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EDITORIAL	iii
RECOVERED MEMORIES OF CHILDHOOD SEXUAL ABUSE: SOCIAL WORKER, PSYCHOLOGIST, AND PSYCHIATRIST REPORTS OF BELIEFS, PRACTICES, AND CASES <i>Ellen Legault and Jean-Roch Laurence</i>	111
FOSTERING POSITIVE ATTITUDES TOWARDS HYPNOSIS THROUGH A MEASURE OF MENTAL IMAGERY ABILITY <i>Calvin Kai-Ching Yu</i>	134
THE EFFECT OF EMOTIONAL AROUSAL ON RECALL AND INTERROGATIVE SUGGESTIBILITY <i>Colette Roos and Kathryn Gow</i>	150
POWER BREAK: A BRIEF HYPNORELAXATION PROGRAM TO REDUCE WORK- RELATED FATIGUE AND IMPROVE WORK SATISFACTION, PRODUCTIVITY, AND WELL-BEING <i>Gerard A. Kennedy and Harry Ball</i>	169
REFLECTIONS: THE ESSENCE OF THERAPY – AS OLD AS TIME <i>Harry Stanton</i>	194
ABOUT SPONTANEOUS TRANCE AND THE USE OF INTROJECTS OR EGO STATES AS HELPERS IN HYPNOTHERAPY <i>Jens-Jørgen Gravesen</i>	202
HYPNOSIS IN HANDLING UNFINISHED BUSINESS IN BEREAVEMENT <i>Salina Ho</i>	220
SCRIPTS	
HYPNOSIS ANTENATAL TRAINING FOR CHILDBIRTH (HATCH): INTERVENTION SCRIPT 2 <i>Allan Cyna, Marion Andrew, and Celia Whittle</i>	234
COMPLEX PAIN <i>Helen Rowe</i>	243
REVIEWS	248

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EDITORIAL

Welcome to the November 2007 edition of the *AJCEH*. In attempting to maintain a balance of interest between practitioners and researchers, this edition contains four research features, a reflective paper on hypnosis training, and three case studies, plus several hypnosis scripts. Book reviews complete the edition.

Ellen Legault and Jean-Roch Laurence from Canada detail some interesting responses amongst mental health workers' views on the validity of recovered memories of childhood sexual abuse, while Queenslanders Colette Roos and Kathryn Gow pose and answer a related question about the role of emotional arousal in suggestibility and recall.

Calvin Kai-Ching Yu from Hong Kong utilises the Creative Imagination Scale in investigating if one can foster positive attitudes towards hypnosis. In future editions, we commence the introduction of articles on hypnosis scales per se and their role in practice as well as research.

Feeling sleepy? Australian authors Gerard Kennedy and Harry Ball remind us of the value of short naps (with which some of us are becoming increasingly familiar).

Some of you may wonder if there is anything new under the sun when it comes to new learning in hypnosis and Harry Stanton, a Fellow of ASH and ASCH, invites us to question whether new processes are just new packaging and perhaps window dressing, rather than bringing any fundamental changes to hypnosis practices which substantially remain the same over time. Because of that he stresses the need for hypnosis training to stay in the hands of practiced professionals.

Jens-Jørgen Gravesen, from Denmark, takes us inward on an exploration of spontaneous trance and the use of introjects or ego states as helpers in hypnotherapy, and Salina Ho, from Hong Kong, walks us through a treatment process about grief and we include a family drawing utilised in the therapy.

Finally, a new fellow of ASH, James Auld, and Queensland Branch ASH President Susan Hutchinson-Phillips give us an insight into four books on topics of interest to those involved in the world of hypnosis.

Kathryn M. Gow

RECOVERED MEMORIES OF CHILDHOOD SEXUAL ABUSE: SOCIAL WORKER, PSYCHOLOGIST, AND PSYCHIATRIST REPORTS OF BELIEFS, PRACTICES, AND CASES

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Canadian psychiatrists, psychologists, and social workers were surveyed regarding their endorsement of beliefs and techniques thought to be associated with cases of memory recovery of child sexual abuse (CSA) and regarding the number of CSA cases seen. Two hundred and twenty usable questionnaires (24%) were returned. Fifty-five per cent of respondents reported at least one case of recovered memory. Therapists reported that 4.3% of clients recovered memories. Support for recovered memory validity was associated with use of more memory recovery techniques, including hypnosis and related techniques, and more reports of recovered memory. Psychiatrists were the most sceptical of recovered memory validity, and social workers the least. Professions did not differ on proportion of cases reported. The base rate of clients recovering memories was low, suggesting that there is not an epidemic of recovered memories of CSA. The reported rates are not negligible, however, and care must be exerted when exploring clients' past history.

Do mental health professionals practising in Quebec endorse beliefs and practices which could lead them to elicit false memories from clients? Ever since the publication of *The Courage to Heal* (Bass & Davis, 1988), a controversy concerning the validity of recovered memories of child sexual abuse (CSA) has waxed and waned in academic journals and the popular media. Since memories of CSA are sometimes recovered during a course of

This study was supported by a Medical Research Council of Canada studentship to Ellen Legault and by research grants to Jean-Roch Laurence from the Social Sciences and Humanities Research Council of Canada and the Fonds Québécois de la Recherche sur la Nature et en Technologie. Requests for reprints should be sent to Jean-Roch Laurence at jr.laurence@concordia.ca.

therapy (Andrews et al., 1995; Poole, Lindsay, Memon, & Bull, 1995), a sub-controversy concerns the nature of responsible therapeutic practice (e.g., Prout & Dobson, 1998). A central tension here comes from the conflicting goals of identifying true cases of CSA in adult clients and avoiding the induction of false memories. Partially because practices sometimes used to aid memory recovery (e.g., hypnosis and guided imagery) are also ones which have been shown to induce false memories in laboratory experiments (Laurence & Perry, 1983, 1988), authors tend to favour one goal over the other. In the present study, our concern was with the risks of creating false memories. We wanted to learn where Canadian clinicians placed themselves in the recovered memory debate and whether certain views and practices were associated with higher reported frequencies of cases of recovered memory.

Authors who disagree about the relative dangers of failing to identify true CSA cases and creating false ones tend to disagree about a wide variety of issues, including the nature of memory, the safety of the use of memory recovery techniques, the aims of therapy, and the motivation for questioning the validity of recovered memories (McConkey and Sheehan, 1995; Palm & Gibson, 1998; Prout & Dobson, 1998). These were the bones of contention which we believed would be likely to separate clinicians who reported seeing many cases from those who reported few or none. Two issues about the nature of memory seem particularly important. On the one hand, those who worry about inducing false memories stress the degree to which memories can be distorted and even created under certain conditions. On the other hand, those concerned with identifying all cases of CSA sometimes stress the persistence and stability of memories of traumatic events (e.g., Brown, Schefflin, & Hammond, 1998). Some even seem to argue that all, or most, forgotten events are recorded somewhere in the brain (or body) and are explained by retrieval problems alone (e.g., Brown et al., 1998; see also McNally, 2003). The notion that events leave permanent memory traces justifies the conviction that what cannot be remembered today can surely be remembered at some later time (e.g., Terr, 1994). The dual beliefs that memories are little affected by thoughts, fantasies, or post-event information and that experiences are permanently recorded in the brain, if held, could lead clinicians to be overly confident about the memory recovery process.

Books advising clinicians in the treatment of CSA (e.g., Saxe, 1993) often assert strong causal links between CSA and a variety of adult symptoms. Moreover, these books sometimes give lists of symptoms of a CSA history (e.g., Blume, 1990), suggesting that in the absence of memories, diagnoses of CSA

can still be made on the basis of symptoms. Some also recommend the use of special techniques to facilitate memory recovery. Some of these techniques, notably hypnosis and guided imagery, have been shown in laboratory research to induce distorted and even false memories (Hyman & Pentland, 1996; Laurence & Perry, 1988). It seems probable then that clinicians who use special techniques are likely to elicit more recovered (or false) memories in their clients than those who spurn such devices. It should be apparent, moreover, that the use of these techniques can be justified by the view of memory discussed above, that is, that memory is permanent and relatively impervious to distortion or creation.

Several studies have examined the prevalence of the use of memory recovery techniques and of cases of recovered memories reported by clinicians (Andrews et al., 1995; Polusny and Follette, 1996; Poole et al., 1995). One survey investigated in some detail the relevant beliefs endorsed by clinicians (Yapko, 1994a, 1994b). Certain patterns are distinguishable in these results. A large proportion of therapists have been shown to entertain at least some beliefs supportive of memory recovery validity, many of which are unsubstantiated. Yapko surveyed therapists attending psychotherapy conventions and hypnosis workshops. He found that 54% of therapists surveyed believed that "hypnosis can be used to recover memories of actual events from as far back as birth" (1994a, 1994b, p. 235). Clearly, the idea that hypnosis could be used in this way implies that there are memories from birth which exist somewhere in the person's mind. This confidence in the permanence of memory is somewhat misplaced because memory permanence has not been empirically supported (Loftus & Loftus, 1980).

Therapists have also reported employing a variety of techniques to aid memory recovery (Andrews et al., 1995; Palm & Gibson, 1998; Polusny & Follette, 1996; Poole et al., 1995; Yapko, 1994a, 1994b). For example, Yapko found that 56% of his 869 respondents used hypnosis (at least occasionally) to help clients recover memories (1994b). Yet hypnosis has long been known to lead to the creation of false memories in some cases (Laurence & Perry, 1983, 1988). Poole et al. (1995) conducted two mail surveys of a total of 900 randomly selected PhD level American and British psychologists, from which they obtained 202 respondents. Seventy-one per cent of the 195 respondents giving interpretable answers reported using at least one memory recovery technique. Poole et al. also found correlations ranging from .31 to .40 between the number of techniques used and the percentage of female clients who recovered memories of CSA during therapy (as reported by respondents). This

supports the view that special techniques are being used by ordinary therapists in the United States and Britain, and that the techniques are moderately successful in eliciting memories.

The number of respondents who report encountering cases varies across surveys. Andrews et al. (1995) and Polusny and Follette (1996) report the lowest proportions. Andrews et al. surveyed 4,005 randomly selected British psychologists, from which 810 returned usable responses. Twenty-three per cent of these respondents reported having at least one client who recovered memories of CSA in the preceding year of therapy with them. Polusny and Follette surveyed 1,000 randomly selected American psychologists. They obtained 173 usable responses, and 28% of their sample reported seeing at least one client who recovered memories during therapy in the previous year. Pope and Tabachnick (1995) surveyed 900 randomly selected psychologists from the APA Membership Register and obtained 382 usable questionnaire responses. Of these, 73% of respondents indicated that they had encountered at least one case of recovered memory. Poole et al.'s (1995) article reports that 85% of respondents to their first survey reported seeing at least one case of recovered memory. The wording of this item may have been misleading, however. In response to their second survey, with clearer wording, 71% of respondents reported at least one case of recovered memory.

Interestingly, cognitive and behavioural therapists seem to espouse different views from therapists of other orientations. Behavioural (Poole et al., 1995) and cognitive-behavioural (Polusny & Follette, 1996) therapist respondents assigned less importance to the role of remembering in therapy than did psychodynamic therapists. Moreover, cognitive-behavioural therapists were more likely to believe that false memories occur, but to report encountering fewer cases of memory recovery than therapists of other orientations (Andrews et al., 1995).

All previous surveys of therapists' beliefs and practices relating to recovered memories of CSA were conducted with English-speaking therapists in the United States or Britain. One purpose of the present study was, therefore, to gather data on Canadian therapists practising in the province of Quebec (the majority of whom are French-speaking). We wanted to learn more about the frequency with which Quebec practitioners endorse beliefs and practices likely to increase the probability of eliciting false memories. Moreover, previous surveys have focused either on therapist beliefs (Yapko, 1994a, 1994b), or cases (Pope & Tabachnick, 1995), or on the use of memory recovery techniques and

its relation to number of cases reported (Andrews et al., 1995; Palm & Gibson, 1998; Polusny & Follette, 1996; Poole et al., 1995).

In the present study, we wanted to test our prediction that beliefs, use of techniques, and frequency of cases of recovered memories are all associated statistically. In addition, only Yapko's (1994a, 1994b) study included non-psychologist mental health professionals. Thus, we wanted to know whether professions differ from each other in their attitudes and practices regarding memory recovery. The present study surveyed equal numbers of psychotherapists from three different professions (social work, psychology, psychiatry). Moreover, as noted above, confidence or skepticism about the validity of memories elicited in therapy is supported by a wide variety of arguments and assumptions. With the exception of Yapko's, previous surveys have focused largely on therapeutic practices, dealing somewhat summarily with beliefs. The present study therefore sought to tap the level of support, in each of the three professions sampled, for the full range of beliefs and arguments relating to recovered memory, and to relate these to use of memory recovery techniques and number of cases reported.

Two aspects of the debate were of special interest. Because the literature on memory distortion is an area of academic psychology (see, e.g., Brainerd & Reyna, 2005, for a review of false memory in the experimental context), we wanted to know whether psychologists would demonstrate more research-based knowledge of memory malleability than other professions. Second, we were interested in the role played by beliefs prevalent in the popular literature on recovered memory and CSA: Would professions differ in their beliefs about why the recovered memory debate exists, and in their respect for what Bowers and Farvolden (1996) refer to as the "authority of subjective experience" (p. 375)?

METHOD

Participants

Three hundred Quebec psychiatrists, clinical psychologists, and social workers were selected from professional lists (yielding a total of 900). The goal of the selection process was to obtain a random sample of all those who did clinical work with adults. Thus, for example, clinical neuropsychologists were included; however, social workers who worked exclusively in child protection were not. Obtainable information about the respondents varied for different professions. The most complete information was available for psychologists. The actual selection was made, after ineligible people were excluded, by beginning

with some randomly chosen name and then choosing every n th name from professional lists. (For social workers, this meant taking every tenth name; for psychiatrists, every third; and for psychologists, every twentieth name.)

Measures

The questionnaire consisted of 74 items concerning demographic information, estimates of the number of clients of different categories seen in the preceding two years, the use of certain therapeutic techniques, use of symptoms to diagnose a history of CSA, and endorsement of beliefs related to the recovered memory debate. The questionnaire was written in English and translated into French. The French and English versions were reviewed for clarity of expression and similarity of meaning. A pilot study was conducted by mailing both the forms (English and French) to 30 mental health professionals each, and eliciting comments. The definition of CSA — “Physical sexual contact perpetrated against someone 16 years of age or younger by a person 6 or more years older than the victim” — was taken from Poole et al. (1995, p. 427). The list of therapeutic techniques used (see Table 1) was a revised version of the list used in that study. A list of potential symptoms of CSA was based on lists found in popular self-help books such as Blume (1990). Respondents were asked to indicate the ones they believed suggested a CSA history.

Belief Scale

Support for the validity of recovered memory was estimated on the basis of responses to 40 items which asked respondents to rate their agreement with statements of belief on a 5-point Likert scale ranging from -2 to $+2$, with anchors of *strongly agree* and *strongly disagree*. Each statement was based on views expressed in either the popular or the research literature on recovered memories. For example, respondents were asked to indicate their agreement with the statement, “A history of child sexual abuse can be detected in someone who has no memories of abuse.” Another statement said, “Clients can come to believe that they were abused when in reality they were not.” Responses to this section were used to derive a measure of the degree of a respondent’s overall support for the validity of recovered memory (“Belief”). Statements supportive of the validity of recovered memories were scored positively and statements supportive of criticism of recovered memory were scored negatively. Unanswered items were scored 0, for “uncertain.” Higher scores indicated greater agreement with the recovered memory theory, and lower scores indicated less agreement.

Table 1: Memory Recovery Techniques and Symptoms

Techniques
Hypnosis ^a
Age regression ^a
Dream interpretation ^a
Guided imagery ^a
Instructions to give free rein to the imagination ^a
Bibliotherapy (please specify which books)
Family photographs as memory cues ^a
Keeping a journal ^a
Interpretation of physical symptoms (including body memories) ^a
Relaxation
Sodium amytal (or similar medication)
Support groups (with or without a therapist)
Rebirth
Other (please specify) ^a
Symptoms
Sexual difficulties
Poor relationships
Fear of men
Poor self-esteem
Depression
Anxiety
Insomnia
Chemical dependency
Amnesia for periods of childhood
Denial &/or repression of memories
Flashbacks
Night terrors
DID (formerly multiple personality disorder)
Body memories
Vaginal infection
Urinary tract infections
Trichotillomania
Eating disorders
Wearing a lot of clothing
Avoidance of mirrors
Self-mutilation
Stealing
Risk-taking behaviour
Inability to take risks

^a Memory recovery techniques derived from Poole et al. (1995).

The internal consistency of the Belief scale was assessed using Cronbach's alpha. Alpha was .88 ($df = 218, p < .01$). In addition, the test-retest reliability coefficient was calculated by giving the English version of the Belief scale to

27 undergraduate psychology students on two occasions, four weeks apart. This yielded a test-retest reliability coefficient of .85 ($p < .01$). Twenty items taken from the Belief section of the questionnaire were used to calculate two subscale scores. Because subscales incorporated fewer items than the Belief scale itself (and were therefore more vulnerable to distortion), when even a single item was missing from a subscale, the respondent was dropped from the entire scale. One of the two subscales was concerned with beliefs about the nature of memory. Five items tapped beliefs about memory malleability and five tapped beliefs about its permanence. Together, these two 5-item clusters formed a measure of Expertise (see Table 2). Each statement was deemed to be either true or false based on results from the literature concerning memory distortion. Because of the impossibility of distinguishing logically between the truth value of different levels of agreement (e.g., *strongly agree* vs *agree*) the two levels of agreement and disagreement were collapsed. Items were scored so that a higher score indicated greater overall familiarity with this research literature, and a lower score indicated that the respondent entertained misconceptions about memory processes. Because the misconceptions about memory, which were tapped in the questionnaire, are offered as support for validity of recovered memories, items were scored in an opposite direction for the total Belief score and for the Expertise subscale score. For example, the statement that “everything one experiences is permanently recorded in one’s brain” is unsupported by research evidence (Loftus & Loftus, 1980), and has been used as an argument for recovered memory validity (Terr, 1994). Conversely, the statement that “post-event information can alter a person’s recall of an event” is supported by research (see, e.g., Loftus, 1993) and suggests that memory is malleable. The maximum score possible on Expertise was 10 and the minimum was -10. Based on the data from the 207 respondents who answered all items, alpha for Expertise was .88 ($p < .01$).

A second subscale was called Social Context. Items on this scale were intended to tap popular beliefs unrelated to the nature of memory. Instead, they paraphrased views concerning what should happen in therapy and the authority of personal experience. (See Table 3 for items.) For example, one item read, “It doesn’t really matter clinically whether memories of abuse are accurate or not. What matters is what the client believes.” Another said, “A scientific appraisal of the veracity of recovered memories is necessary if we want to get at the truth about their validity.” In calculating this score the distinction between levels of agreement was maintained. Higher scores indicated stronger support for views which have been used to support the

validity of recovered memories. The maximum score possible was 20 and the minimum was -20. Alpha for this scale was .75 ($df = 194$, $p < .01$) based on the responses of the 196 respondents who answered all items.

