.” He had no sleeping difficulties and enjoyed making new friends and participating in new activities. When I asked Mary how Tom was going she said things were “fantastic” and she thought the hypnotherapy had worked well for Tom.

At this consultation I turned my attention to Tom’s weight problem. I had a long discussion with the boy about proper nutrition, exercise (sport), self-esteem and his body. Time spent in formal hypnosis was much reduced in this session. Induction was similar to that of the second session but his magic carpet was now a “jet-cycle” which transported him to an island where he created his “safe place.” In this special place Tom had a “split-screen” room where he could visualise the negative consequences of not controlling his weight, and on the other screen the future positive Tom who was slimmer, playing sport, fitting special clothes, and feeling strong, happy and confident. Before bringing Tom out of hypnosis, the usual post-hypnotic suggestions were given, with his “safe place” being added to his self-hypnotic routine.

### **Session 4**

I last saw Tom three months after the third session. He had no further troubles with his sleep, nightmares, or night terrors. Tom was not very interested in talking about his former problems so we discussed what was happening in his life now. He was trying out for the school’s under-age Rugby team and was training regularly. We talked about his weight, exercise program, nutrition, and the disadvantages of obesity. I stressed avoidance of junk food, fatty food, and sweets. A good food guide was drawn up and given to Tom. He was given further advice on visualising himself at his best in hypnosis. A short hypnotic session was induced as in the last two sessions, with emphasis on teaching rapid self-hypnosis so that Tom could practise his brief self-hypnosis many times each day.

After bringing Tom out of hypnosis, I spoke to Mary alone to ascertain how she thought Tom was going. She said he had improved in every way. He was performing better at school and was being more social. He was not only going out more but he was also inviting friends home. Apparently John had said jokingly, “Is this the same Tom?” when Tom had invited a number of friends to go cycling in the local park. Tom also was, “out of the blue,” wanting to wear

new fashion “sports gear,” much to his parents’ surprise. Mary smiled as she recalled seeing Tom asleep one night when John was away — he was smiling, with his right thumb and forefinger holding his “summoning ring.”

## **EPILOGUE**

I have not seen Tom since that last session. However, both Mary’s mother and sister have consulted me on medical matters where formal hypnosis was not used. Three months after Tom’s last session and seven months after his first appointment, Mary came to see me on her own. She told me that Tom’s improvement had been maintained and his poor sleep was no longer an issue. In passing, she wondered about the possibility that I could help her to conquer her fears as I had helped Tom. Most of the consultation dealt with her difficulties and worries in her relationship with Tom. She intimated that hypnosis might improve Tom’s attitude and behaviour towards her. I expressed my opinion that hypnosis may well be able to help her deal with her fears, although in regard to her relationship with Tom, I suggested referral to family therapy. Mary is yet to follow up on either issue.

## **SUMMARY AND REVIEW**

This study shows the use of paediatric hypnosis and hypnotherapy in a case of sleep disturbance, nightmares and night terrors. Imagination and visualisation were the main hypnotic modalities used in matching the natural abilities of the child. Hypnosis proved a very effective tool for ending this child’s sleep disturbance and improving his general confidence. Success in these goals allowed further use of hypnosis as an adjunct in treating his major medical problem of obesity. Underlying relationship difficulties between mother and son uncovered during the sessions were thought to be aggravated by an under-involved father, and may require professional help with family therapy. Finally, it is interesting to ponder the link between Mary’s pre-natal trauma and the poor relationship with her son, and how hypnotherapy could be used to explore this.

## **REFERENCES**

- Hammond, D. C. (1990). *Handbook of hypnotic suggestion and metaphors*. W. W. Norton, New York.
- Gardner, G. G. & Olness, K. (1981). *Hypnosis and hypnotherapy with children*. Grune and Stratton Inc., Florida.
- Hunter, M. E. (1994). *Creative scripts for hypnotherapy*. Brunner-Mazel, New York.

## **THE CONSEQUENCES OF INDIVIDUAL DIFFERENCES IN PREPARATION FOR SURGERY AND INVASIVE MEDICAL PROCEDURES**

**Rodger Kessler**

*Psychologist*

---

Hypnosis is a powerful intervention and its use is intuitively appealing. As clinicians, we sometimes use hypnosis without sufficient critical attention. Questions such as why we use it, what data about our patients are important, and how we use such data to influence selection of our clinical strategies, are sometimes given insufficient attention. This dilemma is compounded by the fact that individual patient differences affect responses to hypnosis. Reviewing the field of hypnotic and psychological preparation for surgery, this paper considers two related individual differences, predominant coping style and history of negative prior medical/surgical events. Both consistently affect patient responses to surgery. A position is presented that suggests (a) these differences have predictable, consistent consequences that interact positively or negatively with preparation strategy, and (b) such logical consequences provide us the data to tailor interventions to optimise patient response and thus affect surgical outcomes.

It has consistently been demonstrated that individual patient differences influence responses to stressful events (Salmon 1994). Individual differences affect treatment response to a variety of stressful medical procedures. Tailoring clinical investigations to individual differences has been infrequently investigated, but sometimes has been shown to enhance effectiveness (Miller, 1988; Syriala, Cummings, & Donaldson, 1992). Within hypnosis, research has found that different styles of presentation (i.e., tailored versus standardised interventions) do not enhance effectiveness, but they concluded a limiting factor is the lack of any theoretical construct around which to tailor suggestions and interventions (Lynn, Neufeld, & Mare, 1990).

---

Adapted from *Hypnos: Swedish Journal of Hypnosis in Psychotherapy and Psychosomatic Medicine* (1997) 181–192.

Requests for reprints should be sent to Rodger Kessler, PhD, Department of Anesthesiology and Surgery, Central Vermont Hospital, Montpelier, VT 05602, U.S.A.

In one area of hypnotic and psychological treatment, the preparation of patients for stressful and invasive surgery procedures, a review of the literature generates similar findings. Individual patient differences predict the quality of life after coronary artery bypass graft surgery; surgical pain is predicted by individual and family pain history; and individual differences affect treatment response to surgery. Elsewhere I have discussed that little attention has been given to the impact of individual differences, and even less attention to tailoring surgical preparation strategies to specified patient differences (Kessler & Dane, 1996).

This paper explores tailoring clinical interventions to specified individual patient differences in order to optimise patient outcomes in response to preparation for surgery. The logical consequences of two individual patient differences, coping style and a related dimension, previous medical and surgical experiences, will be identified. I discuss the generation of clinical strategies based on these logical consequences of individual patient differences and then present two case studies to illustrate the position.

Because of the enormous breadth of the literature concerned with psychological involvement in surgery, the reader is encouraged to consult other sources which discuss three other related and important aspects of this work: the use of instruction and suggestion during general anaesthesia (Bennett, 1988; Ghonheim & Block, 1992); the use of hypnosis as sole anaesthetic for surgical procedures (Chaves, 1989; Levitan & Horbaugh, 1992); and the hypnotic reduction of pain (Barber, 1982; Barber, 1996; Chaves & Barber, 1976).

### **IF THIS IS SUCH A GOOD THING, WHY DISCUSS IT FURTHER?**

Four major review papers that summarise literature from the last thirty years have concluded that:

1. surgical or coronary patients who were provided information or psychological support pre-surgically do better than patients who receive ordinary care (Mumford, Schlesinger, & Glass, 1982);
2. there is well-documented evidence that psychological intervention prior to surgery can affect post-operative recovery both clinically and economically (Rogers & Reich, 1986);
3. suggestion and relaxation shorten the convalescent period, promote physical recovery, and aid the emotional response of surgical patients (Blankfield, 1991); and
4. there is substantial agreement that psychological preparation for surgery is beneficial for patients (Johnstone & Voge, 1993).

Despite the generally positive tone suggested by these reviews, some studies have found a lack of benefit from psychological preparation for surgery. Although Egbert is frequently cited for his finding that a single supportive pre-surgical visit by an anaesthesiologist produced potent outcomes (Egbert, Battit,

& Turndorf, 1963), other studies suggest that single pre-operative discussion with patients does not provide adequate intervention (Surman, Hackett, Silverberg, & Behrendt, 1974). Other studies have found no difference in analgesic use, pain, anxiety, mood, and nausea between patients who received pre-surgical preparation and those who did not (Evans & Richardson, 1988). These variables are frequently offered in other studies as indicators of the efficacy of preparatory interventions.

Relaxation training as a preparation condition has met with only mixed success in a number of studies (Aiken & Hendricks, 1971; Field, 1974). Using taped suggestions for coronary patients, when taped suggestions were played during surgery, Blankfield (1991) found the intervention not superior to noise alone. Greenleaf and colleagues found that none of the experimental preparation conditions displayed significance compared to controls (Greenleaf, Fisher, Miaskowski, & DuHamel, 1992).

## **PROBLEMS IN INTERVENTION**

Part of the dilemma in interpreting this literature is that studies often report detailed results and minimally identify the characteristics of the interventions that were used. Further, standardised interventions may respond to the needs of research design, but limit the ability to assess the effects of patient individual differences.

Because individual differences are frequently designed out of studies, they are infrequently analysed, and their relationships to outcomes remain unclear (Kessler & Dane, 1996). Thus, the analysis of the relationship between patient characteristics and standardised or tailored intervention strategies has also not frequently occurred.

## **THE NEGLECTED IMPORTANCE OF INDIVIDUAL DIFFERENCES**

Individual differences in patient response may influence performance (Salmon, 1994). For example, we know that patients characterised by avoidance as a primary coping strategy respond poorly to interventions which focus on information provision while coping sensitisers find information helpful (DeLong, 1970). Yet some studies using pre-surgical information provision strategies as the experimental condition have found no effectiveness of the intervention but have also not assessed individual coping style. Therefore, the no difference finding could be attributed to the interaction between individual differences in patients' coping style and the intervention. If this work is to be taken seriously, we must optimise the probability of successful preparation and enhance surgical and post-surgical outcomes.

The hypnosis literature generally has discussed individual differences with reference to differences in hypnotic susceptibility and the nature of hypnotic experiences. However, variation in contextual factors and individual patient

characteristics can significantly alter a participant's motivation, response and relationship with the clinician. Such variations can have a major impact on hypnotic performance (Bates, 1993), and their interaction.

Specifically, I have been investigating individual variation in coping style and a related dimension, prior experiences with medical and surgical procedures. Each appears to affect pre-surgical functioning, the effectiveness of pre-surgical preparation and post-surgical outcomes.

## **DIFFERENCES IN COPING STRATEGIES**

The coping style that a patient brings to the surgical experience, left unresponded to or responded to inappropriately, appears to affect patient surgical and post-surgical functioning (Kessler & Dane, 1996). Patients characterised by avoidance or denial frequently have less positive surgical results (Rogers & Reich, 1986). Patients who use avoidant strategies may experience more pain and anxiety if given increased information pre-surgically (Andrew, 1970; Cohen & Lazarus, 1973) or gain no benefit from pre-surgical information provision (Wilson, 1981). Coping sensitisers increase their rate of surgical recovery with specific information, but in general have been found to have the poorest post-surgical recovery (Cohen & Lazarus, 1973).

It is frequently agreed that providing patients assistance in generating and using coping strategies appears to be the most effective set of intervention strategies in pre-surgical preparation (Salmon, 1994).

There is some evidence to suggest that when interventions are tailored to individual patient coping style, the benefit of the intervention is enhanced (Miller, 1988; Mumford et al., 1982).

## **PREVIOUS MEDICAL SURGICAL EXPERIENCE**

Sometimes when a patient comes to surgery, part of what they may be reacting to is the sometimes profound influences from their own and family members' prior experiences with medical and surgical procedures (Blacher, 1987; Kessler & Dane, 1996). An upcoming surgical procedure may evoke responses associated with previous negative medical experiences (Blacher, 1987). This is compounded by the observation that these issues are frequently neglected in the care of surgery patients (Blacher, 1987). Children accurately recall pain and older children tend to accurately recall their worst pain experiences.

In another case, I worked with a woman who was preparing for double knee replacement surgery. During the initial interview she said, "I hate hospitals and doctors. When I was nine, I was in a car accident. The pain was the worst I ever felt even though apparently nothing was broken. They made me stay overnight in the hospital. I was terrified. I made them promise that there would be no needles, no tests, just watching. I was in a room with three other girls. In the morning a nurse came in. She said to the other three girls, you can have

breakfast. When she came to me she said no breakfast. It was horrible. I was so scared about why me? What’s wrong? From that point on I have always hated doctors and medicine.”

**THE LOGICAL CONSEQUENCES OF INDIVIDUAL PATIENT DIFFERENCES IN COPING STYLE AND PREVIOUS MEDICAL EXPERIENCE**

Preparation for medical and surgical procedures presents an opportunity to combine research and theory concerning individual differences to tailor pre-surgical hypnotic and/or psychological interventions in situations such as those just described. This discussion of individual differences reveals that careful clinical assessment of the surgical patient’s unique individual style will present very different clusters of beliefs, attitudes, emotions, abilities and experiences that affect patient response.

These differences generate logical consequences that provide the basis of intervention selection. The notion of using patient differences on specified dimensions to select strategies was elaborated by Herbert and David Spiegel, when writing about the functional differences between patients with different levels of hypnotic ability (Spiegel & Spiegel, 1978). They suggested that patients with different levels of hypnotic ability consistently varied in their responses to “styles and traits” posited by the Spiegels. A similar position can be taken concerning differences in coping style, and previous medical and surgical experience.

Table 1 identifies the logical consequences of those differences in belief, attitude, emotional abilities and experiences related to coping style and previous medical surgical experience. The differences generate a response framework a patient brings to the clinical encounter, which we respond to as we construct

**Table 1:** Examples of Logical Consequences of Individual Differences

		Logical consequences
Coping Style		
Avoidant	Belief	I cannot pay attention
	Attitude	I do not want to know
	Emotion	Fear
	Abilities	Distract, let others do it
Sensitiser	Belief	I need to participate
	Attitude	I want to know more
	Emotion	Anticipatory anxiety
	Abilities	Active thinking; participation; using information
Previous Medical/Surgical Experience		
Negative	Belief	This time will be like that time
	Attitude	Negative
	Emotion	Fear, scared
	Abilities	Cognitive and physical arousal
Not significant history		No need to consider this dimension



clinical interventions. For example, someone who presents a negative history of childhood surgical experience, and who is characterised as avoiding coping, may most readily respond to a strategy that utilises their experience to promote an imaginal strategy. It defocuses them from the specific sequence of tasks and information associated with their surgery. An attempt to use an information-based strategy which directly confronts the distorted cognitive linkage between the childhood event and the current medical or surgical event may well be resisted or have paradoxically negative outcomes.

Conversely, another patient may reveal a negative medical history, and imaginative ability, an external locus of control, and a sensitiser coping style characterised by a need to know everything that is going to happen. Such a patient may respond well to direct discussion of the prior medical procedure. This strategy might also be paired with recollections of successful performance of past activities, outlining each of the steps in the procedure, with a further rehearsal of each of these steps as a part of successful future completion of the surgical tasks. The same patient may not respond as well to a tailored relaxation-based intervention with suggestions for dissociative not-remembering or time location distortion, because of a potential loss of control and involvement. This implies that individual patient differences not only have logical consequences, but that these consequences imply clinical strategies that may have a greater or lesser likelihood of effectiveness.

