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EDITORIAL

This first journal for 1996 features a range of research and clinical papers by authors from Australia, the US, and from Europe. The inclusion of this range of topics and authors reflects my intention to broaden the scope and readership of the journal, better meeting the needs and interests of readers.

In the first of two research papers, Kevin McConkey and his colleagues report Australian norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A), together with a structural analysis of these. This study expands the data available on the scale and makes it more applicable to local usage. In the second research paper, Daniel Kohen from the University of Minnesota reports a study of the effects of self-hypnosis on asthma relief in a group of 7 to 12 year-old children. The study clearly demonstrates the powerful effect of hypnosis in the treatment of a condition known to have clearly established psychological causes in frequency and severity of attacks, and sequelae to these.

In the first of two papers from European authors, Burkhard Peter discusses in personal terms his experiences with terminally ill patients and his concerns about discussing death and dying with such patients. His experience, together with that of cancer experts in this country, suggests many patients do want to talk about their own mortality, but that this should only be done at the patient's request. J. Philip Zindel discusses the integration of hypnosis into psychoanalytic therapy and the different qualities both bring to therapy. The articles by Peter and Zindel are reproduced from Hypnos: Swedish Journal of Hypnosis in Psychotherapy and Psychosomatic Medicine (edited and reprinted with permission).

Three Australian authors have case histories included in this journal. Carolyn Manning reports the use of hypnosis in the treatment of trauma associated with childhood sexual assault. Matthew Byrne describes a complex case of a physical illness compounded by psychological problems, in which hypnosis was an integral component of treatment. Harry Stanton describes his combination of hypnosis and neurolinguistic programming in the treatment of phobias, and illustrates this with the case study of treatment for telephone phobia.

In Case Notes, Vicky Powlett describes her use of a regression technique, designed to alleviate clients' emotional reactions which usually accompany hypnotic regression.

This journal also contains a response to an article published in the November 1995 edition of the journal, with a commentary provided in response by the author of the original article. This number concludes with a book and video review. I recommend the journal to you, and hope it is of interest and clinical use to all readers.

A NORMATIVE AND STRUCTURAL ANALYSIS OF THE HGSHS:A WITH A LARGE AUSTRALIAN SAMPLE

Kevin M. McConkey, Amanda J. Barnier, Fiona L. Maccallum, and Karen Bishop

University of New South Wales

Australian norms and structural analysis for the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A) are presented. Results relating to score distributions, item difficulty level, and reliability were considered for a large sample of Australian students (N = 4,752) obtained over eight years of testing at Macquarie University. The aggregated sample, which represents the largest normative study of the HGSHS:A undertaken to date, was compared to recent normative studies conducted in Australia, Canada, Germany, and Spain, using both English and non-English versions of the test. In general, the aggregated sample was consistent with other reference samples, and results indicated that the HGSHS:A continues to function well as an instrument for the initial screening of hypnotisability. Further, the emergence of a three-factor solution from the principal components analysis was also consistent with previous factor-analytic studies, and suggested that performance on this scale reflects three dimensions of hypnotic responding.

The Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A), adapted by Shor and E. Orne (1962) from the individually administered Stanford Hypnotic Susceptibility Scale, Form A (SHSS:A; Weitzenhoffer & Hilgard, 1959) is the most widely used measure of hypnotisability (Sheehan & McConkey, 1982). The relative efficiency of administration and the psychometric properties of the scale have resulted in the HGSHS:A being the preferred instrument for the initial screening of high-, medium-, and low-hypnotisable subjects for further participation in hypnosis research. Normative studies of the HGSHS:A in the USA (Coe, 1964; Shor & Orne, 1963), Australia (Sheehan & McConkey, 1979), and Canada (Laurence & Perry, 1982) have

This research was conducted at Macquarie University. Its conduct was supported in part by a grant from the Australian Research Council. We are grateful to Bernadette Bibb, Sandra Hejtmanek, and Natalie Watson for research assistance.

Requests for reprints should be sent to Kevin M. McConkey, School of Psychology, The University of New South Wales, Sydney, N.S.W., 2052.

established the reliability and validity of the HGSHS:A, and more recent normative studies in Germany (Bongartz, 1985) and Spain (Lamas, del Valle-Inclan, Blanco, & Diaz, 1989) have established that transposing the HGSHS:A into other linguistic contexts does not result in either a loss of precision or a substantial change in the scale's psychometric properties. Thus, the HGSHS:A is comparable across different socio-cultural and linguistic contexts. Minor differences in the distributions of scores have generally been attributed to the nature of the different samples. For instance, subject selection procedures (e.g., whether participants were volunteers), participants' knowledge and expectations about hypnosis, and the presence of group pressure to participate may alter the composition of the sample in ways that affect the overall results.

Sheehan and McConkey (1979) reported Australian norms for the HGSHS:A on 1,944 participants who were tested over three years (1973-1975) at the University of Queensland. Those norms established the reliability and utility of the HGSHS:A as a predictor of hypnotic susceptibility in the Australian context. The present paper provides updated Australian norms for the HGSHS:A, and is based on a sample of 4,752 participants obtained over eight years (1985–1992) of testing at Macquarie University. In this paper we compare this large aggregated sample with previous Australian (Sheehan & McConkey, 1979), and subsequently reported overseas reference samples (viz., Bongartz, 1985; Lamas et al., 1989; Laurence & Perry, 1982). Although the HGSHS:A was designed to measure "hypnotisability," assuming that it taps a single trait or general ability factor labelled "hypnotisability," different types of performance have been observed (Sheehan & McConkey, 1982). Specifically, factor analytic studies of the structure of the HGSHS:A (e.g., McConkey, Sheehan, & Law, 1980; Peters, Dhanens, Lundy, & Landy, 1974) have generally supported the existence of three types of items or dimensions underlying the scale: direct or ideomotor (e.g., hand lowering, hands moving apart), challenge (e.g., arm rigidity, eye catalepsy), and cognitive/delusory (e.g., fly, post-hypnotic amnesia) (for a critical review see Balthazard & Woody, 1985). Since inconsistent or unstable findings from factor analyses of the HGSHS:A may be attributed to small sample sizes, the present analysis, which is based on the large aggregated sample, sought to clarify the dimensions of the HGSHS:A.

METHOD

Participants

Four thousand seven hundred and fifty-two first-year Psychology students enrolled at Macquarie University in the years 1985–1992 participated in the HGSHS:A testing program. Participants received research credit in return for their participation. Table 1 presents information about the age and sex of subjects in the aggregated sample.

Table 1 Age Distributions of the Eight Samples and the Aggregated Sample Separately for All Subjects, Males, and Females

		N	Mean	SD
1985	All	622	22.62	7.67
	Males	191	22.08	6.99
	Females	431	22.86	7.95
1986	All	518	23.57	8.48
	Males	133	22.29	7.23
	Females	385	24.02	8.83
1987	All	491	22.73	7.88
	Males	116	21.75	6.28
	Females	375	23.04	8.29
1988	All	570	22.20	7.69
	Males .	168	21.45	6.02
	Females	402	22.51	8.27
1989	All	546	20.82	6.37
	Males	150	19.70	3.74
	Females	396	21.24	7.07
1990	All	818	21.51	7 .27
	Males	249	20.57	5.42
	Females	569	21.93	7.91
1991	All	624	21.81	7.59
	Males	163	20.61	6.05
	Females	461	22.24	8.03
1992	All	563	23.08	8.98
	Males	140	22.94	8.88
	Females	423	23.52	9.02
Aggregated	All	4,752	22.24	7.78
sample	Males	1,310	21.40	6.46
	Females	3,442	22.55	8.20

Procedure

Subjects were tested in groups of 3-30. The testing procedure was described and participants were informed that they were free to withdraw their participation at any time. The standard tape-recorded version of the HGSHS:A

(Shor & Orne, 1962; see original test manual for details of the procedure) was administered. The 12 test items were head falling, eye closure, hand lowering, arm immobilisation, finger lock, arm rigidity, hands moving apart, communication inhibition, fly hallucination, eye catalepsy, post-hypnotic suggestion, and post-hypnotic amnesia. Following the hypnosis session, the participants completed the standard self-report response booklet that indexed their behavioural response to each of the test items. Finally, any questions were answered and the session was ended.

RESULTS AND DISCUSSION

Scoring of responses to the 12 test items followed the standard procedure described by Shor and Orne (1963). For Items 1 to 11, a score of "1" was awarded if subjects reported a response that met the behavioural criterion for the response in question. A score of "0" was awarded for responses not meeting the criteria. For Item 12 (amnesia), participants were awarded a score of "1" if they recalled fewer than four items before the experimenter gave the signal to remember. Participants were awarded a score of "0" if they remembered four or more items prior to the cancellation cue. The scores on the 12 items were summed to yield a scale score with a maximum of 12.

Age and Sex Differences

Product-moment correlations between age of subject and HGSHS:A scores were computed for each sample separately (range: r = -0.02 to -0.16) and for the aggregated sample (r = -0.11). Similarly, point-biserial correlations between sex and HGSHS:A scores were computed for each sample separately (range: r = -0.04 to -0.16) and for the aggregated sample (r = -0.09). There was no substantial relationship between either age or sex and HGSHS:A scores. These data are consistent with the general burden of evidence that suggests slight, but nonsignificant, differences in the direction of women being more responsive to hypnosis (as measured by the HGSHS:A) than men (e.g., Bongartz, 1985; Lamas et al., 1989). Due to the absence of demonstrable age or sex differences in the samples, the data for males and females of all ages were pooled for the remaining analyses of the aggregated sample.

Score Distributions

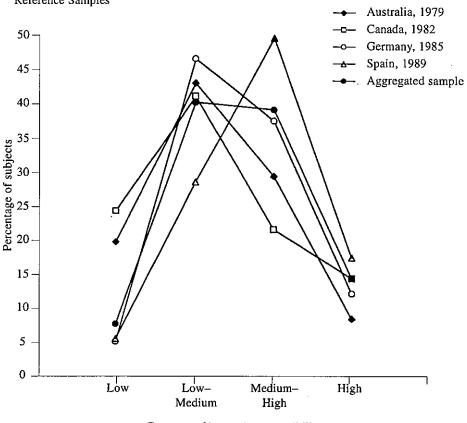
Table 2 presents the percentage distributions of scale scores and the overall mean scale scores for the aggregated sample and the Australian reference sample. The mean scale scores across the eight samples in the aggregated sample varied within acceptable limits, ranging from 5.90 to 6.91. The mean scale score for the aggregated sample (6.54) fell around the middle of the distribution of mean scores of the reference samples, was slightly higher than those reported in the Canadian (M = 5.38; Laurence & Perry, 1982), Australian

(M = 5.45; Sheehan & McConkey, 1979) and German (M = 6.51; Bongartz, MacConkey, 1979)1985) reference samples, and was slightly lower than that reported in the Spanish reference sample (M = 7.13; Lamas et al., 1989). Examination of the samples in terms of the four categories of hypnotic susceptibility proposed by Laurence and Perry (1982) suggested that differences in means could be attributed to the composition of the samples. Figure 1 presents the distribution of participants in Low (0-2), Low-Medium (3-6), High-Medium (7-9), and High (10-12) categories of responsiveness for the aggregated sample and the reference samples. The percentage of High-Medium hypnotisable participants in the aggregated sample (39%) was similar to the percentage reported for the German reference sample (37%; Bongartz, 1985), was smaller than that reported for the Spanish reference sample (49%; Lamas et al., 1989), but was considerably larger than the percentage reported for both the Australian (29%: Sheehan & McConkey, 1979) and Canadian (21%; Laurence & Perry, 1982) reference samples. Conversely, the percentage of Low hypnotisable participants in the aggregated sample (7.5%), while similar to both the German (5%; Bongartz, 1985) and Spanish (5%; Lamas et al., 1989) reference samples, was smaller than the percentage reported for both the Australian (20%; Sheehan & McConkey, 1979) and Canadian (24%; Laurence & Perry, 1982) reference samples.