Procedure

Potential respondents were mailed questionnaires along with a cover letter explaining the study and inviting their participation. Stamped, addressed return envelopes were provided in which to mail the completed questionnaire. In addition, a response card with the participant's name was included so that respondents could indicate whether or not they were returning the questionnaire. This card was stamped and addressed, so that it could be returned separately. Thus, participants could indicate that they had returned the questionnaire without revealing their identity on the questionnaire itself, which remained completely anonymous. A reminder notice was mailed four weeks later to all those who did not return a response card. In addition, subsamples of social workers and psychologists were contacted by telephone in order to encourage their participation. (Telephone numbers were not available for psychiatrists.)

RESULTS

Characteristics of the Respondents

Respondents were 220 therapists who returned questionnaires. Of the 300 questionnaires sent to social workers, 5 were undeliverable and 87 were returned completed, making a return rate of 29%. Eighty-five of these questionnaires were usable. Out of 300 questionnaires sent to psychologists, 17 were not deliverable and 76 were returned, yielding a response rate for psychologists of 27%. From those questionnaires mailed to psychiatrists, 5 were undeliverable. Fifty-nine completed questionnaires were returned, a response rate for psychiatrists of 20%. The combined rate of usable responses for all professions was 24%.

On average, respondents were 46.15 years old ($SD = 9.80$), had practised for 17.42 years ($SD = 9.83$), and 56% of them were female. Thirty-seven per cent were social workers, 35% psychologists, and 27% were psychiatrists.

Beliefs About the Validity of Recovered Memories¹

The mean total Belief score for the whole sample ($N = 220$) was 1.65 with a standard deviation of 19.93. The lowest possible score was -80, the lowest obtained score was -59. The highest possible score was 80 and the highest obtained score was 54. When all participants with any missing answers were excluded, these statistics remained essentially the same ($M = 1.23$, $SD = 21.94$, $N = 148$). Highest and lowest obtained scores were unchanged.

Alpha was set at .05, two-tailed, for all statistical tests. One-way analyses of variance (ANOVAs) were used to compare scores for different professions. Total scores on Belief were highest for social workers, followed by psychologists, and by psychiatrists ($M_s = 11.31, 0.88, -11.27$, $SD_s = 12.97, 21.90, 18.13$), ($F [2, 217] = 27.96$, $MSE = 318.70$, $p < .001$). Tukey's Honestly Significant Difference (HSD) was used as a post hoc test. This revealed that each of the groups was significantly different from the other ($p < .001$), with social workers being most favourable to arguments supportive of recovered memory validity and psychiatrists being the least.

Psychiatrists obtained the highest Expertise scores and social workers the lowest, with psychologists scoring in the middle ($F [2, 205] = 24.71$, $MSE = 13.31$, $p < .001$, $HSD p < .01$), indicating that psychiatrists were the professionals most in agreement with the research literature on the malleability and impermanence of memory, and social workers the least. Mean Expertise scores for social workers, psychologists, and psychiatrists were, in order, -0.05, 1.97, and 4.40 ($SD_s = 3.41, 4.17, 3.24$).

Social workers obtained the highest scores on Social Context, and psychiatrists the lowest, with psychologists again falling in the middle ($F [2, 193] = 20.32$, $MSE = 47.21$, $p < .001$, $HSD p < .05$). Mean Social Context scores for social workers, psychologists, and psychiatrists were 3.66, -0.62 and -4.12 respectively ($SD_s = 5.46, 7.87, 7.34$). Thus, the practitioners most in agreement with popular beliefs supportive of recovered memory validity, but unrelated to memory, were social workers, and the ones least in agreement were psychiatrists.

In addition to scoring lowest on Belief, psychiatrists also differed from other groups in having a lower proportion of females ($X^2 [2; N = 219] = 50.79$, $p < .0001$). Seventy-six per cent, 62%, and 17% of social workers, psychologists, and psychiatrists, respectively, were women. To test the possibility that differences observed between professions were due to differences in proportions of females,

¹ Copies of questionnaires and of frequencies of response by profession for each item are available from the authors.

we compared scores of male and female respondents. Female respondents scored higher than male subjects on Belief (t [217] = 5.40, $p < .001$, $M_s = 7.74, -6.06$, $SD_s = 18.80, 18.79$ for female and male respondents, respectively). In other words, female clinicians were more favourable to memory recovery validity. However, when both Profession and Gender were used to predict Belief scores in a multiple linear regression, Profession added 11% of unique variance, while gender added only 3% of unique variance to the prediction of Belief by Profession. This implies that gender does not account for the entire relation between Profession and Belief.

The differences between professions on Belief, Expertise, and Social Context scores were also consistently apparent in differences on individual items. There was a stable tendency for the responses of psychiatrists to be most critical of the validity of recovered memories, social workers to be most supportive, and psychologists to fall in the middle, but closer to the social workers. For responses to individual items, see Tables 2 and 3.

Symptoms

Respondents were asked to check off, out of a list of 24 symptoms, those they believed indicated a history of CSA. In making this selection, they were obliged to choose whether a symptom indicated *definite abuse* or only *possible abuse*. Respondents responded, on average, that only 1.36 symptoms indicated definite abuse ($N = 218$, $SD = 2.92$), while the average number of symptoms of possible abuse endorsed was 13.92 ($N = 217$, $SD = 7.41$). No symptoms were more frequently chosen than others. The professions did not differ from each other on the number of symptoms of possible abuse endorsed. Symptoms of definite abuse showed a somewhat different pattern, however. Whereas 53% of social workers indicated that at least one symptom indicated definite abuse, only 24% of psychologists and 36% of psychiatrists endorsed one or more such symptoms. Thus, social workers were the least reticent about identifying symptoms of definite abuse.

Memory Recovery Techniques

Respondents were asked to “please place a check by any technique that you yourself use or for which you refer clients in order to help them remember childhood events.” A list of 13 memory recovery techniques followed. They were also asked to “draw a line through any technique that you believe should not be used to help clients remember events from childhood.” Social

Table 2: Social Workers' (SW), Psychologists' (Psy), and Psychiatrists' (MD) Agreement With Statements of the Subscale 'Expertise'

Statement	SW (n) %	Psy (n) %	MD (n) %
Malleability			
Post-event information can alter a person's recall of an event	(65) 90	(70) 97	(51) 96
Imaginary events can seem subjectively real when they are frequently rehearsed	(59) 86	(61) 87	(56) 97
It is possible for people to create memories for traumatic events which they have heard described but did not experience	(36) 52	(45) 70	(44) 86
Hypnotically obtained memories are less reliable than simple remembering ^a	(8) 16	(16) 47	(29) 71
Hypnosis can be used in such a way as to create confabulated memories ^a	(24) 53	(39) 78	(45) 94
Permanence of memory			
Everything one experiences is permanently recorded in one's brain	(65) 84	(52) 71	(26) 51
Sensory impressions from early in life (preverbal memories) may form the basis for reliable memories which can be recovered later on	(51) 71	(41) 61	(26) 49
Traumatic events create lasting visual images which cannot be altered	(16) 21	(10) 15	(9) 18
Hypnosis enables people to accurately remember things they otherwise would not ^a	(41) 65	(26) 41	(17) 36
Hypnosis can be used to recover memories of actual events from as far back as birth ^a	(44) 80	(37) 67	(21) 46

Note: Percentages represent agreement versus disagreement, excluding undecided.

^aThese items were taken from Yapko (1994b). However, the two malleability items from Yapko were revised.

Table 3: Social Workers' (SW), Psychologists' (Psy), and Psychiatrists' (MD) Agreement With Statements of the Subscale 'Social Context'

Statement	SW (n) %	Psy (n) %	MD (n) %
Denial of the existence of satanic ritual abuse is similar to denial of horrifying realities like the Holocaust	(43) 67	(36) 67	(20) 44
A scientific appraisal of the veracity of recovered memories is necessary if we want to get at the truth about their validity	(20) 29	(33) 51	(33) 66
The real experts on traumatic memory are not the researchers who study memory but the victims themselves	(46) 73	(32) 52	(13) 27
Recovered memories must be reliable because no one wants to have been abused as a child	(40) 54	(17) 27	(9) 16
Questioning the veracity of women's memories of sexual abuse is a new way of saying that women are hysterical and unreliable	(55) 68	(31) 44	(17) 30
A primary motivation for the statement that recovered memories are unreliable is to establish a legal defense for sexual abuse	(52) 71	(33) 51	(14) 30
People adopt the false memory theory because it is easier than facing the truth about sexual abuse	(41) 66	(24) 44	(19) 39
Blaming present problems on past abuse may prevent clients from taking responsibility for their own lives	(30) 37	(38) 55	(37) 70
It doesn't really matter clinically whether memories of abuse are accurate or not. What matters is what the client believes	(52) 67	(41) 63	(23) 44
It is very important that a client who was sexually abused remember that abuse in order for therapy to be effective	(36) 49	(31) 48	(25) 52

Note: Percentages represent agreement versus disagreement, excluding undecided.

workers and psychologists endorsed more memory recovery techniques than psychiatrists ($H [2, N = 206] = 9.75, p < .01, Mdns = 3, 3, \text{ and } 2$, for social workers, psychologists and psychiatrists, respectively). Social workers and psychologists rejected significantly fewer techniques than psychiatrists ($H [2, N = 205] = 20.53, p < .001, Mdns = 1, 2 \text{ and } 4$). No one technique was endorsed more frequently than others. Only the use of sodium amytal (or equivalent) was endorsed less frequently than the others and rejected more often.

Hypnosis (22%), age-regression (20%) and hypnosis-like techniques (guided imagery [35%], imagination work [44%], relaxation [48%]) were endorsed by a fair number of the sample as memory recovery techniques. The use of these recovery techniques is rather problematic, if we keep in mind that 53% of our sample agreed that hypnosis could be used to recover memories of actual events from as far back as birth.

Recovered Memory Cases

In order to arrive at an estimate of the number of recovered memory cases encountered, participants were asked how many adult clients (18 years or older) they had treated in therapy over the past two years and (a) how many of these clients reported experiencing some type of sexual abuse during childhood. In addition to the number of abused clients they had seen, respondents were asked: (b) how many of such clients, at the beginning of therapy, "had no memory or suspicion of CSA (i.e., they were consulting you for some other reason)"; (c) how many, at the beginning of therapy, "thought they had been abused without having any specific memories of the abuse"; and (d) "how many already remembered being abused when therapy began." The sum of the numbers given in answer to (a) minus (d) was taken as the number of clients with recovered memories of CSA. This was usually the same as (b) plus (c). However, some respondents understood (b) to include those who did remember abuse but were consulting for some other reason. Adding (b) to (c) would therefore have overestimated the number of cases. For this reason, the estimate was obtained by subtraction.

One hundred and five respondents (55% of those who responded to the question) indicated that at least one of their clients recovered memories of CSA. The professions did not differ significantly in the proportion of respondents who reported having recovered memory cases (58%, 54%, 51% for social workers, psychologists, and psychiatrists respectively).

The proportion of clients who recovered memories during the course

of therapy was calculated by dividing the number of clients who recovered memories by the total number of clients seen who did not have memories at the beginning of therapy. This yielded a rate of memory recovery expressed as a percentage of those clients who began therapy without memories of CSA. The variable created in this way was positively skewed. Therefore, nonparametric tests were used to compare rates of memory recovery reported by different professions. Although rates appeared rather different (Mdn s = 0.56%, 1.08%, 0.00% for social workers, psychologists, and psychiatrists respectively), professions did not differ significantly from each other on this dimension (Mdn = 0.56%, semi-interquartile range = 3.13%, GM = 4.31%, SD = 8.16).

To summarise, the level of psychologists' expertise concerning memory processes proved to be inferior to that of psychiatrists. Social workers were more supportive of beliefs consistent with arguments in popular culture than other professions. All professions endorsed a variety of symptoms of possible abuse. Psychiatrists endorsed fewer memory recovery techniques and rejected more than other professions. Despite differences in expressed support for the validity of recovered memory, there were no significant differences between professions in proportion of cases reported.

Theoretical Orientation

Respondents indicated the theoretical orientations they favoured. Those who endorsed either cognitive, behavioural, cognitive-behavioural, or social-learning as their first choice of theoretical orientation were considered cognitive-behavioural therapists. Those who endorsed psychodynamic, psychoanalytic, or interpersonal orientations first were considered psychodynamic. Therapists who listed humanist/client-centered or existential orientations as their first choice were called humanist, and those who endorsed either psychosocial² or systemic orientations were considered systemic therapists. Those who chose medical-pharmacological orientation first (a subsample of psychiatrists) were so classified.

Cognitive-behavioural therapists obtained significantly lower Belief scores than all but the medically oriented therapists (F [4, 190] = 7.42, p < .0001, HSD p < .05, M s = -15.46, -6.50, 0.89, 5.77, 7.61, SD s = 19.20, 19.76, 20.80, 18.72, 16.75, for cognitive-behavioural, medically oriented, psychodynamic, humanist, and systemic therapists, respectively). In spite of the differences between theoretical orientations in expressed support for the validity of

² "Psychosocial" is a social work orientation which views personal problems as resulting from the interaction of the individual and the environment and which seeks to resolve difficulties by facilitating personal growth and the ability to affect the environment.

recovered memory, there were no significant differences in the number of techniques endorsed. However, cognitive-behavioural therapists rejected more memory recovery techniques than systemic and humanist therapists ($H [4, N = 185] = 14.20, p < .01, Mdns = 3, 0, 1$ for cognitive-behavioural, systemic, humanist, respectively), although they did not differ significantly from other orientations. Cognitive-behavioural therapists also reported encountering a lower proportion of cases of recovered memory than psychodynamic and humanist therapists ($H [4, N = 162] = 21.23, p < .001, Mdns = 0.00\%, 3.45\%, 2.86\%$ for cognitive-behavioural, psychodynamic and humanist therapists), although, again, they did not differ significantly from other orientations.

Prediction of Recovered Memory Cases

Higher Belief scores (indicating stronger endorsement of beliefs supportive of recovered memory) predicted both a wider variety of techniques endorsed and a higher rate of memory recovery. Scores on a subscale of Belief (Social Context) were a significantly ($p < .05$) better predictor of number of memory recovery techniques used than Belief ($r [176] = .35; p < .001$ vs. $r [198] = .29, p < .001$). Social Context scores reflected agreement with arguments for memory recovery validity unrelated to the nature of memory. They were also a better predictor ($p < .05$) of rate of memory recovery than Belief scores ($r [160] = .41; p < .001$ vs. $r [175] = .32; p < .001$). Unlike Social Context, scores on Expertise were not strongly associated with rate of memory recovery ($r = -.20$). Use of a greater number of techniques was also associated with higher rate of memory recovery ($r [173] = .33; p < .001$).

Representativeness of the Sample

It is difficult to know how well these data reflect the views and the practices of Quebec clinicians without some indication of the representativeness of the sample. One way to get an indication of this is to consider return rates. Return rates from survey studies in this area vary from 43% to 22% (Andrews et al., 1995; Palm & Gibson, 1998; Polusny & Follette, 1996; Poole et al., 1995; Pope & Tabachnick, 1995). Our rate of return (24% for usable questionnaires) is therefore comparable to the lower end of this range. It should be pointed out, however, that rather than targeting therapists who would be particularly interested in this subject, we surveyed a very broad range of therapists. For example, neuropsychologists were included in our mailing because we did not want to exclude anyone who worked with adults. In the case of psychiatrists, moreover, we had no way of knowing

which ones worked only with children. Thus, pediatric psychiatrists had as much chance of being included in the survey as those working only with adults. In addition, we learned from phone calls and answer cards that many of those who did not return questionnaires had moved, died, retired, or were serving in purely administrative positions. Therefore, we did not expect as high a rate of return as we would have, had our sample been more selective.

DISCUSSION

The present study attempted to verify whether Quebec psychiatrists, psychologists, and social workers endorsed beliefs and practices likely to lead them to elicit memories of CSA in clients, and whether these professions differed from each other in their endorsements of these notions and in number of cases encountered. Further, we wanted to see whether theoretical orientation was associated with differences on these dimensions, and perhaps most important, how strong were the relationships between beliefs, practices, and number of reported cases of recovered memories among all professions.

The results suggest that Quebec clinicians resemble other groups of clinician-respondents in their endorsement of certain beliefs (Yapko, 1994a, 1994b) and in the frequency with which they use memory recovery techniques and encounter cases of recovered memory. As in previous studies (Palm & Gibson, 1998; Polusny & Follette, 1996; Poole et al., 1995) Quebec therapists answering a survey tended to endorse the use of a variety of memory recovery techniques. The majority of respondents (55%) reported that at least one client recovered a memory of CSA during the previous two years. Respondents also reported that a median of 0.56% of their clients recovered memories. (The mean was 4.31%, reflecting the uneven distribution of cases.)

As did Poole et al. (1995), the present survey found a correlation ($r_s = .33$) between rate of memory recovery and number of memory recovery techniques used (e.g., hypnosis). The degree of agreement with arguments supportive of the validity of recovered memories also contributed to prediction of the rate of memory recovery cases ($r_s = .32$). However, agreement with a subscale of Belief (Social Context), which tapped arguments unrelated to memory but reflecting popular beliefs about the role of truth and how we know it, and the reasons that a debate about recovered memory validity exists, was an even better predictor of rate of recovered memory cases than overall Belief ($r_s = .41$).

The three professions surveyed (social workers, psychologists, and psychiatrists) did not differ significantly in the number of cases of recovered

memories reported. Nevertheless, as revealed by mean differences on the Belief scale of the questionnaire, psychiatrists were the most skeptical of arguments supportive of recovered memory therapy, and social workers the least. On the other hand, the range of possible scores was from +80 to -80 and ratings of 0 on individual items indicated uncertainty. Thus, although mean differences were significant, the actual means for all the professional groups (11.31, 0.88, -11.27) were actually rather close to 0. Although respondents frequently indicated certainty on individual items by picking one of the extreme response options (e.g., 2, *strongly agree*) responses, across items and across individuals, seem to have canceled each other out to an important extent. (The range of scores was rather large, from -59 to 54.)

Perhaps one conclusion to be drawn is that although psychiatrists were quite consistently more conservative than psychologists and social workers, even psychiatrists were only *relatively* skeptical of beliefs supportive of the validity of recovered memories. Agreement with items which would tend to lead a clinician to be cautious was often balanced by agreement with another one which would lead to lack of caution. For example, the role of defense mechanisms in forgetting was quite strongly supported, even by psychiatrists. Ninety-eight per cent of the whole sample (and 95% of psychiatrists) agreed that "when an adult who was frequently abused as a child has difficulty remembering some of the particular incidents of this abuse, it is likely to be due to defense mechanisms." Very few respondents disagreed or were uncertain about this statement. Moreover, 81% of the whole sample (and 75% of psychiatrists) agreed that "forgetfulness for experiences occurring before the age of about three (childhood amnesia) is most likely to be caused by defense mechanisms (e.g., repression)." (Note that the percentages reported here are based on those who expressed an opinion, excluding those who were uncertain or failed to answer.)