Table 2 reviews the hypnotic and psychological strategies suggested by the logical consequences. This allows us to tailor our interventions and select from the appropriate strategies suggested by a patient’s individual differences. It also gives us direction about which strategies may be less useful. Therefore, hypnotic preparation for surgery involves assessing individual differences, identifying

**Table 2:** Tailoring Pre-surgical Preparation Strategies to Logical Consequences of Individual Differences

	Logical consequences	Suggested clinical strategies
<b>Coping Style</b>		
Avoidant	Defocused attention	Dissociation and distraction
	No desire for information	Limit information
	Fear	Provision
	Distraction	Establish trust
Sensitiser	Trust in medical professionals	Create safety
	Participation	Active involvement
	Wants information	Rehearsal
	Anticipatory anxiety	More information
	Active, involved	Cognitive restructuring
		Active dearousal
<b>Previous Negative Medical/Surgical Experience</b>		
	Now is then	Cognitive restructuring
	Negative affect	Reframing
	Fear	Relaxation
	Arousal	Cognitive and physical

their logical consequences, and tailoring our interventions to strategies suggested by the logical consequences of individual differences. Let me now present the clinical history from which this position has evolved, and present two case studies as illustration.

## **CLINICAL HISTORY**

I have had the opportunity to evaluate these ideas in the Department of Anesthesiology and Surgery in a Vermont hospital for the past eight years. During this time I have provided psychological and hypnotic preparation to over 10 patients prior to medical events or surgery. Patients are referred by anaesthesiologists and surgeons, and occasionally by primary care physicians. They are generally seen within one to two weeks of their procedure in usually one or two (infrequently more than two) one-hour sessions. In addition to the contact with patients, after the preparation the author contacts the anaesthesiologist or surgeon sharing information that is sometimes used in the preoperative anaesthesia procedure, or in the operating rooms. Patients have ranged from 22 to 75 years of age, 70% have been female. Procedures have included abdominal surgery, obstetric and orthopaedic procedures, as well as biopsies and laparoscopies.

Patients are seen in an outpatient treatment room in the hospital. At initial clinical contact, a brief psychological distress profile, and a medical/surgery experience rating scale are filled out by the patient. The initial part of the first session is a conversational assessment of prior medical experience, coping style, hypnotic ability, and experience with pain (Kessler & Dane, 1996). Using this information and the patient's unique set of life experiences, as well as experiences related to the procedure or surgery, a specific intervention is constructed. Characteristics of the intervention include a future orientation (Kessler & Miller, 1995), a conversational approach to intervention (Kessler, 1994), suggestions for positive realistic healing (Kessler & Dane, 1996), and a specific psychophysiological focus determined by the assessment.

Hypnosis sometimes may be used, but the formal induction of hypnosis and the use of any formal hypnosis ritual is infrequent. Suggestions are embedded within a conversation in which there is the inclusion of focused attention, some degree of imaginal involvement with or without dissociation, and some activity relating to training in cognitive and physiological self regulation.

## **CASE EXAMPLES**

The following two case examples illustrate the translation of this theoretical position into clinical practice.

### **CASE HISTORY 1**

Elizabeth, a 29 year-old female, was referred by her obstetrician. She was in the

31st week of her pregnancy and the obstetrician indicated that she was highly anxious, refusing blood tests, and at high risk for a caesarean section she did not want to have. Elizabeth arrived for her appointment and completed both the psychological distress profile (PDP) and the medical/surgical rating scale (M/SRS). The PDP displayed a high degree of anxiety, some sleep disturbance and minimal indicators of other somatic symptoms or depression. The M/SRS indicated negative childhood experience with doctors and needles, as well as poor adult contact with doctors, needles, pain and hospitals. After further introduction, Elizabeth was asked, "What do you think about your upcoming childbirth?" At this point she became teary and revealed a childhood experience dealing with a paediatrician whom she did not like at all. He used, as she described it, "big needles." She reported ridicule and scorn from family members, and from the paediatrician, about her nervousness regarding the use of the needles and about her concern about going to the doctor. She also recounted that, since she had been pregnant, her mother frequently commented how difficult her mother's birth of Elizabeth had been, that it was physically painful and had left some physical consequences. Elizabeth was thus left to prepare for the joyful experience of childbirth with a model of childbirth that was the opposite. Therefore, if Elizabeth had a successful childbirth, she felt that there was some sense of disloyalty to her mother. She also went on to note that any time there was any discussion of having blood drawn or need for an IV to be inserted, there was a reaction of "fear of pain, needles, hospital and doctors."

Elizabeth was asked, "Some people in preparing for a procedure like this like to have as much information as possible and they feel like they will do better with that . . ." Before I was able to finish the statement, the patient extended her hand and held it out far away from her body and started moving her head from left to right rapidly. She responded, "I don't want to know anything. I just want this to happen. The more I know about it the more anxious I wind up getting." Further, in assessing her imaginal ability and history she was found to daydream easily, to be able to be highly absorbed in a movie or a book, and to describe times when she "almost felt like I was doing something else even though I was sitting there."

### **Assessment, Treatment Selection, and Summary**

Assessment to this point revealed a young woman with negative medical experiences clouding the current procedure, an avoidant coping predisposition, and a perceived moderate level of dissociative ability. This suggested using her dissociative skills to hypnotically review and resolve the previous medical experiences, and to support the avoidance by helping her to feel comfortable through the range of experiences, while people in whom she had confidence assisted her through the process.

When I asked her why she had come to see me she related that she had a

girlfriend who had had a very successful preparation for surgery, as well as “I know I need to relax and calm down and I thought that some of the hypnosis stuff might be helpful.” This easily led into a conversation wondering about how she calmed down, with rapid shift to diaphragmatic breathing and muscle relaxation, and shortly after that easy eye closure. During the session, a dissociative strategy was used to review the affective discomfort concerning needles and medical procedures. Those were differentiated from the strengths and competencies in her adult life. Also, within this imaginal context Elizabeth was able to have a conversation with her mother, during which she was able to be supportive of her mother concerning the difficulty that she had with her labour while making it clear that Elizabeth intended to have a positive experience with her own.

I then moved on to briefly describe the capable, competent physicians that she had selected and to discuss her confidence in me, and suggested that we were very good at helping her have a pleasant, comfortable experience, and all she really needed to do was to allow herself to feel more and more comfortable throughout the procedure. Using a similar dissociative procedure we rehearsed a successful completion of her pregnancy and a successful future with her child and then identified and rehearsed specific steps to achieve that outcome. Included in that review was the insertion of the IVs, the blood tests, and other procedural steps with suggestions that she could just allow it to happen.

At the end of the first session, her affect had altered. There was a sense of confidence and strength in her ability to get through labour and delivery and a second session was scheduled.

When Elizabeth arrived for the second session, there was a remarkable shift. She was smiling, and there was much less physical tension. She related a conversation with her mother during which her mother was very supportive and touched by her daughter’s concern for her during Elizabeth’s pregnancy. In the interim, the patient had self-selected to go to the lab and finish blood work that she had been avoiding. It was not an easy task, but she had been able to do it. “I can just easily space out while it was happening and just let them know what they needed to do. I turned my head away and before I knew it, it was done.” The rest of the session was uneventful. We used a similar hypnotic conversation to review her upcoming successful procedure and reinforced her ability to dissociate into thoughts and images of raising her child while the clinicians she selected did their job. At her obstetrician’s request a third appointment was set up, but a phone call occurred between the second and third appointment indicating that Elizabeth had gone into labour, had a successful vaginal delivery with no complications, and delivered a healthy male child.

In a follow-up interview at her home less than a week after the procedure, Elizabeth was functioning at a high level and she and her husband both reported that, to their surprise, the entire procedure was remarkably smooth. There were no concerns about pain, pain medication was not needed, and the insertion of the IV had been effortless. Elizabeth commented that “The only thing I asked

them to do was to remove the clear tape that they put over the area where they inserted the IV and use some white tape so I wouldn't have to see the needle."

## **CASE HISTORY 2**

A 35-year-old woman, Mary, was referred by her surgeon prior to a colostomy closure. The surgeon was adamant that despite the woman's protestations he would not do the surgical procedure until she had seen me. He reported that during the initial surgical procedure the patient had been emotionally volatile during every phase of the procedure, including office visits and visits to the lab. The surgeon characterised the patient as the most disruptive he had ever had to operate on. He further went on to say that the patient was "so needy, that every step of the way she had a gang of people with her for support and that she even had to talk to her therapist on the telephone in the operating room before I could start the procedure." The patient arrived for her appointment in a rather sullen and clearly angry fashion. She initially refused to complete either the PDP or the M/SRS form, but ultimately agreed to do so. The distress scale indicated a high degree of anger and physical tension and also depression. The medical/surgical evaluation form displayed a high degree of concern with previous contact with hospitals and physicians.

When asked the initial question, "Tell me about your surgery," Mary was very clear that she did not mind filling out the forms, or mind seeing me, but she very much resented being told by the surgeon that she had to come and see me. Mary reported that this left her very vulnerable and that she had a high degree of difficulty being vulnerable with men. She went on to rapidly disclose a history of post-traumatic stress disorder with multiple episodes of physical and sexual abuse. She was currently being treated by a therapist in the community for these issues.

Mary related that the therapist was aware of, and encouraged, her contacts with me. I wondered what we might be able to accomplish, given the odd way that we were brought together, and noted my desire to be a support for her and not to inflict distress or discomfort into her life. Mary responded, "What I'd really like to do is just go up into the woods on my property by this stream and put a tent there, just me, my dog and my cat, until this goes away, and somehow or other I would be magically safe and protected from loggers and hunters, and people like that so I can know that nothing bad would happen to me."

She then went on to note that she knew that she had to have the surgery and in fact was looking forward to it, noting that living life with a colostomy bag was a great hassle, but she just wished that she did not have to put up with it at all. I then asked if that meant that she really did not want to know very much about the procedure, and she quickly interrupted and said, "No, not at all. Even though I want to go to my tent, I know that I am going to be more comfortable if I know as much as I possibly can."

### **Assessment, Treatment Selection, and Summary**

Assessment to this point revealed a great deal of physical tension and anger plus poor experiences with physicians.. She was also assessed as quite vulnerable with a high degree of need for safety. Further, Mary had good dissociative ability and was assessed to be a coping sensitiser. Treatment, then, would emphasise safety, dissociation to her piece of land, and active participation in reviewing steps, with specific suggestions for actively shunting blood away from the surgical site.

I asked her whether it might be okay to imagine, for a while anyway, what it would be like to find yourself in complete control of that wonderful piece of ground next to the stream in such a way that it was absolutely impenetrable to anyone else so that she could feel completely and totally safe there. Mary responded that she was a little nervous about that, that she and her therapist had talked about using hypnosis and relaxation and that she was not sure if she was ready to do that, but she was willing to try. In conversation we then discussed the specific set of steps that would allow that to happen and very slowly moved through each one of those steps. By the end of the first session, she was able to imagine being in the tent surrounded by her animals in a way that felt specifically safe and comfortable. We rescheduled and I left an instruction to practise imagining that place prior to the second session.

At the time of the second session, there was a significant change in affect. Mary was enthusiastic about what she had been able to accomplish during the week. She had noticed a greater degree of control and was viewing the procedure without the former sense of dread. Mary reported that she had been able to easily incorporate the imaginal movement to the place on her land, and had in fact gone up there a couple times and just spent some time comfortably and safely with her animals. The session was spent rehearsing specific ways of promoting greater involvement in the dissociative experience and then specifically identifying the procedural steps related to her surgery and the likely sensory experiences during each phase of surgery and recovery. In addition, specific instructions were given for shunting of blood away from the operative site during the surgery as well as rapid return of gastrointestinal and bowel function post-surgery.

This is one of the major determinants of post-operative stay in the hospital after abdominal surgery. In this particular case, after the preparation was concluded, these specific instructions were conveyed to the anaesthesiologist who was going to be in the operating room. Prior to and during the procedure, the anaesthesiologist gave instructions for comfort, safety, blood flow away from the surgical site, and for rapid return of bowel function.

In post-operative interviews with the patient, the anaesthesiologist, the surgeon and the nurse who was involved in the procedure, it was noted that the surgery was quite successful. Besides the medical success of the operation, there was an absence of any emotional volatility prior to and after the surgery. Mary's return of functioning was quite rapid, and both the nurse and the

anaesthesiologist estimated that there was probably 50% less blood loss at the surgical site than they had expected. Both the surgeon and the anaesthesiologist observed that return of bowel functioning occurred at least two days prior to what they would have expected. The assisting surgeon saw the patient walking in the hall one day after surgery and said with alarm, "What are you doing up?" Mary just smiled and continued to walk down the hall. There were no other complications and the patient left the hospital two days prior to the surgeon's initial estimate of the post-surgery length of stay.

## **SUMMARY**

There is a large and fairly consistent anaesthesia and surgery literature that indicates that a variety of hypnotic and psychological interventions can dramatically affect psychological and physiological functioning of patients before, during, and after surgery and other invasive medical procedures. Review of this literature suggests that earlier and recent suggestions that a broad range of pre-surgical hypnotic interventions with virtually any surgical patient should be effective is simplistic and inaccurate. Little clinical attention has been paid to the interaction between patient individual differences and their interaction with preparation strategy. Consistent research suggests, however, that such an interaction effect exists and may explain some of the confusing findings in the literature. It may be that some of the no difference findings that have been reported may be the result of poor matching between intervention strategy individual differences and their logical consequences.

I hope that I have demonstrated that assessing historic coping style and prior medical surgical experiences have significant value. Such assessment identifies how patients function pre-surgically and how the consequences of pre-surgical functioning may be utilised to tailor interventions to optimise hypnotic and psychological utility. Perhaps these intervention selection strategies have the potential to not only generate rapid and positive clinical outcomes such as those described in this paper, but also provide a theoretical framework to evaluate the efficacy of tailoring interventions in general.

This paper is a step — the identification of a theoretical and clinical position supported by compelling case material. Hopefully, it also offers a pathway to improving hypnotic interventions to optimally affect patient psychological and physiological functioning, and have an impact on the cost of major surgical procedures. The quest for markers and strategies that consistently demonstrate the psychological mediation of physiological processes is one of the great hopes of mind-body research and medicine. Hopefully this paper contributes to that process.

## **REFERENCES**

Aiken, L., & Hendricks, T. (1971). Systematic relaxation as a nursing intervention with open-heart surgery patients. *Nursing Research*, 20, 212–217.

- Andrew, J. (1970). Recovery from surgery, with and without preparatory instruction for three coping styles. *Journal of Personal and Social Psychology*, *15*, 223–226.
- Barber, J. (Ed.). (1996). *Hypnosis and suggestion in the treatment of pain*, New York: Norton.
- Barber, T. X. (1982). Hypnosuggestive procedures in the treatment of clinical pain. In T. Milton, C. Green, R. Meagher (Eds.), *Handbook of clinical health psychology*. (pp. 521–559. New York: Plenum.
- Bates, B. (1993). Individual differences in response to hypnosis. In J. Rhue, S. Lynn, & I. Kirsch (Eds.), *Handbook of clinical hypnosis*. (pp. 23–54). Washington, DC: American Psychological Association.
- Bennett, H. L. (1988). Perception and memory for events during adequate general anesthesia for surgical operations. In H. Pettinati (Ed.), *Hypnosis and Memory*. Guilford Press.
- Blacher, R. (1987). General surgery and anesthesia: the emotional experience. In R. Blacher (Ed.), *The psychological experience of surgery*. (pp. 1–25). New York: John Wiley.
- Blankfield, R. (1991). Suggestion, relaxation, and hypnosis as adjuncts in the care of surgery patients: A review of the literature. *American Journal of Clinical Hypnosis*, *33*(3), 172–187.
- Chaves, J. (1989). Hypnotic control of clinical pain. In N. Spanos & J. Chaves (Eds.), *Hypnosis: The cognitive behavioral perspective* (pp. 242–272). Buffalo, New York; Prometheus Books.
- Chaves, J., & Barber, T. X. (1976). Hypnotic procedures and surgery: A critical analysis with applications to “acupuncture analgesia.” *American Journal of Clinical Hypnosis*, *8*, 217–236.
- Cohen, F., & Lazarus, R. (1973). Active coping processes, coping disposition, and recovery from surgery. *Psychosomatic Medicine*, *35*, 375–389.
- Delong, R. (1970). *Individual differences in patterns of anxiety arousal, stress-relevant information and recovery from surgery*. Unpublished doctoral dissertation, University of California, Los Angeles.
- Egbert, L., Battit, G., & Turndorf, H. (1963). The value of the preoperative visit by the anesthetist: A study of doctor–patient rapport. *Journal of the American Medical Association*, *185*, 553–555.
- Evans, C., & Richardson, P. (1988). Improved recovery and reduced post-operative stay after therapeutic suggestions during general anaesthesia. *Lancet*, *2*, 491–493.
- Field, P. (1974). Effects of Tape-Recorded Hypnotic Preparation for Surgery. *International Journal of Clinical and Experimental Hypnosis*, *22*, 54–61.
- Ghonheim, M. M., & Block, R. I. (1992). Learning and consciousness during general anesthesia. *Anesthesiology*, *76*, 279–305.