Table 2 HGSHS:A Percentage Distributions, Mean Scores, and Standard Deviations

	Sample		
HGSHS:A Score	Aggregated sample	Sheehan & McConkey (1979) %	
0	1.2	4.0	
1	2.2	6.0	
2	4.2	9.5	
3	6.5	9.8	
4	9.6	10.3	
5	10.7	10.4	
6	12.8	12.0	
7	13.8	10.1	
8 .	13.5	10.5	
9	11.2	8.4	
10	9.0	4.5	
11	4.0	3.3	
12	1.3	0.7	
Mean HGSHS:A Score	6.5	5.5	
SD	2.65	2.95	

Figure 1. Percentages of Participants in Each Category of Hypnotisability for the Aggregated Sample and the Australian (Sheehan & McConkey, 1979), Canadian (Laurence & Perry, 1982), German (Bongartz, 1985), and Spanish (Lamas et al., 1989) Reference Samples



Category of hypnotic susceptibility

Item Difficulty

Table 3 presents the percentages of subjects passing each item and the mean pass percentage for the aggregated sample and the Australian reference sample. In addition, the ranked difficulty level is shown for each item. Rank item difficulty levels were also calculated for each of the eight samples in the aggregated sample, and rank order correlations for each pair of samples were calculated. Correlations were high (range: r = 0.91 to 1.00), indicating a high degree of consistency in item difficulty across the eight samples. To evaluate the consistency of item difficulty across the aggregated sample and the reference samples, item difficulty ranks were calculated for each sample, and rank order

Table 3 Percentages of Subjects Passing Each Item for the Aggregated Sample and the Australian Reference Sample. Numbers in Parentheses Represent Rankings for Items from Least Difficult/Most Passed (1) to Most Difficult/Least Passed (12)

	Sample			
Item	Aggregated sample	Sheehan & McConkey (1979) %		
1 Head falling	70 (4)	61 (3)		
2 Eye closure	73 (3)	57 (4)		
3 Hand lowering	76 (2)	71 (1)		
4 Arm immobilisation	48 (8)	36 (9)		
5 Finger lock	63 (5)	53 (5)		
6 Arm rigidity	52 (6)	41 (7)		
7 Hands moving	79 (1)	71 (2)		
8 Communication inhibition	52 (6)	42 (6)		
9 Hallucination	25 (12)	25 (11)		
10 Eye catalepsy	45 (10)	38 (8)		
11 Posthypnotic suggestion	26 (11)	17 (12)		
12 Posthypnotic amnesia	46 (9)	33 (10)		
Mean	55	45		

correlations for each pair of samples were calculated. High correlations between the aggregated sample and the Australian (r = 0.95; Sheehan & McConkey,1979), Canadian (r = 0.88; Laurence & Perry, 1982), German (r = 0.91; Bongartz, 1985), and Spanish (r = 0.78; Lamas et al., 1989) reference samples supported the consistency of item difficulty across the various culturally and linguistically specific contexts.

Reliability

Point-biserial correlations between each item and the scale score omitting that item were calculated for each of the eight samples in the aggregated sample. High correlations between pairs of samples (range: r = 0.92 to 0.97) suggested that the HGSHS:A is a reliable instrument. The similarity of the relative magnitudes of the Kuder-Richardson coefficient for each of the groups (range: 0.66 to 0.69), as well as a high coefficient of concordance between the eight samples (W = 0.97), also indicated a high degree of consistency among the samples comprising the aggregated sample. Point-biserial correlations for each item and the Kuder-Richardson coefficient for the total scale were calculated for the aggregated sample and the reference samples; Table 4 presents these data for the aggregated sample and the Australian reference sample. Inspection of these data revealed that total scale reliability, as well as item reliability, was generally

lower for the aggregated sample. Similarly, the Kuder-Richardson coefficient for the aggregated sample (0.68) was smaller, but comparable to that of the Australian reference sample (0.76; Sheehan & McConkey, 1979) and the other reference samples (for comparison of previous samples, see Lamas et al., 1989). Despite the lower reliability of the HGSHS:A items and the mean scale score for the aggregated sample, the rank order of the point-biserial correlations of the aggregated sample was consistent with the rank order of the Australian (r = 0.94; Sheehan & McConkey, 1979), Canadian (r = 0.78; Laurence & Perry, 1982), German (r = 0.83; Bongartz, 1985), and Spanish (r = 0.95, Lamas et al., 1989) reference samples. These results indicated that the hierarchies of the items were comparable between the aggregated sample and the reference samples, highlighting the reliability of the scale.

Structural Analysis of the HGSHS:A

Data for the aggregated sample were factor analysed by the principal components model. Factors extracted using the principal components method

Table 4 Point-Biserial Correlations Between Each Item and the Total Score Omitting That Item, and Kuder-Richardson Total Scale Reliability Index for the Aggregated Sample and the Australian Reference Sample

	Sample		
Individual HGSHS:A items	Aggregated sample	Sheehan & McConkey (1979) %	
1 Head falling	.27	.39	
2 Eye closure	.27	.39	
3 Hand lowering	.13	.25	
4 Arm immobilisation	.37	.36	
5 Finger lock	.48	.59	
6 Arm rigidity	.46	.55	
7 Hands moving	.31	.42	
8 Communication inhibition	.47	.51	
9 Hallucination	.25	.34	
10 Eye catalepsy	.49	.53	
11 Posthypnotic suggestion	.14	.18	
12 Posthypnotic amnesia	.18	.18	
Total scale (Kuder-Richardson coefficient)	.68	.76	

represented both the common and unique, or error, variance of the test items. Using the phi coefficient, intercorrelations were calculated for each item on the scale. Correlations were low, suggesting orthogonal rotation should be used. A principal components analysis was then conducted and three factors with eigenvalues greater than 1 were extracted; a scree test was used to confirm the appropriateness of this solution. Table 5 presents the factor loading matrix, rotated orthogonally using the varimax criterion.

Using a stringent cut-off for factor loadings of 0.50, three factors emerged that represented the data reasonably well, accounting for 44.1% of the variance. The arm immobilisation, finger lock, arm rigidity, communication inhibition, and eye catalepsy items were most representative of Factor 1; the head falling, eye closure, hand lowering, and hands moving apart items were most representative of Factor 2; and the fly hallucination and post-hypnotic suggestion items were most representative of Factor 3. Posthypnotic amnesia appeared to be factorially complex, loading moderately on all three factors. With the exception of the amnesia item, this pattern suggested that a three-factor solution most appropriately defined the vector space shared by the 12 items. The emergence of these three factors, consisting of (what are typically labelled) Challenge items, Ideomotor (or Direct Suggestion) items, and Cognitive (or Complex Delusory) items, is consistent with previous factor analytic results (e.g., McConkey et al., 1980; Peters et al., 1974) and the theoretical distinctions between item types (Hilgard, 1965).

 Table 5
 Communalities and Rotated Factor Loading Matrix for Principal

 Components Analysis of Aggregated Sample

Item		Communality	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	on	.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 in	hibition	.492	.68	.18	.00
9 Hallucination		.498	.16	.09	.68
10 Eye catalepsy		.468	.63	.27	.06
11 Posthypnotic sugg	estion	.599	06	.12	.76
12 Posthypnotic amne	esia	.351	.43	32	.26

CONCLUSION

These findings were based on a series of samples that were combined to create the largest sample of its kind in the literature. The properties of this aggregated sample were consistent with those demonstrated for previous normative samples, thus demonstrating a remarkable degree of consistency and stability in how the test functions across different cultures, samples, and times. The HGSHS:A has been shown to work equally well for samples of students tested in different countries, whether English or non-English versions of the test are n used. These findings add further support to the notion that the HGSHS: A is both a reliable and efficient tool for securing preliminary assessments of hypnotic susceptibility, and for the process of screening large numbers of individuals to identify the most promising candidates for further hypnotic involvement. Although some minor discrepancies in score distributions were noted across the reference samples considered, we would argue that differences in sample composition, rather than any weakness in the scale, accounted for these differences. Overall, the current data indicate that, in the Australian context, the HGSHS:A is a viable tool for the measurement of individual differences in susceptibility in continuing research on hypnotic phenomena.

REFERENCES

- Balthazard, C. G., & Woody, E. Z. (1985). The "stuff" of hypnotic performance: A review of psychometric approaches. Psychological Bulletin, 98, 283-296.
- 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 on the Harvard Group Scale of Hypnotic Susceptibility, Form A. International Journal of Clinical and Experimental Hypnosis, 12, 184-190.
- Hilgard, E. R. (1965). Hypnotic susceptibility. New York: Harcourt, Brace and Jovanovich.
- Lamas, J. R., del Valle-Inclan, F., Blanco, M. J., & 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.
- 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.
- 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.

- Sheehan, P. W., & McConkey, K. M. (1979). Australian norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 27, 294–304.
- Sheehan, P. W., & McConkey, K. M. (1982). Hypnosis and experience: The exploration of phenomena and process. Hillsdale, NJ: Lawrence Erlbaum.
- 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 Harvard Group Scale of Hypnotic Susceptibility, Form A. International Journal of Clinical and Experimental Hypnosis, 11, 39-47.
- Weitzenhoffer, A. M., & Hilgard, E. R. (1959). Stanford Hypnotic Susceptibility Scale, Forms A and B. Palo Alto, CA: Consulting Psychologists Press.

RELAXATION/MENTAL IMAGERY (SELF-HYPNOSIS) FOR CHILDHOOD ASTHMA: BEHAVIOURAL OUTCOMES IN A PROSPECTIVE, CONTROLLED STUDY

Daniel P. Kohen

Associate Professor of Pediatrics, Family Practice and Community Health of the University of Minnesota, and Director of the Behavioural Pediatrics Program

Twenty-eight 7–12-year-old children entered a controlled study of the effects of self-hypnosis on asthma. Asthma belief and behavioural inventories were collected before, and at one and two years after intervention. Asthma diaries were kept daily and mailed monthly. Subjects were randomly assigned to (a) experimental (self-hypnosis), (b) waking suggestion (no hypnosis), (c) attention placebo (no hypnosis or asthma discussion), or (d) traditional control groups.

Twenty-four completed one-month follow-up, 16 completed six months, and 13 completed two years.

Results included: (a) fewer emergency room visits in the experimental group (p < 0.05); (b) less school missed in the experimental group compared to the traditional control group (p < 0.001) and to the waking suggestion group (p < 0.005); (c) no differences in psychological evaluations between groups; and (d) surprising findings regarding hypnotic and hypnotic-like experiences among subjects.

INTRODUCTION

Asthma affects 6.9% of children 3 to 17 years of age (Gevgen, Mullally, & Evans, 1988). Well-known morbidities include the economic stress of physician visits, medications, and laboratory studies (Marion, Creer, & Reynolds, 1985; Sheffer, 1991); time missed from school (Konig, 1978) and play (Francis, Krastins, & Levison, 1980; Oseid & Edwards, 1983); and negative effects on

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Request for reprints should be sent to Daniel P. Kohen, Behavioural Pediatrics Program, University of Minnesota, University Office Plaza, 2221 University Avenue S.E. Suite #100, Minneapolis, MN 55414, U.S.A.

healthy development (Leffert, 1980; Mattson, 1975). Recent reports focus on education-based self-management programs (Rachelefsky, Lewis, & Delasota, 1985; Rakos, Grodek, & Mack, 1985; Hindi-Alexander, 1985; Blessing-Moore, Fritz, & Lewiston, 1985; Rachelefsky & Siegel, 1985; Bauchner, Howland, & Adair, 1988; Carson, Council, & Schauer, 1991; Kohen & Wynne, 1988).