The contrast between professions was also apparent in mean score differences on the Expertise subscale (tapping expertise concerning the literature on memory distortion). Here, mean differences between professions seemed somewhat larger (means were 0.05, 1.97, 4.40 on a scale which varied from -10 to 10). Psychiatrists scored highest and social workers lowest. Naturally, such differences are reflected in responses to specific items. For example, a large majority (84%) of social workers agreed that "everything one experiences is permanently recorded in one's brain" while only 51% of psychiatrists did so (with psychologists falling in the middle with 71%). Despite the rather dramatic difference between professions, a majority of psychiatrists

did endorse this statement. The notion that experience is permanently stored in memory and that hypnosis allows access to it seems to meet with substantial agreement among respondents to different surveys. Many therapists from both Yapko's (1994a, 1994b) study (54%) and the present (65%) agreed that "hypnosis can be used to recover memories of actual events from as far back as birth." (Again, the contrast between professions was evident in response to this item, with 80% of social workers endorsing it, but only 46% of psychiatrists agreeing.)

On the other hand, familiarity with the well-established phenomenon of memory malleability was widespread. For example, 94% of our respondents agreed that "post-event information can alter a person's recall of an event" and 89% agreed that "imaginary events can seem subjectively real when they are frequently rehearsed." And on these items, professions agreed with each other. There were some important exceptions to this rule, however. Answers to items related to memory malleability in special contexts were quite different from those related to memory malleability in general. This was especially marked for social workers and psychologists. Two of those items referred specifically to the reliability of memories obtained with the aid of hypnosis. Eighty-four per cent of social workers and 68% of psychologists, but only 29% of psychiatrists, disagreed with the true statement that "hypnotically obtained memories are less reliable than simple remembering." A second item said "hypnosis can be used in such a way as to create confabulated memories." Forty-seven per cent of social workers, 22% of psychologists, but only 6% of psychiatrists disagreed with this well-supported statement. Another item referred specifically to the creation of traumatic memories: "It is possible for people to create memories for traumatic events which they have heard described but did not experience." Forty-eight per cent of social workers, 30% of psychologists, and 14% of psychiatrists disagreed. Thus, the widespread notion that memory is malleable was often not applied by therapists to the specific contexts of hypnosis and of memory for trauma. For social workers this was especially dramatic. Yapko (1994a, 1994b) found a similar discrepancy between respondents' recognition that memories could be falsely recovered and their belief that this did not occur in hypnosis.

Professions also differed consistently in their responses to items of the Social Context scale. For example, 71% of social workers and 51% of psychologists, but only 30% of psychiatrists, agreed that "a primary motivation for the statement that recovered memories are unreliable is to establish a legal defense for sexual abuse." Moreover, responses to this scale were more predictive of whether respondents reported cases than expertise about memory. The correlation

between the rate at which recovered memory cases are reported and Expertise was small ($r_s = -.20$), whereas the correlation between rate of memory recovery and Social Context was relatively large ($r_s = .41$). Even though Social Context is a subscale of Belief, Social Context was a better predictor of rate of memory recovery than the latter ($r_s = .32$ vs. $.41$). This would imply that what really matters in predicting cases may not be how much a person knows about the risks of memory distortion, but how much one is influenced by beliefs current in popular culture. On the other hand, it may signify that witnessing memory recovery has a greater impact on these popular beliefs than it does on beliefs about memory. In addition to being generally more conservative in their endorsement of arguments supportive of recovered memory validity, psychiatrists showed greater conservatism than social workers and psychologists in their reported use of memory recovery techniques.

Therapists' theoretical orientations were non-significantly related to the number of techniques endorsed. However, cognitive-behavioural clinicians were significantly more critical of arguments supportive of the validity of recovered memories than all but those psychiatrists who reported being medically oriented. Cognitive-behavioural therapists also reported a lower percentage of recovered memory cases than humanist and psychodynamic therapists. The finding that behavioural and cognitive-behavioural therapists differ from other orientations begins to appear quite robust. As noted above, previous studies (Polusny & Follette, 1996; Poole et al., 1995) reported that these therapists accorded less importance to remembering in therapy than did psychodynamic therapists, and less importance to the role of early experience (Poole et al., 1995). In addition, Andrews et al. (1995) found that being a cognitive-behavioural therapist was the only factor they examined which was consistent in predicting both lack of theoretical support for the validity of memory recovery and low number of cases reported. That is, they found that cognitive-behavioural therapists reported fewer cases of recovered memories, weaker endorsement of the possibility of accurate recovered memory, and stronger endorsement of belief in the possibility of false memory.

In conclusion, in this study of mostly French-speaking Quebec clinicians we found large and consistent differences between professions in their confidence in the validity of recovered memories of CSA and the beliefs supporting this validity. Psychiatrists were the most sceptical, and social workers the most favourable, to such views. Contrary to expectation, psychologists did not demonstrate greater expertise about memory distortion than other professions. In fact, psychiatrists revealed greater awareness of memory malleability and impermanence than did

either psychologists or social workers. In addition, we found that psychologists' and social workers' opinions were markedly more consistent than those of psychiatrists with views prevalent in the popular literature on memory recovery. Despite these differences, however, *all* professions expressed support of some of the beliefs underlying confidence in the validity of recovered memory. For example, the majority of members of all professions attributed some types of forgetting to the action of defense mechanisms. Moreover, despite expressing less theoretical support for the validity of recovered memories of CSA, psychiatrists did not differ significantly from other professions in the frequency with which they reported encountering cases.

One difficulty in this and similar studies is how to estimate the number of cases of recovered memories. Some previous authors have treated all cases of remembering as memory *recovery* (e.g., Pope & Tabachnick, 1995; for an exception see Qin, Goodman, Bottoms, & Shaver, 1998). We used the number of clients (based on respondents' reports) who began therapy with no memories of CSA, but who later reported such a history. We cannot know whether this number indexed new narratives in each case, or whether it sometimes indexed ordinary memories. Thus, this operationalisation could lead to an overestimate of the true number of cases of recovered memories. On the other hand, this measure excludes clients who began therapy with memories of CSA, but who, in response to suggestion, recovered new memories of episodes during therapy and who can also be considered cases.

Another difficulty is that some of the data we gathered were based on retrospective reports, and as such must be interpreted with caution. However, these retrospective data were also consistent with those from other studies. All relevant studies indicate frequent endorsement of the use of suggestive mnemonic techniques (Andrews et al., 1995; Palm & Gibson, 1998; Polusny & Follette, 1996; Poole et al., 1995) and large proportions of therapists who encounter at least some cases of recovered memory of CSA (Andrews et al., 1995; Palm & Gibson, 1998; Polusny & Follette, 1996; Poole et al., 1995; Pope & Tabachnick, 1995). Our findings of a statistical association between reported belief, use of mnemonic techniques, and cases are also consistent with those of prior research (Andrews et al., 1995; Laurence & Perry, 1983; Perry & Nogrady, 1985; Palm & Gibson, 1998; Poole et al., 1995), although the present study was unusual in linking all of these variables in a single study. Thus, although there are important differences between professions, Quebec clinicians do seem to resemble American and British psychologists in their general support of the validity of recovered memories and the frequency with which they employ

mnemonic techniques and encounter cases. These data, consistent with those from other studies, show that there is indeed a relationship between certain beliefs and practices reported by clinicians and the number of cases they report seeing. This should bring attention to the risks inherent in uncritically embracing some of these notions and practices.

REFERENCES

- Andrews, B., Morton, J., Bekerian, D. A., Brewin, C. R., Davies, G. M., & Mollon, P. (1995). The recovery of memories in clinical practice: Experiences and beliefs of British Psychological Society practitioners. *The Psychologist*, 8, 209–214.
- Bass, E., & Davis, L. (1988). *The courage to heal: A guide for women survivors of child sexual abuse* (3rd ed.). New York: Harper & Row.
- Blume, E. S. (1990). *Secret survivors: Uncovering incest and its aftereffects in women*. New York: Wiley.
- Bowers, K. S., & Farvolden, P. (1996). Revisiting a century-old Freudian slip — From Suggestion Disavowed to the Truth Repressed. *Psychological Bulletin*, 119, 355–380.
- Brainerd, C. J., & Reyna, V. F. (2005). *The science of false memory*. New York: Oxford University Press.
- Brown, D., Schefflin, A. W., & Hammond, D. C. (1998). *Memory, trauma treatment, and the law*. New York: W. W. Norton.
- Hyman, I. E., Jr, & Pentland, J. (1996). The role of mental imagery in the creation of false childhood memories. *Journal of Memory and Language*, 35, 101–117.
- Laurence, J.-R., & Perry, C. (1983). Hypnotically created memory among highly hypnotisable subjects. *Science*, 222, 523–524.
- Laurence, J.-R., & Perry, C. (1988). *Hypnosis, will and memory: A psycholegal history*. New York: Guilford.
- Loftus, E. F. (1993). The reality of repressed memories. *American Psychologist*, 48, 518–537.
- Loftus, E. F., & Loftus, G. R. (1980). On the permanence of stored information in the human brain. *American Psychologist*, 35, 409–420.
- McConkey, K. M., & Sheehan, P. W. (1995). *Hypnosis, memory, and behavior in criminal investigation*. New York: Guilford.
- McNally, R. J. (2003). *Remembering trauma*. Cambridge, MA: Harvard University Press.
- Palm, K. M., & Gibson, P. (1998). Recovered memories of childhood sexual abuse: Clinicians' practices and beliefs. *Professional Psychology: Research and Practice*, 29, 257–261.
- Perry, C., & Nogrady, H. (1985). Use of hypnosis by the police in the investigation of crime: Is guided imagery a safe substitute? *British Journal of Experimental and Clinical Hypnosis*, 3, 25–31.
- Polusny, M. A., & Follette, V. M. (1996). Remembering childhood sexual abuse: A national survey of psychologists' clinical practices, beliefs, and personal experiences. *Professional Psychology: Research and Practice*, 27, 41–52.

- Poole, D. A., Lindsay, D. S., Memon, A., & Bull, R. (1995). Psychotherapy and the recovery of memories of childhood sexual abuse: U.S. and British practitioners' opinions, practices, and experiences. *Journal of Consulting and Clinical Psychology*, 63, 426–437.
- Pope, K. S., & Tabachnick, B. G. (1995). Recovered memories of abuse among therapy patients: A national survey. *Ethics and Behavior*, 5, 237–248.
- Prout, P. I., & Dobson, K. S. (1998). Recovered memories of childhood sexual abuse: Searching for the middle ground in clinical practice. *Canadian Psychology*, 39, 257–265.
- Qin, J., Goodman, G. S., Bottoms, B. L., & Shaver, P. R. (1998). Repressed memories of ritualistic and religion-related child abuse. In S. J. Lynn & K. M. McConkey (Eds.), *Truth in memory* (pp. 260–283). New York: Guilford.
- Saxe, B. J. (with Johnson, S. M., Barrett, P., Erickson-Fraser, L., Kalil, K., & Collins, N.) (1993). *From victim to survivor: A group treatment model for women survivors of incest*. Ottawa: National Clearinghouse on Family Violence, Health Canada.
- Terr, L. (1994). *Unchained memories: True stories of traumatic memories lost and found*. New York: Harper Collins.
- Yapko, M. D. (1994a). Suggestibility and repressed memories of abuse: A survey of psychotherapists' beliefs. *American Journal of Clinical Hypnosis*, 36, 163–171.
- Yapko, M. D. (1994b). *Suggestions of abuse: True and false memories of childhood sexual trauma*. New York: Simon & Schuster.

FOSTERING POSITIVE ATTITUDES TOWARDS HYPNOSIS THROUGH A MEASURE OF MENTAL IMAGERY ABILITY

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The current study was geared towards demonstrating the possibility of modifying the attitudes of Chinese people towards hypnosis and being hypnotised through a measure of mental imagery ability. Ninety experimental and 30 control subjects who had not received any forms of hypnosis previously were included. Both groups were required to complete the same set of inventories, preceding and following the intervention, in which the experimental group received an imagery test (the Creative Imagination Scale). The present findings showed that the experience of imaginative suggestions had a positive impact on the subjects' attitudes, along with changes in beliefs about hypnosis and its effects.

Much work has been devoted to the investigation of modifying attitudes towards hypnosis. Amongst various interventions, providing people with analogous hypnotic experience by administering a suggestibility test with, or without, a trance induction is perhaps the most direct and confronting one for demystifying the process of hypnosis, as well as desensitising its associated fears. However, the effects of such vivo method are far from straightforward. Explicitly labelling the intervention process as “hypnosis” or a “hypnotisability test” has a substantial impact on the intervention outcomes.

The Creative Imagination Scale (CIS) is particularly suitable for testing the effect of labelling. The CIS was constructed by Barber and Wilson (1977, 1978) to measure responsiveness to waking hypnotic suggestions, so as to meet the need for a non-authoritarian scale, which guides subjects to produce the phenomena themselves and can be delivered with, or without, a trance induction. McConkey, Sheehan, and White (1979) have criticised the validity of the CIS as a hypnotic or non-hypnotic suggestibility measure on the grounds that the CIS was correlated weakly with the Harvard Group Scale

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of Hypnotic Susceptibility (HGSHS:A), one of the widely accepted tests for measuring hypnotisability. This was in stark contrast to some other studies which yielded much higher correlations (Hilgard, Sheehan, Monteiro, & MacDonald, 1981; Laidlaw & Large, 1997). In a similar vein, Spanos, Gabora, Jarrett, and Gwynn (1989) documented a variety of correlations between the CIS and another hypnotisability test, the Carleton University Responsiveness to Suggestion Scale (CURSS), which were dependent on the expectations embraced by the subjects. The authors therefore asserted that the discrepant correlations were attributable to how the CIS was presented to the subjects. The higher correlation may be due to the CIS being viewed as an alternative measure of hypnotisability, whereas avoiding this direct connection in the perceptions of the subjects may contribute to the lower correlation.

In their original study, Barber and Wilson (1977) varied the opening instructions to the CIS during the research project. For subjects in one group, the CIS test was preceded by “think-with” instructions that defined the CIS as a measure of creative imagination and that encouraged subjects to become actively involved in their imaginings. Subjects in another group were administered a standard hypnotic induction procedure prior to the administration of the CIS. Interestingly, the subjects who were given the “think-with” instructions scored significantly higher on the CIS than those who received the hypnotic induction.

Following this study, comparable findings have been accumulated to provide further substance to and explanations of the notion that defining the situation as hypnosis may induce negative attitudes and resistance and therefore suppress responses to suggestions. For instance, it was found that some non-responsive subjects conceptualise hypnosis negatively and perceive it as something that “just happens” to subjects who wait passively for its occurrence (Barber, 1979; Katsanis, Barnard, & Spanos, 1988; Spanos, 1986). Moreover, when arranged in hypnotic contexts, some people (in particular low hypnotisables) do more than simply fail to cooperate; they actively behave in a counterdemand fashion in order to emphasise their status as not hypnotised and not responsive to suggestions (Jones & Spanos, 1982; Lynn et al., 1986; Spanos et al., 1989). On the other hand, most people are likely to perceive the notion of creative imagining in a positive light and to become actively involved in generating the experiences that will earn them the label of “creative” (Spanos et al., 1989).

Corresponding to the labelling effect of hypnosis, using the concept of altered state of consciousness or trance to delineate hypnosis similarly appears to induce apprehensions from some subjects and thereby triggers

their reluctance to use this technique (Capafons, 2002, 2004; Kirsch, 1993, 1994). Even more, introducing hypnosis as an altered state of consciousness or trance can generate fears and inhibit the responses of those who are initially unafraid of hypnosis and those who would otherwise be willing to collaborate (Capafons, 2002, 2004; Kirsch, 1993, 1994).

A similar scenario has been captured by an experiment involving cancer outpatients in chemotherapy (Hendler & Redd, 1986). In this experiment, patients generally believed that hypnosis was a powerful process involving loss of control and altered states of consciousness. As expected, those patients who received a description of an intervention labelled hypnosis were less likely to believe that the procedure would effectively control their nausea and vomiting and were less willing to say they would try the procedure than patients who received the identical description labelled relaxation or passive relaxation with guided imagery.

In contrast to most of the previous studies, Capafons et al.'s (2005) experiment which exposed subjects to either cognitive-behavioural information or trance information before administering a hypnotisability test provided rather different results. According to the authors, a trance-based explanation of hypnosis does not impair the development of positive attitudes towards hypnosis, but actually facilitates it. A caveat, however, is that in Capafons et al.'s experiment, 30% of the subjects dropped out after receiving a trance-based explanation of hypnosis. This has two implications. First, defining hypnosis as an altered state of consciousness did drive away potential subjects. Second, the remaining subjects seemed to hold comparatively positive attitudes towards hypnosis or being hypnotised.

In their investigation of people's misconceptions regarding hypnosis before and after a hypnotisability test session, McConkey and Jupp (1986) had indeed highlighted the paradoxical situation that the experience of hypnosis contributes positively to people's opinions about hypnosis, but those who hold extreme misconceptions are unlikely to expose themselves to such an experience. In the same vein, Melei and Hilgard's (1964) early large-scale study revealed that those volunteering for hypnosis are more favourable in attitudes than those who do not volunteer. In view of this, it is worth emphasising that people who embrace negative attitudes rarely take part in studies involving any form of activities labelled hypnosis, while those who are willing to participate may hold rather different or even opposite attitudes.

A considerable amount of evidence generated in Western studies showed that there is a widespread misperception of hypnosis and its applications

(e.g., Crasilneck, 1985; Daglish & Wright, 1991; Johnson & Hauck, 1999; Koizumi, 2001; Kroger, 1963; Marcuse, 1964; McConkey, 1986; McConkey & Jupp, 1986; McIntosh & Hawney, 1983; Northcott, 1996; Page, Handley, & Green, 1997; Pratt, Wood, & Alman, 1988; Vingoe, 1995; Wallace, 1979). These studies consistently underlined a number of beliefs and concepts that are in contradiction to empirical evidence, such as forced truth-telling. Notably, most common misconceptions centre on the stereotypical view of hypnosis as a powerful form of mind control (Leviton & Jeven, 1986; Kroger 1963; Mann, 1986; Udolf, 1981; Wester, 1984; Yapko, 1995).

The findings with respect to the common beliefs and misconceptions have been largely replicated in the studies of Chinese people (Yu, 2004a, 2004b). Moreover, these Chinese studies revealed that the idea that hypnosis is a normal state of consciousness is associated positively with credulous attitudes, and negatively with sceptical attitudes and fears. In contrast, beliefs in the power of irresistible hypnotic suggestions and the amnesia of events during hypnosis have strong associations with negative attitudes and apprehensions.

Following in the footsteps of these findings, the present study was designed to intervene in the attitudes of Chinese people towards hypnosis by providing them with an analogous experience of hypnotic suggestions. The CIS, instead of “hypnotisability tests,” was adopted to measure subjects’ mental imagery ability, an important trait associated with hypnotic responding. The utilisation of the term “imagery test” for an intervention avoided selective participation of prospective subjects by eliminating potential apprehension and misperceptions associated with the labels “hypnosis” or “hypnotisability test,” using suggestions that are phrased in a permissive way, and delivering suggestions without a hypnotic induction procedure.