- Greenleaf, M. Fisher, S., Miaskowski, C., & DuHamel, R. (1992). Hypnotisability and recovery from cardiac surgery. *American Journal of Clinical Hypnosis*, 35, 119–128.
- Johnstone, M., & Voegelé, C. (1993). Benefits of psychological preparation for surgery: A meta-analysis. *Annals of Behavioral Medicine*, 15, 245–256.
- Kessler, R. (1994). Tailoring hypnotic responsiveness in clinical practice. In M. Hunter (Ed.), *The frontiers of hypnosis: Proceedings of the third congress of Canadian societies of clinical hypnosis*. University of British Columbia Press.
- Kessler, R., & Dane, J. (1996). Psychological and hypnotic preparation for anesthesia and surgery: An individual differences perspective. *International Journal of Clinical Hypnosis*, 44(3), 189–207.
- Kessler, R., & Miller, S. (1995). The use of future time frame in hypnosis and psychotherapy. *American Journal of Clinical Hypnosis*, 37(4), 349–356.
- Levitán, A., and Horbaugh, (1992). Hypnotisability and hypnoanesthesia. *American Journal of Clinical Hypnosis*, 24(4), 223–226.
- Miller, S. M. (1988). The interacting effects of coping styles and situational variables in gynecologic settings: Implications for research and treatment. *Journal of Psychosomatic Obstetrics and Gynecology*, 9, 23–24.
- Mumford, E., Schlesinger, H., & Glass, G. (1982). The effects of psychological intervention on recovery from surgery and heart attacks: An analysis of the literature. *American Journal of Public Health*, 2, 141–151.
- Rogers, M., & Reich, P. (1986). Psychological intervention with surgical patients: Evaluation outcome. *Advances in Psychosomatic Medicine*, 15, 25–50.
- Salmon, P. (1994). Psychological factors in surgical recovery. In H. B. Gibson (Ed.), *Pain and anesthesia* (pp. 229–258). London: Chapman & Hall.
- Spiegel, H., & Spiegel, D. (1978). *Trance and treatment: Clinical uses of hypnosis*. New York: Basic Books.
- Surman, O., Hackett, T., Silverberg, F., & Behrendt, D. (1974). Usefulness of psychiatric intervention in patients undergoing cardiac surgery. *Archives of General Psychiatry*, 30, 830–835.
- Syriala, K., Cummings, C., & Donaldson, G. (1992). Hypnosis or cognitive behavioral training for the reduction of pain and nausea during cancer treatment: A controlled clinical trial. *Pain*, 48, 137–148.
- Wilson, J. (1981). Behavioral preparation for surgery: Benefit or harm? *Journal of Behavioral Medicine*, 4(1), 79–102.

## **AN HYPNOTIC INTERVENTION FOR MIGRAINE CONTROL**

**Gordon J. Emmerson**

*Victoria University of Technology, Melbourne*

**Gitta Trexler**

*Psychologist*

---

Migraine is a complex disorder, with symptoms variously responding to both psychological and physiological interventions. This study, using (a) group hypnosis, (b) hypnotic relaxation, and (c) vascular manipulation, tested the efficacy of hypnosis in the reduction of migraine duration, frequency, severity, and requirement for medication. A time-series design was used to determine a pre-treatment trend and a post-treatment effect. During a pre-treatment period of 12 weeks, participants recorded details of their migraines and medication. This was followed by 12 weeks of treatment, beginning with a group hypnosis session and the dissemination of pre-recorded hypnosis tapes for use over the treatment period. Significant improvement differences were found for all variables. Reduction of medication by almost 50% is viewed as a consequence of a reduction in the other variables since no medication reduction was encouraged. Pre-treatment medication was standardised to a mean of 100 corresponding to a post-treatment mean of 51. Reductions in duration, frequency, and severity were especially impressive considering the concurrent reduction in medication. Migraine duration was reduced from a group mean of 54 migraine hours per fortnight to 26 hours. Migraine frequency was reduced from a mean of 3.8 attacks per fortnight to 2.8 attacks. The migraine severity rating was reduced from a group mean of 2.0 to 1.4.

Migraine imposes major personal and social costs upon individuals and society. In an Australian study on the cost of migraine, Parry (1993) found that 68,000 work days, 33,200 school/university days, and 167,300 days of reduced activity were lost to migraine and other headaches. That same study also revealed that, while migraine sufferers do not always seek medical help, there were some

---

Requests for reprints should be sent to Gordon Emmerson, Psychology Department, Victoria University of Technology, PO Box 14428 MCMC, Melbourne, Victoria 8001.

566,000 reported visits to doctors, specialists, and hospital clinics for the complaint.

An American study found that headache is one of the 10 most common complaints presented to physicians, accounting for more than 18 million outpatient visits per year (Osterhaus, Townsend, Gandek, & Ware, 1994). In particular, migraines account for substantial morbidity and cost, resulting in an estimated 3 million bed days each month, and lost labour cost ranging from \$6.5 billion to \$17 billion per annum.

The pain of migraine can be debilitating. Migraine pain tends to involve the sides of the head more frequently than other parts of the body. When the actual pain begins, it is usually localised in the temple or in the eyeball on one side of the head. Occasionally it spreads downward to the neck and, in rare instances, to the arm. The sensation is one of intense, throbbing pain that is aggravated by exposure to light, noise, or movement (Low, 1987, p. 9). The pain sites are notably in the temporal, parietal, and occipital lobes, and may also occur in the upper and lower teeth, at the base of the nose, in the neck, in the region of the common carotid arteries, and down as far as the tip of the shoulder (Wolff, 1972). While pain locations tend to be unilateral at onset, the pain frequently becomes diffuse and bilateral as the attack takes its course. About one-third of patients experience bilateral attacks at onset (Sachs, 1985).

The duration of migraine pain may vary from a matter of minutes to several days, with the average duration for common migraine being between 8 and 24 hours (Prendergast, 1992). The frequency of migraines needs to be considered in relation to their duration. For example, one migraine which lasts some 12 hours or even several days cannot be meaningfully equated with one or even two migraines of only two hours duration each. For this reason some researchers prefer to speak of frequency in terms of number of migraine days per month (Emmerson & Farmer, 1996).

Selby and Lance (1960) found that more than 50% of subjects experienced between one and four attacks each month. They considered it highly probable that emotional factors are of great aetiological significance as the frequency of attacks increases. In 15% of subjects who reported more than 10 attacks per month, tension headaches were often present as well, and the subjects sometimes found it difficult to distinguish between the two types of headaches.

Severity of migraine pain is proportionally related to, and synchronised with, arterial pulsation. Head movements of any kind may easily aggravate severity. In severe migraines, the pulsation of extracranial arteries may be visible, and can be frequently so severe that the patient becomes greatly incapacitated and even immobilised (Petty, 1987; Sachs, 1985). Severity may also be aggravated by other co-existing secondary symptoms such as tension headache, fluid retention, profuse sweating, blurred vision, abdominal pain, diarrhoea, catarrh, dizziness, vertigo, lethargy, and drowsiness (Lance, 1993; Lewis, 1988; Milne, 1995; Petty, 1987).

Given the considerable costs, both to the community in lost work, and to the individual in pain and personal and economic expense, finding appropriate treatments for migraine is of importance. The present study investigated a psychological intervention involving a single group session and participation (using a pre-recorded audio tape) with self-hypnosis, relaxation, and vascular manipulation.

The purpose of the study was to investigate the effect of an hypnotic intervention on the duration, frequency, and severity of migraines. It was expected that a successful treatment impacting positively on migraine duration, frequency, and severity may also result in a reduction in the amount of migraine medication required by subjects.

## **METHODOLOGY**

### **Participants**

Recruitment of persons with migraine for participation in this study was undertaken through press advertising, posters in supermarkets, pharmacies, and medical clinics, and referrals from migraine clinics at the Austin and Repatriation Medical Centre, and the Royal Melbourne Hospital. Interested persons were sent an acknowledgment letter containing further information, and a registration form for attendance at a two-hour information seminar. The completed registration form was to be returned if participants wished to attend the seminar, and if they met all the selection criteria set out on the form.

The final selection of 32 volunteers was made on the basis of specified selection criteria, and the signing of a participation consent form. The selection criteria included the requirements that participants be clinically diagnosed migraine sufferers, that they experience at least two migraines per month, and that they would not undergo any other drug-free migraine treatment in the course of this study. Attrition occurred only during the first 12 weeks of the study (prior to treatment) and was due to various domestic- and work-related changes. Attrition reduced the original number of 32 participants to the 25 who completed the study. Of these, 6 were male, and 19 were female. Participants received no financial compensation for their participation. The age range of subjects was 36 years to 68 years, with a mean age of 51 years and a median age of 49 years.

Fifteen of the participants (60%), suffered bilateral migraines, seven (28%) suffered unilateral migraines involving only the left hemisphere, and three (12%) suffered unilateral migraines involving only the right hemisphere. Thus, from the combined total of bilateral and unilateral migraines, the left hemisphere was involved in 88% of migraines, and the right hemisphere in 72% of all attacks. Thirteen (52%) of the 25 participants experienced aura, that is, "classic" as opposed to "common" migraine. Thirteen participants also suffered comorbid somatoform disorders.

## **Research Design**

The research design was a single-group time-series, comprising a pre-treatment and a post-treatment phase. Each phase was of 12 weeks duration. A one-week interval between phases 1 and 2 allowed participants to be trained in the self-administration of hypnotic treatment.

Phase 1 was used to record daily pre-treatment data for fortnightly collection and measurement. These recording procedures, which covered details concerning migraine and medication, were extended for Phase 2, where they also included details of administered treatment.

A questionnaire was designed to obtain baseline information. It contained items pertaining to the severity, duration, and frequency of migraines and to medication and demographic data.

Participants recorded daily details of the severity, duration, and frequency of each migraine, as well as details of their hypnotic treatment on a log sheet. The hypnotic treatment details included information regarding the date, the number of times, and the length of time each of the self-hypnotic treatment sessions, as well as the perceived level of hypnosis reached.

Audio tapes were used to provide the standardised hypnotic treatment modalities of relaxation and vascular manipulation for migraine. The tape (relaxation and migraine) contained instructions for the use of the tape, an hypnotic induction procedure for relaxation, and hypnotic suggestions to reduce the vascular dilatation and swelling symptomatic of migraine pain.

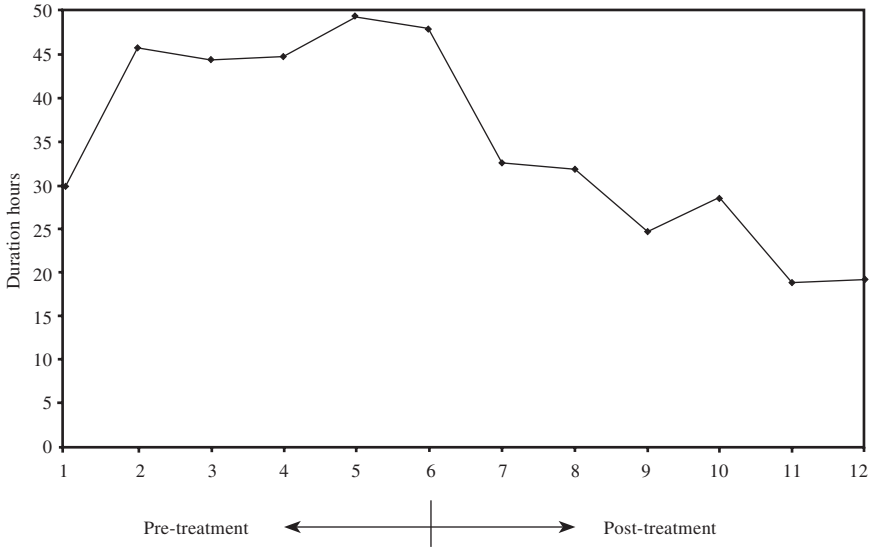
The techniques on the audiotape included the Spiegel (1972) eye-roll technique and direct suggestions for induction, and imagery with suggestions for relaxation (“And now for a special treat and to release any last, left-over tension, visualise yourself lying on a sheltered beach”). Vascular manipulation was suggested using the imagery of a cooling helmet (“... and so you allow the freeze coils behind their protective cover to go on cooling these affected blood vessels near the skull on the migraine sites of your head”).

## **RESULTS**

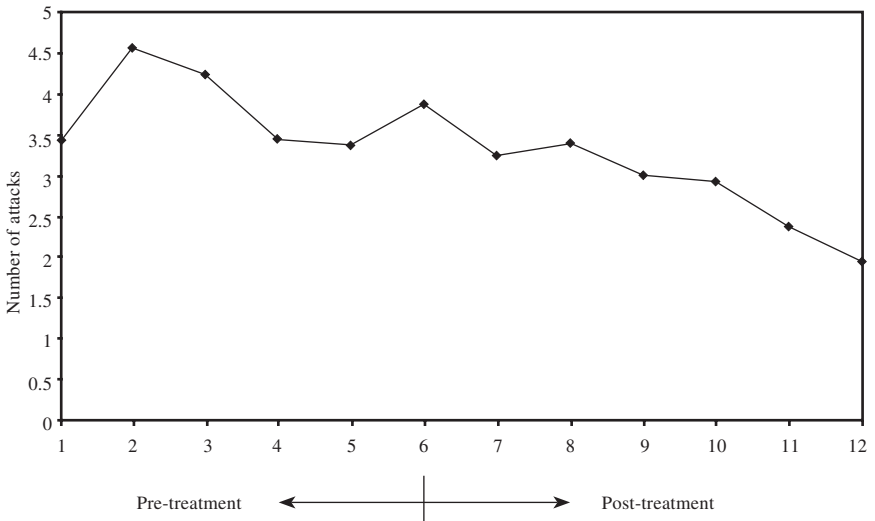
Dependent two-tailed tests were employed after Kolmogorov-Smirnov testing for normality of data. Multiple testing necessitated the downward adjustment of alpha using the Bonferroni procedure. Significant pre/post-treatment effects were found for all migraine hypotheses analysed. Means and standard deviations are presented in Table 1. The progressive reductions in duration, frequency, and severity of migraine are presented in Figures 1, 2, and 3 respectively.