This study was designed to investigate the effectiveness of the mastery-based self-management technique, relaxation/mental imagery (RMI = self-hypnosis), as an adjunct in asthma management. The response of children with asthma to training in self-hypnosis has not been adequately studied. Relaxation training, with and without systematic desensitisation (Alexander, Miklich, & Hershkoff, 1972; Luparello et al, 1968; Moore, 1965; Phillip, Wilde, & Day, 1972; Yorkston et al., 1974) has been shown to produce statistically significant improvement in pulmonary function. Biofeedback, with and without relaxation, has also been effectively used as an adjunct in asthma. The work of Kotses and colleagues (Kotses and Miller, 1987; Kotses et al., 1991) suggests that biofeedback (facial EMG) as a method of producing relaxation in facial muscles improves some measures of pulmonary function in children with asthma and adults without asthma. In a clinical trial with 29 children with asthma, Kotses and colleagues (1991) compared the long-term effect of training to decrease facial muscle tension with training to hold it at the same level. Subjects showed improvement in some pulmonary function measurements and those trained to decrease facial muscle tension also showed a greater improvement in their attitudes toward asthma. Also a reduction in anxiety, both of which may have also contributed to the observed changes in pulmonary function. Spevack and associates (1978) have reported that children with asthma responded well to training in "passive relaxation." While most studies attempted to evaluate clinical improvement, none (Feldman, 1976; Khan, 1977; Scherr & Crawford, 1978) included any controls for attention.

Self-hypnosis has also been successful in the interruption of the vicious cycle (wheezing \rightarrow anxiety \rightarrow increased wheezing \rightarrow increased anxiety \rightarrow increased wheezing, etc.) of asthma symptoms. (Kohen, Olness, Colwell, & Heimel, 1984; Kohen, 1986a). Prior studies have lacked appropriate controls, and failed to determine clinical improvement.

Previous studies have not attempted to assess the so-called "placebo" effects of positive suggestion or attention on the outcome of intervention with hypnosis or other self-regulation. These concerns were incorporated in the design of this study to better understand the effects of RMI on childhood asthma.

METHODS

Following Human Subjects Research approval by the University of Minnesota, children 7 to 12 years of age with asthma were sought for participation in the study. Initially the design sought to limit the study to an identified target population of children admitted to the Minneapolis Children's Medical Center (MCMC, now Children's Health Care — Minneapolis) with asthma, asthma

complications, or status asthmaticus. The initial design and development of this study identified both the desirability and the reasonable expectation of participation of 100 subjects, or 25 in each of four groups. Shortly after funding approval and institution of the project, the new availability in the United States of inhaled medications for the treatment of asthma (e.g., beta-2-agonists such as albuterol) altered clinical management patterns of children with asthma through the availability of these inhalers. Though inhaled beta agonists have since proved to be inadequate as sole treatments for asthma, the initial appearance of inhalers had the immediate effect of (temporarily) decreasing hospitalisations and emergency room (ER) visits for asthma during the time this study was being conducted (Kohen, 1986b).

Entry criteria were broadened to include any child from 7 to 12 years with asthma, who agreed to the protocol, and had not formally been taught RMI techniques. Recruitment included letters to practising paediatricians, family physicians, and allergists, and descriptions of the proposed study in local publications. Patients in the target age-group admitted to MCMC, attending the emergency room, or utilising the pediatric outpatient clinic, were offered the opportunity to participate. Several in-patients and outpatients declined offers to participate. Reasons for refusals most often focused on an unwillingness to commit to the two-year follow-up design of the protocol.

Families whose children had participated in the Hennepin County Lung Association's Family Asthma Program, and families whose children had participated in the local asthma summer camp, CAMP SUPERKIDS, over the preceding two years were also contacted. Of 76, 64 were contacted. Of the 23 who agreed to participate, two dropped out before entry. Continued efforts to recruit additional subjects at this time were unsuccessful.

A total of only 33 children with asthma, 23 males and 10 females, ages 7 to $12^{11}/_{12}$ years, were initially enrolled, and randomly assigned to groups as described below. At the first visit patients and parents completed intake questionnaires, the nature of the study was explained, and informed consent was obtained.

Patients were excluded if they had previously been taught RMI, or if they requested specific group assignment rather than agreeing to accept random assignment as defined in the protocol. In each case asthma was defined by the primary physician, and as reactive airway disease reversible with the use of bronchodilator medications; and in each case the patient's regular asthma medical care continued with their primary care provider. Patients' physicians were sent reports of pulmonary function studies and psychological evaluations as they were completed. No pre-study assessment of asthma severity was determined beyond the intake questionnaire inventories, and no effort was made to control for severity or psychological profile status prior to entry or at the time of randomisation to groups.

Each patient was taken to a separate room for preliminary pulmonary function tests (PFTs). These were performed in the evenings, after the patients had been quietly engaged in listening to an introduction to the project and in completing the intake questionnaires (30 to 45 minutes). Following the first PFT, patients were randomly assigned to Experimental (RMI) Group (Group 1) wherein they were taught RMI; to the Waking Suggestion Group (Group 2) wherein they received suggestions similar to Group 1 but without formal RMI teaching or hypnotic induction; to the Attention Placebo Control Group (Group 3) wherein they received the equivalent time and attention in the form of age-appropriate conversation or games and without discussion or suggestions regarding asthma; or to the Traditional Control Group (Group 4) wherein they received no special attention, time, or instruction.

Each patient then spent an initial 30-40 minute session with the principal investigator or research associate in their assigned groups. After this "first intervention" contact, each patient had a second, "post-intervention" pulmonary function test (PFT) performed, approximately one to one-and-a-half hours after.

Relaxation/Mental Imagery (Self-Hypnosis) Procedure (Group 1)

Experimental group patients were taught a RMI (self-hypnosis) exercise at the first session, with attention to and flexibility for the individual needs and developmental abilities of each child. Included were a variety of direct, indirect, and metaphoric suggestions for prevention and control of wheezing; and training in self-hypnosis in order to be able to practise RMI at home.

- 1. The patient met privately with the Principal Investigator (PI) and a brief time was spent gaining rapport, with a particular focus on identifying the child's ideas of fun, play, and relaxation. This included information about and demystification of hypnosis, emphasising the everyday and natural quality of the hypnotic experience presenting it as analogous to daydreaming, imagining, or pretending (Kohen, 1987; Olness & Kohen, 1995). Discussion focused on the child's favourite activities and/or daydreams. Rapport-building was integrated with emphasis on self-control and mastery, and introduction to using imagination (RMI) in order to develop self-control. Examples of hypnotic language typically used included: "In a few moments, I wonder what you would like to pretend or daydream about, while I teach you something new you can use to help yourself when your asthma bothers you..."
- 2. A simple statement such as "go ahead and close your eyes and start daydreaming about something fun now" was consistently sufficient to initiate RMI, that is, to induce hypnosis.
- 3. The child's report of imagination or daydreams validated the hypnotic RMI experience, as did the demonstration of their response to suggestions. Each child was encouraged to "let me know when you can feel yourself in some favourite place," and to describe their imagery. Each was also encouraged to communicate about imagery via ideomotor options such as head-nodding, raising an indicator finger, or talking. The investigator also noted other indicators of the alternative state of awareness, such as eye movements, eyelid flutter, slowing of respirations, and muscle relaxation.

- 4. Cultivation of the RMI experience (= deepening of hypnosis) was done via suggestions of multi-sensory imagery and open-ended suggestions such as encouraging awareness of sights, sounds, feelings, smells, tastes, while imagining some favourite place activity.
- 5. Progressive relaxation suggestions were interspersed with suggestions for enhancement of imagery.
- 6. Hypnotic suggestions included allowing progressive relaxation of "outside" and "inside" muscles, and especially peribronchial muscles ("those muscles around your breathing tubes"); and suggestions how to practise self-hypnosis at home.

After RMI, the experience was reviewed, and the value of practice was reinforced. Each patient was asked to keep a record of RMI practice, a daily diary of medications, and self-ratings of asthma severity. The overall goal of the procedure was the best hypnotic induction possible, believed to be dependent upon the individual flexibility reflected in this approach.

Waking Suggestion Group Procedure (Group 2)

Children in Group 2 met with a research associate who spent time developing rapport and focusing on the child's favourite activities. No effort was made to solicit information about daydreaming or pretending experiences. No mention was made of hypnosis. Suggestions were offered in a matter-of-fact, conversational manner. Content was similar to suggestions given in RMI, but without induction of hypnosis or suggestions to alter focus by daydreaming or pretending. As in the experimental group, suggestions were given that children could think about their breathing tubes and the muscles around them, that they could relax them and other muscles of their bodies, and that by doing so they could breathe more easily and feel better.

Attention-Placebo Group (Group 3)

Children in this group received the equivalent time and attention of the research associate without any discussion or suggestions about asthma. Conversation focused on their personal interests.

Traditional Control Group (Group 4)

Children in this group spent no time in discussion with the research staff, but completed the intake inventories and pulmonary function tests, and were asked to maintain diaries, as did the other groups.

Pulmonary Function Tests (PFTs)

At the initial visit, pre- (#1) and post-intervention (#2) PFTs were performed. At subsequent visits one PFT was performed, after the intervention session. PFTs

were performed at follow-up visits 1, 6, 12 and 24 months following entry. PFTs included forced vital capacity (FVC), forced expiratory volume in one second (FEV-1), and forced expiratory flow (FEF-25-75). The best of three efforts was used at each performance. Subjects' clinical status (degree of comfort/discomfort) were assessed and recorded by respiratory therapist technicians who performed spirometry and were blinded to subjects' background or group assignments.

Studies were performed on a Medical Graphics Corporation Microloop Pulmonary Function Unit in the MCMC Laboratory. Results were interpreted by a pediatric allergist-pulmonologist or anesthesiologist who were also blinded to subjects' group assignments and clinical status.

Daily home measurement of pulmonary function with a peak flow meter was not a part of the study.

EVALUATION

All subjects were asked to keep daily asthma diaries recording medication use, self-rating of severity, RMI practice (Group 1). Each patient received follow-up telephone calls one and two weeks following the initial session. For Group 1 this was to reinforce hypnotic suggestions and the value of practising RMI; for Group 2 it was to repeat the waking suggestions; and for Group 3 it was simply to spend time encouraging the keeping of the diary. No reinforcement was given to Group 4 participants. Encouragement and reinforcement of diary maintenance also occurred at in-person follow-ups.

After one month all children were seen again for repeat PFTs following the half-hour reinforcement session with the PI or research associate. Psychological testing was performed between the time of entry and the first month re-visit.

At three and nine months, telephone follow-up was conducted as at the one and two-week telephone contacts. At 6, 12, and 24 months, repeat PFTs were performed, and reinforcement of group specific contact was conducted. At the one- and two-year visits intake-data questionnaires were readministered; and at one year psychological testing was also repeated.

Data Analysis

Comparisons between experimental and control groups were made for each variable measured, before, during, and at the end of the two-year study period. One-way analysis of variance (ANOVA), chi-square, and one- and two-tailed Fisher exact tests were used for analysis and comparison of PFT results. Chi-square and multiple regression analysis were utilised to evaluate differences and similarities within and between groups with regard to other variables described.

RESULTS

The major hypothesis for this study was that children with asthma who learn RMI will demonstrate positive improvement in the physiologic effects and

behavioural manifestations of asthma. Unfortunately, the small number of subjects entering and the smaller number completing this study limit the conclusions possible from the observed results.

As described in detail below, overall results revealed (a) fewer emergency room visits in the experimental (hypnosis) group (p < 0.05); (b) fewer school days missed due to asthma in the experimental group compared to the traditional control group (p < 0.001) and compared to the waking suggestion group (p < 0.005); and (c) no significant differences in psychological evaluations between the individuals (randomly assigned) or groups. Of great interest is the finding that five children (representing all four of the groups) had prior experience with naturally and spontaneously occurring relaxation and mental imagery, and that this was associated with improvement in pulmonary function tests.

Twenty-eight of the original 33 subjects remained in the study, completing pre- and post-PFTs and initial intervention on the first day. Five subjects dropped out, either after agreeing to participate and after initial PFTs, or after assignment to their group and prior to the second PFTs. Reasons for withdrawal included changing their minds, the two-year commitment required, and dissatisfaction with the (random) group assignment. These subjects did not differ significantly from study subjects with regard to demographic characteristics or asthma medication usage. No other comparison data were available.