METHOD

Subjects

A total of 120 Hong Kong Chinese subjects were drawn randomly from a larger population of 198 psychology major students at a college. They were assigned, using a stratified and random allocation procedure, to an experimental (90 subjects) or a controlled condition (30 subjects) (i.e., receiving vs not receiving the CIS session). Both groups shared similar backgrounds. In the experimental group, 24 (26.7%) of the subjects were males and 66 (73.3%) were females. Mean age was 21.64 ($SD = 2.76$, Range = 20–46). In the control condition, seven (23.3%) were males and 23 (76.7%) were females, with the mean age of

20.63 ($SD = 1.07$, Range = 19–23). None of the subjects had ever received hypnosis, and only four amongst the 90 in the experimental group and two of the 30 in the control group had acquaintances who had been hypnotised before.

Procedure

The 90 randomly selected experimental and 30 control subjects were required to complete the same set of inventories about hypnosis for the pre-test Attitudes Towards Hypnosis Scale and General Beliefs About Hypnosis Scale. After that, information about the Creative Imagination Scale (CIS), a suggestibility test, was given. The experimental subjects were informed that the CIS test aimed at measuring their imagination ability, which is in turn a component of hypnosis. The experimental subjects then received the CIS, and were required to complete the CIS form, while the subjects in the control group spent the equivalent length of time sitting quietly. Immediately following the CIS, both groups were requested to fill in the two inventories again for the post-test.

Measures

Attitudes Towards Hypnosis Scale This scale, developed by Spanos, Brett, Menary, and Cross (1987), was used for assessing subjects' attraction to hypnosis, perceptions of people who are hypnotisable, and fears regarding hypnosis. The scale comprises 14 statements which are rated using a 7-point scale (from 1 = *disagree strongly* to 7 = *agree strongly*). Nos 6, 7, 9, 10, 11, 13, and 14 are reverse items. Higher total scores reflect more positive attitudes, with the maximum score of 98.

General Beliefs About Hypnosis Scale McConkey's (1986) inventory was adopted in order to measure general beliefs about hypnosis. This inventory includes 25 statements, concerning the nature, experience, and effects of hypnosis and hypnotic suggestions. The ratings range from 1 = *disagree strongly* to 4 = *agree strongly*.

Creative Imagination Scale (CIS) The CIS assesses subjective responses to 10 test suggestions. In this study, the CIS was delivered without a trance induction. Immediately following administration of the CIS, the experimental subjects were asked to rate their experiences for each of the 10 test suggestions by indicating the extent to which each suggested (i.e., imagined) experience

matched the corresponding real experience. For instance, the subjects were guided to make their hands and arms feel heavy by imagining heavy dictionaries piled on their palms. They then indicated the extent to which the suggested arm heaviness experienced was similar to actually having dictionaries piled on their hands, on a 5-point scale ranging from *not at all the same* as the real thing (score of 0) to *almost exactly the same* (score of 4). Thus scores on each of the 10 suggestions ranged from 0 to 4, and total scale scores on the CIS ranged from 0 to 40. The CIS normative data of the current Chinese sample is available in the previous paper (Yu, 2005).

RESULTS

Attitudes Towards Hypnosis Before the CIS

Referring to the mean scores and the percentages of agreement of the Attitudes Towards Hypnosis Scale preceding the CIS session, the experimental subjects in general expressed positive attitudes in half of the 14 statements (statements 1, 6, 7, 8, 9, 13, 14) (see Table 1). For instance, the notion of hypnosis sounded attractive to 70% of the subjects (Statement 1), and 65.5% agreed that people who can become deeply hypnotised are normal and well adjusted (Statement 8). Most of these statements were about perceptions of people who are hypnotisable (Statements 6–9).

On the other hand, a negative trend of attitudes was also noted (Statements 3, 10, 11, 12). This mostly concerned their fears and reluctance towards being hypnotised (Statements 10–12). Despite the positive perceptions about people who are hypnotisable, the majority of the subjects had reservations about being known as someone who can be deeply hypnotised (Statement 3). More than half of the subjects feared being (Statements 10, 12), and were reluctant (Statement 11) to be, hypnotised. Furthermore, it should be noted that although the subjects on average disagreed that those who become deeply hypnotised are mentally unstable (Statement 6), the fact remained that one out of four subjects expressed such concern. Similarly, from the clinical perspective, it was alarming that almost 40% of the subjects thought that a deeply hypnotised person is robot-like and goes along automatically with whatever the hypnotist suggests (Statement 14).

Changes in Attitudes Towards Hypnosis After the CIS

The total attitude score in the post-test ($M = 64.13$, $SD = 11.67$, Range = 40–95) was significantly higher than the total attitude score in the pre-test

Table 1: Changes in Attitudes Towards Hypnosis of the Experimental Group (Means and Standard Deviations) ($N = 90$)

Statements	Pre-test		Post-test	
	<i>M (SD)</i>	%	<i>M (SD)</i>	%
1. I find the whole idea of becoming hypnotised an attractive prospect	5.04 (1.32)	70.0	4.79 (1.41)	63.3
2. I would like to become deeply hypnotised	4.30 (1.47)	51.0	4.29 (1.57)	44.4
3. I would not mind being known as someone who can be deeply hypnotised	3.82 (1.56)	32.2	4.30 (1.53)	44.4
4. I am totally open to being hypnotised	4.50 (1.42)	52.3	4.50 (1.46)	51.1
5. One's ability to be hypnotised is a sign of their creativity and inner strength	4.20 (1.19)	44.5	4.70 (1.35)	6.0
6. I wonder about the mental stability of those who become deeply hypnotised	3.70 (1.23)	25.6	3.53 (1.34)	23.5
7. Those who are easily hypnotised are weak people	2.69 (1.42)	12.2	2.69 (1.36)	1.0
8. Those who can become deeply hypnotised are as normal and well adjusted as anyone	5.00 (1.25)	65.5	4.87 (1.33)	64.5
9. Intelligent people are the least likely to get hypnotised	2.82 (1.25)	8.9	2.82 (1.24)	6.6
10. I have some apprehensions about hypnosis and being hypnotised	4.39 (1.53)	53.4	3.92 (1.48)	40.0
11. If someone attempted to hypnotise me, I would tend to hold myself back rather than let myself get carried away by the process	4.64 (1.39)	53.3	4.22 (1.40)	47.7
12. I am not afraid of becoming hypnotised	4.20 (1.40)	42.2	4.53 (1.27)	52.3
13. I am wary about becoming hypnotised because it means giving up my free will to the hypnotist	3.42 (1.47)	23.3	3.10 (1.32)	13.4
14. A deeply hypnotised person is robot-like and goes along automatically with whatever the hypnotist suggests	3.81 (1.44)	38.9	3.65 (1.54)	32.5

Note: All the statistics provided in the table were calculated without reversed scoring.

For mean ratings, 1 = *strongly disagree*, 7 = *strongly agree*; standard deviations appear in parentheses. Percentages reflect those subjects who agree with the statements (i.e., gave a rating of 5, 6, or 7). Bold means and standard deviations reflect significant changes.

($M = 61.59$, $SD = 11.47$, Range = 30–91) (Wilcoxon signed-rank test: $z = 3.074$, $p < 0.01$), reflecting a positive shift in attitude after the CIS intervention. Further Wilcoxon signed-rank analyses indicated that half of the ratings for the 14 statements concerning subjects' attitudes towards hypnosis had significant changes (Tables 1 and 2). Following the CIS exercise, the experimental subjects generally adopted more positive attitudes towards hypnosis in answering these seven questions. Specifically, although they rated the idea of becoming hypnotised a less attractive prospect (Statement 1) after the CIS experience, they expressed fewer apprehensions about hypnosis (Statement 10). They were also less wary of becoming hypnotised (Statement 12), having alleviated the fear that it entailed giving up their free will to the hypnotist (Statement 13). Furthermore, after the CIS experience, the subjects felt they would be less inclined to hold themselves back, indicating that the fear of being carried away by the process of hypnotism had been somewhat alleviated (Statement 11). Along with the reduced fear and resistance, they expressed less reservation about being known as someone who falls easily into deep hypnosis (Statement 3), and they were more open to the claim that one's ability to be hypnotised is a sign of their creativity and inner strength (Statement 5).

With regard to the statement measuring the general level of interest and desire felt at the prospect of hypnosis (Statement 1), the subjects seemed to be uncertain, and significant differences were also revealed in the control group ($z = 2.58$, $p < 0.01$). No other significant differences were found among the 14 statements within the control group. Irrespective of the significance level, the experimental subject showed more positive attitudes in 11 of the 14 statements following the CIS practice (Table 1).

Both the total attitude scores in the pre-test ($r_s = 0.13$, $n = 86$, $p = 0.23$) and the post-test ($r_s = 0.76$, $n = 84$, $p = 0.49$) were not significantly associated with the total CIS score. Only one of the 14 items in the pre-test was significantly associated with the total CIS score (Statement 2: $r_s = 0.27$, $n = 86$, $p < 0.05$).

Overview of Changes in General Beliefs About Hypnosis After the CIS

The Wilcoxon signed-rank analyses indicated that the experimental subjects changed their answers significantly in 10 (40%) out of the total 25 general belief statements after the CIS intervention (Table 3). Mean scores and standard deviations for all 25 statements are provided in Table 4. After receiving the CIS

intervention, the subjects showed a higher tendency to believe that hypnosis is a normal conscious state (Statements 1, 2, 4). Also, they seemed less inclined to agree with the assertion that responsive subjects are not conscious or aware of their surroundings during hypnosis (Statements 12, 18) and are unable to remember what occurred during hypnosis (Statement 25). Compared with the ratings recorded prior to administering the intervention, the subjects believed more strongly that responsive subjects retain voluntary control (Statements 21, 23) and even take an active role in hypnosis (Statements 10, 23). In the control group, only two mildly significant changes were obtained for these 10 statements (Statement 23: $z = 2.71$, $p < 0.01$; statement 25: $z = 2.11$, $p < 0.05$).

Table 2: Significant Differences in Attitudes Towards Hypnosis of the Experimental Group ($N = 90$)

Statements	Wilcoxon signed-rank test
1. I find the whole idea of becoming hypnotised an attractive prospect	$z = 2.14$, $p < 0.05$ (30 negative ranks, 15 positive ranks, 45 unchanged)
3. I would not mind being known as someone who can be deeply hypnotised	$z = 2.83$, $p < 0.01$ (18 negative ranks, 34 positive ranks, 38 unchanged)
5. One's ability to be hypnotised is a sign of their creativity and inner strength	$z = 3.30$, $p < 0.001$ (15 negative ranks, 37 positive ranks, 38 unchanged)
10. I have some apprehensions about hypnosis and being hypnotised	$z = 3.13$, $p < 0.01$ (34 negative ranks, 18 positive ranks, 38 unchanged)
11. If someone attempted to hypnotise me, I would tend to hold myself back rather than let myself get carried away by the process	$z = 3.24$, $p < 0.001$ (41 negative ranks, 15 positive ranks, 34 unchanged)
12. I am not afraid of becoming hypnotised	$z = 2.16$, $p < 0.05$ (18 negative ranks, 34 positive ranks, 38 unchanged)
13. I am wary about becoming hypnotised because it means giving up my free will to the hypnotist	$z = 2.21$, $p < 0.05$ (35 negative ranks, 15 positive ranks, 39 unchanged)

Note: All the statistics provided in the table were calculated without reversed scoring.

Table 3: Significant Differences in General Beliefs About Hypnosis of the Experimental Group ($N = 90$)

Statements	Wilcoxon signed-rank test
Nature of hypnosis	
1. Hypnosis is an altered state of consciousness, it is quite different from normal waking consciousness	$z = 3.97, p < 0.001$ (36 negative ranks, 8 positive ranks, 46 unchanged)
2. Hypnosis is a normal state of consciousness, it simply involves the focusing of attention	$z = 4.63, p < 0.001$ (7 negative ranks, 38 positive ranks, 45 unchanged)
4. Hypnosis only involves thinking along with and imagining the suggestions given by the hypnotist	$z = 2.93, p < 0.05$ (8 negative ranks, 26 positive ranks, 56 unchanged)
During hypnosis	
10. During hypnosis, responsive subjects can experience the suggested effects only if they consciously think in a way to help them happen	$z = 4.44, p < 0.001$ (6 negative ranks, 34 positive ranks, 50 unchanged)
12. During hypnosis, responsive subjects are aware only of what the hypnotist is suggesting, and are not aware of anything else	$z = 2.74, p < 0.01$ (36 negative ranks, 16 positive ranks, 38 unchanged)
18. During hypnosis, responsive subjects are not conscious of their surroundings	$z = 4.43, p < 0.001$ (43 negative ranks, 8 positive ranks, 39 unchanged)
Suggestions given	
19. Suggestions given during hypnosis can make responsive subjects insensitive to pain	$z = 3.99, p < 0.001$ (36 negative ranks, 8 positive ranks, 46 unchanged)
21. Suggestions given during hypnosis can make responsive subjects tell the truth about things that they would normally lie about	$z = 3.05, p < 0.01$ (22 negative ranks, 6 positive ranks, 62 unchanged)
23. Suggestions given during hypnosis will only work if the subjects want them to work	$z = 3.32, p < 0.001$ (11 negative ranks, 37 positive ranks, 42 unchanged)
After hypnosis	
25. After hypnosis, responsive subjects cannot remember those things that happened during hypnosis	$z = 3.4, p < 0.001$ (27 negative ranks, 8 positive ranks, 54 unchanged)

Table 4: Changes in General Beliefs About Hypnosis of the Experimental Group (Means and Standard Deviations) ($N = 90$)

Statements	Pre-test		Post-test	
	<i>M (SD)</i>	%	<i>M (SD)</i>	%
Nature of Hypnosis				
1. Hypnosis is an altered state of consciousness, it is quite different from normal waking consciousness	2.99 (0.65)	83.4	2.67 (0.58)	63.3
2. Hypnosis is a normal state of consciousness, it simply involves the focusing of attention	2.38 (0.61)	40.0	2.78 (0.61)	70.0
3. Hypnosis is a normal state of consciousness, it simply involves being very deeply relaxed	2.67 (0.69)	63.4	2.82 (0.57)	73.3
4. Hypnosis only involves thinking along with and imagining the suggestions given by the hypnotist	2.82 (0.55)	74.5	3.04 (0.52)	88.9
5. Hypnosis can be experienced by everyone to a similar degree, under the right circumstances	2.22 (0.58)	25.5	2.32 (0.63)	36.6
6. Hypnosis can be faked such that even an experienced hypnotist could not detect the fake	2.48 (0.64)	46.6	2.59 (0.56)	57.8
The experience				
7. The experience of hypnosis depends even an experienced hypnotist could not detect the fake ability of the hypnotist	2.40 (0.68)	41.1	2.53 (0.75)	51.1
8. The experience of hypnosis depends on the ability of the hypnotist, not on the ability of the subject	2.11 (0.59)	18.9	2.08 (0.59)	16.6
During hypnosis				
9. During hypnosis, responsive subjects experience the suggested effects without having to consciously try to make them happen	2.78 (0.49)	74.4	2.67 (0.62)	63.4
10. During hypnosis, responsive subjects can experience the suggested effects only if they consciously think in a way to help them happen	2.54 (0.54)	56.7	2.92 (0.46)	85.6
11. During hypnosis, responsive subjects experience the suggested effects as happening involuntarily	2.92 (0.40)	87.7	2.91 (0.55)	80.0

Table 4: (Cont.)

12. During hypnosis, responsive subjects are aware only of what the hypnotist is suggesting, and are not aware of anything else	2.54 (0.60)	51.5	2.30 (0.63)	32.2
13. During hypnosis, responsive subjects have a sort of double-awareness where they experience what is suggested but also know things that are in contradiction to the suggestions	2.51 (0.62)	51.1	2.67 (0.67)	60
14. During hypnosis, responsive subjects seem to understand things better	2.28 (0.60)	31.1	2.42 (0.64)	38.9
15. During hypnosis, responsive subjects feel that everything happens automatically	2.63 (0.66)	62.3	2.61 (0.61)	56.7
16. During hypnosis, responsive subjects feel that time stands still	2.39 (0.59)	42.2	2.40 (0.58)	37.7
17. During hypnosis, responsive subjects feel that they are more than one person, with one part experiencing things and the other part observing things	2.33 (0.63)	37.8	2.50 (0.74)	42.2
18. During hypnosis, responsive subjects are not conscious of their surroundings	2.59 (0.65)	61.1	2.14 (0.63)	25.5
Suggestions given				
19. Suggestions given during hypnosis can make responsive subjects insensitive to pain	2.51 (0.59)	53.3	2.18 (0.63)	27.8
20. Suggestions given during hypnosis can make responsive subjects remember things that they could not normally remember	3.03 (0.38)	94.5	2.90 (0.64)	78.9
21. Suggestions given during hypnosis can make responsive subjects tell the truth about things that they would normally lie about	3.02 (0.45)	91.1	2.82 (0.49)	8.0
22. Suggestions given during hypnosis can make responsive subjects do things that they would not normally do	2.90 (0.48)	85.6	2.80 (0.50)	77.7
23. Suggestions given during hypnosis will only work if the subjects want them to work	2.48 (0.60)	46.6	2.77 (0.58)	71.1

Table 4: (Cont.)

24. Suggestions given during hypnosis cannot be resisted by subjects	2.23 (0.70)	34.4	2.17 (0.60)	25.5
After hypnosis				
25. After hypnosis, responsive subjects cannot remember those things that happened during hypnosis	2.29 (0.64)	32.6	2.02 (0.54)	13.3

Note: For mean ratings, 1 = *disagree strongly*, 2 = *disagree*, 3 = *agree*, 4 = *agree strongly*; standard deviations appear in parentheses. Percentages reflect those subjects who agree with the statements (i.e., gave a rating of 3 or 4); McConkey (1986) used reversed ratings (i.e., 4 = *disagree strongly*; 1 = *agree strongly*). Bold means and standard deviations reflect significant changes.

DISCUSSION AND CONCLUSION

The CIS was originally intended as a measure of hypnotic suggestibility by Barber and Wilson and has been used as such. However, it has been repeatedly demonstrated that although the CIS are correlated with the standard tests for measuring hypnotic suggestibility, factor analyses of the CIS and the HGSHS:A tend to load on separate factors (Hilgard et al., 1981; Laidlaw & Large, 1997). These findings alluded to the possibility that the two tests are assessing two different but related abilities that are found in conjunction with each other. Accordingly, the CIS may serve as an alternate measure of mental imagery ability — an important trait related to responsiveness to hypnosis — but probably not as an alternative measure of hypnotisability (Kihlstrom, 1985).

The current study showed that neither pre- nor post-total attitude score was significantly associated with the total CIS score. Therefore, the level of the CIS imagery ability does not directly modulate the extent of the attitudes towards hypnosis and being hypnotised. In line with the purpose of the experiment, the Chinese subjects did not seem to define the CIS intervention per se as hypnosis. Yet such relevant experience seemed to desensitise the subjects' fear of being hypnotised.