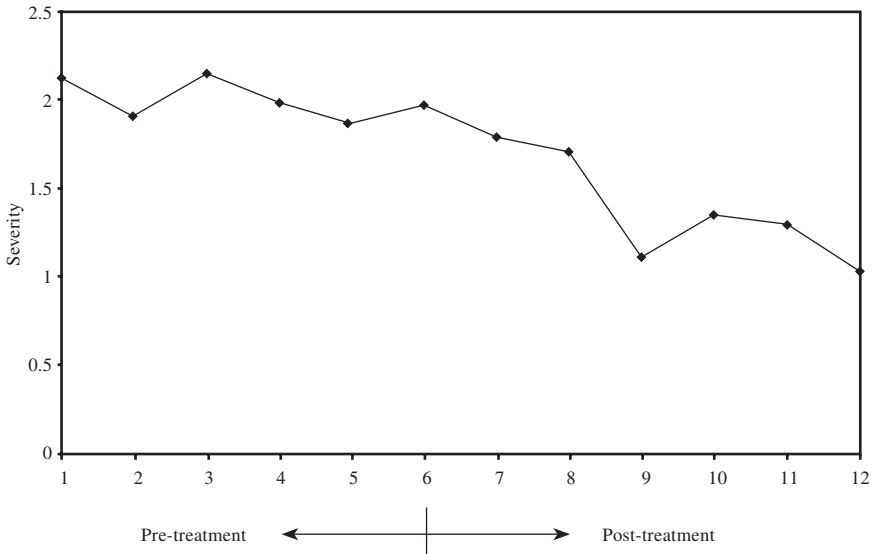
The data show that the hypnotic intervention resulted in reductions in the duration, frequency and severity of migraines. Post-treatment duration of migraine was significantly shorter than pre-treatment duration ( $t(24) = 5.74$ ,  $p < 0.0005$ ). Post-treatment frequency of migraine was significantly lower than pre-treatment frequency ( $t(24) = 3.86$ ,  $p < 0.001$ ). Post-treatment migraine

**Figure 1:** Migraine Duration: Group Means of Number of Migraine Hours per Consecutive Fortnight ( $N=25$ )



**Figure 2:** Migraine Frequency: Group Means of Number of Migraine Attacks per Consecutive Fortnight ( $N=25$ )



**Figure 3:** Migraine Severity: Group Means per Consecutive Fortnight ( $N=25$ ) Self-Rated on a Scale of 1–3

severity was significantly less than pre-treatment severity, ( $t(24) = 5.71$ ,  $p < 0.0005$ ).

The reduction in migraine duration, frequency, and severity corresponded with a reduction in migraine medication taken by subjects. Post-treatment medication requirements were significantly less than at pre-treatment ( $t(12) = 9.43$ ,  $p < 0.0005$ ). Participants' medication levels were standardised to a pre-treatment score of 100 to facilitate comparison.

**Table 1:** Migraine Means and Standard Deviations Phases 1 and 2 ( $N=25$ )

Variable	Mean	<i>SD</i>
Duration 1	54.0067	68.3927
Duration 2	25.9267	40.3896
Frequency 1	3.8133	4.6486
Frequency 2	2.8067	3.4088
Severity 1	1.9933	0.5193
Severity 2	1.3700	0.5824
Medication 1	100	20.00
Medication 2	51	18.53

## DISCUSSION

The mean total duration of migraine per participant during the 12-week post-treatment phase was 155.54 hours, compared with 260.28 hours during the pre-treatment phase. This reduction of 104.74 hours (40.25%) at the conclusion of treatment is statistically significant ( $t(24) = 5.74, p < 0.0005$ ).

The test data for duration of attacks are interesting. Sachs (1985) claims that the duration of migraine becomes prolonged by using analgesic drugs, and that patients have the option to choose reduced pain for a longer period by taking medication, or to endure, without medication, the full severity of pain for its shorter, natural duration. In the present study, participants were able to decrease the dosage of their migraine medication. As such, and in keeping with Sachs' view on prolonged medicated pain, it could be that the achieved decrease in medication also contributed to the decrease in the duration of their migraine. To avoid the possibility of subconscious compliance responses, participants were not told of this connection. However, as no controlling or testing mechanisms for this factor were used, the effect of such a contribution having occurred remains a possibility.

The treatment responses of migraine in terms of frequency and severity were also significantly reduced. The group's frequency mean of 22.88 migraine attacks for the 12-week pre-treatment phase was reduced to 16.8 attacks at post-treatment ( $t(24) = 3.86, p < 0.001$ ). Severity was reduced from a pre-treatment mean score of 1.99, to a post-treatment mean of 1.35 ( $t(24) = 5.71, p < 0.0005$ ). The decrease of severity was achieved while medication was being halved ( $t(12) = 9.43, p < 0.0005$ ) for the 13 of 25 participants who were taking prescribed medication.

These treatment responses demonstrate the effectiveness of hypnosis in the treatment of migraine. The reduction in frequency, in particular, demonstrates the capacity of hypnotic treatment to prevent the onset of migraine symptoms. Research has shown that, with the exception of continuous daily medication, only psychologically based treatments, such as hypnosis, appear to have a particularly strong capacity for reducing the frequency of migraine with reductions in duration and severity (Harding, 1978; Schaefer, Millman, & Levine, 1979). This study confirms the effectiveness of self-empowering psychological strategies such as self-hypnosis in the treatment of migraine.

These results raise the question of how hypnotic interventions reduce the severity and duration of migraine pain. Are reductions in frequency, duration, and severity achieved through neurovascular or biochemical changes, such as a return of abnormally dilated blood vessels to their normal state, or are they simply due to an inhibited awareness of the "pain in progress," as suggested by Hilgard and Hilgard (1975), or a combination of both?

The levels of hypnosis reported by participants in the present study showed that the results for migraine were achieved regardless of the state of hypnosis. Although six participants reportedly attained medium levels on several



occasions, only two participants appeared able to reach deep levels, and this occurred only on rare occasions. This outcome supports findings that, for clinical purposes, a light to medium level of hypnosis is generally adequate for successful treatment (Rose, 1990).

The present study has demonstrated the effectiveness of an hypnotic treatment in reducing migraine symptoms and the need for associated medication. These results were achieved with a single session of group hypnosis followed by successive use of pre-recorded audio tapes for induction, relaxation, and vascular manipulation. Such a treatment is physiologically useful and economically viable, and should be considered with other interventions for treating the disorder of migraine.

## REFERENCES

- Emmerson, G. J., & Farmer, F. (1996). Ego state therapy and menstrual migraine. *Australian Journal of Clinical Hypnotherapy and Hypnosis*, 17, 7–14.
- Harding, H. C. (1978). Workshop on hypnotic treatment of migraine and obesity. Queensland Branch of Australian Society for Clinical and Experimental Hypnosis. Brisbane.
- Hilgard, E. R., & Hilgard, J. R. (1975). *Hypnosis in the relief of pain*. Los Altos, CA: William Kaufmann Inc.
- Lance, J. W. (1993). *Mechanism and management of headache* (5th ed.). London: Butterworth-Heinemann.
- Lewis, J. (1988). *The migraine handbook*. London: Vermilion.
- Low, R. (1987). *Victory over migraine: The breakthrough study*. New York: Henry Holt & Co.
- Milne, G. (1995). *Hypnosis and the art of self-therapy* (2nd ed.). Melbourne: Lothian.
- Osterhaus, J., Townsend, R. J., Gandek, B., & Ware, J. E. (1994). Measuring the functional status and well being of patients with migraine headache. *Headache Journal*, 34, 337–382.
- Parry, T. (1993). *The prevalence and cost of migraine in Australia*. University of New South Wales: Centre of Applied Economic Research.
- Petty, R. (1987). *Migraine and other headaches*. London: Unwin.
- Prendergast, M. (1992). *Understanding migraine*. Melbourne: Text.
- Rose, L. (1990). *Overcoming pain*. Melbourne: McCulloch Publishing.
- Sachs, O. (1985). *Migraine: Understanding a common disorder*. London: Pan Books.
- Schaefer, C. E., Millman, H. L., & Levine, G. F. (1979). *Therapies for psychosomatic disorders in children*. San Francisco: Jossey-Bass.
- Selby, G., & Lance, J. W. (1960). Observations on 500 cases of migraine and allied vascular headache. *Journal of Neurological Neurosurgery and Psychiatry*, 23, 23–26.
- Spiegel, H. (1972). *Manual for hypnotic induction profile: Eye-roll levitation method*.

## **INABILITY TO DEHYPNOTISE: IMPLICATIONS FOR MANAGEMENT**

**Melvin A. Gravitz**

*Psychologist*

---

One of the possible complications of working with hypnosis, and a concern of some, is difficulty in alerting the patient from the hypnotic condition. Although such adverse reactions are rare and infrequently observed, they have been noted for many years. This article presents two cases of inability to dehypnotise and discusses the implications for clinical management of the dynamics that were found to be causally related to such behaviour.

One of the possible implications of working with hypnosis is encountering difficulty in alerting the patient (dehypnotising), which is also an expressed concern of some patients (MacHovec, 1986), although such behaviour has been rarely observed. This article describes the historical background of the problem, two recent cases, and implications for clinical management.

### **REVIEW OF THE LITERATURE**

The literature dealing with this phenomenon contains mainly anecdotal accounts, rather than specific conceptual understanding. Most of these brief reports emphasise a change of technique by the clinician as the remedy although several appeared to be early recognition that there could be a transference factor in the difficulty.

Lafontaine, an early authority, focused on the role of the clinician and recommended that in the event of difficulty the mesmerist should “retain all his calm” and then “plunge his hands in freshwater,” after which the alerting procedures based on manual passes were to be resumed (Lafontaine, 1860, p. 66). Elliotson (1843) and Esdaile (1846) both advocated raising the

---

Reprinted with permission from *Hypnos: Swedish Journal of Hypnosis in Psychotherapy and Psychosomatic Medicine* (1998) 93–97.

Requests for reprints should be sent to Melvin A. Gravitz Ph.D, P.C., Suite 105, 1325 Eighteenth Street, N.W. Washington D.C. 20036-6511 U.S.A.

individual's eyelids and then blowing on the exposed eyes and face. Vincent (1893) proposed sprinkling water on the patient, and Dubor (1922) issued loud, brusque commands to "awaken."

Nearly a century and a half ago, Du Potet de Sennevoy (1852), a prominent French theorist, wrote that he had magnetised two girls and become panic-stricken when he was unable to alert them for several hours. He did not note how he eventually managed the problem. Bernheim (1881), a principal architect of the late nineteenth-century Nancy school, astutely observed that were a hypnotist to panic and then make frantic efforts to alert a patient, the latter thereby would be signalled that there was a critical problem and, responding to the clinician's distress as an indirect suggestion, would not alert.

Williams (1953) later cited several cases where individuals remained in hypnosis for periods ranging from an hour or less to as long as 12 days in one instance, and he underscored that the most effective manner of dealing with the problems encountered in alerting was by understanding the intrapsychic factors involved. In more recent years, Hartland (1971) maintained that the infrequent difficulties in terminating hypnosis could occur either as a defence, or as a misconception by the patient of what was expected, or as the avoidance of personally unacceptable post-hypnotic suggestions. Bramwell (1921) had earlier described two situations in which difficulty arose because disagreeable post-hypnotic instructions had been given to patients who then rejected them. On the other hand another possibility is that a patient could find the hypnotic experience pleasant and therefore not want to relinquish it.

Fromm (1972) has commented on the problem within the context of the ego-psychological psychoanalytic theory of activity and passivity and her position is further discussed below.

In summary, there has been a consensus in the field that the problem is rare and that hypnosis itself is a generally safe procedure with virtually no significant negative consequences, provided that it is used by competent professionals in appropriate ways (Coe & Ryken, 1979; Hilgard 1974).

## **CASE 1**

A workshop in the clinical application of hypnosis was being presented to the mental health professionals of a large military medical centre. The participants were staff, residents and interns. At one point in the workshop program, the participants were divided into teams of two persons each so that they could practise induction techniques with each other. Each team was placed in a separate office, and the course instructor served as a circulating observer and supervisor.

During a workshop practice session, one of the participants, who was practising being the hypnotist, became concerned when, despite several attempts, he was unable to alert the resident. In the instructor's presence the trainee was asked to attempt alerting once more, which again was unsuccessful,

as was an attempt to communicate verbally with the resident. The trainee and several onlookers were then asked to leave the room, after which the door was closed.

When the two were alone, the instructor told the still hypnotised resident that he could respond with an ideomotor finger signal if he could hear him, and the resident complied. The instructor then proposed that the two of them discuss the event in private after the resident alerted and another ideomotor signal indicated agreement. After a leisurely “coming up,” the resident reported that he had been fully aware throughout the situation that the trainee-hypnotist was seeking to alert him and that the workshop instructor had been brought in for assistance. Further discussion brought out that the trainee hypnotist was the director of residency training at the medical centre and a harsh individual who was feared and disliked because of his hostile and tyrannical treatment of the residents in his program, one of whom was the subject, a first-year resident who was several military ranks below the training director. With a laugh, the resident then voiced his recall of the training director’s alarm and distress when the alerting was unsuccessful. After further discussion, what became apparent was that the resident’s seeming inability to be alerted was actually a demonstration of his own suppressed resentment toward the head of the residency training programme. Furthermore, by his non-compliance the resident was able to make the training director feel anxious, embarrassed, and upset in safe, socially functioning circumstances, which caused the training director to “lose his cool” and appear incompetent before his peers and the workshop leader. The resident was thus finally able to express his anger toward his superior and, although he was unable to show these feelings openly, he did do so indirectly by the extreme discomfort he caused when the training director was unable to alert him.

## **CASE 2**

The 36-year-old wife of a naval officer was referred by her neurologist for hypnotic intervention to aid the management of pain. Four years prior to the referral, the patient and her family had resided in Japan where her husband had been stationed at an American military facility. Shortly after her arrival there, she had developed a neurological disorder one of the symptoms of which was pain. When medication proved ineffective, she was in turn referred to a physician who successfully used hypnosis as an analgesic. After several years in Japan, during which the pain was effectively controlled by hypnosis, the family was transferred back to the continental United States after conclusion of the husband’s tour of duty. Several months before the current referral, the patient’s discomfort had begun to recur and, as previously, medication was not helpful. She consequently asked her neurologist for a referral for hypnosis. Accordingly the patient arrived with positive motivation and expectancy and a previously successful experience with hypnosis for a symptom that was again causing her increasing concern.

She proved to be a good subject and responded quickly to a classic induction paradigm based on eyelid closure, numerical countdown, and suggestions for relaxation. After a period of depth facilitation, appropriate suggestions for the abatement of pain were given, after which the patient was then given alerting instructions based on numerical count-up. She did not respond as expected, however, and indeed she appeared to continue to be in at least the same trance depth as previously, if not deeper. Alerting suggestions were repeated several times, but the patient continued to display no response.

Recognising that there must be a valid and sufficient reason for her inability or unwillingness to comply, she was first asked how she felt. Her slow, monotonous, and barely audible reply was, "Great," and she showed no apparent clinical indications of pain or other discomfort. On the contrary she continued to appear relaxed and effectively hypnotised. The patient was then asked what she was thinking, and her reply to that was that she was afraid to open her eyes.

In simultaneously addressing the therapeutic goal of the appointment (pain management), the patient's resistance and failure to alert, and her inner security needs, all of which were convergent, the following was then said, in a slow, firm, and confident way. She was told that she was safe, that her pain was gone and need not recur, that I understood why she was afraid, and that I would show her how to have hypnosis always available when and if she elected to use it. I then asked if she understood what I had said, and an ideomotor finger signal indicated that she had. At that point, the alerting process was repeated, and this time the patient responded by opening her eyes, moving about, and exhibiting other indications of normal alertness. She also smiled spontaneously, and when asked how she felt she replied in a firm voice that she felt great.