After subjects continuing had completed at least six months of follow-up, data analysis was begun by a biostatistician unfamiliar with the individual subjects, their families, or their clinical problems.

Pulmonary Function Tests

For the 28 subjects, evenly distributed in the four groups, no significant differences were found in PFTs from the first to the second PFT (after initial intervention) on the first day.

One-month PFTs were compared with entry PFTs. No significant differences were found between groups for changes in the FVC or FEV (one-way ANOVA, p > 0.05 for all comparisons).

A surprising similarity was found among five children (two from Group 4, one each from Groups 1, 2, and 3) who showed these dramatic changes in FEF 25-75 improvement. These changes occurred only in subjects who had indicated prior contact or experience with naturally and spontaneously occurring relaxation mental imagery (RMI) experiences. While this was true for these five of the 24 subjects completing one month follow-up, of the other 19, only one had reported any analogous spontaneous imagery experiences (χ^2 18.9, p < 0.001). This information was unknown until a review of the PFT data revealed these five subjects' FEF 25-75 results. While entry criteria for the study had excluded anyone who had been specifically taught RMI or self-hypnosis exercise, inquiries about naturally occurring hypnotic phenomena

were made only in the intake questionnaire which was designed specifically for later review.

One child in Group 1 (Figure 1) had no previous history of learning RMI, but learned it as a participant in the experimental group. By the one-month visit he had had four reinforcements of the newly learned skill. He also reported that "forgetting about it" helped his asthma, and this self-distraction can well be understood as analogous to a form of spontaneous hypnotic behaviour. The patient in Group 2 with the larger change in FEF 25-75 reported on the intake questionnaire that his asthma improves with "watching TV." This discovery prompted further review at this stage of all other patient intake inventories, and particularly of information regarding self reports of "What helps your asthma?" All 24 subjects had indicated help from liquids, rest, and medications. However, only those who at one month had shown these larger changes in FEF 25-75 indicated other positive impact on their asthma from imagery-based experiences (Figure 1), for example, from watching TV, picturing pleasant circumstances, daydreaming, and listening to music.

Sixteen subjects completed the original protocol through six months, and 12 subjects had valid PFTs through one year. No significant differences in PFTs were found between groups. Thirteen subjects completed the study, obtaining final PFTs at the end of two years. No significant differences in PFTs were

Figure 1. Characteristics of Patients with Great Improvements in FEF 25-75 at One Month

Patient	Group	Change FEF 25-75	Self-perceptions and experience with relax/imagery
JK-#23	1	+28% (& FEV1 + 17%)	No previous relax/imagery"Forgetting about it" helpsRMI-experimental group
BB-#11	2	+28%	No previous relax/imagery"TV" helps asthma
JK-#28	3	+17%	• "Forgetting about it", "TV", "Daydreaming", "Music"
TH-#20	4	+31%	• "TV", "Daydreaming", "Music"
JM-#26	4	+29%	 "Relax very deeply lying down, picturing pleasant circumstances"

identified. The small number of participants, the high drop-out rate, and the high variability in pulmonary functions over time precluded reliable or meaningful interpretation of these data.

Behavioural Outcomes

All subjects kept daily asthma diaries, recording medications, school missed, ER visits, personal observations, self-rated severity scores, and RMI practice (Group 1 only). Diary recording was reinforced with in-person and telephone contacts. Families mailed self-reports monthly. Results include diaries of all patients who participated in the study.

Multiple t-test, chi square, and regression analysis showed no significant group differences in socioeconomic status, psychological data, parental education, duration or severity of asthma, medications, or even parental expectations with regard to the future of their child's asthma. The collective optimism of the patients' families was notable and also not significantly different from one group to another. It is noted that the small sample size alone and the associated lack of statistical power could be responsible for the absence of identified differences.

7 visits/ 1.5 59 months Group 1 1.4 1.3 1.2 Group 2 1.1 1.0 2 visits/ .9 28 months Group 3 8. Rate .6 3 visits/ Group 4 .5 87 months .4 .3 .2 0 visits/ .1 55 months 0

Figure 2. Emergency Room Visits

Note. Group 1 significant to p < 0.05

Emergency Room Visits

Experimental group children had significantly fewer visits to the emergency room than those in the Traditional (Group 4) Control Group ($\chi^2 = 3.90, p < 0.05$) (Figure 2). The Waking Suggestion Group showed no significant difference from the Traditional Control Group (Group 2 to Group 4, p = 0.50), and there was also no significant difference between ER visits required by the Experimental (RMI) Group (Group 1) compared to the other two "intervention" groups, that is, the Waking Suggestion (Group 2) or Attention Placebo (Group 3) Control Group.

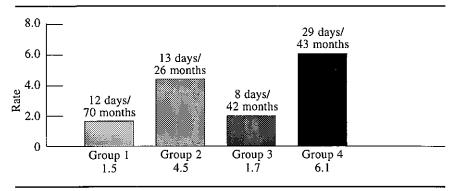
In calculation of differences, numbers of months for which data were collected were compared to numbers of reported ER visits. Months for which data were missing were assumed to be months with no ER visits, based on the perspective that ER visits were unlikely to be forgotten by families. Notably, the Attention Placebo Group (Group 3) is the best in having no ER visits (Figure 2). In spite of the statistical significance noted, these data must be understood and interpreted with caution, particularly in view of the small numbers of patients involved, the potential influence of "missing data" from unrecorded or unreported months, and the possibilities that one or more medically compliant subjects could dramatically skew group results by having complete reporting (by virtue of their compliance) and reporting no ER visits (e.g., by virtue of taking medication consistently, not requiring ER visits for that reason).

Days Missed from School

A frequently cited, important functional measure of asthma severity is days missed from school due to wheezing episodes. Based on family diaries, the data include all patients who kept diaries and participated for any length of time in the study, utilising only usual school months (9 of 12) as a measure.

Subjects in the Experimental (RMI) Group (Group 1) missed significantly fewer days of school due to asthma than did the Control Group (Group 4) subjects ($\chi^2 = 29.$ 1, p < 0.001), and also significantly fewer days than subjects in the Waking Suggestion Group (Group 1 to Group 2, $\chi^2 = 10.6$, p < 0.005). The Waking Suggestion Group (Group 2), did not differ significantly from the Traditional Control Group (Group 4) ($\chi^2 = 2.06$, p > 0.10). The Experimental Group, however, did not differ significantly from the Attention Placebo Group (Group 1 to Group 3, $\chi^2 = 0.6$, p > .75). Group 3 also showed significantly fewer school days missed than the Traditional (Group 4) Control Group ($\chi^2 = 20$, p < 0.001). The Attention Placebo Group doing as well as the Experimental Group was a surprise, but speaks to the potential power and influence of the clinical encounter as in itself having a well-known, therapeutic, and yet often unexplored and undiscussed, positive effect.

Figure 3. School Days Missed



Note. Group 1 to Group 4, p < 0.001; Group 1 to Group 2, p < 0.005; Group 2 to Group 4, p < 0.10.

Asthma Severity

Patients were instructed to rate their symptom severity on a 0 to 3 scale, at the end of the day noting the average amount of wheezing for that day. No mention was made or instruction given regarding duration of wheezing or the method or rapidity of amelioration of wheezing in considering these personal perceptions and ratings. Children were to rate themselves "0" for no wheezing at all; "1" for "only a little bit of wheezing," "2" for "moderate or in-between amount of wheezing," and "3" for "severe or real bad wheezing." Scores were weighted for severity with 1 point for each day of "1" rating, 2 for each day of "2," and 3 for each rating of "3." The maximum severity rating in a month, therefore, would be 93 (31 days of "3" ratings).

No effort was made at the outset to either similarly measure severity prior to entry into the study, or to stratify patients/groups according to severity. After computing severity ratings for the first and second years of the study, the percentage change in severity from year one to year two was computed. Except for one child in Group 1 (Experimental), all subjects showed either no change or a decrease in severity from the first to the second year of the study. However, patients in Group 1 showed a significantly greater decrease in severity than those of other groups (Table 4) with an average decrease of 52% compared to an average decrease of 32% in Group 2 patients ($\chi^2 = 8.21$, p < 0.005), an average decrease of 34% in Group 3 patients ($\chi^2 = 6.12$, p < 0.025), and an average decrease of 35.3% in Group 4 patients ($\chi^2 = 5.88$, p < 0.025).

Figure 4. Severity Ratings

Group	Average decrease in severity from year 1 to year 2	Significance to Group 1 $\chi^2 - p$ value
1 (RMI-EXPTL)	52%	
2 (waking suggestion)	32%	(Gp 1 to Gp 2) 8.21 < 0.005
3 (attention placebo)	34%	(Gp 1 to Gp 3) 6.12 < 0.025
4 (control)	35%	(Gp 1 to Gp 4) 5.88 < 0.025

While self-ratings of severity were reduced for experimental group (RMI) patients, individual verbal reports of reduction in severity were even more dramatic. Each RMI group patient reported the consistent, rapid, and at least partially successful application of RMI techniques to their acute episodes of wheezing. Thus, while the patient's individual severity rating for a day may have been noted to be a "2" or a "3," in all cases the children reported much shorter durations of a given episode of wheezing with the use of RMI, compared to longer reported periods of wheezing prior to learning RMI. Since no prestudy self-monitoring was done, this must be understood in a retrospective context. Most significantly, this represented the perceptions and beliefs of the patients. At the conclusion of the study, one parent sent this note: "I don't understand all of this, but our C. is doing wonderfully! We put his medicine away for the first time in 18 months . . . he's a new kid . . . thanks again!" These effects were neither observed nor spontaneously reported in any of the other groups. Though neither prospectively nor objectively assessed, this seems to represent an important difference in experimental group patients.

Care was taken to provide careful controls and to prevent cross-contamination between groups. Beyond the apparently unpredictable course of the individual patient with asthma, multiple factors could contribute to differences observed. Seasonal variations, medication requirements and compliance, and degree and severity of asthma are important variables. Efforts to control for these included control groups, careful randomisation, and identification and subsequent comparisons of individual and group data. Parent and child questionnaires and daily diaries were analysed for these variables, and no significant differences were identified between groups regarding demographic characteristics of patients and families, medications required and taken, severity of asthma (as perceived/recorded at intake), or seasonal variations.

DISCUSSION

Asthma is an inflammatory disease of the airways and as such is a heterogeneous, complicated, significant illness which has a wide spectrum of manifestations and is influenced variably by a variety and combination of immunologic, environmental, pharmacologic, psychosocial, and physical (e.g., exercise) stimuli.

Whether the results described are a function of some of the children's natural imagery experiences labilities or a function, for example, of the associated relaxation or absence of strenuous exercise is unclear. This may not be as important, however, as the new awareness of the subjects' perceptions of what does and does not affect their asthma behaviour, and how one might use that information to facilitate comfort/improvement (in themselves, their children, their patients).

The conditions of this study did not allow for thorough testing of an hypothesis that RMI (hypnosis) can improve pulmonary function in children with asthma. In retrospect the PFTs would have been more appropriately obtained and studied as a pre- and post-PFT at each follow-up visit, as well as being conducted (and reinforced and monitored at home via the use of Peak Flow Meter recordings). In future studies this will allow not only for assessment of (each) intervention effect, but also theoretically for the effect of learning and practice (of RMI) on the degree of change at each subsequent pre- and post-assessment.

It is of importance to note that these results do not at all negate the validity of the repeatedly reported anecdotal clinical effectiveness of RMI interventions as adjuncts for the acutely wheezing child (Kohen, 1986a; Maher-Lochman, 1970, 1978; Neinstein & Dash, 1982; Zeltzer, LeBaron, & Barbour, 1980).