The potency of the CIS intervention in modulating attitudes and some conceptions regarding hypnosis is highlighted by the present study. Personal experience of the CIS measure helps to foster a stronger conviction of self-control (e.g., Statements 10, 23) and to lessen the connotation that hypnosis is mysterious and involuntary (e.g., Statements 21, 25). It is also worth noting that after the CIS intervention the subjects gave more credence to the idea of hypnosis as a normal state (Statements 1, 2), which was shown in the previous study (Yu, 2004a) to be positively associated with benign attitudes towards

hypnosis, although this is by no means necessarily consistent with the general trend of the contemporary scientific understanding.

Along with the changes in beliefs, attitudes towards hypnosis are also subject to the effects of the CIS intervention, which has been shown to be effective in fostering more constructive attitudes towards hypnosis (e.g., Statement 5), while also reducing apprehension (e.g., Statements 10, 12, 13) and resistance (e.g., Statement 11). Although the subjects rated the idea of becoming hypnotised a less attractive prospect (Statement 1) after the CIS, this may simply reflect the demystification of the process.

There is every reason to believe that hypnotisability (as opposed to suggestibility) may modulate the effect of the CIS practice on attitudes towards hypnosis. However, people who embrace negative attitudes towards hypnosis are not likely to participate in hypnotisability tests, even with information about hypnosis being provided. This seems particularly true when hypnosis is posited as an altered state of consciousness. For that reason, an “imagery test,” instead of a hypnotisability test, was adopted in the current study, which intended to prevent excluding potential subjects who were resistant to or anxious about participating in any kind of activity labelled as hypnosis. Negative attitudes towards hypnosis and, in particular, being hypnotised were indeed prevalent in the current Chinese sample. Over 50% of the subjects had expressed some apprehension about hypnosis and being hypnotised, and said that they would tend to hold themselves back if someone attempted to hypnotise them. Yet encouragingly, no subjects refused to take part in the CIS practice. This is impressive, taking into consideration the high drop-out rates of the previous studies.

By benefiting potential clients in terms of fostering positive attitudes, avoiding their initial fears or reluctance in relation to the label of “hypnosis” or “hypnotisability test,” and encouraging participation and their creative imaginative abilities, the CIS test constitutes a good tool for introducing participants to the uses of hypnosis through giving them a first taste of suggestion, a crucial component of hypnosis.

REFERENCES

- Barber, T. X. (1979). Suggested (“hypnotic”) behavior: The trance paradigm versus an alternative paradigm. In E. Fromm & R. E. Shor (Eds.), *Hypnosis: Developments in research and new perspectives* (pp. 217–271). Chicago: Aldine.
- Barber, T. X., & Wilson, S. C. (1977). Hypnosis, suggestion and altered states of consciousness: Experimental evaluation of the new cognitive-behavioral theory and the traditional trance-state theory of “hypnosis.” *Annals of the New York Academy of Sciences*, 296, 34–47.
- Barber T. X., & Wilson, S. C. (1978). The Barber Suggestibility Scale and the Creative Imagination Scale: Experimental and clinical applications. *American Journal of Clinical Hypnosis*, 21, 84–108.

- Capafons, A. (2002). Dissemination of hypnosis: Don't change the name, change the perspective. *Hypnosis International Monographs*, 6, 225–36.
- Capafons, A. (2004). Clinical applications of “waking” hypnosis from a cognitive-behavioural perspective: From efficacy to efficiency. *Contemporary Hypnosis*, 21, 187–201.
- Capafons, A., Cabañas, S., Alarcón, A., Espejo, B., Mendoza, M. E., Chaves, J. F., & Monje, A. (2005). Effects of different types of preparatory information on attitudes toward hypnosis. *Contemporary Hypnosis*, 22, 67–76.
- Crasilneck, H. B. (1985). *Clinical hypnosis: Principles and applications* (2nd ed.). New York: Grune & Stratton.
- Daglish, M. R. C., & Wright, P. (1991). Opinions about hypnosis among medical and psychology students. *Contemporary Hypnosis*, 8, 51–55.
- Hendler, C. S., & Redd, W. H. (1986). Fear of hypnosis: The role of labeling in patients' acceptance of behavioral interventions. *Behavior Therapy*, 17, 2–13.
- Hilgard, E. R., Sheehan, P. W., Monteiro, K. P., & MacDonald, H. (1981). Factorial structure of the Creative Imagination Scale as a measure of hypnotic responsiveness: An international comparative study. *International Journal of Clinical and Experimental Hypnosis*, 29, 66–76.
- Johnson, M. E., & Hauck, C. (1999). Beliefs and opinions about hypnosis held by the general public: A systematic evaluation. *American Journal of Clinical Hypnosis*, 42, 10–20.
- Jones, B., & Spanos, N. P. (1982). Suggestions for altered auditory sensitivity, the negative subject effect and hypnotic susceptibility: A signal detection analysis. *Journal of Personality and Social Psychology*, 43, 637–647.
- Katsanis, J., Barnard, J., & Spanos, N. P. (1988). Self-predictions, interpretational set and imagery vividness as determinants of hypnotic responding. *Imagination, Cognition and Personality*, 8, 63–78.
- Kihlstrom, J. F. (1985). Hypnosis. *Annual Review of Psychology*, 36, 385–418.
- Kirsch, I. (1993). Hipnoterapia cognitivo-comportamental. Expectativas y cambio de comportamiento [Cognitive-behavioral hypnotherapy: Expectancies and behavioral changes]. In A. Capafons & S. Amigo (Eds.), *Hipnosis, terapia de auto-regulacion e intervencione comportamental* [Hypnosis, self-regulation therapy, and behavioural intervention] (pp. 45–62). Valencia: Promolibro.
- Kirsch, I. (1994). Clinical hypnosis as a nondeceptive placebo: Empirically derived techniques. *American Journal of Clinical Hypnosis*, 37, 95–106.
- Koizumi, S. (2001). Investigation into university students' views towards the notion of “hypnosis.” *Japanese Journal of Hypnosis*, 46, 40–46.
- Kroger, W. S. (1963). *Clinical and experimental hypnosis in medicine, dentistry and psychology* (2nd ed.). Philadelphia: J. B. Lippincott.
- Laidlaw, T. M., & Large, R. G. (1997). Harvard Group Scale of Hypnotic Susceptibility and the Creative Imagination Scale: Defining two separate but correlated abilities. *Contemporary Hypnosis*, 14, 26–36.
- Levitán, A., & Jeven, R. (1986). Patients fearful of hypnosis. In B. Zilbergeld, M. Edlstein, & D. Araoz (Eds.), *Hypnosis: Questions and answers* (pp. 81–86). New York: W. W. Norton.
- Lynn, S. J., Weekes, J., Snodgrass, M., Abrams, L., Weiss, F., & Rhue, J. (1986). *Control and countercontrol in hypnosis*. Paper presented at the Annual Convention of the American Psychological Association, Washington, DC.

- Mann, H. (1986). Describing hypnosis to patients. In B. Zilbergeld, M. Edlstein, & D. Araoz (Eds.), *Hypnosis: Questions and answers* (pp. 76–80). New York: W. W. Norton.
- Marcuse, F. L. (1964). *Hypnosis throughout the world*. Springfield, IL: Charles C. Thomas.
- McConkey, K. M. (1986). Opinions about hypnosis and self-hypnosis before and after hypnotic testing. *International Journal of Clinical and Experimental Hypnosis*, 34, 311–319.
- McConkey, K. M., & Jupp, J. J. (1986). A survey of opinions about hypnosis. *British Journal of Experimental and Clinical Hypnosis*, 3, 87–93.
- McConkey, K. M., Sheehan, P. W., & White, K. D. (1979). Comparison of the Creative Imagination Scale and the Harvard Group Scale of Hypnotic Susceptibility, Form A. *International Journal of Clinical and Experimental Hypnosis*, 3, 266–277.
- McIntosh, I. B., & Hawney, M. (1983). Patient attitudes to hypnotherapy in a general practice: A brief communication. *International Journal of Clinical and Experimental Hypnosis*, 31, 219–223.
- Melei, J. P., & Hilgard, E. R. (1964). Attitudes toward hypnosis, self-predictions, and hypnotic susceptibility. *International Journal of Clinical and Experimental Hypnosis*, 12, 99–108.
- Northcott, P. (1996). Yellow Pages advertisers of hypnotherapy: A survey of hypnosis beliefs and practice. *Contemporary Hypnosis*, 13, 120–128.
- Page, R. A., Handley, G. W., & Green, J. P. (1997). Response expectancies and beliefs about hypnosis: Another look. *Contemporary Hypnosis*, 14, 173–181.
- Pratt, G. J., Wood, D. P., & Alman, B. M. (1988). *A clinical hypnosis primer*. New York: John Wiley & Sons.
- Spanos, N. P. (1986). Hypnosis and the modification of hypnotic susceptibility: A social psychological perspective. In P. L. N. Naish (Ed.), *What is hypnosis?* (pp. 85–120). Philadelphia: Open University Press.
- Spanos, N. P., Brett, P. J., Menary, E. P., & Cross, W. P. (1987). A measure of attitudes toward hypnosis: Relationships with absorption and hypnotic susceptibility. *American Journal of Clinical Hypnosis*, 30, 139–150.
- Spanos, N. P., Gabora, N. J., Jarrett, L. E., & Gwynn, M. I. (1989). Contextual determinants of hypnotisability and of relationships between hypnotisability scales. *Journal of Personality and Social Psychology*, 57, 271–278.
- Udolf, R. (1981). *Handbook of hypnosis for professionals*. New York: Van Nostrand Reinhold.
- Vingoe, F. J. (1995). Beliefs of British law and medical students compared to an expert criterion group on forensic hypnosis. *Contemporary Hypnosis*, 12, 173–187.
- Wallace, B. (1979). *Applied hypnosis: An overview*. Chicago: Nelson-Hall.
- Wester, W. (1984). Preparing the patient. In W. Wester & A. Smith (Eds.), *Clinical hypnosis: A multi-disciplinary approach* (pp. 18–28). Philadelphia: Lippincott.
- Yapko, M. D. (1995). *Essentials of hypnosis*. New York: Brunner Mazel.
- Yu, C. K.-C. (2004a). Beliefs and attitudes of Chinese regarding hypnosis and its applications. *Contemporary Hypnosis*, 21, 93–106.
- Yu, C. K.-C. (2004b). Beliefs and opinions regarding hypnosis and its applications among Chinese professionals in medical settings. *Contemporary Hypnosis*, 21, 177–186.
- Yu, C. K.-C. (2005). Suggestibility of Chinese as revealed by the Creative Imagination Scale. *Contemporary Hypnosis*, 22, 77–83.

THE EFFECT OF EMOTIONAL AROUSAL ON RECALL AND INTERROGATIVE SUGGESTIBILITY

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This study investigated the influence of induced emotional arousal on the recall of semantic memory, and on interrogative suggestibility and confabulation. Two hundred and twenty-four psychology students participated in the study. Arousal, as measured by self-reports in mood change, was induced in the experimental groups using an emotionally arousing video. The control group was shown an emotionally neutral video. Memory scores on immediate and delayed recall of a short story and scores on interrogative suggestibility and confabulation, using Gudjonsson's Suggestibility Scale, Form 2 (GSS 2), were obtained. The results found that participants who viewed the emotionally arousing video did report greater levels of arousal than the control group. Indeed, participants who were emotionally aroused had lower levels of accurate recall; however, the hypothesis that arousal would significantly affect suggestibility and confabulation was not supported. Age and gender effects are also explored in this paper.

The debate surrounding memory has been extensive. Memory can be seen as an active and distortion-inclined process (Gudjonsson, 1996; Loftus, 1979). Memory is not a video recording which can be replayed with precise accuracy, but rather a complex phenomenon with inherent plasticity (McConkey & Sheehan, 1995), which is strongly influenced by pre-existing schema and post-event information, leading to distortion of memory in many populations (Ceci & Loftus, 1994; Loftus & Burns, 1982; McConkey & Sheehan, 1995).

Many moderating factors have been shown to affect a person's ability to recall information accurately under a wide range of cognitive conditions.

Arousal has been shown to affect the encoding, storage and retrieval of memory (Bonner, 2006; Eysenck, 1976; Hulse & Memon, 2006; Mandler, 1992; Revelle & Loftus, 1990; Trouve & Libkuman, 1992). Specifically, negative affect has generally been shown to bias the encoding and the retrieval of information (Leichtman, Ceci, & Ornstein, 1992; Revelle & Loftus, 1990). A study conducted by Caprara, Spizzichino, and Romeo (1989) concluded that persons who were emotionally vulnerable and exposed to emotionally negative stimuli had significant impairment of recall of word lists.

Emotional stress may lead to deficits in remembering information that precedes or succeeds emotional events (Christianson, 1992). Extensive eyewitness testimony research also supports the statement that emotional arousal impairs the accuracy of memory (Deffenbacher, Bornstein, Penrod, & McGorty, 2004; Kassin, Ellsworth, & Smith, 1989; Loftus, 1979; Trouve & Libkuman, 1992; Ward & Loftus, 1985). In a meta-analysis of five separate experiments, Christianson and Loftus (1991) found a significant relationship between emotional arousal and memory.

Studies in which a negative mood state has been induced have indicated that depressed mood induction can impair retrieval from memory. For example, Ellis, Thomas, McFarland, and Lane (1985) found that depressed participants recalled fewer target words (35.8%) than controls (51.7%) in word list recall, and that accuracy of retrieval was reduced under all depressed mood conditions.

Affect influences memory in the encoding and retrieval interval by filtering incoming information and altering the accessibility of previously stored information (Revelle & Loftus, 1990). The examination of affect or mood in research is often concerned with mood congruent or incongruent recall. Support for the relationship between the mood state at encoding and the mood state during retrieval has been demonstrated by numerous studies (Bradley & Mogg, 1994; Bradley, Mogg, & Williams, 1995; Caprara et al., 1989; Mayo, 1989; Philpot & Madonna, 1993; Weingartner, Miller, & Murphy, 1977), including researching skydiver's arousal and memory (Cavenett & Nixon, 2006). Resource allocation effects theory proposes that extreme or negative mood states, during encoding or retrieval, impair processing by reducing or using an area of "limited capacity of conscious attention that would otherwise be allocated to a particular cognitive task" (Norman & Bobrow, 1975; Tobias, Kihlstrom, & Schacter, 1992, p. 78). This theory assumes that cognitive deficits will occur in attention demanding tasks or in tasks which require great cognitive effort, such as free recall (Hertel & Rude, 1991; Leichtman et al., 1992; Tobias et al., 1992).

In the interference model, it is asserted that material is best remembered if competing associations are not made. Within memory literature, interference focuses on forgetting which occurs at the time of retrieval (Spear & Riccio, 1994). There are two models of interference: retroactive interference, which refers to memory deficits that occur because of conflicting memories acquired between acquisition and retrieval; and proactive interference, referring to the loss of a memory due to interference caused by previous learning (Cavenett & Nixon, 2006; Spear & Riccio, 1994). This research focuses on retroactive interference because it is in this gap, between acquisition and retrieval, where post-event interference (including suggestions, negative feedback, and leading questions) can irrevocably alter the accuracy of memory.

Studies demonstrate that arousal inhibits the accuracy of memory (Bonner, 2006; Ellis et al., 1985; Hertel & Rude, 1991; Revelle & Loftus, 1990; Trouve & Libkuman, 1992). Experimental eyewitness studies demonstrate that participants who watch a shocking film (where a child is shot) are significantly less able to recall details of the film than participants who viewed a similar film without the shocking ending (Loftus & Ketcham, 1994). However, real-life studies suggest that negative events are remembered well; these studies have found an increase in accuracy following highly emotional stimuli (Christianson, 1992; Hulse & Memon, 2006; Yuille & Cutshall, 1986). Witnesses to a murder were interviewed four to five months following the incident and found to have very accurate recall (van der Kolk, 1996; Yuille & Cutshall, 1986). It was concluded that memories of shocking personal events were “detailed, accurate and persistent” (Yuille & Cutshall, 1986, p. 181).

To explain this contradiction within the literature, researchers have discussed the inverted U-shape relationship between arousal and memory known as the Yerkes-Dodson Law (Christianson, 1992; Mandler, 1992; see Yerkes & Dodson, 1908). This theory proposes that the highest levels of arousal evoke the poorest levels of memory performance, while low or moderate levels of arousal may facilitate memory performance, as mediated by task difficulty (Christianson, 1992; Revelle & Loftus, 1990; Royce & Diamond, 1980). While some memory functions, such as information transfer, increase with arousal, other functions, such as short-term memory retrieval, decrease with levels of arousal (Anderson, Revelle, & Lynch, 1989). It is asserted that the more difficult the task, the lower the level of arousal that can be tolerated before impairing performance (Cavenett & Nixon, 2006; Morris, 1991).

Suggestive questioning, in the form of leading questions or negative feedback, aimed at eyewitnesses has been shown to influence the accurate recall

of the target memory (Gudjonsson, 1984, 1987a, 1992, 1996; Gudjonsson & Clare, 1995; Gudjonsson & Clark, 1986; Linton & Sheehan, 1994; Wells, 1993). Misleading questions increased the likelihood that a witness would report the “false clue” by a significant amount (Wells, 1993). The ability of researchers to make participants believe that they had seen or heard something that they had not established that the accuracy of eyewitness performance could be compromised by misleading post-event information (Zaragoza & Lane, 1994). Suggestibility and confabulation, as measured by the Gudjonsson Suggestibility Scale, in relation to eyewitness testimony and interrogation, reveal that under stressful conditions people may be more highly suggestible and more prone to confabulation (Gudjonsson, 1984, 1987b, 1988, 1996; Gudjonsson & Clare, 1995; Linton & Sheehan, 1994; Tata & Gudjonsson, 1990).

Eysenck (1947, cited in Gudjonsson, 1996) argued that a person must be predisposed to being suggestible. Stukat (1958) asserted that suggestibility factors are not caused by a particular situation, and that the individual's characteristics must be considered. Krech and Crutchfield (1948) maintained that suggestibility is a state, and different characteristics of the stimulus situation must be considered. It may be useful to view suggestibility as a framework, in which both internal attitudes and external stimuli influence a person to accept or reject misleading information (Coffin, 1941).

Studies investigating state anxiety and interrogative suggestibility found that state anxiety correlated highly with suggestibility (Gudjonsson, 1988). It is thought that state anxiety is more relevant to suggestibility than trait anxiety, which has been shown in several studies to correlate poorly with suggestibility (Haraldson, 1985). Gudjonsson (1988) proposed that state anxiety, or mood state, influences the three basic components of suggestibility: uncertainty, trust, and expectations.