The patient was then taught self-hypnosis with pain management as the therapeutic goal. She was advised that in the event she wanted to feel "even more comfortable than you will already be," which was in effect a reinforcing post-hypnotic suggestion, she could find a quiet place of her own choice where she would either lie down or sit comfortably, as in the therapist's office. She was then to count back slowly from 10 to 1, by which time she would feel "much more relaxed and comfortable than when you started and without pain." She was also told that she could contact me at any time were she to feel the need to do so. She was seen for one reinforcing visit the next week, during which the pain management and self-hypnotic instructions were reiterated without incident. Subsequently, her referring neurologist reported at three months post-treatment that the patient continued to be free of disruptive pain.

## **DISCUSSION**

The above two cases are the only instances of inability to dehypnotise encountered in this writer's personal clinical experience of more than three decades with the modality. In both situations the instructions for alerting were

initially those that had been effective and used without difficulty in many other cases. In managing the problem at the time, the guiding psychological principle was that all behaviour is consciously or unconsciously intended to meet the patient's needs, and therefore the inability to alert reflected the patient's need not to do so for an important personal reason. In retrospectively analysing these two cases, it was evident that such patient-centred dynamics were in operation and the role of expectancy set in hypnotic behaviour has been amply demonstrated (e.g., Coe & Steen, 1981). Fromm (1972) has proposed that there are two forms of coping with the demands of reality; in both of which the ego in the psychoanalytic sense retains its relative autonomy from environmental demands. In creative coping, individuals actively meet the demands of the external world and control or change them at their own pace, whereas in protective coping, a person defends against demands originating in the environment by taking ego-controlled action that is short of complete mastery. Fromm (1972) described a case of a young woman who did not alert because hypnosis unconsciously reminded her of anaesthesia, and several years previously she had refused for days to come out of anaesthesia after a tonsillectomy for fear of suffering pain, as had her mother after another surgery. This situation is similar to my second case described above.

Fromm (personal communication, 21 October, 1994) also emphasised that there can be a number of reasons why some individuals do not alert, including their need to engage in a transference-based power play with the therapist, or as a demonstration of their need for attention.

The medical center resident, described above, was acting out his resentment and the related need to retaliate safely at his harsh training director and he did so in an effective, non-verbal, and covert manner that was without risk of retribution to himself. It was apparent that the resident's resistance represented self-control, and not a loss of control, over the alerting situation.

The dynamics in the second case were more psychologically basic but no less important to that patient, because her need to attenuate the pain was paramount, and she was aware from prior experience that hypnosis could be helpful in achieving that goal. In her situation, the eyelid closure, which was an integral component of the hypnotic treatment, served to symbolise the shutting out of the pain. By not opening her eyes, a behaviour that was part of the alerting paradigm, she was defensively seeking to prevent the return of pain. The patient's behaviour may also be understood as having possible transference implications in that she could have been acting out a dependent role so that the therapist would care for her (Fromm, personal communication, 21 October 1994). In giving her the post-hypnotic suggestions as noted, the patient was aided to have an enhanced feeling of self-control, and her own role in remaining free of pain was underscored. This approach used her own inherent strengths.

It is clear that in both these cases, the individuals were in control of their situations and important personal needs of the moment. Practitioners who may encounter the infrequent problem of inability to dehypnotise their patients

should understand that the patient is thereby undertaking to control his or her own behaviour for personally significant reasons. Understanding these reasons as defences, and circumventing and even using such defences, enable successful resolution of the problem.

## REFERENCES

- Bernheim, H. M. (1881). *De la suggestion dans l'état hypnotique et dans l'état de veille* (Concerning suggestion in the hypnotic and in the awake state). Paris: Octave Doin
- Bramwell, J. M. (1921). *Hypnotism*. London: William Riley
- Coe, W. C., & Ryken, K. (1979). Hypnosis and risks to human subjects. *American Psychologist* 34, 673–81.
- Coe, W. C., & Steen, F. (1981). Examining the relationship between believing one will respond to hypnotic suggestions and hypnotic responsiveness. *American Journal of Clinical Hypnosis*, 24, 22–32.
- Dubor, G. (1922). *The mysteries of hypnosis* (translated from the French). London: Rider
- Du Potet De Sennevoy, J. D. (1852). *La magie dévoilée* (Magic unveiled). Paris: Pommerehne C Moreau
- Elliotson, J. (1843). Cases of cures by mesmerism, *Zoist* 2, 161–208.
- Esdale, J. (1846). *Mesmerism in India and its practical application in surgery and medicine*. London: Longman, Brown, Green & Longmans.
- Fromm, E. (1972). Ego activity and ego passivity in hypnosis. *International Journal of Clinical and Experimental Hypnosis*, 20, 238–251.
- Hartland, J. (1971). *Medical and dental hypnosis and its clinical applications* (2nd ed.). London: Baillière.
- Hilgard, J. R. (1974). Sequelae to hypnosis. *International Journal of Clinical and Experimental Hypnosis* 22, 281–298.
- Lafontaine, C. (1860). *L'art de magnétisme* (The art of magnetism) (2nd ed.). Paris: Baillière.
- MacHovec, E. J. (1986). *Hypnosis complications: Prevention and risk management*. Springfield, IL: C. Thomas.
- Vincent, R. H. (1893). *The elements of hypnotism*. London: Kegan Paul, Trench & Treubner.
- Williams, G. W. (1953). Difficulty in dehypnotising. *Journal of Clinical and Experimental Hypnosis*, 1, 3–12.

## **HYPNOSIS AND IMMUNE SYSTEM FUNCTIONING**

**Karin Hannigan**

*Psychologist*

---

The new interdisciplinary field of psychoneuroimmunology is giving greater credibility to the notion that the mind is able to influence the body. Autonomic nervous system functions which were believed to be out of conscious control are now thought to be more amenable to it. New interest is being shown in the effects of relaxation, imagery, and hypnosis on immune system function.

Research in the area of hypnosis and the immune system indicates that, generally, hypnotic intervention can moderate immune system functioning, although it is not yet clear to what extent this effect is due to a general relaxation response or hypnosis-specific effect. Research also suggests hypnotisability is positively correlated with the degree of immune system changes. Other immune system research utilising relaxation and imagery approaches which are “hypnosis-like” are also considered. Implications for future research are discussed.

There is growing research evidence of the ability of the mind to directly influence immune system functioning, which has led to the creation of an exciting new interdisciplinary field called psychoneuroimmunology. Researchers suggest it is incorrect to talk about an immune system that is separate from the nervous system and endocrine system. Pert (1997), for example, has argued that the brain, glands, spleen, bone marrow, and lymph nodes are all part of a multi-directional communication network, linked by the information carriers neuro peptides. In effect, it is more useful to think of an integrated body/mind where thoughts and emotions are continually involved in exciting and inhibiting neurochemical secretions and changing neurological potentials and biochemical gradients to effect changes in the body.

The long-puzzling placebo effect suggested mind/body healing systems which defy conventional medical models. Research is beginning to question functions of the autonomic nervous system which were thought to only occur involuntarily and unconsciously. Research using biofeedback has demonstrated



the potential for an exquisite degree of control of body systems thought to be outside of conscious control. Basmajian (1963) found that it is possible for a person to learn control of just one single nerve fibre in a bundle of nerve fibres, even though the muscle tension of a single nerve cell cannot be detected by conscious sensory awareness.

Although much controversy exists in this area, Simonton's work (Simonton, & Matthews-Simonton, 1982) with cancer patients brought to attention the notion of enhancing the immune system through relaxation and mental imagery. In fact, mental imagery is one of the six most commonly used alternative therapies chosen by cancer patients (Moye, Richardson, Post-White, & Justice, 1995). This paper investigates the effectiveness of using hypnosis to change immune system parameters. Hypnosis is defined as a state in which there is a "weakening of the generalised reality orientation" (Shor, 1959) and habitual mental functioning is in some way modified by the hypnotic process (Carrese, 1993). A number of imagery and visualisation studies have been included in this paper as they fall within this definitional framework. Where experimenters have not specifically described their protocols as "hypnosis," this has been noted.

Generally, to measure immune function, blood samples are analysed to determine blood cell counts of various subgroups of white blood cells (e.g., leukocytes) or assay their biochemical mediators (e.g., lymphokenes). Leukocyte sub-populations are difficult to measure as they are interdependent and many have specialised functions, with change in one group producing a cascade effect in others. There is, however, no standard global measure of immune function, and this has contributed to the confusion in interpreting the relevance of data in this area. Kiecolt-Glaser and Glaser (1992) have suggested that, in general, functional assays rather than quantitative assays provide a more realistic indicator of immune response. Other researchers have questioned the reliability of using secretory IgA (immunoglobulin A) as the sole dependent measure of immune system change as flow rate needs to be adequately controlled (Stone, Cox, Valdimarsdottir, & Neale, 1987).

Early research on hypnosis and the immune system concerned itself with immediate and delayed skin allergic responses. Typically, research involved injection of the same antigen in both arms with hypnotic instructions to differentially decrease the reaction in one arm, while increasing the allergic reaction in the other. Subjects were usually skilled in hypnosis and served as their own controls. Results were inconclusive, with most studies showing significant differences in responsiveness between arms (Zachariae & Bjerring, 1990; Zachariae, Bjerring, & Arendt-Nielsen, 1989) but some reporting no difference (Behrs, Harris, & Hilgard, 1970; Locke et al., 1987). In these studies it was unclear whether observed effects were due to reduction in skin flare eruption (i.e., area of swelling) or genuine changes in cellular immune function. Still other studies (Kaneko & Takeishi, 1963) found hypnosis effective in treatment of chronic urticaria, a skin disorder characterised by hives which may result from a hypersensitivity-immune condition mediated by immunoglobulin.

In the more recent research studies, findings on the modulation of the immune system, specifically by hypnosis, are far from clear-cut. There is some confusion as to whether relaxation processes constituted hypnosis or not. Procedurally, the only definition of hypnosis was whether or not the experimenters defined it as such. Few studies went to the trouble of measuring hypnotisability or including proficient subjects. Other procedures were classed as relaxation imagery yet fall within Shor's (1959) broad definition of hypnosis and thus are mentioned here.

Many studies have shown that hypnosis or "hypnotic-like" strategies can facilitate significant alterations of immune functioning across populations. Experimenters have used a wide variety of strategies to show that immune system responses can be modified. Approaches have ranged from the more conscious processes of relaxation and imagery, to more unconscious conditions such as biofeedback, hypnosis and conditioning paradigms (Halley, 1991).

Green and Green (1987) found immune system changes in college students after only one 20-minute relaxation session of either a suggestive relaxation sequence, guided visualisation, or massage. Taylor (1995) evaluated the effects of a stress-management intervention including progressive muscle relaxation, biofeedback relaxation, meditation, and self-hypnosis on anxiety, mood, self-esteem, and T-cell count in a group of HIV positive men who were asymptomatic except for T-cell counts below 400. He found significant improvements on all measures, but it is impossible to ascertain what the specific contribution of hypnosis made to this effect. In a study assessing the impact of relaxation (muscle relaxation and guided imagery) and social contact on geriatric residents from independent living facilities, researchers found that only subjects in the relaxation condition produced significant increase in immune function as measured by increases in NK (natural killer) cell activity and decreases in HSV antibody titres (Kiecolt-Glaser et al., 1985).

Evidence suggests that stressful events have an immune-suppressive effect which hypnosis can modify. A study on medical students (Kiecolt-Glaser et al., 1986) found that relaxation group meetings (which included group hypnotic induction as well as progressive relaxation, autogenic training, and imagery) reduced exam stress with significant decreases in both NK cell activity and gamma interferon production by lymphocytes. Frequency of relaxation practice was a significant predictor of the extent of this effect. Unfortunately these studies did not control for subjects' hypnotisability.

Silvers' (1993) innovative work with chronic substance abusers utilised a "self-regulatory" technique (focused concentration and imagery, following information sessions on brain neurotransmitters) to teach addicts how to intentionally restore adequate levels of depleted neurochemicals for relief of substance cravings. Subjects were supposedly able to gain a "high" through release of endogenous neuropeptides.

Not all studies found that hypnosis makes a significant difference to the immune system. Whitehouse et al. (1996) looked at the effectiveness of self-

hypnosis/relaxation for relieving stress and moderating immune system reactivity to examination stress. The sample consisted exclusively of subjects of moderate to high hypnotisability, and thus by implication, able to benefit from self-hypnosis. Fourteen 90-minute weekly sessions were used to train subjects who then proceeded to practise at home during the exam period. The study found that, although self-hypnosis subjects reported lower stress and anxiety, self-hypnosis did not result in any significant alterations in immune function relative to the control group. Hypnotisability (moderate or high) had no significant effect on the psychological or immune system outcomes.

Children are also able to influence the immune system through hypnosis (Olness, Cuthbert, & Uden, 1989). Children were taught self-hypnosis using relaxation imagery and viewed a video on the immune system. Children in the group who were instructed to control salivary immunoglobulins significantly increased salivary IgA levels. A similar self-hypnosis group who were given permission to increase immune substance, but were not specifically directed to do so, and a control group who were given equal time but no instructions, did not increase IgA levels.

In considering the effects of hypnosis on the immune system it is necessary to distinguish between general relaxation effects and hypnosis-specific effects. In general, studies are divided as to the ability of hypnosis to specifically influence the immune system. Ruzyla-Smith, Barabasz, Barabasz, and Warner (1995) found that subjects in their hypnosis group (audio-taped standard induction then taught self-hypnosis with instructions for twice daily practice) showed significantly greater T-cell counts than a relaxation group, even for highly hypnotisable subjects. Interestingly, for their relaxation group, this study utilised float-tank relaxation as the most stringent competition for the relaxation effect of hypnosis. Zachariae et al. (1994) looked at cellular immune function under specific guided imagery (music assisted imagery with hypnosis-like suggestions for effective immune functioning) and relaxation conditions. They found no significant differences between the effect on the immune system of relaxation as opposed to guided imagery.

Distinctive imagery instructions have produced very specific immune parameter changes. Rider and Achterberg (1989) found that, through specific immune system imagery, subjects could differentially influence discrete components of the immune system (types of white blood cells). A group directed to change neutrophils had a significant effect on only this group, while another group instructed to change lymphocytes were able to significantly change this cell type alone. Similarly, Hall, Minnes, Tosi, and Olness (1992) educated subjects about functions of certain immune cells, then trained them in visualisation and self-hypnosis. Subjects were asked to design their own imagery for increasing the stickiness of these particular white blood cells. Samples of blood and saliva taken after the visualisation and self-hypnosis practice showed that the only significant change in the properties of the immune cells was their ability to stick to foreign objects.

A number of studies suggest that high hypnotisability has a positive correlation with immune system changes. In his review of research findings related to the effects of hypnosis on the immune system, Hall (1983) noted that those studies which found hypnosis to be successful in altering immune function had in common the inclusion of highly hypnotisable subjects. Ruzyla-Smith et al. (1995) found that alterations in immune response, as measured by increases in B-cells and helper T-cells, occurred only for highly hypnotisable subjects exposed to hypnosis. Highly hypnotisable subjects under relaxation or control conditions showed no significant changes. Zachariae et al. (1994) found that high hypnotisable subjects showed a trend towards decreases in lymphocyte proliferative response and natural killer cell activity (immune enhancement) than low hypnotisability subjects. In contrast, Olness et al. (1989), in their work with children, found that hypnotisability had no effect on immunoglobulin changes.

## **DISCUSSION**

In general, research supports the idea that hypnosis is one intervention that can affect the immune system. However, without controlling for hypnotic capacities and the potential effect of relaxation, it is difficult to determine the specific effect of hypnosis on the immune system.