By chance, none of the subjects was wheezing or evidently in need of immediate care at the time of their initial visit. Accordingly the "need" or expectation/motivation for change was less than one might appropriately expect or predict from a child with an acute wheezing episode. Many clinicians report success of intervention with RMI or similar self-regulation techniques for such patients acutely in distress with wheezing (Aronoff, Aronoff, & Peck, 1975; Kohen, 1986a; Kohen et al., 1984). This important clinical observation was not a focus for examination in this study.

The changes evidenced in five of the patients in FEF 25-75 after one month reflected improvement in small airway function. These five patients were, by chance, distributed across the four groups. This did not support our initial hypothesis that being taught RMI would result clinically in more improvement in PFTs than not learning RMI clinically. As noted, however, these five patients were found to be strikingly similar in sharing particular self-perceptions. Each independently reflected a belief in and experience with either newly learned RMI (i.e., the one child in the experimental group), or in analogous but spontaneous and natural hypnotic-like phenomena which they reportedly

naturally applied at times of wheezing episodes.

In developing the intake inventory, we clinically understood RMI as analogous to the daydreaming or imagining activities which all children do (Kohen et al., 1984; Kohen, 1986a). It appears that except for the one child in the experimental group who learned RMI anew, these children (like so many) had been unconsciously utilising natural, spontaneous, hypnotic-like phenomena to their advantage. Further, they had no apparent need for heterohypnotic induction or teaching in order to do so. Possibly, they had inadvertently practised a self-regulation method which triggered a natural state of self-hypnosis. One can only speculate and wonder how their PFT and other results might have changed had they intentionally learned RMI in addition. Indirect support of this may be found in the fact that these five patients' differences at one month do not "hold" or persist as the study proceeds. It remains unknown, however, whether with RMI their improvement in PFT would stay the same, increase, or decrease.

No other differences or similarities in subject data were identified to otherwise explain why these particular children had the most dramatic changes in FEF 25-75. One possible explanation is that, in the absence of urgent motivation, learning and applying, RMI (especially to undo a previously internalised negative cycle of behaviour and responses) takes time and practice. Thus, as RMI is learned, practised, and integrated into one's own internal understanding and perceptions of asthma, this may ultimately be reflected in positive physiologic and behavioural changes.

Data on emergency room visits and missed school days support previous clinical observations that RMI seems to contribute to a reduction in these functional morbidities (Kohen, 1986a; Zeltzer et al., 1980). While the Experimental Group had significantly fewer ER visits than Traditional Control Group patients, no significant difference was found between the Experimen al Group and those experiencing "waking suggestion" (Group 2) or attention (Group 3). Experimental Group RMI patients had significantly fewer school absences than other groups combined. RMI patients also missed significantly fewer days than patients in the Waking Suggestion Group (2), suggesting that the effect seen was due to the experimental (RMI) intervention. While the rate of missed school days was also slightly lower for RMI patients compared to the control group patients, this difference was not significant.

No subjects or families reported adverse or negative effects from participation. All seemed grateful for the opportunity to participate, and for the "extra" contact with health personnel interested in them and their problem. This was true even for subjects and families in the traditional control group who had no special attention beyond the initial intake, scheduled visits for PFTs, and a brief greeting from the project coordinator at revisit times.

CONCLUSION

This report supports and reinforces the clinically observed value of RMI in altering some of the functional morbidity of childhood asthma in reducing the duration and severity of individual episodes of wheezing, reducing ER visits, and reducing days missed from school. The value of these alterations to maturational factors, psychosocial adjustment, and issues of personal locus of control and mastery by implication seem to be intrinsically positive, and await further investigation.

This study did not control for severity of asthma or address or control for the treatment regimens of subjects, thus limiting the value and generalisability of the results described. While analysis did not show any individual or group differences with regard to severity, no effort was made, for example, to examine the possible differential effectiveness of RMI for children with mild versus severe asthma, or the differential influence of good versus poor compliance with prescribed pharmacologic treatment. Future research in this area would benefit from the design described herein being enhanced by larger groups matched carefully for asthma severity, duration, lability, and adequacy of treatment. Careful self- and home-monitoring might be best enhanced not only with peakflow measurements, but also with consistent guidelines (to families) for the altering of ongoing treatment plans. The impact of various home, school, and other interpersonal stressors, personal and familial expectations (for illness or improvement), and/or the effect of maturation on coping skills also must be considered.

In the absence of any known adverse effects, and with the identified value of RMI clinically, behaviourally, and now the suggestion physiologically, we recommend that RMI be considered to be an important adjunctive therapeutic tool in the (self) management of childhood asthma. We recommend that children with asthma have the opportunity to learn personal RMI skills and apply them as needed along with other educational, preventive, and pharmacologic methods of management.

REFERENCES

- Alexander, A. B., Miklich, D. R., & Hershkoff, H. (1972). The immediate effects of systematic relaxation training on peak expiratory flow rates in asthmatic children. *Psychosomatic Medicine*, 34, 388-394.
- Aronoff, G. M., Aronoff, S., & Peck, L. W. (1975). Hypnotherapy in the treatment of bronchial asthma. *Annals of Allergy*, 34, 350-362.
- Bauchner, H. C., Howland, J., & Adair, R. (1988). The impact of paediatric asthma education on morbidity: Assessing the evidence. American Journal of Diseases of Children 142, 398-399.
- Blessing-Moore, J., Fritz, G., & Lewiston, N. J. (1985). Self-management programs for childhood asthma A review. Supplement: Advances in diagnosis and treatment of asthma. *Chest*, 87, 107-110.

- Carson, D. K., Council, J. R., & Schauer, R. W. (1991). The effectiveness of a family asthma program for children and parents. *Children's Health Care*, 20, 114-119.
- Feldman, G. M. (1976). The effect of biofeedback training on respiratory resistance of asthmatic children. *Psychosomatic Medicine*, 38, 27–37.
- Francis, P. W. J., Krastins, I. R. B., & Levison, H. (1980). Oral and inhaled salbutamol in the prevention of exercise-induced bronchospasm. *Pediatrics*, 66, 103–108.
- Gevgen, P. J., Mullally, D. L., & Evans, R. (1988). National survey of prevalence of asthma among children in the United States 1976–1980. *Pediatrics*, 81, 1-7.
- Hindi-Alexander, M. C. (1985). Decision-making in asthma self-management. Supplement: Advances in diagnosis and treatment of asthma. *Chest*, 87, 100–102.
- Khan, A. U. (1977). Effectiveness of biofeedback and counterconditioning in the treatment of bronchial asthma. *Journal of Psychosomatic Research*, 21, 97-104.
- Kohen, D. P. (1986a). The value of relaxation/mental imagery (self-hypnosis) to the management of children with asthma: A cyberphysiologic approach. *Topics in Pediatrics*, 4, 11–18.
- Kohen, D. P. (1986b). Applications of relaxation/mental imagery (self-hypnosis) in pediatric emergencies. *International Journal of Clinical and Experimental* Hypnosis, 34, 283-294.
- Kohen, D. P. (1987). A biobehavioral approach to managing childhood asthma. *Children Today 16*, 6–10 DHHS Pub. no. (OHDS) 87-30014.
- Kohen, D. P., Olness, K. N., Colwell, S.O., & Heimel, A. (1984). The use of relaxation/mental imagery (self-hypnosis) in the management of 505 pediatric behavioral encounters. *Journal of Developmental and Behavioral Pediatrics*, 5, 21–25.
- Kohen, D. P. & Wynne, E. R. (1988). A preschool family asthma education program: Uses of storytelling, imagery, and relaxation. (Abstract). The Hague: International Society of Hypnosis.
- Konig, P. (1978). Pharmacologic management of childhood asthma. Advances in Asthma and Allergy 5, 3.
- Kotses, H., & Miller, D. J. (1987). The effects of changes in facial muscle tension on respiratory resistance. *Biological Psychology*, 25, 211–219.
- Kotses, H., Harver, A., Segreto, J., Glaus, K. D., Creer, T. L., & Young, G. B. (1991). Long-term effects of biofeedback-induced facial relaxation on measures of asthma severity in children. *Biofeedback and Self-Regulation*, 16, 122.
- Leffert, F. (1980). The management of acute severe asthma. *Journal of Pediatrics* 96, 1-12.
- Luparello, T. et al. (1968). Influences of suggestion on airway reading in asthmatic subjects. *Psychosomatic Medicine*, 30, 6.
- Maher-Lochman, G. P. (1970). Hypnosis and autohypnosis for the treatment of asthma. *International Journal of Clinical and Experimental Hypnosis*, 18, 1–14.
- Maher-Lochman, G. P. (1978). Hypnosis in bronchial asthma. In E. B. Weiss & M. S. Segal (Eds.). *Bronchial asthma in mechanisms and therapeutics* (pp. 1041–1054). Boston; Little Brown.

- Marion, R. J., Creer, T. L., & Reynolds, R. V. C. (1985). Direct and indirect costs associated with the management of childhood asthma. *Annals of Allergy*, 54, 31–34.
- Mattson, A. (1975). Psychologic aspects of childhood asthma. Pediatric Clinics of North America, 22, 77–89.
- Moore, N. (1965). Behavior therapy in bronchial asthma: A controlled study. *Journal of Psychosomatic Research*, 9, 257–267.
- Neinstein, L. S., & Dash, J. (1982). Hypnosis as an adjunct therapy for asthma: Case report. *Journal of Psychosomatic Research*, 9, 257-276.
- Olness, K. N., & Kohen, D. P. (1995). Hypnosis and hypnotherapy with children (3rd ed.). New York: Guilford Press.
- Oseid, S., & Edwards, A. M. (Eds.). (1983). The asthmatic child in play and sport. Proceedings of an international symposium, Oslo, Norway: Pitman.
- Phillip, R. L., Wilde, G. J., & Day, J. H. (1972). Suggestion and relaxation in asthmatics. *Journal of Psychosomatic Research*, 16, 193-204.
- Rachelefsky, G. S., Lewis, C. E., & Delasota, A. (1985). ACT (asthma care training) for kids; a childhood asthma self-management program. Supplement: advances in diagnosis and treatment of asthma. *Chest*, 87, 98S-100S.
- Rachelefsky, G. S., & Siegel, S. (1985). Asthma in infants and children treatment of childhood asthma: Part II. Journal of Allergy and Clinical Immunology, 76, 409-425.
- Rakos, R. F., Grodek, M. V., & Mack, K. K. (1985). The impact of a self-administered behavioral intervention program in pediatric asthma. *Journal of Psychosomatic Research*, 29, 101-108.
- Scherr, M. S., & Crawford, P. L. (1978). Three-year evaluation of biofeedback techniques in the treatment of children with chronic asthma in a summer camp environment. *Annals of Allergy*, 41, 288-292.
- Sheffer, A. L. (1991). National asthma education program. Expert panel report. Guidelines for the diagnosis and management of asthma. U.S. Department of Health and Human Services. Public Health Service, National Institutes of Health. Publication No. 91, 3042.
- Yorkston, N. J., McHugh, R. B., Brady, R., et al. (1974). Verbal desensitisation in bronchial asthma. *Journal of Psychosomatic Research*, 18, 371-376.
- Zeltzer, L., LeBaron, S., Barbour, J., et al. (1980). Self-hypnosis for poorly controlled adolescent asthmatics. *Clinical Research*, 28, 862A.

HYPNOTHERAPY WITH CANCER PATIENTS: ON SPEAKING ABOUT DEATH AND DYING

Burkhard Peter

Founding President, Milton H. Erickson Gesellschaft (MEG), Germany 1978-1984. Editor of Hypnose und Kognition, the journal of MEG

At the end of the 1970s when more and more psychotherapists started to work with cancer patients, the focus was primarily on how to help these patients survive. Speaking about death and dying sometimes was supposed to give negative, harmful suggestions. Obviously this was a false assumption as the study by Spiegel, Bloom, Kraemer and Gottheil (1989) demonstrated. Working with cancer patients of all kinds and during all stages of the disease raises the question of how, when, and why to speak about the themes of dying and death. The author is dealing with this topic from a very personal point of view; he provides some case vignettes and finally gives some guidelines.