Confabulation has been described as “honest lying” (Moscovitch, 1989, cited in Dalla Barba, 1993). Gudjonsson and Clare (1995) define confabulation as “problems in memory processing where people replace gaps in their memory with imaginary experiences which they believe to be true” (p. 333). Confabulatory memory error is likely to occur when the participant is highly motivated or aroused (Cassells, 1991). Interestingly, studies which investigated the relationship between suggestibility and confabulation have found no significant correlation between the two variables (Gudjonsson & Clare, 1995). This may indicate that while suggestibility hinges on the introduction of misleading information by an external source, confabulation is due to memory error already contained in the person's cognitions. Confabulation is thought

to be exacerbated by the person's own schema and life experiences (Bartlett, 1932, in Hirsch, 1988; Gow, 1997).

The specific aim of this study was to examine the effect of emotional arousal on memory recall, suggestibility and confabulation, to confirm previous findings in the eyewitness performance literature, that emotional arousal affects memory recall. It was predicted that participants who were emotionally aroused, would have a deficit in the recall of details contained in a short story, would be more highly suggestible, and would be more prone to confabulation. This study also attempted to clarify whether the women or men in certain age groups were more prone to suggestibility and confabulation, under arousal, than other such demographic groups.

METHOD

Participants

First-year psychology students formed two groups: a control group and an experimental group. There were a total of 224 participants, with 172 women and 52 men, aged between 18 and 55 years. The control group consisted of 87 participants, with 25 men and 62 women; and the experimental group consisted of 137 participants, with 27 men and 110 women.

Materials

Pre- and Post-Emotion Questionnaire The pre- and post- emotion questionnaire was designed to briefly examine the emotional level of the participants. The questionnaire consisted of five questions about mood states, rated on a 5-point Likert scale, for example, "I am feeling depressed" or "I feel happy." When designing the questionnaire, attention was paid to determining the general mood level of the participants, in order to confirm that the emotionally arousing video had an effect on arousal. After consulting Beck's Depression Inventory (BDI) and the Profile of Mood Scale (POMS) in order to identify appropriate terms, the five statements were developed (Beck & Steer, 1993; McNair, Lorr, & Droppleman, 1992), and trialled with a small pilot group and then altered according to their recommendations.

Gudjonsson Suggestibility Scale Form 2 (GSS2) The Gudjonsson Suggestibility Scale (Form 2) (Gudjonsson, 1987a), containing an emotionally neutral story, was used to assess recall, suggestibility, and confabulation. The scale consists of a narrative passage (short story) and 20 questions about the story, 15 of which

contain misleading information. The GSS 2 has been used on numerous populations, including “normal” populations, forensic patients, psychiatric patients and clients referred by court order, children, delinquent boys, and professionals (Baxter, Boon, & Marley, 2006; Clare, Gudjonsson, Rutter, & Cross, 1994; Gudjonsson, 1987a, 1987b, 1988). The GSS 2 has standardised scoring criteria and high inter-rater reliability (Clare et al., 1994; Gudjonsson & Clare, 1995). The scale provides data on the following information: immediate recall, delayed recall, yield (which represents the number of times the participant responds incorrectly to leading questions), shift (which represents the number of times the participant changes their answer in response to the leading questions, following negative feedback) and total suggestibility (the sum of the yield and shift scores) (Gudjonsson, 1987a). The scale also provides scoring criteria for confabulation, which is the total of the number of times an error is made on recall, or new or introduced information is included (Gudjonsson & Clare, 1995).

Videos The decision to use videos as the emotionally arousing stimulus, rather than a procedure such as the Velten procedure, which utilises emotional statements (Velten, 1968), was two-fold. First, with regard to Spanos’ work, it was expected that the videos would have an effect on influencing the emotional arousal of the participants. Second, Caprara et al. (1989) used an emotionally arousing slide presentation to demonstrate that visual stimuli would arouse participants. The current study utilised an emotionally arousing video.

Two different videos were utilised in the interval between immediate and delayed recall for each group. One video was used to induce negative arousal in the experimental group and a second video was used to maintain the current emotional level of the control group. Both videos were viewed by a small pilot group of three people and rated as emotionally arousing and emotionally neutral, respectively. The video for the experimental group was an emotionally arousing video (EAV) which was about a group of refugees leaving Burma under distressing circumstances. While this video was viewed as emotionally arousing, it did not contain issues which were of a personal nature to the participants and therefore, while it was arousing, the researchers did not expect the same level of arousal as obtained through personal trauma. The control group viewed an emotionally neutral video (ENV). The depressing video was withheld from the control group and the neutral video was withheld from the experimental group. The duration of both the experimental and control videos was 50 minutes.

Design and Procedure

The design of this research project was a pre-test – post-test control group experimental design. The participants, were assigned to be in either the experimental or control group. The first part of the study consisted of a pre-test and post-test of memory recall, across the experimental condition, of induced arousal. Additionally, both groups were given pre-tests and post-tests to determine their emotional level prior to, and after, a neutral video, and prior to, and after, an emotionally laden video. After receiving full written consent from all participants, the research project encompassed several phases.

Participants were first required to attend regular lecture times of one hour in duration, and they were then given a pre-test of emotion questionnaire. During the next phase, participants were read a short story memory item by the researcher and instructed, “I want you to listen to a short story. Listen carefully because when I am finished, I want you to write down everything you remember.”

Following the reading of the story, participants were required to perform an immediate recall task and write down everything they could remember about the short story. Papers were then collected in order to prevent participants from referring to the immediate recall tasks during the following stages.

The next phase required the participants in the experimental group to view an emotionally arousing video. The next phase directed the participants to complete the post-test of emotion questionnaire. Following this, they completed the delayed recall task, where participants were asked to again write down everything they could remember about the short story (without the story being re-read), approximately 90–120 minutes after the immediate recall task. Papers were again collected to prevent participants from referring to previous material.

The participants were then asked to complete the Yield scale of the GSS2, which included some leading questions. Following the collection of this paper and a 15-minute break, participants were given negative feedback regarding the previous paper. Participants were told: “Many people have made a number of errors on the previous test. This is common with these tests. It is therefore necessary to go through the questions once more, and this time please try to be as accurate as possible.” Participants then completed the Shift scale of the GSS 2. Participants were then fully debriefed following the experiment with regard to the full nature and intent of the study.

RESULTS

ANOVAS were utilised to establish if the emotionally arousing video had an effect on the emotional mood levels of the participants. An ANOVA and an ANCOVA were used to determine if the two groups (control and experimental) would show significant differences in immediate and delayed recall and pre-and post-confabulation. ANOVAs were also applied to the groups with regard to suggestibility.

Pre- and Post-Emotion Data

Factor Analysis of the Pre- and Post-Emotion Tests

A one-way ANOVA was conducted on the Pre-emotion score by groups. No significant difference was found between the two groups, $F(1, 223) = 1.228$, $p = .269$, $\eta^2 = .005$. The means for the two groups were as follows: control group, $M = 17.88$, $SD = 4.17$, and the values for the experimental group were, $M = 18.44$, $SD = 3.96$. It was concluded that the two groups were in similar mood states at the commencement of the experiment.

In order to establish that the video intervention had an effect on the emotions of the participants in both groups, a one-way ANOVA was performed on the Post-emotion score by groups. A significant difference between the groups was found, $F(1, 167) = 30.3274$, $p = .000$, $\eta^2 = .154$. The means for the groups demonstrated that the control group had a slight increase in mood scores ($M = 18.33$, $SD = 4.05$); while the experimental group obtained significantly lower scores on mood ($M = 13.83$, $SD = 4.33$). It was determined that the intervention did have an effect on the groups and that participants exposed to the arousing video had a significant change in mood scores. The group shown the neutral video had a slight increase in scores, indicating a nominally happier mood, while the group shown the emotionally arousing video had a significant decrease in scores indicating a markedly more depressed mood (see Table 1).

Table 1: Pre- and Post-Emotion Analyses of Variance Results by Group, Age, and Gender

	<i>df</i>	<i>F</i>	η^2	Power
Pre-emotion scores				
Group	1, 223	1.228	0.005	0.182
Age	4, 222	1.429	0.024	0.415
Gender	1, 222	0.277	0.002	0.113
Age x gender	4, 222	1.693	0.031	0.514
Post-emotion scores				
Group	1, 167	30.327**	0.154	1.000
Age	4, 167	2.845*	0.067	0.773
Gender	1, 167	13.972**	0.082	0.968
Age x gender	4, 167	3.618	0.084	0.868

* $p < 0.05$, ** $p = 0.000$.

Post-emotion scores were also significant by age, $F(4, 167) = 2.845$, $p = .062$, $\eta^2 = .067$ (see Table 1), with age group 5 (45–55 years) showing the greatest increased reactions, as measured by lower scores. Means and standard deviations for the 45–55-year-old age group were as follows: pre-emotion $M = 18.45$, $SD = 3.93$; post-emotion $M = 12.10$, $SD = 5.80$. Students Newman Kuels at a significance level of $p = .050$ showed that age group 5 was significantly different from age groups 2, 3, and 4 (respectively age groups 18–24, 25–34, and 35–44) (see Table 2).

Table 2: Pre- and Post-Emotion Means and Standard Deviations for Age Groups

Age	Pre-emotion		Post-emotion	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
> 18	18.20	3.74	14.81	4.38
18–24	17.66	4.07	14.55	3.98
25–34	19.37	3.66	15.60	4.25
35–44	18.64	4.93	16.93	5.80
45–55	18.45	3.92	12.10	5.80

Post-emotion scores were also significant by gender $F(1, 167) = 13.972$, $p = .000$, $\eta^2 = .082$. A post-emotion by gender x age ANOVA revealed a main effect for gender of $F(2, 167) = 19.209$, $p = .000$, and a two-way interaction effect of $F(1, 167) = 3.618$, $p = .008$. Table 3 illustrates means by gender groups for the pre- and post-emotion questionnaire.

Table 3: Pre- and Post-Emotion Means for Gender by Group

	Pre-emotion		Post-emotion	
	Male	Female	Male	Female
	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>
Control group	17.77	17.90	17.38	18.94
Experimental group	19.33	18.22	16.74	13.09

In order to further confirm that the participants themselves felt that they had had an emotional shift, a frequencies analysis was performed on the question, “My mood has changed since I completed the previous questionnaire,” which appears on the post-emotion questionnaire. Of those in the control group, 52% of respondents indicated that their emotions had changed since the previous questionnaire, while 91% of the respondents from the experimental group indicated that their emotions had changed.

Immediate Recall

To confirm that there was no significant difference between the groups in memory recall before the presentation of the intervention, a one-way ANOVA was applied to examine the differences between the control and experimental groups on immediate memory recall. No significant difference was found between the groups, $F(1, 220) = .4975, p = .4814, \eta^2 = .002$. The control group averaged 17.73 ($SD = 5.17$) and the experimental group averaged 18.23 ($SD = 5.18$) in their immediate recall scores. Therefore there was no difference between the groups on memory recall before the presentation of the videos (see Table 4).

A significant difference was found between immediate recall and gender, $F(1, 219) = 13.358, p = .000$, with women gaining higher recall scores than men, women $M = 18.76$ ($SD = 5.02$) and men $M = 15.98$ ($SD = 5.18$). Immediate recall was also examined by age, but no significant differences between the age groups were found, $F(4, 220) = 1.153, p > .01$.

Delayed Recall

An ANCOVA was utilised with the immediate recall scores used as a covariate to adjust for differences in the pre-test scores. A significant difference between the groups was found at $F(1, 218) = 11.358, p = .001, \eta^2 = .050$. The mean and standard deviations were: control group $M = 17.92, SD = 5.44$; and experimental group $M = 17.46, SD = 5.82$.

Therefore, it was confirmed that the video did have an effect on the memory recall of those participants who viewed the emotionally arousing material (see Table 5). Delayed recall was also examined by gender and a significant difference of $F(1, 217) = 80352, p < .01, \eta^2 = .007$ was found, with women again scoring higher on recall than men, with $M = 18.27$ ($SD = 5.67$) and $M = 15.86$ ($SD = 5.33$), respectively. Age and delayed recall showed no significant difference $F(4, 218) = .488, p > .05$. However the use of post hoc tests revealed a significant difference between age group 4 (35–44 years) and age group 2 (18–24 years), $M = 14.73$ ($SD = 5.35$) and $M = 18.19$ ($SD = 5.83$), respectively.

Change Variable on Immediate to Delayed Recall

To more closely examine the changes in individual scores from immediate to delayed recall, a change variable was computed which examined the change in scores from immediate recall to delayed recall. As Table 4 shows, a one-way ANOVA was performed on the change variable by groups, and a significant difference between the groups; $F(1, 217) = 10.842, p = .001, \eta^2 = .048$, was

demonstrated. This confirmed that, even though some participants may have obtained very high or very low scores on the memory tests, their changes in scores from immediate recall to delayed recall were still significant, depending on which group they belonged to. An ANOVA was conducted with the change variable by gender and age and no significance interactions were found at $F(2, 216) = .428, p > .05$.

Table 4: Analysis of Variance for Immediate and Delayed Recall and Change Scores

Source	<i>df</i>	<i>F</i>	η^2	Power
Immediate recall				
Group	1, 220	0.4915	0.002	0.358
Age	4, 220	1.153	0.027	0.447
Gender	1, 219	13.358**	0.052	0.923
Age x gender	4, 219	0.214	0.004	0.096
Delayed recall ^a				
Group	1, 218	11.358**	0.050	0.918
Age	4, 218	0.488	0.010	0.173
Gender	1, 217	8.352*	0.007	0.231
Age x gender	4, 217	0.579	0.011	0.191
Change score				
Group	1, 217	10.842**	0.048	0.754
Age	4, 217	0.858	0.017	0.114
Gender	1, 216	0.929	0.005	0.061
Age x gender	4, 216	0.428	0.037	0.611

* $p < .01$, ** $p < .001$.

^a ANCOVA with immediate recall as covariate.

Suggestibility

To determine if there were significant differences between the two groups on suggestibility, ANOVAs were utilised on yield and shift scales, the two subscales of suggestibility, and on total suggestibility. Surprisingly, there were no significant differences between the groups on the three suggestibility variables. The yield variable had non-significance at $F(1, 123) = 1.839, p = .178, \eta^2 = .015$. Shift by groups was also non-significant at $F(1, 124) = .202, p = .654, \eta^2 = .002$. Total suggestibility by groups was also non-significant at $F(1, 123) = 1.111, p = .294, \eta^2 = .009$. Thus, the prediction that emotional arousal would make participants more highly suggestible was not supported. Total suggestibility was also examined by age and gender and no significant interaction, $F(4, 122) = .578, p = .679$, was found. In fact with relation to gender, men scored slightly higher on suggestibility than women, $M = 4.17$ ($SD = 3.14$) and $M = 3.83$ ($SD = 3.19$), respectively (see Table 5 for results).

Table 5: Analysis of Variance Results for Suggestibility

Source	<i>df</i>	<i>F</i>	η^2	Power
Yield				
Group	1, 123	1.839	0.015	0.268
Age	4, 123	0.203	0.006	0.089
Gender	1, 122	0.378	0.001	0.049
Age x gender	4, 122	0.497	0.017	0.166
Shift				
Group	1, 124	0.202	0.002	0.047
Age	4, 124	0.918	0.034	0.309
Gender	1, 123	0.064	0.001	0.049
Age x gender	4, 123	1.142	0.039	0.349
Total suggestibility				
Group	1, 123	1.111	0.009	0.183
Age	4, 123	0.359	0.013	0.132
Gender	1, 122	0.416	0.002	0.043
Age x gender	4, 122	0.578	0.020	0.187

Confabulation

The confabulation score is the sum of all errors and new/introduced scores obtained through the memory tests; however, theoretically, the implications of confabulation were closer to suggestibility, as the scores represent answers which did not appear in the original story. An ANOVA was employed for immediate confabulation, but no significant differences by groups at $F(1, 133) = .255, p > .05, \eta^2 = .003$ were found. No significant differences were found for age and gender and immediate confabulation $F(4, 132) = 3.796, p > .05, \eta^2 = .008$.

An ANCOVA was utilised on delayed confabulation, with immediate confabulation as the covariate, to control for pre-test differences. There were no significant differences, for delayed confabulation with immediate confabulation as a covariate, for groups $F(1, 132) = 1.251, p > .05$, nor for gender $F(1, 131) = .020, p > .05$. However, there was a significant difference for age, $F(4, 132) = 4.849, p = .001$, with only the oldest age group (45–55) showing the highest amount of confabulation. (Table 6 illustrates this.) Post hoc tests revealed that age group 5 (45–55 years) was significantly different from age groups 1, 2, and 3 (under 18, 18–24, and 25–34, respectively).

Table 6: Analysis of Variance Results for Confabulation

Source	<i>df</i>	<i>F</i>	η^2	Power
Immediate confabulation				
Group	1, 133	0.255	0.003	0.095
Age	4, 133	0.187	0.006	0.090
Gender	1, 132	3.262	0.029	0.488
Age x gender	4, 132	3.796	0.006	0.130
Delayed confabulation ^a				
Group	1, 132	1.251	0.007	0.172
Age	4, 132	4.849**	0.074	0.834
Gender	1, 131	0.020	0.011	0.002
Age x gender	4, 131	2.493	0.076	0.695
Total confabulation				
Group	1, 132	0.014	0.003	0.078
Age	4, 132	0.893	0.028	0.277
Gender	1, 131	2.745	0.023	0.403
Age x gender	4, 131	3.986	0.007	0.131

** $p < 0.001$.

^a ANCOVA with Immediate Confabulation as covariate.

DISCUSSION

These findings provided mixed support for the predictions made from the literature concerning emotional arousal and memory processes. First, it was confirmed that it was possible to induce emotional arousal in the participants using an emotionally arousing video, as demonstrated by the self-report measure scores on change in emotional states. The oldest age group (45–55) showed the greatest emotional reactions to the emotionally arousing video, which outcome may have been due to the emotional content of the video and increased life experiences in the older group. Women who viewed the emotionally arousing video also had the greatest levels of increased arousal, as indicated by the markedly decreased scores on the self-report measure of mood state.

Participants who were more emotionally aroused had a significant decrease in memory recall, when their pre-test scores were used as a covariate. Furthermore, according to results gained from the change variable, regardless as to whether the individual participant scored well or poorly on the recall task, for those participants in the experimental group, their change from immediate to delayed recall suffered significantly.

Previous findings are consistent with that of this study, that emotional arousal negatively affects recall of memory (Ellis et al., 1985). These findings support the resource allocation effects theory, that extreme or negative mood states prior to retrieval impairs memory (Tobias et al., 1992). Although, some studies have not found support for this phenomenon (e.g., Bower, 1981, failed to find retrieval effects after the experimental induction of mood states), the methodology utilised in this study attempted to prevent some of the methodological criticisms directed at previous studies. For example, in contrast to Bower's (1981) study, this study presented the target information (short story), the mood induction, and the memory recall after relatively short time intervals, rather than introducing longer time intervals which may have compromised the effects. In this study, the induction of arousal occurred during the retention stage. This highlights the vulnerability of people to "errors in commission" (Yarmey, 1990) or critical incidence, when interference occurs due to arousal following encoding, but preceding retrieval.

However, the prediction that women would have decreased levels of recall following the emotional arousal was not supported. In fact, women's scores on recall were consistently higher than the men. This may be related to the findings by Powers, Andriks, and Loftus (1979) that both women and men provided more accurate recall on same-gender-orientated information.