Much of the confusion may be due to the wide range of intervention strategies defined as hypnosis. Self-hypnosis, group hypnosis, and experimenter-facilitated hypnosis have been treated as equivalent, with experimental sessions ranging from 20 minutes to practise over a number of weeks. A number of imagery-studies interventions could easily qualify as hypnosis conditions.

The effect of hypnotic suggestibility on ability to utilise hypnosis to change immune system components is still unclear, although emerging trends tend towards greater hypnotisability increasing immune system changes. Little is known of the hypnotisability of subjects in imagery and relaxation studies, as experimental procedures are not classified as “hypnotic.”

In the past, research has been fragmented, with researchers using many different indicators of immune functioning without addressing the question of the clinical implications of immune parameter changes. Some indicators are more robust than others and the reliability of measuring IgA without controlling for effect of saliva flow rate has been questioned (Stone et al. 1987). Some changes will be more powerful than others and will last longer. At present it is not clear how a change in immune system response translates into changes into measurable decreases in the incidence, severity, or duration of disease, or distinctive improvements in health and well being.

Kiecolt-Glaser and Glaser (1992) raised the issue of whether immune system functioning can, in fact, be enhanced above normal levels in prime, healthy people, and whether it is desirable to even attempt to do so. Homeostatic regulatory processes may prevent alterations in a well-balanced system. This presumes that we know what a healthy immune system is in the first place.

Current medical models tend to define health as the absence of disease. Pert (1997) indicated that a healthy functioning immune system involves free expression and flow of emotions. Immune system impairment occurs when peptide flows are restricted from freely flowing due to information overload from suppressed trauma or unexpressed emotions.

At present, we have some indicators of what factors seem to be key components for effective intervention in the immune system. Halley (1991) suggested these include: (a) the amount of education given on the desired physiological response and rationale; (b) length of practice time; (c) level of skill in the modality utilised; and (d) skill of the facilitator. Other studies provide further hints of how to effect productive changes. Dilts, Hallbom, and Smith (1990) found that the structure of the imagery used was crucial. For example, cancer patients who were able to build an associated image of themselves (i.e., they are in their picture as though looking through their own eyes) were more successful than patients who made a dissociated picture. In early biofeedback studies, Green and Green (1977) noted that the key to effecting changes in biological functions was to build clear images with strong feelings attached. Gawler (1998) highlights the need to develop images that “feel good” and include a physical sensation. He also notes that, almost invariably, symbolic or abstract imagery is most successful for communicating a message to heal to the unconscious mind, and suggests the use of archetypal symbols of light and water in developing healing sequences.

Even if it is possible to change functioning of elements of the immune system such as white blood cell counts (Rider & Achterberg, 1989), there are issues in doing so. The immune system is part of an even wider, intricate biological system and tampering piecemeal with components of an elegant self-regulating system may be ill advised. Zachariae et al. (1994) noted they were unable to determine whether immune cell changes they found were evidence of immune suppression or immune enhancement, or perhaps just disturbances of the equilibrium of the immune system.

Perhaps the most elegant input is to set the intention to heal and get out of the way of the detail. One of Milton Erickson’s classic teaching tales involved returning a strayed horse to his owner. Not knowing just where the horse belonged, it was enough to trust that the horse knew where he needed to go and so to point him in the right direction and keep his attention on the road, without dictating which hoof came first (O’Hanlon, 1987).

## REFERENCES

- Basmajian, J. (1963). Control and training of individual motor units. *Science*, *141*, 440–441.
- Behrs, J. O., Harris, D. R., & Hilgard, E. R. (1970). Failure to alter skin inflammation by hypnotic suggestion in five subjects with normal skin reactivity. *Psychosomatic Medicine*, *32*, 627–631.
- Carrese, M. (1993). The paradox of the new hypnosis, *Australian Journal of Clinical*

- Hypnotherapy and Hypnosis*, 14, 31–40.
- Dilts, R., Hallbom, T., & Smith, S. (1990). *Beliefs: Pathways to health and well-being*. Portland, OR: Metamorphous Press.
- Gawler, I. (1998). The creative power of imagery: Specific techniques for people affected by cancer. *Australian Journal of Clinical Hypnotherapy and Hypnosis*, 19, 17–30.
- Green, E., & Green, A. (1977). *Beyond biofeedback* New York: Delta.
- Green, R. G., & Green, M. L. (1987). Relaxation increases salivary immunoglobulin A. *Psychological Reports*, 61, 623–629.
- Hall, H. (1983). Hypnosis and the immune system: A review with implications for cancer and the psychology of healing. *American Journal of Clinical Hypnosis*, 25, 92–103.
- Hall, H. (1992). Voluntary modulation of neutrophil adhesiveness using cyberphysiologic strategy. *International Journal of Neuroscience*, 63, 287–297.
- Hall, H., Minnes, L., Tosi, M., & Olness, K. (1992). Voluntary modulation of neutrophil adhesiveness using a cyberphysiologic strategy. *International Journal of Neuroscience*, 63, 287–297.
- Halley, F. M. (1991) Self-regulation of the immune system through biobehavioral strategies. *Biofeedback and Self Regulation*, 16, 55–74.
- Kaneko, Z., & Takeishi, N. (1963). Psychosomatic studies on chronic urticaria. *Folia Psychiatrica et neurologica Japonica*, 17, 16–24.
- Kiecolt-Glaser, J. K., & Glaser, R. (1992). Psychoneuroimmunology: Can psychological interventions modulate immunity? *Journal of Consulting and Clinical Psychology*, 60, 569–575.
- Kiecolt-Glaser, J. K., Glaser, R., Strain, E. C., Stout, J. C., Tarr, K. L., Holliday, J. E., & Speicher, C. E. (1986). Modulation of cellular immunity in medical students. *Journal of Behavioral Medicine*, 9, 5–21.
- Kiecolt-Glaser, J. K., Glaser, R., Williger, D., Stout, J., Messick, G., Sheppard, S., Ricker, D., Romisher, S. C., Briner, W., Bonnell, G., & Donnerberg, R. (1985). Psychosocial enhancement of immunocompetence in a geriatric population. *Health Psychology*, 4, 25–41.
- Locke, S. E., Ransil, B. J., Covino, N. A., Toczydolwski, J., Lohse, C. M., Dvorak, H. F., Arndt, K. A., & Franke, F. H. (1987). Failure of hypnotic suggestion to alter immune response to delayed-type hypersensitivity antigens. *Annals of the New York Academy of Science*, 496, 745–749.
- Moye, L. A., Richardson, M. A., Post-White, J., & Justice, B. (1995). Research methodology in psychoneuroimmunology: Rationale and design of the IMAGES-P clinical trial. *Alternative Therapies in Health and Medicine*, 1, 34–9.
- O'Hanlon, W. H., (1987). *Taproots: Underlying principles of Milton Erickson's therapy and hypnosis*. New York: W. W. Norton.
- Olness, K., Cuthbert, T., & Uden, D. (1989). Self regulation of salivary immunoglobulin A by children. *Pediatrics*, 83, 66–71.
- Pert, C. (1997). *The molecules of emotion: Why you feel the way you feel*. New York: Scribner.

- Rider, M. S., & Achterberg, J. (1989). Effect of music assisted imagery on neutrophils and lymphocytes, *Biofeedback and Self Regulation*, 14, 247–257.
- Ruzyla-Smith, P., Barabasz, A., Barabasz, M., & Warner, D. (1995). Effects of hypnosis on the immune response: B-cells, T-cells, helper and suppressor cells, *American Journal of Clinical Hypnosis*, 38, 71–79.
- Silvers, E. (1993). A psychotherapeutic approach to substance abuse: Preliminary observations, *American Journal of Drug and Alcohol Abuse*, 19, 51–54.
- Simonton, C., & Matthews-Simonton, S. (1982). *Getting well again*. New York: Bantam Books.
- Shor, R. E. (1959). Hypnosis and the concept of the generalised reality orientation. *American Journal of Psychotherapy*, 13, 582–602.
- Stone, A. A., Cox, D. S., Valdimarsdottir, H., & Neale, J. (1987). Secretory IgA as a measure of immunocompetence. *Journal of Human Stress*, 13, 353–140.
- Taylor, D. N. (1995). Effects of a behavioural stress management program on anxiety, mood, self esteem and T-cell count in HIV positive men. *Psychological Reports*, 76, 451–457.
- Whitehouse, W., Dinges, D., Orne, E., Keller, S., Bates, B., Bauer, N., Morohan, P., Haupt, B., Carlin, M., Bloom, P., Zaugg, L., & Orne, M. (1996). Psychological and immune effects of self-hypnosis training for stress management throughout the first semester of medical school. *Psychosomatic Medicine*, 58, 249–263.
- Zachariae, R., & Bjerring, P. (1990). The effect of hypnotically induced analgesia on flare reaction of the cutaneous histamine prick test. *Archives of Dermatological Research*, 282, 539–543.
- Zachariae, R., Bjerring, P., & Arendt-Nielsen, L. (1989). Modulation of Type I immediate and Type IV delayed immunoreactivity using direct suggestion and guided imagery during hypnosis. *Allergy*, 44, 537–542.
- Zachariae, R., Hansen, J. B., Anderson, M., Jinqun, T., Petersen, K. S., Simonsen, C., Zachariae, C., & Thesstrup-Pedersen, K. (1994). Changes in cellular immune function after immune specific guided imagery and relaxation in high and low hypnotisable healthy subjects. *Psychotherapy and Psychosomatics*, 61, 74–92.

**Editor's note:** This paper was submitted after the publication of *Hypnosis in Australia*, which contains a specific section on “Psychoneuroimmunology, Mind-Body Healing, and Hypnosis.” In the four chapters in the section, the reader will find a complete description and analysis of the relationships between mind and body, and experimental work in the field.

Copies of *Hypnosis in Australia* can be ordered using the form at the back of this issue of *AJCEH*.

## **HYPNOSIS FOR SLEEP DISORDERS**

**Robert Evans**

*Psychologist*

---

This case study describes the use of hypnosis as an adjunct to the treatment of a sleep disorder. Although the client had previously required only four to five hours sleep, her husband's poor medical diagnosis had seriously impaired her sleep pattern. Hypnosis was used in conjunction with behavioural techniques to enable her to return to her previous pattern.

Alison specifically sought assistance with her sleeping problem. Her former sleep pattern of four to six hours sleep had deteriorated to two hours sleep over a three-month period. She was referred by a consultant psychiatrist for assistance with grief resolution after her 42-year-old husband had been diagnosed with early-onset dementia. Alison's husband had been discharged from hospital (after the diagnosis of dementia) into her care, but was readmitted to hospital four months later. During the time Alison cared for her husband at home, his behaviour had become increasingly abnormal, including waking at all hours of the night and early morning.

This nocturnal behaviour had disturbed Alison's sleep pattern and reduced her sleeping hours to only two hours per night (going to sleep at midnight and waking at 2 a.m.). Alison also reported that prior to the onset of her husband's illness she had never slept long hours, averaging four to five hours per night, and occasionally six hours sleep. In fact, this sleep pattern had been the case throughout her adult life and she appeared to have coped adequately with four to five hours sleep per night.

Alison was seen for seven months by a clinical psychologist prior to the use of hypnotherapy for her sleep problems. She developed what appeared to be a mildly depressed mood with associated anxiety soon after her husband was diagnosed with dementia, but these symptoms worsened after her husband was readmitted to hospital. Upon careful investigation, the depression and anxiety symptoms appeared to be clearly related to her grief reaction and were exacerbated by her husband's readmission to hospital. Her score on the Beck

---

Requests for reprints should be sent to Robert Evans, 7 Blakes Ridge, Winthorp, W.A.



Depression Inventory (BDI; Beck, Steer, & Brown, 1996) indicated moderate range depressed mood. Furthermore, consultation with Alison's general practitioner was initiated and he agreed that her depressed mood was a moderate range reactive depression. Combined pharmacological and cognitive behavioural intervention was then initiated, targeting depression and anxiety. These grief-related symptoms responded to treatment, but the problem with sleep deprivation did not self-correct with the alleviation of depressed mood and anxiety. Readministration of the Beck Depression Inventory one month later showed that Alison's depressed mood had improved from moderate to low mild range.

## **DIAGNOSIS**

Adjustment Disorder — With Mixed Anxiety and Depressed Mood, 309.28 from the DSM-IV (American Psychiatric Association [APA], 1994) was the primary diagnosis. Primary Insomnia, 307.42 (APA, 1994) was a secondary diagnosis. However, a detailed description of symptoms include reaction with associated depressed mood and anxiety triggered by her husband's chronic terminal illness, her new responsibilities as a full-time carer and her husband's readmission to hospital with uncertain outcome. Insomnia was also evident and did not improve when pharmacological and cognitive behavioural treatment significantly improved mood. The resulting hypothesis was that the ongoing sleep problem, while partly caused by mood disturbance, appeared to have been behaviourally shaped and reinforced by her husband's disruptive nocturnal behaviour.

Her general practitioner ruled out sleep disorder of organic origin.

## **ASSESSMENT FOR HYPNOSIS**

Client contact for seven months of weekly therapy for grief resolution resulted in a good understanding of the precipitating factors of the sleep deprivation problem. Her depressed mood had clearly improved to the mild range as indicated by the BDI. Suicidal ideation was not present and had been checked on many occasions during contact with the client. No premorbid psychopathology appeared evident or was reported by the client. Her sleeping problem had not changed, despite successful pharmacological and cognitive behavioural treatment of her depression. Alison's GP was keen to see if hypnotherapy intervention was successful before prescribing a sedative hypnotic medication. Antidepressant medication was to continue.

The Stanford Hypnotic Clinical Scale (SHCS; Weitzenhoffer & Hilgard, 1959) was administered to assess patient's hypnotisability. Alison scored in the high range on the SHCS, demonstrating a high degree of hypnotisability and deep trance state.

## **RATIONALE FOR CHOICE OF TECHNIQUE AND SPECIFICATION OF**

## HYPNOTIC TREATMENT

Hypnosis was chosen to assist Alison extend the duration of her sleep, based upon the evidence that sleep and sleep behaviour are amenable to manipulation by hypnosis (Fromm & Shor, 1979). It was planned to utilise both post-hypnotic suggestion and hypnotic cues as part of the treatment procedure.

The client and therapist agreed that the goals of hypnotic treatment should be graduated with an initial goal of three hours sleep per night sustained over a two-week period. Thence four hours per night, also sustained over a two-week period was the goal. Finally, the client was keen to sleep for five to six hours per night if it was possible and agreed to trial this as a final stage of hypnotic treatment. However, her past history of coping with four hours per night during adult life was to be the benchmark of successful treatment outcome.

Subjective depression was to be monitored between each treatment session using an agreed rating scale of 0–100 that measured “no depression” to “severely depressed.” This was considered important in view of the possibility that depressed mood may increase, thus contraindicating continued use of hypnosis. Readministration of the BDI was also planned after treatment session 3 and at the end of hypnotherapy (in order to provide a more objective measure of depression). The previous BDI administration had been only two weeks prior to the start of the hypnosis sessions.

Six treatment sessions were conducted using hypnosis. Each session included a preliminary discussion of the patient’s thoughts and behaviours before retiring for sleep, along with thoughts and behaviours that ensued when waking earlier than anticipated. Secondary gain issues were investigated, but did not appear to be unduly influencing Alison’s sleep pattern.

An agreed retirement time was negotiated for 10.30 p.m. each evening. This retirement time was selected by Alison, even though midnight appeared more appropriate (in order to avoid too many waking hours early in the morning when it was still dark). However, Alison pointed out she often felt like doing work around the house early in the morning rather than later in the evening. (Doing this work appeared to be more a substitute for not sleeping, rather than a secondary gain factor in the form of negative reinforcement for not sleeping, as she has plenty of time to do this work at other times of the day.)