INTRODUCTION

In 1980, when I started to work psychotherapeutically with cancer patients (Peter & Gerl, 1985), there were no guidelines on how to deal with topics like dying and death. Quite the contrary there was a silent assumption shared by many of my colleagues within the hypnotherapeutic community that discussing these topics might even be harmful for patients, giving them the possible suggestion to die. At that time, Simonton's ideas on "getting well again" were very popular; intensively fighting for life would help these patients survive or, at least, prolong their lives.

Other misconceptions derived from the tradition of autogenic training and from "newer" assumptions about how the unconscious understands the meaning of a given phrasing, gave rise to additional caution. We were taught to use

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positive sentences and to avoid negative ones. According to post-Ericksonian theorising, the unconscious was supposed not to understand the word "no": things should be said in a positive way. With cancer patients, therefore, you should speak about life and living and avoid speaking about death and dying to guard against these words becoming unconscious suggestions for the patient to die. Speaking with patients about their own mortality and asking them to face the realities of their illness was thought to shorten their lives.

There was one exception: You could ask a patient provocatively, "Tell me why you don't want to die?" Questions like that sometimes were thought to evoke a positive force for surviving. Consequently, these questions were also used to select patients for different treatment groups. Simonton, for example, reported in one of his 1980s workshops that he would select only those patients who convincingly demonstrated their will to fight for their lives to participate in his visualisation groups. Other patients were put in so-called "dying groups" or even rejected. (I do not know what Simonton actually did, just what he said.)

Besides complicating our therapeutic task by avoiding specific words and specific themes, I believe we did not do a good job for our patients, and that we were wrong in our assumptions about doing harm to them by talking about death and dying.

LITERATURE STUDIES

Studies in the literature support this new emphasis on being open with patients. For instance, let us look at the Spiegel, Bloom, and Yalom study (1981) of patients who had metastatic breast cancer. Their idea that psychosocial interventions could influence the course of cancer was not respected in most medical/psychological circles, with some exceptions, of course (e.g., Meares, 1984; Newton, 1982/83). Spiegel, too, was originally a disbeliever. He first designed a study to develop interventions that might help patients cope more effectively with the frightening new circumstances in their lives following their diagnosis. One major intervention was designed to build up strong social networks of support, but another task of the groups was to discuss death and dying, to help individual patients face their fears of death and perhaps deal with them more effectively. Spiegel called this effort "detoxifying dying" (Spiegel, 1994). Better coping, less fear, and less pain were thought to be acceptable outcomes when the study was completed. However, some 12 years later, when he looked at his catamnesis data, Spiegel was surprised by the compelling evidence of considerably prolonged survival time of his treatment groups when compared to his control groups: The patients in the treatment groups had survived twice as long as the patients in the control groups (36.6 months versus 18.9 months mean time). When Spiegel and his colleagues plotted the survival curves, deaths of the control groups began to outpace those of the treatment groups and, after a period of 48 months, all of the control patients were dead while a third of the treatment patients were still alive. There were still three of the original treatment patients alive 12 years after the study had begun.

In my own work during the years from 1980 to 1984, I was still very anxious about "killing" patients with negative suggestions and I deliberately avoided discussing the themes of death and dying with my terminal cancer patients. I was not the only one to do so. Many of my colleagues believed and acted as I did.

Instead of speaking about my own psychodynamics, I want to speak about my helplessness in these years in being confronted with terminally ill patients who had only a few days or weeks left to live and no chance to speak about their experience.

Patients who are dying fall into at least two categories: those who refuse to talk and those who benefit from talking. On examining my own experience in recent years I found both kinds. Let me first share a few examples of those who actually refused to share with me the reality of their dying.

One terminally ill patient talked with me about his desire to leave the hospital as soon as possible. He detailed to me his plans of taking a pleasurable vacation and then gradually getting again more and more involved in everyday life. I gladly discussed these issues and encouraged him to regain strength and health. Both of us agreed that in a few weeks we would be able to meet again at his place. I invited him to go into a deep trance as he did at previous meetings. During his trance, I suggested to him increasing strength, his body defence mechanisms fighting against the tumour cells, etc. Finally I suggested that in doing so, sooner or later, he could get well again. Immediately he moved his head slowly but definitely, as if saying "no." I could not believe my eyes and quickly returned to reinforcing the themes of building strength and defeating tumour cells. A while later, I returned to the idea of him getting well again. The same happened again: his head moved to signal "no." I tried a third time and received the same answer. After waking from trance, he was totally amnesic for the period. I carefully made, in his awake state, an attempt to introduce this theme of dying from cancer and had no success. He insisted on discussing leaving the hospital, taking a vacation, etc. I don't know whether he purposefully wanted to avoid this theme of death and dying or whether he really did not realise his condition was so serious and his death so imminent. He died two weeks later, and as far as I know, he had not spoken even with his wife about dying or his death.

In retrospect, it is difficult to judge whether it was my own fear, his unwillingness or the general trend of these years that made us keep silent about these issues. His wife, being a psychologist and a colleague of mine, engaged me to help him to get well in spite of his advanced illness. I feel I failed to talk with him in an honest way.

I began to see more and more terminally ill patients. In 1985, 1 realised it was absurd to think that speaking about death and dying could be harmful for a patient who is just about to die. It just did not make any sense that honesty with patients who were ready and wished to share their fear of death could be

harmful to them. I discovered, however, that only a few of them were willing to include these themes in our talks. After all medical treatments had failed, hypnosis was supposed to be the last hope even in hopeless cases. But I realised I did not know how to deal with such patients. To some of them I said the truth openly, that I did not feel able to give them healing suggestions when the progression of their disease was so advanced. The only thing I could do was to talk with them about their remaining time and about their fear of death. Some of these patients left therapy immediately. This approach clearly was not what they wanted. With others, however, I had a silent agreement about what was going on and, in these cases, our communication seemed mostly non-verbal, since most of the time was spent with pain control and dealing with side effects of the disease or its medical treatment.

WAYS OF COMMUNICATION

I remember one patient with cancer of the mouth whom I treated over one year until his death. As the skin of his chin and his cheeks began to shrivel away, it became obvious to both of us there was almost no hope left and we concentrated solely on pain control and dealing with the side effects (Hilgard & LeBaron, 1984; Peter, 1990; Rosen, 1985). The actual communication about death and dying took place by my holding his hands, caressing his hair, and by the tone of my voice, etc. When he could not speak any more, he answered only by nodding or shaking his head.

Another method of communication with patients was rather symbolic and occurred via dreams and waking imaginations.

I invited another patient to imagine himself being on a coast and seeing a boat in the water. As his imagination unfolded, he reported sailing away from the coast out to sea, eventually approaching an island. After arriving there he told me how it was and how he felt. Despite his relative good health, I was very shocked to learn from him that he had imagined entering a solid boat which broke down piece by piece while it sailed further and further away into the open sea. When he arrived at the island he had just one single plank to help him swim to this new shore. On hearing this story I didn't know what to do. So I asked him what he would prefer: to talk with me about this seemingly troubling image which was not at all terrible for him (he took it rather as a matter of fact) - or to first go back into the trance and to allow his unconscious to let the "movie" go backwards, to grasp the plank, swim out to sea, and experience how piece by piece the boat would be reconstructed again until he arrived at the original coast safely in a solid vessel. He preferred the latter and this he did. After having done so, he felt quite happy and did not want to speak about the possible meaning in any greater depth. Some weeks later he died quite suddenly and unexpectedly. Perhaps I was of help, but I still wondered whether direct discussion of these issues might be more helpful.

Let me give a more recent case example and then summarise what I now

consider necessary to guide me in my interventions with dying patients. This patient was a woman in her middle 50s. She was a German teacher in Chile who came back to Germany in May 1992 for treatment of pancreatic carcinoma. She underwent surgery without any benefits and her doctors determined the condition was inoperable. In October, after receiving a mild course of chemotherapy, she came to me. It soon became clear to me that she was not consciously aware of her condition. Despite my attempts to direct her attention towards her fatal condition, she openly refused to discuss it. She just wanted to get well and to go back to Chile before Christmas. Therefore, a lot of our work dealt with how to accomplish this goal. As the weeks passed, she apparently improved, visibly regaining her physical strength and improving her mood. It became impossible for me to make any comments to her about her incurable cancer condition.

Instead of going back to Chile at Christmas and immediately returning to her teaching job, I convinced her that she should take some smaller vacation beforehand. Indeed, with some friends she flew to an Atlantic island where she spent two weeks in January 1993. Despite some difficulties with eating, she returned very proud and happy and stated she was ready to leave for Chile in March. However, two weeks before the scheduled departure she had to go back into the hospital for treatment of severe icterus and ascites.

She required a minor surgical procedure and I visited her shortly after this had been done. For the first time she complained that the doctors had not really told her the truth. One doctor even told her that in two weeks she could pack her bags and leave for Chile. It was now obvious that she was aware of her worsened condition. First I asked her if she wanted to know the truth, and how much of the truth she really wanted to know. For a long time she looked straight into my eyes and then, rather than answering my question, she asked me what I thought about her condition, while continuing to look into my eyes. I returned her gaze a long time and then said, while holding her hand, "Your condition is very bad, indeed. When I look at your condition I get very, very sad." She then asked me again to ask the doctors to tell her the truth, which I did. I suggested to her specific questions to ask, for example, if there remained any hope; if not, how much time was still left; and if she was to die, how would it happen.

In this way we worked out several more questions she could ask the doctors and we also discussed possible answers and how to determine which one might be true. We talked a long time, with the conversation punctuated by long pauses. When I left her three hours later she mentioned that she wanted to speak with her sister too, about these things, and that we should discuss them in some more detail at our next day's visit. However, the next day, a Thursday, she was too tired to speak or even to listen. She asked me to come again the next day so we could speak again about her imminent death. She fell asleep and after a while I left. Two hours later I learned she had lapsed into coma. The next day when I visited her again she was still in coma and stopped breathing three hours later.

Though I never will know, my personal impression is that she quite suddenly and totally let go after we had talked about death and dying so openly. There was no fight at all, there was no pain. We shared and by doing so reduced her isolation.

SUMMARY

Let me summarise what I think could be helpful, and probably even necessary, in dealing with cancer patients who are going to die:

- 1. The sooner in the course of the treatment you signal your patients that you are willing to talk with them openly about whatever issues they want to discuss, even about death and dying, the more confidence, trust, and freedom you are introducing into the therapy.
- Observe your patients carefully for verbal and non-verbal signs they give about their willingness, or even desire, to talk about death and dying. Understand, however, that some patients need you to respect their wish not to talk about it.
- 3. If there is disparity between verbal and non-verbal cues, give priority to the non-verbal, unless the patient strongly suggests the contrary.

Only a few patients ask you directly and openly, but you can look for some non-verbal cues which also alert you to the fact that they want to talk. In these cases, you can use such indirect strategies as trying to make discreet body contact while not answering promptly and directly. Try to discover how direct you can be. Acknowledge what your own feelings are, what your body or your unconscious mind are telling you. You might even tell a story, for example, about a person who is willing to know but at the same time is not yet able to know all the hard and terrible facts in detail. Then watch the patient's reactions carefully.

Some patients give indirect signs they want to talk about issues in a more direct way. To stimulate more direct communication you might ask: "If you want me to talk with you also about your condition getting worse, please don't hesitate to ask me to do so," or "Don't you think we should consider the worst case too?"

Some patients give no verbal or non-verbal feedback, and show non-verbally that they are frightened by the subject. In these cases do not tap this theme of death and dying on any level. You could try to ask carefully when the patient is in trance, whether he or she is able and willing to get in contact with thoughts and feelings about his/her failure to recover from the disease, but this requires absolute tact and patient-centred respect. The therapist must always respect the patient's wishes.

Only in those cases when the patient shows willingness should you have a talk with her/him very openly.