The prediction concerning suggestibility was not supported. Although it was expected that suggestibility would be affected by emotional arousal, there was no evidence to support this hypothesis. Research by Sadoff (2000) did not find a significant effect of arousal on suggestibility. However, in a follow-up study the manipulation check found few actual differences between groups for arousal. Possible reasons for this may include violations to the definition of interrogative suggestibility used by the current study. In utilising a group situation to examine suggestibility, this research may not have sustained the levels of uncertainty, trust, and expectations necessary to influence participants, regardless of their levels of arousal (Gudjonsson, 1988).

Also, it is possible that due to the situation and design of the experiment, participants may have had their "discrepancy detectors" on (Schooler & Loftus, 1986, p. 107). That is, simply asking the participants to "pay attention" to the task may have been sufficient to alert the participants to possible misleading information (Hall, Loftus, & Tousignant, 1984). However, these findings do not support the interference model where post-event interference (including suggestions and leading questions) is thought to alter the accuracy of memory.

Powers et al. (1979) reported that females were more suggestible than males, while Gudjonsson and Lister (1984) found that females scored slightly higher on total suggestibility on the GSS2 than males. However, the women in this study actually scored lower on total suggestibility than men. This may be explained, in part, by hypnosis studies, which show that females do not exceed males in hypnotic susceptibility (Hibbard & Worring, 1996).

In relation to the Yerkes–Dodson law, participants who were aroused did have a decrement in their ability to recall information, but did not demonstrate increased suggestibility or confabulation. It may be that either the task difficulty of suggestibility and confabulation was not complex enough to cause detriment to performance, or that the arousal levels attained by the emotionally arousing video were not high enough to cause significant differences on suggestibility and confabulation between the two groups.

The implications of these findings for the arousal and memory literature are threefold. First, with regard to arousal and recall, it was further confirmed that memory recall is adversely affected by increased emotionally distressing arousal. Second, these findings establish that suggestibility is not affected by increased arousal. While this is surprising, it may demonstrate that recall and suggestibility utilise different memory processes and may be affected distinctly by arousal. Third, confabulation was not affected by arousal. Given that confabulation is not correlated with suggestibility, it appears that confabulation may also be a distinct memory process which may be affected by the individual and the situation.

REFERENCES

- Anderson, K. J., Revelle, W., & Lynch, M. J. (1989). Caffeine, impulsivity and memory scanning: A comparison of two explanations for the Yerkes–Dodson effect. *Motivation and Emotion*, 13, 1–20.
- Baxter, J. S., Boon, J. C., & Marley, C. (2006). Interrogative pressure and responses to minimally leading questions. *Personality and Individual Differences*, 40, 87–98.
- Beck, A. T., & Steer, R. A. (1993). *Beck Depression Inventory*. New York: The Psychological Corporation, Harcourt Brace & Company.
- Bonner, K. (2006). An assessment of eyewitness accuracy: The integration of suggestibility and misidentification. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, Vol. B, 5112.
- Bower, G. H. (1981). Mood and memory. *American Psychologist*, 36, 129–148.
- Bradley, B., & Mogg, K. (1994). Mood and personality in recall of positive and negative information. *Behaviour Research and Therapy*, 32, 137–141.
- Bradley, B., Mogg, K., & Williams, R. (1995). Implicit and explicit memory for emotion congruent information in clinical depression and anxiety. *Behaviour Research and Therapy*, 33, 755–770.

- Caprara, G., Spizzichino, C., & Romeo, C. (1989). Trait congruence in the study of the cognitive consequences of emotional arousal. *European Journal of Personality*, 3, 285–298.
- Cassells, A. (1991). *Remembering and forgetting*. London: BPS Books.
- Cavenett, T., & Nixon, R. (2006). The effect of arousal on memory for emotionally-relevant information: A study of skydivers. *Behaviour Research and Therapy*, 44, 1461–1469.
- Ceci, S. J., & Loftus, E. F. (1994). Memory work: A royal road to false memories. *Applied Cognitive Psychology*, 8, 351–364.
- Christianson, S. A. (1992). *Handbook of emotion and memory: Research and theory*, Hillside, NJ: Erlbaum.
- Christianson, S. A., & Loftus, E. F. (1991). Remembering emotional events: The fate of detailed information. *Cognition and Emotion*, 5, 81–108.
- Clare, I. C., Gudjonsson, G., Rutter, S., & Cross, P. (1994). The inter-rater reliability of the Gudjonsson Suggestibility Scale (Form 2). *British Journal of Clinical Psychology*, 33, 357–365.
- Coffin, T. E. (1941). Some conditions of suggestions and suggestibility: A study of certain attitudinal and situational factors influencing the process of suggestion. *Psychological Monographs*, 53, 1–121.
- Dalla Barba, G. (1993). Different patterns of confabulation. *Cortex*, 29, 567–581.
- Deffenbacher, K. A., Bornstein, B. H., Penrod, S. D., & McGorty, E. K. (2004). A meta-analytic review of the effects of high stress on eyewitness memory. *Law and Human Behaviour*, 28, 687–706.
- Ellis, H., Thomas, R., McFarland, A., & Lane, J. (1985). Emotional mood states and retrieval in episodic memory. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 11, 363–370.
- Eysenck, M. W. (1976). Arousal, learning and memory. *Psychological Bulletin*, 83, 389–404.
- Gow, K. (1997). *Recovered memories of abuse: Real, fabricated or both?* Unpublished dissertation, University of Melbourne.
- Gudjonsson, G. (1984). A new scale of interrogative suggestibility. *Personal and Individual Differences*, 5, 303–314.
- Gudjonsson, G. (1987a). A parallel form of the Gudjonsson Suggestibility Scale. *British Journal of Clinical Psychology*, 26, 215–221.
- Gudjonsson, G. (1987b). Historical background to suggestibility: How interrogative suggestibility differs from other types of suggestibility. *Personality and Individual Differences*, 8, 347–355.
- Gudjonsson, G. (1988). Interrogative suggestibility: Its relationship with assertiveness, social-evaluative anxiety, state anxiety and method of coping. *British Journal of Clinical Psychology*, 27, 159–166.
- Gudjonsson, G. (1992). Interrogative suggestibility: Factor analysis of the Gudjonsson Suggestibility Scale (GSS2). *Personality and Individual Differences*, 13, 479–481.
- Gudjonsson, G. (1996). *The psychology of interrogations, confessions and testimony*. Brisbane: Jacaranda Wiley.

- Gudjonsson, G., & Clare, I. C. (1995). The relationship between confabulation and intellectual ability, memory, interrogative suggestibility and acquiescence. *Personality and Individual Differences*, 19, 333–338.
- Gudjonsson, G., & Clark, N. K. (1986). Suggestibility in police interrogation: A social psychological model. *Social Behaviour*, 1, 83–104.
- Gudjonsson, G., & Lister, S. (1984). Interrogative suggestibility and its relationship with perceptions of self-concept and control. *Journal of the Forensic Science Society*, 29, 261–269.
- Hall, D., Loftus, E. F., & Tousignant, J. (1984). Postevent information and changes in recollection for a natural event. In G. Wells & E. F. Loftus (Eds.), *Eyewitness testimony: Psychological perspectives* (pp. 124–141). Cambridge: Cambridge University Press.
- Haraldson, E. (1985). Interrogative suggestibility and its relationship with personality, perceptual defensiveness and extraordinary beliefs. *Personality and Individual Differences*, 6, 765–767.
- Hertel, P., & Rude, S. (1991). Recalling in a state of natural or experimental depression. *Cognitive Therapy and Research*, 15, 103–127.
- Hibbard, W., & Worring, R. (1996). *Forensic hypnosis*. Springfield, IL: Charles C. Thomas.
- Hirsch, E. D. (1988). *Cultural literacy: What every American needs to know*. New York: Vintage.
- Hovdestad, W. E., & Kristiansen, C. M. (1996). A field study of false memory syndrome: Construct validity and incidence. *The Journal of Psychiatry and Law*, 24, 299–338.
- Hulse, L., & Memon, A. (2006). Fatal impact? The effects of emotional arousal and weapon focus on police officers' memories for a simulated crime. *Legal and Criminological Psychology*, 11, 313–325.
- Kassin, S. M., Ellsworth, P. C., & Smith, V. L. (1989). Déjà vu all over again: Elliott's critique of eyewitness experts. *Law and Human Behaviour*, 18, 203–210.
- Krech, D., & Crutchfield, R. S. (1948). *Theory and problems in social psychology*. New York: McGraw Hill.
- Leichtman, M., Ceci, S. J., & Ornstein, P. A. (1992). The influence of affect on memory: Mechanisms and development. In S.A. Christianson (Ed.), *The handbook of emotion and memory: Research and theory* (pp. 181–195). Hillsdale, NJ: Erlbaum.
- Linton, C., & Sheehan, P. (1994). The relationship between interrogative suggestibility and susceptibility to hypnosis. *Australian Journal of Clinical and Experimental Hypnosis*, 22, 53–64.
- Loftus, E. F. (1979). *Eyewitness testimony*. London: Harvard University Press.
- Loftus, E. F., & Burns, T. E. (1982). Mental shock can produce retrograde amnesia. *Memory and Cognition*, 10, 318–323.
- Loftus, E. F., & Ketcham, K. (1994). *The myth of repressed memory*. New York: St Martin's Press.
- Mandler, G. (1992). Memory, arousal and mood: A theoretical integration. In S.A. Christianson (Ed.), *The handbook of emotion and memory: Research and theory* (pp. 93–108). Hillsdale, NJ: Erlbaum.

- Mayo, P. (1989). A further study of the personality-congruent recall effect. *Personality and Individual Differences*, 10, 247–252.
- McConkey, K. M., & Sheehan, P. W. (1995). *Hypnosis, memory and behavior in criminal investigation*. New York: Guilford.
- McNair, D. M., Lorr, M., & Droppleman, L. F. (1992). *Profile of mood states*. San Diego: Educational and Industrial Service.
- Morris, C. G. (1991). *Understanding psychology*. Englewood Cliffs, NJ: Prentice-Hall.
- Moscovitch M (1989). Confabulation and the frontal systems: Strategic versus associative retrieval in neuropsychological theories of memory. In H. L. Roediger & F. I. Craigh (Eds.), *Varieties of memory and consciousness: Essays in honour of Endel Tulving* (pp. 133–160). Hillsdale, NJ: Erlbaum.
- Norman, D. A., & Bobrow, D. G. (1975). On data-limited and resource-limited processes. *Cognitive Psychology*, 7, 44–64.
- Philpot, V., & Madonna, S. (1993). Fluctuations in mood state and learning and retrieval. *Psychological Reports*, 73, 203–208.
- Powers, P. A., Andriks, J. L., & Loftus, E. F. (1979). Eyewitness accounts of females and males. *Journal of Applied Psychology*, 64, 339–347.
- Revelle, W., & Loftus, D. (1990). Individual differences and arousal: Implications for the study of mood and memory. *Cognition and Emotion*, 4, 209–237.
- Royce, J. R., & Diamond, S. R. (1980). A multifactor system dynamics theory of emotion: Cognitive-affective interaction. *Motivation and Emotion*, 4, 263–298.
- Sadoff, J. L. (2000). The suggestibility of memory: Individual differences, environmental factors and psycho-legal implications. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, Vol. 61(6-B), 3303.
- Spanos, N. P. (1996). *Multiple identities and false memories*. Washington, DC: American Psychological Association.
- Schooler, J. W., & Loftus, E. F. (1986). Individual differences and experimentation: Complementary approaches to interrogative suggestibility. *Social Behaviour*, 1, 105–112.
- Spear, N., & Riccio, D. (1994) *Memory: Phenomena and principles*. Sydney: Allyn & Bacon.
- Stukat, K. G. (1958). *Suggestibility: A factorial and experimental analysis*. Stockholm: Almqvist, & Wiksell.
- Tata, P., & Gudjonsson, G. (1990). The effects of mood and verbal feedback on interrogative suggestibility. *Personality and Individual Differences*, 11, 1079–1085.
- Tobias, B. A., Kihlstrom, J. F., Schacter, D. L. (1992). Emotion and implicit memory. In S. A. Christianson (Ed.), *The handbook of emotion and memory: Research and theory* (pp. 67–84). Hillsdale, NJ: Erlbaum.
- Trouve, R., & Libkuman, T. (1992). Eyewitness performance of personality types as a function of induced arousal. *American Journal of Psychology*, 105, 417–433.
- van der Kolk, B. A. (1996). Trauma and memory. In B. A. van der Kolk & A. C. McFarlane (Eds.), *Traumatic stress: The overwhelming experience on mind, body and society*. New York: Guilford.

- Velten, E. (1968). A laboratory task for induction of mood states. *Behaviour Research and Therapy*, 6, 473–482.
- Ward, R., & Loftus, E. (1985). Eyewitness performance in different psychological types. *Journal of General Psychology*, 112, 191–200.
- Weingartner, H., Miller, H., & Murphy, D. (1977). Mood state dependent retrieval in verbal associations. *Journal of Abnormal Psychology*, 86, 276–284.
- Wells, G. (1993). What do we know about eyewitness identification? *American Psychologist*, 48, 553–571.
- Yarmey, A. D. (1990). *Understanding police and police work*. New York: New York University Press.
- Yerkes, R. M., & Dodson, J. D. (1908). The relation of the strength to rapidity of habit formation. *Journal of Comparative Neurology and Psychology*, 18, 459–482.
- Yuille, J. C., & Cutshall, J. L. (1986). A case study of eyewitness memory of a crime. *Journal of Applied Psychology*, 71, 318–323.
- Zaragoza, M., & Lane, S. (1994). Source misattributions and the suggestibility of eyewitness memory. *Journal of Experimental Psychology*, 20, 934–945.

POWER BREAK: A BRIEF HYPNORELAXATION PROGRAM TO REDUCE WORK-RELATED FATIGUE AND IMPROVE WORK SATISFACTION, PRODUCTIVITY, AND WELL-BEING

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The aim of this study was to examine the effect of hypnorelaxation “power breaks” taken each day over a four-week period on fatigue, mood, physical health symptoms and satisfaction with work. The participants were 75 men and women who were employees at AAMI Insurance Company telephone call centres in Melbourne, Australia. It was hypothesised that four weeks of practising the Power Break Program (hypnosis) for two 10-minute sessions each day would significantly reduce fatigue symptoms and improve mood, physical health and satisfaction with work. The results showed that the Power Break Program significantly reduced fatigue, negative mood and physical symptoms, and improved satisfaction with work. The Power Break Program consisted of an effective, but minimal intervention that could easily be adapted to any workplace. The Power Break Program appeared to meet the psychological needs of many of the participants and it was effective in delivering a positive outcome to participants.

The terms sleepiness and fatigue are often used interchangeably, but a distinction should be made between the two states. It is possible to be sleepy without being fatigued, fatigued without being sleepy, both sleepy and fatigued, or neither. When people go to bed they may be sleepy and/or fatigued. However, on many nights when people go to bed at their scheduled bedtime they are neither sleepy nor fatigued, yet they fall asleep quickly. The

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reason they fall asleep is that their scheduled bedtime falls during a time of day when there is a natural maximum propensity to sleep and they have also become conditioned to sleep at that time of day. Humans have two periods each day during which the propensity to sleep is high (Aschoff, 1994; Campbell, Dawson, & Zulley, 1993). The longest sleep episode (6–9 hours) usually occurs at night, while the second shorter period occurs during the day (post-lunch dip) (Campbell et al., 1993).

Taking brief “power naps” has been widely advocated as a way of decreasing fatigue and sleepiness, particularly in situations where performance and vigilance must be sustained for long periods of time and when sleep deprivation may also be present (Bonnet & Arand, 1995; Gillberg, Kecklund, Axelsson, & Akerstedt, 1996; Haslam, 1985; Lumley, Roehrs, Zorick, Lamphere, & Roth, 1986; Naitoh, Kelly, & Babkoff, 1992; Reyner & Horne, 1997; Takahashi & Arito, 2000). Following a night of restricted sleep, a daytime nap of between 15 and 120 minutes has been shown to reduce subjectively and objectively measured sleepiness in day workers (Gillberg et al., 1996) and narcoleptic, and alert and sleep-deprived day workers (Helmus et al., 1997). Brief naps have also been shown to decrease fatigue and improve performance and vigilance (Dinges, Orne, & Orne, 1985). Horne and Reyner (1996) demonstrated that sleepiness and “accidents” on a driving simulator were reduced following a 15-minute nap. A number of studies (Gillberg, 1984; Matsumoto, & Harada, 1994; Sallinen, Harma, Akerstedt, Rosa, & Lillqvist, 1998) have shown that a nap during the night reduces the effects of fatigue. However, conflicting results have been reported in studies assessing the benefits of naps taken prior to a night shift (Bonnet, 1991; Bonnet & Arand, 1995; Harma, Knauth, & Ilmarinen, 1989; Naitoh, Englund, & Ryman, 1982; Rosa, 1993). Therefore, the timing of naps within the circadian day may be of particular importance.

Short power naps (e.g., 15–20 minutes) have been shown to be more efficacious than longer naps because the sleeper does not usually enter slow-wave sleep and therefore experiences minimal sleep inertia upon awakening (Dinges et al., 1985). The symptoms of sleep inertia, although usually only present briefly, include disorientation and grogginess (Jewett et al., 1999). Power naps should not be thought of as a replacement for normal sleep and should only be used within a day as a means of temporarily attenuating fatigue and/or sleepiness.

Taking a nap at times other than when sleep propensity is high (night-time and mid-afternoon), can be difficult even if fatigue and/or sleepiness

are present. This is because it is much more difficult to fall asleep at times outside the natural circadian rhythm of sleep propensity (Campbell et al., 1993). There are a number of occupations where power naps may be useful and may even need to be mandated. These occupations include those where rotational shift work is involved or there is no real schedule (e.g., long-distance truck driving). There are a number of aspects associated with napping that make it difficult or undesirable to promote during day shifts. These include the following: (a) people find it difficult to fall asleep during napping opportunities (Campbell et al., 1993); (b) special napping facilities may be required; (c) people may sleep for too long; (d) long naps and even short naps may be associated with significant sleep inertia (Jewett et al., 1999); and (e) many employers and employees have a negative view of sleeping in the workplace during the day.

Fatigue is a more common problem at work during the day than sleepiness. Therefore, the scheduling of appropriate breaks during day shift work may be more useful than advocating power naps. Most office-based work requires the prolonged use of computers and/or other communication technologies such as telephones. Many workers become fatigued after continuous periods of using a computer or telephone. The normal work breaks (morning and afternoon tea and lunch time) are useful, but may not necessarily allow workers to reduce mental and/or physical fatigue. During the typical work break, workers often perform other personal tasks such as making telephone calls, banking and paying bills, re-parking cars and topping-up parking meters, or discussing work with colleagues. It is also common for people to work through scheduled breaks due to the pressures of modern business. The practice of working through breaks and doing personal tasks during breaks may further contribute to work-related fatigue. When this is coupled with the normal stresses related to home-life and other health factors such as inactivity, poor diet and poor sleep habits, it becomes evident that fatigue may become one of the major health issues in the next several decades.