Behavioural strategies were also employed to reinforce the impact of hypnotherapy (based upon education guidelines about good sleep habits by Sumich, Andrews, and Hunt (1995). That is, Alison should take regular walking exercise in the early evening and prepare herself for sleep at 9.30 p.m. by reading a book in a comfortable lounge chair (she found recreational reading was relaxing and distracted her from ruminating over grief issues). A tryptophan and a snack of Ovaltine was agreed upon after her reading session, after which Alison was to undress and complete ablutions in readiness for bed. These behavioural strategies were developed during the session before the first hypnotic treatment session and reviewed briefly at the beginning of subsequent

treatment sessions to ensure that good effect continued. Modifications were to be made at the beginning of each treatment session if needed.

After retiring to bed Alison would listen to an audiotape prepared by the therapist that incorporated a script for deep breathing induced relaxation along with imagery of a garden scene (used as a deepening technique during the hypnotic treatment sessions). The tape also contained the therapist's post-hypnotic suggestions for duration and quality of sleep and a preset hypnotic cue that served as the signal to fall asleep.

## **SESSION 1**

This was a one-and-a-half-hour session to allow time for self-hypnosis training and preparation. Alison rated herself at 15 on the subjective rating scale of depression at the beginning of the session. Together with the BDI results, this level of depressed mood was considered to be within safe limits to proceed with hypnosis.

### **Goals of Session**

To facilitate increasing sleep from two hours per night to three hours per night through post-hypnotic suggestion; use of a hypnotic cue; and supportive cognitive/behavioural measures.

### **Procedure**

A systematic relaxation induction script was utilised that Alison enjoyed, to lower her anxiety level and to promote a good trance induction. The deepening procedure depicted a walk through the extensive pleasant gardens of a large mansion. This scene was chosen as Alison loved gardens and gardening and found the whole imagery experience relaxing and comforting. Some aspects of the garden scene were borrowed from Kroger and Fezler's (1976) garden scene. No variation was necessary with the script over the six treatment sessions, as good induction and trance effect were maintained. Ideomotor signals were agreed upon prior to induction.

Once depth of trance was achieved, post-hypnotic suggestions were made regarding the strong desire to fall asleep once Alison heard the word "pillow," enjoying sleep and calling upon the subconscious mind to make it possible for her to sleep peacefully for the agreed target of three hours or longer if her subconscious mind so decided, but not beyond eight hours. The quality and depth of sleep were emphasised as part of the script for the post-hypnotic suggestions.

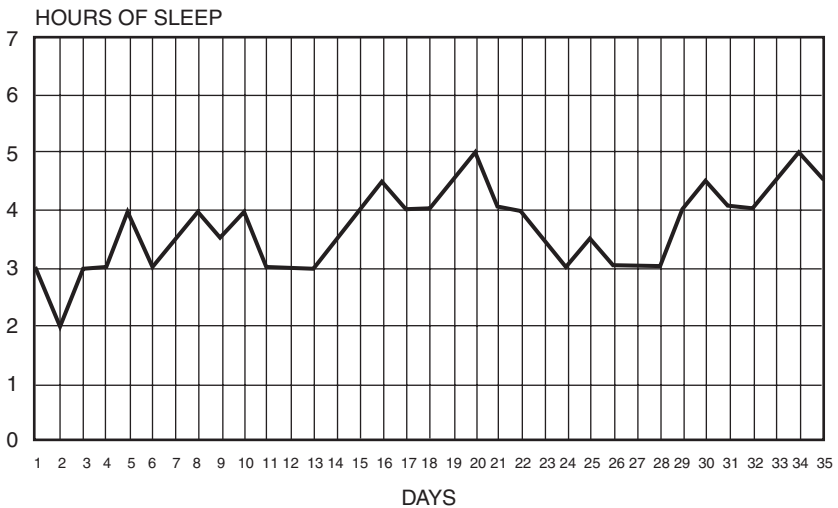
Alison was also familiarised with the self-hypnosis procedure. Self-hypnosis was to be used just after going to bed, following the recreational reading session in the comfortable lounge chair and preparation for bed. As stated above, self-hypnosis was facilitated by an audiotape prepared by the therapist that contained

a pre-rehearsed deep breathing relaxation technique (plus appropriate imagery of the garden scene) and post-hypnotic suggestions about the extended duration of sleep along with the comments about the quality and depth of sleep. The hypnotic cue “pillow” was also embedded at the end of the script as the conditioned stimulus to promote onset of sleep. Once the audiotape was finished, Alison was to switch the tape recorder off at the bedside table and go to sleep.

A sleep chart was provided for Alison to complete in order to provide careful monitoring of treatment outcome (see Figure 1).

**SESSION 2**

**Figure 1:** Hours of sleep over 5 weeks



At the beginning of this one-hour session, Alison rated herself at 10 on the subjective rating scale of depression.

**Review of Last Session and Progress**

Alison reported she attained three hours sleep on the first night of the program, and had two hours sleep on the second night after a disagreement with her mother-in-law left her with residual anxiety prior to retiring. Thence, she achieved three hours sleep with an occasional four hours sleep on subsequent nights. She was very pleased with her progress. The self-hypnosis procedure using the audio tape was effective.

### **Goals of Session**

To discuss relationship and communication with mother-in-law and reinforce good effect of last treatment session: and to reinforce the goal of session 1 to increase sleep from two hours per night to three hours per night through post-hypnotic suggestion and supportive cognitive/behavioural measures.

### **Procedure**

Following discussion about the problem with her mother-in-law, it was evident that Alison needed to exercise an assertive, rather than a passive approach in her communication. This issue has been discussed in sessions prior to the use of hypnosis and was resolved without taking too much time from the planned hypnotic treatment for insomnia. However, the issue was flagged as one to check during the review stage of the next session.

The systematic relaxation induction script was again utilised, with the garden scene employed to facilitate the deepening process. Ideomotor signals were reviewed prior to induction.

Once depth of trance was achieved, the same script for post-hypnotic suggestions was used as in the previous session. Increasing duration of sleep to three hours was again suggested, as were those about the quality and depth of sleep. The self-hypnosis procedure was also reviewed.

### **SESSION 3**

Alison rated herself at 10 on the subjective rating scale of depression at beginning of the session. In reviewing the last session and progress of treatment, she reported she attained a minimum of three hours sleep with four hours sleep on some nights. Again, she was very pleased with progress.

### **Goals of Session**

To check the issue regarding relationship and communication with Alison's mother-in-law and to use hypnosis in order to facilitate increasing sleep from three hours per night to four hours per night through post-hypnotic suggestion and supportive cognitive/behavioural measures.

### **Procedure**

We discussed Alison's contact with her mother-in-law and it appeared she had used appropriate assertive communication, thus lowering her anxiety about contact with the mother-in-law.

The systematic relaxation induction script was again utilised with the garden scene employed to facilitate the deepening process. Ideomotor signals were reviewed prior to induction.

Once depth of trance was achieved, the script for post-hypnotic suggestion incorporated asking the subconscious mind to assist Alison to sleep for four hours per night, and the quality and depth of sleep were again emphasised. The self-hypnosis procedure was also reviewed.

#### **SESSION 4**

Alison rated herself at 5 on the subjective rating scale of depression at beginning of the session. The Beck Depression Inventory was again administered with low range rating obtained.

#### **Review of Last Session and Progress**

Alison reported she attained a minimum of four hours sleep each night, with five hours sleep on the Saturday night after a tiring day in her garden. Again, she was very pleased with progress.

#### **Goals of Session**

Discuss the apparent good effect that gardening had on sleep duration and the possibility of using the gardening activity to promote sleep and a feeling of wellbeing on more occasions. To use the same hypnosis procedure to reinforce the pattern of sleeping four hours per night.

#### **Procedure**

The good effect of gardening was discussed, with Alison happy to spend at least three days per week in the garden during the late afternoon.

The systematic relaxation induction script was again utilised with the garden scene employed to facilitate the deepening process. Once a good depth of trance was achieved, the script for post-hypnotic suggestion again facilitated sleeping four hours per night. The quality and depth of sleep were also emphasised as part of the script for the post-hypnotic suggestions. The continued use of the self-hypnosis procedure was agreed upon.

#### **SESSION 5**

Alison rated herself at 15 on the subjective rating scale of depression at beginning of session.

#### **Review of Last Session and Progress**

She reported she had slept a minimum of three hours per night with four hours sleep on a couple of nights. While the progress was positive, Alison's sleep pattern was not quite as good as the previous week. She suggested she was less settled during the past week due to the news that her husband (who was now

residing in the hospital ward of a psychiatric hospital) was assessed by a nursing home as not suitable for admission due to the fact that he was “too young” for the older aged residents.

### **Goals of Session**

Discuss the issue of the nursing home decision and endeavour to defuse the resulting disappointment and anxiety. Check on the use of the gardening activity to promote sleep. Use the same hypnosis procedure to reinforce the pattern of sleeping four hours per night. Moving to five hours per night at this point was considered impracticable due to the minor setback of the previous week.

### **Procedure**

At least half the session was spent discussing the nursing home issue and the fact that other nursing home replacements were possible for her husband, but not yet explored. The aim was to promote thinking that focused on positive alternatives, rather than negative rumination.

Alison was able to spend three days per week in her garden in late afternoon over the past week, but its good effect was partly offset by the news about the nursing home that intruded into her thoughts.

The systematic relaxation induction script was again utilised with the garden scene employed to facilitate the deepening process. Particular attention was paid to enhancing the relaxation effect in view of the anxiety displayed by the client in face of the bad news about the nursing home situation. An abbreviated version of the treatment script was used because of time constraints, but the script still incorporated the essential elements of the post-hypnotic suggestions aimed to facilitate sleeping four hours per night. Additional post-hypnotic suggestion was added to promote control over the negative intrusive thoughts about the nursing home problem along with fostering positive alternative thoughts relating to the strong likelihood that other better alternatives would eventuate. The continued use of the self-hypnosis procedure was agreed upon.

### **SESSION 6**

Alison rated herself at 5 on the subjective rating scale of depression at the beginning of this session.

### **Review of Last Session and Progress**

Alison reported she had slept mainly four hours per night over the past week. She also reported she had been less concerned about last week’s negative news about the nursing home and found it easier to focus on the more positive alternative that her husband would find a place in another nursing home in the near future. Her use of more positive cognitive schema was appropriately reinforced.

### **Goals of Session**

Use hypnosis procedure to reinforce the pattern of sleeping four hours per night and promote the possibility of five hours sleep per night.

### **Procedure**

The systematic relaxation induction script was again utilised, with the garden scene employed to facilitate the deepening process. Post-hypnotic suggestion was used to reinforce the pattern of sleeping four hours per night and further suggestion was added to the effect that the unconscious mind may promote five hours sleep per night if she needed the extra sleep. This flexible approach was considered to leave the prospect of five or six hours sleep open to the needs of the client, but not to make the client think that attaining these extra hours of sleep was essential. The continued use of the self-hypnosis procedure was agreed upon.

### **SESSION 7 — REVIEW**

Alison rated herself at 5 on the subjective rating scale of depression at beginning of session. The Beck Depression Inventory was again administered, with a score in the normal range.

Alison reported she had slept at least four hours each night with the occasional five hours. She was very pleased with this and felt refreshed and rested after each night's sleep.

Alison was encouraged to continue to use the sleep preparation procedure and self-hypnosis as part of her daily routine, but not to be fazed if circumstances (such as an overnight visitor) disrupted her schedule.

Feedback was provided to Alison's general practitioner about the success of hypnotherapy for insomnia.

### **OUTCOME AND CONCLUSIONS**

The outcome of the hypnotherapy for treatment of insomnia was successful. In this particular case, the therapeutic foundations that had been laid over the preceding months assisted greatly in designing and implementing hypnotic intervention.

Therapist/client rapport was well established and thorough knowledge of the client's circumstances and problems were already available. The motivation of the client was assured, which appeared to facilitate the smooth application of the treatment procedures detailed above.



**REFERENCES**

- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Beck, A.T., Steer, R.A., & Brown, G.K. (1996). *Beck Depression Inventory (BDI-II)*. San Antonio, TX: The Psychological Corporation.
- Fromm, E., & Shor, R. E. (1979). *Hypnosis: Developments in research and new perspectives* (2nd ed.). New York: Aldine.
- Kroger, W. S., & Fezler, W. D. (1976). *Hypnosis and behavior modification: Imagery conditioning*. Philadelphia: J. B. Lippincott.
- Sumich, H. J., Andrews, G., & Hunt, C. J. (1995). *The management of mental disorders: Vol. 5. Handbook for behavioural disorders*. Sydney: World Health Organisation.
- Weitzenhoffer, A.M., & Hilgard, E.R. (1959). *Stanford Hypnotic Susceptibility Scale — Forms A and B*. Palo Alto, CA: Consulting Psychologists Press.

## BOOK REVIEWS

**Hypnosis for Weight Management and Eating Disorders: A Clinical Handbook.** Barry J. Evans, Greg J. Coman, & Graham D. Burrows, AO, KSJ (Eds.). Heidelberg: Australian Journal of Clinical and Experimental Hypnosis. 1997. x + 331; \$35 softcover.

Of the 23 contributions to this edited volume somewhat over half were written specially for it, primarily by Australian authors. The remainder are reprinted papers, mostly from the *Australian Journal of Clinical and Experimental Hypnosis (AJCEH)*, with two from *Contemporary Hypnosis* (by Delia Young and Marcia Degun-Mather, both on bulimia) and one from the *American Journal of Clinical Hypnosis* (by Michael Yapko, on anorexia). In the case of those reprinted from the *AJCEH*, the articles have been re-edited and/or updated for this handbook.

There is naturally an emphasis on hypnotic interventions and techniques, though many of the chapters offer more general reviews of the relevant theories and research literature. The volume as a whole is very well structured, with two introductory chapters dealing with general issues in weight management and with attitudes to eating in non-clinical populations. The remainder of the handbook is organised into three sections, each with a brief introduction by Barry Evans. The three sections are: “Obesity and Weight Management Counselling,” “Bulimia Nervosa,” and “Anorexia Nervosa.” Each section is a mixture of reviews, reports of clinical applications, and case studies. The sections on bulimia and anorexia each begin with a helpful account of the nature and aetiology of the condition in question (by Rosalyn Griffiths and Nola Rushford respectively).

Overall, the handbook draws together a useful collection of new and previously published material which will be a valuable resource for academics and clinicians interested in weight management and eating disorders, irrespective of whether they are primarily concerned with the adjunctive use of hypnosis. It will be of particular interest and relevance to those who use hypnotic procedures, or who are interested in using them, in their clinical work.

DAVID OAKLEY, Hypnosis Unit, Department of Psychology, University College London

Reprinted with permission of the editor of *Contemporary Hypnosis* (1998), 15 (3), 192.

**Hypnosis in Australia.** Barry J. Evans & Graham D. Burrows AO, KSJ (Eds.). Heidelberg: Australian Journal of Clinical and Experimental Hypnosis. 1998. x + 375; \$45 hardcover (ASH members), \$50 (non-ASH members).

The majority of conference handbooks provide very generalised abstracts of workshops and papers which frequently bear little relationship to the work that is actually delivered on the day. *Hypnosis in Australia* is a much more ambitious project, which sets an impressive standard as a conference publication.