4. With the help of natural and hypnotically induced dreams and "imaging" you can actually deal a lot with these issues. But again watch the patient very

- carefully to determine how and when s/he is ready to uncover some or all of the content. Do not uncover before the patient is willing to do it all by him/herself.
- 5. It is obvious that these issues are sometimes better handled in a group setting. There, it is not solely your job to decide exactly whether, when, and how to talk. Group members suffering from the same illness, as Spiegel's work demonstrates, can be an enormous source of strength and wisdom to each other.
- 6. Finally, be sceptical with regard to your own resistance. It might be possible you are just projecting your own fear or incompetence in dealing with these themes with patients and you deprive them of a chance to share with you the content of these final crises in their lives. In all difficult therapy, it is these courageous patients who facilitate our own growth as therapists and as human beings.

REFERENCES

- Hilgard, J. R., & LeBaron, F. H. (1984). Hypnotherapy for pain in children with cancer. Los Altos, CA: William Kaufmann.
- Meares, A. (1984). Eine Form intensiver, mit dem Rückgang von Krebs verbundener Meditation. Hypnose und Kognition, EH, 27-35. (Original in American Journal of Clinical Hypnosis, 25, 1982/83).
- Newton, B. (1982/83). The use of hypnosis in the treatment of cancer patients. American Journal of Clinical Hypnosis, 25, 92-103.
- Peter, B. (1990). Hypnose. In H. D. Basler, C. Franz, B. Kröner-Herwig, H. P. Rehfisch, & H. Seemann (Eds.), *Psychologische schmerztherapie* (pp. 482-500). Berlin: Springer.
- Peter, B., & Gerl, W. (1985). Clinical hypnosis in psychological cancer treatment. In J. K. Zeig (Ed.), *Ericksonian Psychotherapy*, Vol. II, *Clinical Applications* (pp. 398-411). New York: Brunner/ Mazel.
- Rosen, D. (1985). Hypnosis as an adjunct to chemotherapy in cancer. In J. K. Zeig (Ed.), Ericksonian Psychotherapy, Vol. II, Clinical Applications (pp. 387-397). New York: Brunner/ Mazel.
- Spiegel, D. (1994). Living beyond limits: New hope and help for facing life-threatening illness. New York: Times Book.
- Spiegel, D., Bloom, J., Kraemer, H. C., & Gottheil, E. (1989). Effect of psychosocial treatment on survival of patients with metastatic breast cancer. *Lancet*, 2, 888-891.
- Spiegel, D., Bloom, J., & Yalom, I. D. (1981). Group support for patients with metastatic breast cancer. Archives of General Psychiatry, 38, 527.

TREATMENT OF TRAUMA ASSOCIATED WITH CHILDHOOD SEXUAL ASSAULT

Carolyn Manning

Psychologist

The client was a 38-year-old male who attended a centre against sexual assault for counselling support related to childhood sexual assault. He presented with symptoms which supported a diagnosis of Post-Traumatic Stress Disorder. The basis for the therapeutic collaboration with the client was an early explanation of his presenting symptoms and discussion of treatment options. The client was seen for a total of 13 counselling sessions.

A combination of hypnosis, brief therapy, and cognitive-behavioural techniques was utilised in therapy. Hypnosis was used to help the client deal with nightmares, intrusive thoughts, and flashbacks relating to his childhood abuse. It was also effective in the client's management of his chronic pain and persistent sleeping disturbance. Brief-therapy techniques were utilised to facilitate client self-empowerment and ego-strengthening while cognitive-behavioural strategies were utilised for cognitive restructuring and formed the basis for an educative model that enabled the client to understand that his reactions were normal, given the trauma he had faced as a child and adolescent.

While the author was employed at a sexual assault centre located at a major hospital, a call was received in April 1994 by a man who reported that his son had been sexually assaulted by his stepfather. The caller described a need to talk about his son's abuse. In the course of the conversation, it became apparent that the caller himself had also been sexually assaulted and wanted to self-refer for counselling. The client stated his partner had also been sexually assaulted as a child and this, together with his concern about his son's abuse, appeared to provide the impetus for the client's self-referral. The client, who will be identified as Mr Blair, was seen for a total of 13 counselling sessions on a weekly basis over a period of four months.

PRESENTING PROBLEM AND DIAGNOSIS

On initial assessment, the client described the following concerns:

- 1. nightmares which had persisted since childhood, occurring three or four times per week;
- 2. sleeping difficulties (he described obtaining only two or three hours undisturbed sleep per night);
- 3. regular and vivid images or flashbacks during the wakened state;
- 4. recurrent thoughts associated with childhood trauma;
- 5. avoidance of thoughts or feelings associated with the trauma (heavy dependence on alcohol as a way of coping with memories of abuse);
- 6. amnesia associated with the trauma he had no memory of one year of childhood around age nine;
- 7. intense physiological reaction associated with trauma (rapid breathing, shaking, increased heart rate):
- 8. intimacy problems (emotional and sexual) with current partner and a number of prior unsuccessful relationships;
- 9. pain management problems, associated with a major injury to the left arm, which had contributed to a dependence on pain-killers and alcohol and finally resulted in a number of suicide attempts;
- 10. anger management issues associated with outbursts of aggression (for instance, the client spent time in prison for the assault of a man charged with the rape of a close relative, and also set fire to a home);
- 11. four suicide attempts, two as recent as 1993;
- 12. guilt and self-blame associated with his sexual assault.

Although symptoms of depression were noted, such as sleeplessness and selfblame, Mr Blair did not present as clinically depressed at the time. His symptoms were consistent with a diagnosis of Post-Traumatic Stress Disorder (PTSD; American Psychiatric Association, 1987).

PERSONAL HISTORY

Mr Blair was in a de facto relationship and had four sons from two previous relationships. He had no children to his current partner. He had contact with his sons, who all chose to live with their respective mothers.

Mr Blair was forced to retire from his work as a labourer when he injured his shoulder and neck in 1992. His current goal was to purchase a small business and work with his partner towards making the enterprise a success. Despite this optimism, Mr Blair described much of his life as being overshadowed by "demons" from the past (a reference to memories of abuse) from which he was anxious to free himself

As a child, Mr Blair lived in isolated circumstances in a small country town. His first memory of being sexually assaulted was at nine years of age, shortly after his father left home. Mr Blair's mother and uncle began sexually assaulting him and stopped only when he managed to flee from home at the age of 13.

Mr Blair said his father's departure resulted from his mother's sexual infidelities. He maintained contact with his father until the latter's death four years ago. Mr Blair did not disclose to his father his childhood sexual assault. In counselling, Mr Blair spoke fondly of his absent father, who he felt had been destroyed by his mother. Mr Blair avoids all contact with his mother, who occasionally calls him. His hatred and fear of her was deeply entrenched and he talks fondly of the day of her death (she is terminally ill).

Both sisters were living at home when the client was assaulted, although Mr Blair had no recollection of them witnessing any abuse. The eldest sister was removed by police from the home after she was forced into prostitution by her mother at the age of 12. The client believed that his youngest sister had also been sexually assaulted by their uncle.

The assaults were as frequent as once every evening during the school holidays and once or twice per week at other times. The assaults would sometimes last a number of hours involving anal penetration, digital penetration, enforced oral sex, and witnessing adult-to-adult rape. Throughout his ordeal he was told to remain silent and "not to be a little girl" and cry. The consequences of crying or screaming often meant enduring a more prolonged and brutal abuse.

Mr Blair left home at 13 years of age, the night after what he recalls as the most violent sexual assault by his mother and uncle. He sought refuge with neighbours, who cared for him over a period of four months. He suspected that they were aware of the abuse. Mr Blair remained in the care of the family until police forcibly returned him home. He fled from home the day he was returned and remained with his neighbours.

Given his home situation, the client was unable to receive a stable education. At school he suffered from poor concentration and required extra tuition in order to learn to read and write. Mr Blair believed he had missed an entire year of school (grade four) and expressed concern about the lack of memories for that year, which he feared had been particularly traumatic.

Mr Blair began abusing alcohol (up to one bottle of spirits every second day) at age 13, shortly after he left home. While working as a truck driver, he used a combination of amphetamines and marijuana from 16 to 18 years. At 17 years of age he attempted suicide through a drug and alcohol overdose.

Mr Blair's heavy drinking, combined with his frustrations and anger, contributed to his frequent violent outbursts. At the time of counselling he was on probation on a charge of assault. He had spent three months in prison for assaulting a man who raped his stepdaughter.

Shortly after Mr Blair's injury in 1992 he met his current partner. He described the relationship with her as supportive but at times difficult. The relationship was complicated by the fact that both parties had been sexually assaulted. Mr Blair was unable to enjoy sexual intimacy with his partner although he described a deep mutual affection existing between the two of them.

Mr Blair's partner was supportive of him during his attendance at counselling.

MEDICAL AND PSYCHIATRIC HISTORY

Mr Blair indicated that, prior to his work injury in 1992, he had had no major medical problems. At the time of assessment he relied on a combination of sleeping tablets, pain-killers, alcohol, and caffeine to manage pain associated with his injury. He had a history of chronic pain dating back to September 1992, when he sustained a neck and shoulder injury while working at a mobile crushing plant and had been recently diagnosed as having multiple cervical disc damage. Mr Blair has remained off work since 1992 and was financially dependent on Workcover benefits.

In 1993 Mr Blair underwent surgery, which involved the removal of a single rib and the "stapling" of damaged muscles in the left arm. Unfortunately the operation provided no pain relief. Frustrated with the failure of surgery to relieve his pain, Mr Blair took an overdose of medication on New Year's Eve and then drove his vehicle into a tree. Following this suicide attempt, he was referred by his general practitioner to a psychologist who assisted him with pain and anger management strategies.

Mr Blair was unaware of any psychiatric history in the family. He informed me that his father was a heavy drinker and that his youngest sister was both erratic and unstable. Mr Blair currently has a restraining order against his youngest sister, whom he described as threatening and violent.

Mr Blair had a history of suicide attempts prior to 1993. In 1982, following the loss of a child custody case in the Family Court, he overdosed and was admitted to Royal Park Psychiatric Hospital. An earlier suicide attempt occurred when the client was 17 years of age. At the time he was abusing amphetamines and marijuana and attempted to take his life using a combination of drugs and alcohol following a bout of depression. He recovered independently from this overdose. Mr Blair presented as a remarkably determined man who was highly motivated to make changes in his life for himself and his partner.

INTRODUCTION TO TREATMENT INTERVENTION

It was not possible to address all of the client's presenting problems, given the fact that the policy of the sexual assault centre was to provide only short-term counselling support to survivors of sexual assault. For this reason it was agreed that counselling support would focus on relieving some of the PTSD symptoms, which included nightmares, flashbacks, and intrusive thoughts associated with the client's childhood trauma. The therapeutic goals also included building the client's self-esteem and addressing feelings of guilt associated with abuse. However, later in the counselling process the client also requested assistance with pain management. In order to achieve these goals a combination of therapeutic approaches was used. These included hypnosis, cognitive-

behavioural techniques and brief therapy.

Hypnotic procedures were used initially as an adjunct to the cognitivebehavioural technique of systematic desensitisation, to aid symptom reduction (i.e., flashbacks, nightmares and thoughts related to his childhood sexual assault, and anxiety associated with memories of assault). Hypnosis was then used to calm the client following his description of traumatic events associated with his childhood sexual assault.

It was later decided that the client would visualise a particular traumatic image on a television screen and then switch channels to his "special place," rather than verbally describe the trauma, and then be hypnotised. This technique, once mastered, would enable the client to shift his focus away from any traumatic images, thoughts, or flashbacks if they occurred in the future. The technique described is a modified version of the "imaginary screen" described by Evans (1994).

Hypnosis was also used to assist the client manage chronic pain associated with his injury (Burrows & Dennerstein, 1988).