Although written as background papers and selected proceedings of the 28th ASH Congress held in Alice Springs, Australia, in September, 1998, *Hypnosis in Australia* clearly achieves a much broader aim of providing not only a review of the relevant literature but detailed clinical applications in a range of current areas of interest in hypnosis. Strengths include comprehensive updates of the literature, in areas familiar to readers of the *Australian Journal of Clinical and Experimental Hypnosis*, such as anxiety and habit disorders, as well as areas that have perhaps received somewhat less attention up to this point in the Australian context. These include Roger Booth's review of psychoneuro-immunology and mind-body healing, which challenges us to consider a broader range of metaphors than those most frequently associated with immune functioning.

Simon Stafrace, in collaboration with Barry Evans and Graham Burrows, contributes a very comprehensive exploration of the concept of self-esteem. The use of hypnosis for ego-strengthening has a well established therapeutic rationale and this paper deepens our understanding of this concept which has a central role in much clinical work. Two other papers in this section by Harry Stanton extend the existing clinical literature in the area of ego-enhancement and will be of interest to both beginning and experienced practitioners. Two other excellent reviews written specifically for the book are Kevin McConkey and Peter Sheehan's paper on "recovered memory, hypnosis and professional issues," and Kathleen Moore and Vicky Powlett on "clinical applications of hypnotic assessment."

The needs of practitioners working with children and adolescents are well addressed with an excellent section which comprehensively covers a range of clinical issues including Lachlan Lipsett's excellent examination of the way in which developmental considerations influence the selection of hypnotic induction techniques and the use of language, imagery, and metaphor in hypnotherapeutic work. The detailed therapeutic scripts provided by other writers in this section will be valued by clinicians.

The title, *Hypnosis in Australia*, is somewhat misleading, given the significant contribution of a number of international authors, including the conference keynote speakers, Jeffrey Zeig and Samuel LeBaron. Jeffrey Zeig's paper, supported by a contribution by Michael Yapko, provides a useful summary of Ericksonian hypnosis. These papers provide excellent background, particularly for those with limited experience of Ericksonian techniques. The workshop

conducted by Jeffrey Zeig at the Alice Springs Conference assisted a large group of participants to appreciate, through the detailed analysis of a tape of Erickson's work, the process of indirect therapy. I believe that the attention given to Ericksonian techniques accurately estimates the increasing level of interest in indirect approaches in this country. *Hypnosis in Australia* and the 28th ASH Congress have taken up the challenge faced by all the national training programmes to facilitate greater expertise in indirect methods.

The dual purpose of the book as both a conference handbook and a publication updating issues in hypnosis for a wider audience creates some tensions in the choice of content. The range of topic areas addressed provided a welcome diversity for the broad range of conference delegates but perhaps results in less cohesiveness than is typically found in a text for general distribution. Contributions are derived from a range of sources with some written specifically for the Conference, others have previously appeared elsewhere, and several are updated modifications of previously published material.

As a Conference delegate, I valued *Hypnosis in Australia* not just a background resource but as an extra dimension to the learning experiences of workshops and presentations I attended. Subsequently, I have found myself reaching for this publication on a number of occasions as a useful clinical reference. I believe that anyone interested in current developments in hypnosis will find much to interest them in this book and will find that it becomes a valuable ongoing resource. Barry Evans and Graham Burrows are to be congratulated on a fine publication, which does much to promote the Society.

SANDRA BOUGHTON, Senior Clinical Psychologist, Melbourne, Victoria

## BOOKS AVAILABLE FOR REVIEW

Full members of the Australian Society of Hypnosis interested in reviewing books should apply to the Editor. Reviews are subject to editorial review prior to publication.

Martin A. Conway                      *Recovered Memories and False Memories*. Oxford:  
Oxford University Press, 1997.

Robert G. Kunzendorf,              *Hypnosis and Imagination*. Amityville, NY:  
Nicholas P. Spanos, &              Baywood Publishing, 1996.  
Benjamin Wallace (eds)

Björn Enqvist                          *Pre-Surgical Hypnosis and Suggestions in  
Anesthesia*. Stockholm: Department of Health  
Sciences, Karolinska Institute, 1996.

**The Australian Journal of Clinical and  
Experimental Hypnosis**

**Hypnosis in Australia**

The definitive hypnosis handbook for the new millennium, providing a comprehensive literature review and clinical guide to hypnosis practice in the major therapeutic applications

*23 major chapters covering:*

Ericksonian and indirect techniques in therapy

Treatment of pain

Psychoneuroimmunology, hypnosis, and mind-body healing

Uses of music and imaginative involvement in therapy

Hypnosis in the management of anxiety disorders  
and post-traumatic stress disorders

Hypnosis for habit disorders (eating disorders, smoking, and gambling)

Hypnosis for ego-enhancement and performance enhancement

Uses of hypnosis with children and adolescents

Forensic uses of hypnosis and recovery of memories through hypnosis

Research and clinical assessment of hypnotisability

**THIS HANDBOOK IS A MUST FOR  
EVERY HYPNOSIS PRACTITIONER**

All anthologies and clinical handbooks published by the *Australian Journal of Clinical and Experimental Hypnosis* can be obtained from the Editorial Assistant, AJCEH, PO Box 592, Heidelberg, Victoria 3084, Australia. Please use the Order Form later in this edition of the journal.

# Hypnosis in Australia

*Edited by Barry J. Evans and Graham D. Burrows AO KSJ*

Approx 395 pages, hardcover, \$45.00 (ASH members), \$50.00 others, available immediately

## CONTENTS

Foreword .....	<i>Graham Burrows</i>
Introduction .....	<i>Barry Evans</i>
Experiential approaches to clinician development .....	<i>Jeffrey Zeig</i>
Treatment of pain in children and elders: Words are not enough .....	<i>Sam LeBaron</i>
Combining music and words as a pathway through hypnosis: Practical guidelines .....	<i>Wendy-Louise Walker</i>
Anxiety disorders, post-traumatic stress disorders, and hypnosis .....	<i>Barry Evans and Greg Coman</i>
Psychoneuroimmunology and mind-body healing .....	<i>Roger Booth</i>
An hypnotic protocol for eliciting physical changes through suggestions of biochemical responses .....	<i>Antonio Madrid and Susan Barnes</i>
Effects of hypnosis on the immune response: B-cells, T-cells, and suppressor cells .....	<i>Patricia Ruzyla-Smith et al.</i>
Dissociation, dieting disorders, and hypnosis: A review .....	<i>Rosalyn Griffiths and Lorna Channon-Little</i>
Hypnosis for anorexia nervosa and bulimia nervosa: An update .....	<i>Rosalyn Griffiths</i>
Hypnosis as an adjunct to the treatment of bulimia nervosa .....	<i>Rosalyn Griffiths</i>
Hypnosis for problem gambling .....	<i>Greg Coman and Graham Burrows</i>
Hypnosis and smoking cessation .....	<i>Barbara Newton</i>
Self-esteem, hypnosis, and ego-enhancement .....	<i>Simon Stafrace, Barry Evans, and Graham Burrows</i>
Ego-enhancement for positive change .....	<i>Harry Stanton</i>
Gurdjieff and ego-enhancement: A powerful alliance .....	<i>Harry Stanton</i>
Recovered memory, hypnosis, and professional issues .....	<i>Kevin McConkey and Peter Sheehan</i>
Hypnosis with children and adolescents: Some developmental considerations .....	<i>Lachlan Lipsett</i>
Induction and deepening techniques with children .....	<i>William Wester II</i>
Special considerations for using hypnosis with young children .....	<i>Leora Kuttner</i>
The use of hypnosis with children and adolescents .....	<i>Chrissi Hart and Barry Hart</i>
Revisiting the question: What is Ericksonian hypnosis? .....	<i>Michael Yapko</i>
Ericksonian hypnosis: A perspective on direct and indirect methods .....	<i>Jeffrey Zeig</i>
Clinical applications of hypnotic assessment .....	<i>Kathleen Moore and Vicky Powlett</i>

**The Australian Journal of Clinical and  
Experimental Hypnosis**

## **Hypnosis for Weight Management and Eating Disorders**

This clinical handbook contains reviews of current research and clinical practice, providing the reader with a comprehensive understanding of the classifications, aetiology, and treatment of the disorders. There is, of course, a detailed focus on the use of hypnosis in treatment. Many chapters have been specially written for the handbook by Australian and overseas experts, with supplementary chapters reporting clinical applications and case studies.

All anthologies and clinical handbooks published by the *Australian Journal of Clinical and Experimental Hypnosis* can be obtained from the Editorial Assistant, AJCEH, PO Box 592, Heidelberg, Victoria 3084, Australia.



# Hypnosis for weight management and eating disorders

*Barry J. Evans, Greg J. Coman, and Graham D. Burrows AO KSJ (Eds)*

304 pages, softcover, \$35.00 (ASH members), \$40.00 others, available immediately

## Contents

### Introduction

Psychological issues in weight management. . . . . *Greg J. Coman and Barry J. Evans*

Eating attitudes and behaviours in the normal population. . . *Nicole Lefkowitz and Barry J. Evans*

### Obesity and Weight Management Counselling

Introduction. . . . . *Barry J. Evans*

Psychotherapy and hypnotherapy in the  
treatment of obesity. . . . . *Fiona K. Judd and Graham D. Burrows*

Treatment issues in weight management counselling . . . . . *Susan Hook*

Psychotherapy and hypnotherapy for overweight and obesity counselling. . . *Diane J. McGreal*

Weight management: A cognitive behavioural approach,  
utilising hypnosis as a treatment strategy . . . . . *Brian T. Jacka*

Hypnotic treatment of obesity in a general practice . . . . . *Scott Inglis*

Hypnosis in a self-control behaviour modification program  
for weight reduction . . . . . *Lorna D. Channon-Little*

### Bulimia Nervosa

Introduction. . . . . *Barry J. Evans*

The nature and aetiology of bulimia nervosa . . . . . *Rosalyn A. Griffiths*

Hypnosis as an adjunct in the treatment of bulimia nervosa . . . . . *Rosalyn A. Griffiths*

Hypnosis in the treatment of bulimia nervosa: A review of the literature . . . . . *Greg J. Coman*

Some similarities between disordered drinking and eating patterns:  
Case illustrations and implications for treatment . . . . . *Lorna D. Channon-Little*

Hypnosis in the treatment of bulimia nervosa: A case study . . . . . *Rosalyn A. Griffiths*

Hypnobehavioural treatment for bulimia nervosa: A treatment manual . . . *Rosalyn A. Griffiths*

The use of hypnotherapy in the treatment of eating disorders. . . . . *Delia Young*

Group therapy and hypnosis for the treatment of bulimia nervosa. . . . . *Marcia Degun-Mather*

### Anorexia Nervosa

Introduction. . . . . *Barry J. Evans*

The nature and aetiology of anorexia nervosa . . . . . *Nola Rushford*

Management of anorexia nervosa. . . . . *Nola Rushford*

Hypnotic and strategic interventions in the treatment of anorexia nervosa . . . *Michael D. Yapko*

Hypnotherapy in the treatment of anorexia tardive. . . . . *Elizabeth H. Georgiou*

*The Australian Journal of Clinical and Experimental Hypnosis*

## CLINICAL HANDBOOKS AND ANTHOLOGIES ORDER FORM

No. of copies \_\_\_\_\_

**HYPNOSIS IN AUSTRALIA**

PRICE: \$45.00 (ASH MEMBERS) \$50.00 (OTHERS)

**HYPNOSIS FOR WEIGHT MANAGEMENT AND EATING DISORDERS**

PRICE: \$35.00 (ASH MEMBERS) \$40.00 (OTHERS)

**HYPNOSIS AND THE LAW: PRINCIPLES AND PRACTICE**

PRICE: \$35.00

- Please add postage charges as follows: single copy \$10.00, two copies \$12.00, three or more copies \$15.00
- Cheques and bank drafts should be made payable to the Australian Journal of Clinical and Experimental Hypnosis
- To pay by credit card, complete the following:

Mastercard

Visa

Credit Card Numbers

Name \_\_\_\_\_

Address \_\_\_\_\_

Expiry date \_\_\_\_\_ Signature \_\_\_\_\_

**Return order form to:**

Australian Journal of Clinical and Experimental Hypnosis  
PO Box 592  
Heidelberg, Victoria 3084, Australia

**FAX:** +61 3 9243 1158

By special arrangement with the  
Editor and Publisher of  
*Contemporary Hypnosis*

Subscribers to the  
*Australian Journal of Clinical and Experimental Hypnosis*  
receive a special discount when they subscribe to  
*Contemporary Hypnosis*

**Individual discount subscriptions:**

**£35 / US\$65 (regular £45 / US\$85)**

**Institutional discount subscriptions:**

**£65 / US\$125 (regular £75 / US\$135)**

*Contemporary Hypnosis* is published four times a year for the  
British Society of Experimental and Clinical Hypnosis.

Subscribers to *AJCEH* who wish to take out a subscription  
to *Contemporary Hypnosis* should write to:

Whurr Publishers Ltd, 19b Compton Terrace,  
London N1 2UN, U.K.

Tel 0171 359 5979; Fax 0171 226 5290

North American subscribers should write to:

Whurr Publishers Ltd, c/- Box 1897,  
Lawrence, KS 66044-8897, U.S.A.

## INFORMATION FOR AUTHORS

1. Contributions should conform to the style outlined in the *Publication Manual of the American Psychological Association* (3rd ed.; 1983), except that spelling should conform to *The Macquarie Dictionary*. Page references in the following notes are to the *Publication Manual*. The attention of authors is especially drawn to changes in the third edition (p. 13).
2. Manuscripts (pp. 136-143), not usually to exceed 4500 words, should be typed clearly on quarto (21 x 26 cm or 22 x 28 cm) paper, double-spaced throughout and with margins of at least 4 cm on all four sides. Three copies are required. Duplicated or photocopied copies are acceptable if they closely resemble typed copies.
3. Title page (pp. 143-144) for the manuscript should show the title of the article, the name(s) and affiliation(s) of the authors, a running head and, at the bottom of the page, the name and address (including postal code) of the person to whom proofs and reprint requests should be sent.
4. An abstract (pp. 23-24) should follow the title page. The abstract of a report of an empirical study is 100-150 words; the abstract of a review or theoretical paper is 75-100 words.
5. Abbreviations (pp. 63-64) should be kept to a minimum.
6. Metric units (pp. 75-79) are used in accordance with the International System of Units (SI), with no full stops when abbreviated.
7. Tables (pp. 83-93) should be typed on separate sheets with rules (if any) in light pencil only. Please indicate approximate location in the text.
8. Figures (pp. 94-104) should be presented as glossy photographic prints or as black-ink drawings on Bristol board, similar white card, or good quality tracing paper. Diagrams and lettering must have a professional finish and be about twice the final size required. On the back of each figure there should appear in light pencil the name(s) of the author(s), the article title, the figure number and caption, without the front of the figure being defaced. Indicate approximate location in the text. The two copies of figures may be photocopies.
9. References (pp. 107-133) are given at the end of the text. All references cited in the text must appear in the reference list.
10. A copy of the MS must be kept by the author for proofreading purposes.

### Reprints

Because of increasing costs, reprints of articles will not be provided to authors free of charge. Authors may order reprints in multiples of 25 copies at the time of returning proofs. Cost, for each batch of 25 reprints, is \$A2.00 per page rounded up to the next even number of pages. Payment for reprints must be made at the time of ordering.

### Copyright

In view of the increasing complexities of copyright law, copyright of material published in the *Australian Journal of Clinical and Experimental Hypnosis* rests with the Australian Society of Hypnosis, Limited. Authors are at liberty to publish their own papers in books of which they are the author or the editor, and may reproduce their papers for their own use.

ISSN 0156-0417

PRINT POST APPROVED PP 737010/00005