The Spiegel eye-roll hypnotic susceptibility measure indicated that the client was a high-trance subject. The Stanford Hypnotic Scale was not used because of concern that the age-regression component of this assessment could induce an abreaction in the client, who had faced severe trauma throughout much of his childhood.

SESSION 1

On initial assessment Mr Blair presented as tense and controlled as he fought to contain himself emotionally during the session. He later explained that he relied on tranquillisers in order to keep our first few appointments, which he found particularly difficult as this was the first time he had sought any professional counselling for his sexual assault.

In the first session, personal history details were recorded and information about his medical condition was obtained. An assessment was made of the client which supported a diagnosis of PTSD. I noted the client relied heavily on alcohol as a means of coping with current problems and memories relating to childhood abuse. Brief-therapy techniques were used to focus on the client's strengths and coping strategies as a means of building self-esteem.

Mr Blair indicated he had used relaxation in the past and that he was able to visualise a "special place" in the bush where he could relax. I suggested he could use this technique to assist with anger management problems.

SESSION 2

In this session I discussed with the client the nature and causes of PTSD. It was emphasised to the client that his responses were normal given the trauma he had endured. However, it was explained that more functional coping strategies

would be made available to him through counselling. The treatment strategy of systematic desensitisation was explained, using a number of examples to illustrate how it worked.

The notion of using hypnosis to assist the client in his recovery was introduced. I explained to Mr Blair that hypnosis could help him reduce the physical and psychological impact of memories associated with his childhood sexual assault.

A paradoxical challenge was issued to the client: I informed him of the low compliance rate of many PTSD sufferers and explained that only particularly determined individuals remained in counselling and confronted their problems. The client insisted that he was one who would meet this personal challenge. A hierarchy of fears associated with the client's past traumas was then formulated. The client's strong motivation and rapport with the therapist were important factors in contributing to the successful application of hypnosis (Burrows & Dennerstein, 1988).

In the remainder of the session brief therapy was used to reframe the client's experience of the abuse to provide him with the opportunity to acknowledge the resources and survival skills which enabled him to psychologically cope with the repeated sexual assault and finally leave the family home.

SESSION 3

Systematic desensitisation and hypnosis were utilised in this session. It was agreed that Mr Blair would talk about his first memory of sexual assault, which he felt was the easiest memory to confront. As he began to verbally recall (in the awakened state) the events associated with this memory, he became tense and visibly distressed. He was reminded that if he needed to stop at any stage he could do so.

Following this description of the trauma, hypnosis was used to calm the client and ego-strengthening suggestions were made. Mr Blair was asked to focus on his breathing and imagine a wave of relaxation flowing through his body, starting from his head and progressing down to his feet. As the wave progressed he was asked to imagine any tension or stress flow away from his body. He was invited to further deepen his trance by focusing an a numerical count from 1 to 5, after which he could experience an even greater state of relaxation. Following this Mr Blair was asked to imagine himself in his "special place" by a river in the bush. Ego-strengthening suggestions were made to increase the client's self-esteem. He was asked to take whatever he needed from his "special place" and I suggested his unconscious mind might wish to take comfort, security, or confidence to assist his conscious mind deal with day-to-day living.

Following hypnosis, Mr Blair reported he was able to relax and feel in control after remembering the trauma of his first abuse. He explained that, in the hypnotic state, he had imagined himself floating in the water and seeing red and

orange lights, which he described as reassuring and comfortable. The metaphor of floating is helpful in assisting PTSD sufferers in dissociating the mental experience of the trauma from the physical experience (Evans, 1994). In a later session the client explained the orange lights were those of trucks, which were like coats of armour that would protect him.

SESSION 4

At the fourth session, Mr Blair reported that he felt calmer since the last session and had benefited from talking about issues surrounding his past sexual assault. He explained he had successfully managed to deal with his youngest sister, who arrived at his home violently abusing him and making a variety of accusations against him. In the past he would cope with this type of stress through binge drinking. Now he had relied on relaxation strategies and some medication to assist him in dealing effectively with the situation. In the remainder of the session the client agreed to work on reducing his dependence on pain-killers and we talked about utilising alternative pain management strategies. Mr Blair agreed to work on decreasing his caffeine intake from eight cups per day to one or two per day, as a first step towards improving his sleep.

SESSION 5

In this session, Mr Blair informed me he was experiencing violent nightmares about killing his mother. He attributed this to his willingness now to talk about the assault and his anger towards his mother. To help him displace this anger, I suggested he write a letter to his mother stating how he felt. I explained the letter would not be sent, avoiding his fear of giving power to his mother through a written outpouring of emotions. The client felt he was not ready to write such a letter at this stage. In retrospect, the option of providing the client with the opportunity to confront his mother while in the trance state, as an adult, could have been utilised. He continued to refer to the possibility of his mother's death as his only means of gaining "peace of mind."

Mr Blair agreed to continue with the desensitisation process and did so by describing his last memory of sexual assault. During this process he became very distressed, clenching his fists and changing his facial expression. Hypnosis was used to relax and calm him. The induction and deepening techniques used in session 3 were again utilised. However, the suggestion was made to the client to imagine a balloon in which he could place any unwanted concerns. The client appeared to awaken from the trance state and described feeling nauseous (he was visibly ill and disoriented) as he was struggling to place a particularly difficult memory into the balloon. I reassured him he was safe and recommenced hypnosis using a brief induction, deepening, and then asked the client to return to his "special place" taking whatever he needed from this place that would be comforting to him. Mr Blair was visibly calm and relaxed when

he came out of trance. His ability to control the emotional and physical impact of the memories by focusing on his "special place" was reinforced.

Following the client's apparent abreaction to the suggestion of letting go his concerns, it was important to ensure that he left the session in a calm state, hence the decision to reinduce trance. This was to avoid a paired association between hypnosis and anxiety. In retrospect, providing the client with the opportunity to let go of concerns associated with his traumatic experience may have been premature.

It was of concern that, through reliving the trauma of his past abuse, Mr Blair appeared to be reliving the experience. This re-experiencing of the trauma had produced an intense physical abreaction in the client. An attempt was made to reduce the intensity of any future abreactions, should they occur again in the course of treatment.

SESSION 6

Instead of using hypnosis to calm the client following his verbal description of a past trauma, I suggested the client visualise intrusive thoughts or images on a television screen and control these by switching channels to his "special place." I explained this technique would initially be practised under guided hypnosis, but with adequate rehearsal he could visualise any disturbing thoughts that came to him and "switch channels" independently through mastery of self- hypnosis.

Before this technique could be used, Mr Blair complained of pain associated with his left shoulder injury. He was enthusiastic about using hypnosis to assist in pain management. When asked to describe the pain on a scale of 1 to 10, he complained it ranged mostly between 9 and 10. In this session he indicated his pain was at 8.

When asked to describe what was helpful in reducing pain in the past, ne recalled he had enjoyed the numbing sensation induced by anaesthetic following surgery. Utilising this pleasurable sensation as the basis for hypnoanesthesia, I asked him to use an image of heat or ice to recreate the relief he had previously enjoyed. He expressed a preference for ice.

The same induction and deepening technique described in the earlier sessions was used. The client was asked to imagine himself in his "special place," lying on the ground in a tub of iced water. I suggested that, when he placed his arm and shoulder into the water, he would not experience any pain or discomfort but rather would enjoy a gradual numbing sensation. Ideomotor signalling was used to communicate with the client, to determine whether he was able to visualise the iced water and was ready to place his arm into the tub and then remove it when numb.

I concluded with a post-hypnotic suggestion that, by closing his eyes and imagining himself in his "special place," he could reproduce the feeling of numbness in his arm whenever required. I also suggested this sensation of comfort and relief would increase each time he used this technique.

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Mr Blair indicated his surprise at how well he felt following hypnosis. His pain rating dropped from 8 to 4 and, although it was still present, it was not distracting or irritating. He described feeling comfortable and he experienced diminished swelling and increased flexibility in his left arm and shoulder. He reported that throughout the process his right arm had felt hot.

At the end of the session Mr Blair reported he had refrained from alcohol consumption in the past week. This had coincided with a breakthrough in the client's progress, in that he no longer blamed himself for his childhood sexual assault and, for the first time, had said "it wasn't my fault."

SESSION 7

In this session the client reported no vivid nightmares since the last session. This had coincided with the use of relaxation strategies to assist with sleep.

The alternative hypnotic technique discussed in session 6 was utilised. The client was asked to imagine himself relaxed in bed watching a blank television screen. He was then asked to turn on the television and visualise an image from the past. It should be noted that prior to the induction the client agreed to visualise an image that would evoke minimal emotional stress. The client agreed to avoid images of severe abuse. Ideomotor signalling was used to determine whether the client could visualise the blank screen and trauma image.

When asked to visualise the trauma image (in as detached a way as possible) the client became visibly distressed and his breathing increased. He was asked to indicate when he was ready to change channels to his "special place." The client's face and body became visibly relaxed as he became absorbed in his "special place." A post-hypnotic suggestion was made that any intrusive thoughts or images associated with his past trauma could be seen in a detached way on a television screen which he could control by changing channels to his "special place" whenever he so desired.

In feedback after the hypnotic session Mr Blair reported that, when asked to change channels, he had hesitated for a moment. However, he had succeeded in switching to his "special place." He described the transition from the trauma memory to his "special place" as being like walking from a freezer into a safe, warm place where he felt comfortable and at ease.

At the end of the session Mr Blair informed me he had successfully used the hypnotic technique taught to him to manage pain in his arm and shoulder. He explained it took some time before he could immerse himself in his "special place" and picture his arm in iced water. However, he had succeeded in using this method up to three days in a week and had reduced his pain from around 8 to 3 on a scale of 10.

SESSIONS 8 - 13

These sessions focused on preparing of the client for surgery. He was suffering from significant damage to the discs in his neck which could not be repaired.

In later sessions Mr Blair reported that he had suffered from flashbacks to his abuse, but had been able to control his emotional reactions using retreat to his "special place." He had begun sexual relations with his partner and felt his communication had improved and speculated this may have contributed to the absence of any recent violent or aggressive outbursts with his partner or other people. By the end of therapy, Mr Blair felt able to write the letter to his mother. However, during the thirteenth session he revealed he and his partner had decided to separate, after fighting over maintenance for his partner's son. He had begun drinking again and felt his life was falling apart. Mr Blair then abruptly terminated the session and left the office.

FOLLOW-UP DISCUSSION

Some months after his last session, Mr Blair contacted me by telephone to request a further appointment. A week later he telephoned and explained he had decided to continue to manage his problems independently and would contact me if further assistance was required.

CONCLUSION

The treatment of long-term PTSD sufferers is both challenging and draining, particularly when there are multiple problems that are often firmly entrenched. In this case, hypnosis was useful in providing the client with the opportunity to find alternative means of dealing with his PTSD symptoms and chronic pain. Throughout the process I was impressed with his resilience and ability to use self-hypnosis with very limited rehearsal. The brief-therapy techniques utilised as early as session 2 were important in assisting the client to resist self-blame and guilt, and cognitive-behavioural strategies were helpful in thought restructuring in relation to pain and anger management issues.

Despite the overwhelming problems faced by this client, it was apparent he had made significant gains which endured over a period of some months. I felt he would probably continue to experience major difficulties in his life. However, counselling provided him with alternative techniques to the self-destructive coping strategies he relied on in the past. The responsibility for utilising these self-help techniques must rest with the client.

REFERENCES

- American Psychiatric Association (1987). Diagnostic and statistical manual of mental disorders (3rd ed. rev). Washington, DC: Author.
- Burrows, G. D., & Dennerstein, L. (1988). *Handbook of hypnosis and psychosomatic medicine* (2nd ed). Amsterdam: Elsevier/North-Holland Biomedical Press.
- Evans, B. J. (1994). Hypnotisability in post-traumatic stress disorders: Implications for treatment. In B. J. Evans (Ed.). *Hypnosis in the management of anxiety disorders* (pp. 67–76). Heidelberg: Australian Journal of Clinical and Experimental Hypnosis.