It is clear that workers need to take breaks to be revitalised during the day in order to continue performing well. However, it is not likely that power naps will become widely used in the business world in Australia or in other countries where the work ethic is perceived to be in conflict with resting in the workplace. This is largely due to negative attitudes that both employees and employers have about sleeping during the day in the workplace and also the difficulty of accommodating sleeping workers in the workplace. In

addition, research has shown that sleeping during the day for a brief period of time is difficult due to both biological (circadian rhythm of sleep propensity) and environmental (e.g., noise and light levels) factors (Akerstedt, 1988).

A growing number of studies have shown that many people report feeling refreshed and revitalised following short sessions of various types of relaxation, hypnosis, or meditation. Many studies show that hypnosis, relaxation, and guided imagery have significant positive effects on psychological and physical wellness (for review, see Gruzelier, 2002). Gruzelier (2002) provides evidence from studies reviewed that interventions based around short daily sessions of hypnosis, relaxation, or guided imagery improve the immune response and enhance mood and well-being in subjects with a variety of conditions. Similarly, there have been many studies of various types of meditation, particularly transcendental meditation, which suggest that it has a powerful effect on physical and mental well-being (for reviews see Bogart, 1991; Canter & Ernst, 2003; Smith, Richardson, Hoffman, & Pilkington, 2005).

More recently, studies have reported that the practice of mindfulness (a meditational technique “loosely” derived from Buddhism) has some benefits in assisting people with a number of psychological and physical conditions ranging from anger to various cancers (for a conceptual and empirical review, see Baer, 2003). A meta-analysis of mindfulness-based interventions by Grossman, Niemann, Schmidt, and Walach (2004) showed that only 20 of 64 studies retrieved met the statistical criteria for inclusion. Mindfulness studies were excluded because they did not meet the following criteria: (a) insufficient detail about the interventions; (b) poor quality of health intervention; (c) inadequate statistical analysis; (d) mindfulness was not the central component of intervention; or (e) setting of the intervention or sample deviated too widely from the health-related mindfulness program. Nevertheless, Grossman et al. (2004) concluded that mindfulness-based interventions were useful in helping a broad range of individuals cope with both clinical and non-clinical problems.

The reviews cited above highlight problems facing many clinicians in reporting information about relaxation-, hypnosis- and meditation-based interventions. For clinicians, the main goal is to assist patients towards better wellness and thoughts about statistical research design, for practical reasons, are usually given a lower priority. However, clinicians’ reports of single cases or small studies, with less than optimal statistical control, may provide useful and heuristically valuable information.

Studies have shown that following brief sessions of relaxation, hypnosis, or meditation, many subjects report increased feelings of mental and physical

well-being (Baer, 2003; Grossman et al., 2004). Given the problems outlined above with taking power naps during the day in the workplace, it may be more realistic to promote “power breaks” (brief periods of relaxation, hypnosis, or meditation) during the working day. The aim of the study reported here was to determine the effect of two 10-minute Power Breaks taken each day over a four-week period on fatigue, mood, physical health symptoms, and satisfaction with work. It was hypothesised that practising the Power Break Program, for two 10-minute sessions each day over four weeks, would significantly reduce fatigue and improve mood, physical health, and satisfaction with work.

METHOD

Participants

The participants were 75 men and women who were employees at AAMI Insurance Company telephone call centres in Melbourne, Australia. One hundred and twenty employees were approached and 75 (62.5%) volunteered for either the experimental group (Power Break™ group) or the control group (there was no participant attrition during the study). Thus, assignment to the two groups was not random and this issue is addressed in the next section. The Power Break™ group consisted of 18 men and 25 women ($n = 43$). The mean age for men in the Power Break™ group was 27.88 years ($SD = 6.59$) and for women it was 29.64 years ($SD = 10.47$). The control group consisted of 14 men and 18 women ($n = 32$). The mean age for men in this group was 33.64 years ($SD = 8.60$) and for women it was 28.44 years ($SD = 9.43$).

The assignment of participants to the groups in the study was not ideal. The employer requested that workers be allowed to select which group they wanted to participate in. The rationale of the employer was that this would reflect a more realistic situation if power breaks were to be instituted in the workplace at some later date. The split-plot analysis of variance overcomes the participant selection issue, because it compares the groups before the study period and after the study period, and most importantly it compares whether change over the study period (pre to post) is the same or different within each group. The issue of expectation effects that may have arisen due to self-selection into the Power Break™ group could not be avoided. However, this problem is usually encountered in most studies of non-drug therapeutic intervention, because it is difficult to “blind” subjects to the treatment. Given the minimal nature of the Power Break™ intervention, it would be surprising if expectations were maintained over the entire 20-day intervention period.

Measures

Independent Variables

1. *Power Break™* — The program consisted of a 10-minute relaxation script recorded on a compact disk that participants were required to listen to, via headphones attached to a computer work station, on two occasions each day. The script included suggestions for relaxation and statements about being re-energised, recorded against a background of music composed specifically for this project. (This script was published in the May 2007 edition of the *AJCEH*.) The Power Break™ Program was designed to allow people to take a short break in the workplace to facilitate relaxation, reduce stress, promote feelings of being re-energised, and thus perform more efficiently upon returning to work. Power Break™ was specifically designed as a short break of only 10 minutes in order to minimise the chance of people falling asleep during the break. Power Break™ was not meant to be a power nap. With the short period of a Power Break™, it was unlikely that people would fall asleep, unless they were extremely efficient sleepers, sleep deprived, or had a sleep disorder (e.g., obstructive sleep apnoea, or narcolepsy).

Dependent Variables

1. *Physical Health* — The Symptoms Checklist was developed by Dunnell and Cartwright (1972) and consists of 31 commonly reported physical symptoms. The symptoms cover all major bodily systems, including the cardiovascular, respiratory, gastrointestinal, neurological, and musculoskeletal. In reference to the reliability and validity of symptoms checklists, Watson and Pennebaker (1989) reported that health complaint measures correlate about as highly with mood disturbance as they do with each other.

2. *Mood* — Profile of Mood States 37-item short version was developed from the original questionnaire that consisted of 65 statements. Statements include both negative and positive emotions (e.g., cheerful and sad). Six subscale scores: tension/anxiety, depression/dejection, anger/hostility, vigour/activity, fatigue/inertia and confusion/bewilderment, and a total mood disturbance score can be obtained from the Profile of Mood States. The reliability and validity of the scale(s) has been well established and normative data are available (McNair, Lorr, & Droppleman, 1981). The 37-item short version shows similar levels of reliability and validity to those of the original 65-item version (Shacham, 1983).

3. *Job Satisfaction* — The Abridged Job Description Index was developed from the original Job Description Index (Smith, Kendall, & Hulin, 1969). The Abridged Job Descriptive Index (AJDI) described by Russell et al. (2004) includes 25 items that measure satisfaction with job, present pay, promotion opportunities, supervision, and people at work.
4. *Satisfaction* with the Power Break™ Program — a 5-point, single item, Likert scale ranging from Strongly disagree to Strongly agree was used to measure satisfaction with the Power Break™ Program.
5. *Compliance* with the Power Break™ Program was measured by requesting participants to complete a daily log for the 20-day period of the study.
6. Would you *like to continue* using a Power Break™ during work? — a 5-point, single item Likert scale ranging from Strongly disagree to Strongly agree was used to measure interest in continuing the program in the workplace.
7. *Subjective Comments* about the Power Break™ Program — Participants were requested to write comments about what they thought of the Power Break™ Program.

Procedure

During week one, participants in the Power Break™ and control groups were requested to complete the set of questionnaires described above. In week two, 43 participants (Power Break™ group) commenced the Power Break™ Program of two 10-minute sessions per day, the first session after 25% of the work shift had been completed and the second session after 75% of the work shift had been completed, for four weeks. During the two 10-minute breaks, the Power Break™ group were seated upright at standard computer/telephone work stations in a section of a large open style office area where they usually worked. This area was not screened off and was essentially not different from other areas of the office. Following the Power Break™, participants had five minutes during which they were free to take a shorter than usual tea break before returning to their work stations in the same office area. During this time, participants typically drank tea, coffee or other beverages and a few quickly went outside to smoke a cigarette. The control group of 32 participants was yoked to the Power Break™ group and took their normal 15-minute work breaks at the same time during this same four-week period. During this time, control participants typically drank tea, coffee or other beverages, chatted or went outside to smoke a cigarette. At the end of this four-week period, in week six, all participants again completed the

set of questionnaires. Participants' compliance with the two Power Breaks per day was encouraged via daily reminders from the site managers and by being required to complete a daily log of Power Breaks. See Table 1 for the design of the study.

Table 1: Study Design

Groups	Week 1	Weeks 2-5	Week 6
Experimental group <i>n</i> = 43	Questionnaire battery	10 min. Power Break + 5 min. tea break x 2 per day	Questionnaire battery
Control group <i>n</i> = 32	Questionnaire battery	Normal 15 min. tea break x 2 per day yoked to Power Break group	Questionnaire battery

RESULTS

Data Analysis

Data were analysed using the Statistical Package for the Social Sciences (SPSS Version 14.0). One-way analysis of variance was utilised to test whether there were any statistical differences in age and gender between the Power Break and control groups. Pearson's Chi-square analyses were used to determine whether there were any statistical differences between the Power Break and control groups, with respect to previous occupation and level of education. Compliance with the Power Break program was assessed by analysing the logs of adherence to the program completed by participants and responses to a 5-point scale rating compliance. Satisfaction with, and whether participants would like to continue doing the Power Break program, were measured on 5-point rating scales (Figs 1 and 2). All other dependent variables were analysed using the SPSS Split-Plot Analyses of Variance (SPANOVA) procedure. SPANOVA is appropriate for mixed research designs that employ independent groups with repeated measures. The between-subjects factor was group (Power Break versus control) and the within-subjects factor was time (pre- and post- the study period). The statistical significance level was set at $p < .01$ for all comparisons.

Participant Characteristics

There were no statistical age differences between the Power Break and control groups, $F(1) = 1.11, p = .29, \eta^2 = .01$, or between the number of men and women within the groups, $F(1) = .63, p = .42, \eta^2 = .009$. There were no statistical

differences between the Power Break or control groups for previous occupation, $\chi(4) = 2.47, p = .64$, or for level of education, $\chi(4) = 5.93, p = .20$.

Compliance With the Power Break Program

Thirty-eight of the 43 participants in the Power Break group completed compliance logs during the four-week trial. The maximum possible level of compliance (100%) consisted of completing the Power Break 40 times (2 times per day x 20 days). The mean compliance level for the 38 subjects who completed the log was $M = 31.87$ days ($SD = 4.10$), or in percentage terms 79.68% compliance.

Satisfaction With the Power Break Program

Participants were also requested to rate satisfaction with the Power Break Program on a 5-point, single-item Likert scale varying from Strongly disagree to Strongly agree (Fig. 1). Figure 1 shows that 11.6% were not sure Power Break was useful, while the majority rated it as either moderately (25.6%) or strongly (55.8%) useful.

Would You Like to Continue Using a Power Break During Work?

Participants were also requested to rate whether they would like to continue doing the Power Break Program on a 5-point, single-item Likert scale varying from Strongly disagree to Strongly agree (Fig. 2). Figure 2 shows that the majority rated either moderately (27.9%) or strongly (58.1%) that they would like to continue doing the Power Break Program.

Physical Health Symptoms

Table 2 shows that there were no significant effects for group, or time, but the interaction effect between group and time was significant. Figure 3 shows that symptom total scores decreased significantly in the Power Break group ($p < .01$), but did not change in the control group ($p > .01$) across the study period.

Mood States

For depression/dejection, tension/anxiety, anger/hostility and fatigue/inertia, Table 2 shows that there were no significant effects for group or time, but

that the interaction effects between group and time were significant. Figure 4 demonstrates that depression/dejection scores decreased significantly in the Power Break group ($p < .01$) and increased significantly in the control group ($p < .01$) across the study period. Figure 5 outlines that tension/anxiety scores decreased significantly in the Power Break group ($p < .01$) and increased, but not significantly in the control group ($p > .01$) across the study period. Figure 6 shows that the anger/hostility scores for the Power Break group decreased significantly ($p < .01$), while scores for the control group did not change significantly ($p > .01$) across the study period. Figure 7 also depicts that anger/hostility scores decreased significantly in the Power Break group ($p < .01$) and increased, but not significantly, in the control group ($p > .01$) across the study period.

For confusion/bewilderment, Table 2 indicates that the main effect for group was not significant, but that the main effect for time and the interaction effect between group and time were significant. Figure 8 shows that confusion/bewilderment scores decreased significantly in the Power Break group ($p < .01$), while scores for the control group did not change significantly ($p > .01$) across the study period.

Table 2 indicates that for vigour/activity there were no significant effects for group, or time, and that the interaction effect between group and time was not significant. Figure 9 shows that the vigour/activity scores for the Power Break and control groups increased only slightly across the study period.

Table 2 indicates that for total mood disturbance, there were no significant main effects for group or time, but that the interaction effect between group and time was statistically significant. Figure 10 shows that total mood disturbance scores decreased significantly in the Power Break group ($p < .01$), while scores for the control group did not change significantly ($p > .01$) across the study period.

Abridged Job Description Index

Table 3 highlights that for satisfaction with job, the effects for group or interaction were not significant, but the effect for time was significant. Figure 11 also shows satisfaction with job scores increased significantly for the Power Break group ($p < .01$), but did not change significantly for the control group ($p > .01$) across the study period. For satisfaction with present pay, Table 3 indicates there was a significant effect for group, but that the effect time and the effect for the interaction effect between group and time were significant.

Table 2: The Results of the Split-Plot Analysis of Variance for Physical Health Symptoms and Mood Variables

Variables	Effect	<i>F</i>	<i>df</i>	<i>p</i>	η^2
Physical health symptoms	Group	2.48	1, 56	.12	.04
	Time	1.54	1, 56	.22	.03
	Group x Time	8.50	1, 56	.005	.13
Depression/dejection	Group	2.54	1, 68	.12	.35
	Time	0.30	1, 68	.59	.004
	Group x Time	6.42	1, 68	.01	.09
Tension/anxiety	Group	1.17	1, 70	.28	.02
	Time	1.31	1, 70	.26	.02
	Group x Time	9.69	1, 70	.003	.12
Anger/hostility	Group	3.90	1, 70	.04	.04
	Time	1.70	1, 70	.19	.02
	Group x Time	8.07	1, 70	.006	.10
Fatigue/inertia	Group	1.06	1, 69	.31	.02
	Time	3.55	1, 69	.06	.05
	Group x Time	8.15	1, 69	.006	.11
Confusion/bewilderment	Group	0.24	1, 69	.62	.004
	Time	6.81	1, 69	.01	.90
	Group x Time	14.48	1, 69	.0005	.17
Vigour/activity	Group	0.47	1, 68	.49	.007
	Time	1.74	1, 69	.19	.02
	Group x Time	0.55	1, 69	.46	.008
Total mood disturbance	Group	1.65	1, 66	.20	.02
	Time	3.41	1, 66	.06	.05
	Group x Time	13.54	1, 66	.0005	.17

Figure 12 shows that scores for present pay satisfaction for the Power Break group increased significantly ($p < .01$), while those for the control group did not change significantly ($p > .01$) across the study period. For satisfaction with promotion opportunities and with people at work, Table 3 indicates that there were no significant main effects for group or time, and that the interaction effects between group and time were not significant (see Figs 13 and 15). Table 3 shows that for satisfaction with supervision there was a significant effect for group, but not for time, and that the interaction effect between group and time and group was not significant. Figure 14 delineates that scores for satisfaction with supervision were significantly ($p < .01$) higher for the Power Break group, in comparison to the control group, both pre- and post- the study period.

Table 3: The Results of the Split-Plot Analysis of Variance for the Abridged Job Description Index Variables

Variables	Effect	<i>F</i>	<i>df</i>	<i>p</i>	η^2
Satisfaction with job	Group	2.64	1, 60	.11	.04
	Time	6.66	1, 60	.01	.10
	Group x Time	5.27	1, 60	.02	.08
Satisfaction with present pay	Group	7.45	1, 60	.008	.12
	Time	1.08	1, 60	.30	.02
	Group x Time	4.20	1, 60	.04	.07
Satisfaction with promotion	Group	0.14	1, 57	.70	.002
	Time	0.09	1, 57	.76	.002
	Group x Time	0.29	1, 57	.59	.005
Satisfaction with supervision	Group	7.56	1, 61	.008	.11
	Time	0.69	1, 61	.41	.01
	Group x Time	0.08	1, 61	.78	.001
Satisfaction with people	Group	0.47	1, 62	.49	.008
	Time	0.60	1, 62	.44	.01
	Group x Time	0.01	1, 62	.92	.00

Subjective Reports About the Power Break Program

Participants were also requested to supply subjective comments about what they thought about the Power Break Program. Participants' subjective comments were analysed for the number of embedded positive or negative comments. There were 107 positive comment and 29 negative comments. Positive comments outnumbered negative comments by about 3.69 to 1. In most cases, the negative comments were suggestions about how the program might be improved (e.g., see negative comments). These data were analysed by applying a qualitative procedure to extract the dominant themes that were expressed by participants.

The following are examples of positive comments:

I really enjoyed the Power Break. I found I was able to cope with increased caller/calls better and not get as stressed. I found myself relaxed throughout the day and I think I slept better. I noticed now that it's finished I'm a little more tense especially around the shoulders and people are bugging me a little more. I would like to keep doing this if at all possible. (Participant 14)

I loved the Power Break experience! I did find that my memory, focus and confidence were all vastly improved and have since remained at a much higher level. I feel better equipped to assist and respond to customers, more confident

in my ability to solve problems and desire a much higher level of satisfaction from my work. Thank you so much for allowing me to participate in this study. I would recommend the practice be installed as a permanent element of the job. (Participant 19)

The benefits were: Less agitated with customers; more relaxed easygoing which gave better service; could better approach customers; a lot happier for some reason at work and looked forward to the Power Break and felt more positive after I had done it; I was less rushed in my conversations with customers and listened to the customers needs; I was more relaxed with fellow colleagues and enjoyed my work a whole lot more; it was good to learn to relax more even if it was only 15 mins — the two/three hours after was more relaxed as well. (Participant 29)

The Power Break program was great. It helped me be more patient at work, but also I was having a bit of health and personal problem in my life during those four weeks. The Power Break helped me through these difficult times by looking at more positive aspects and take each day as it comes with a good smile. Thank you for letting me experience that as it had bought me a lot of positive in my life. (Participant 30)

The following are examples of negative comments:

At the start it was interesting and exciting, but listening to the same thing made it a bit boring and I started to feel that I knew the program off by heart. (Participant 4)

The only improvement would be if it were possible to have the computer set up in a more private area to make it easier to relax and not be interrupted. (Participant 8)

I felt that after the breaks I would come back tired as it made me want to sleep. (Participant 10)

Was a little repetitive and it got a bit too much after the 3rd week. It'll be good if we can change the CD after each week. (Participant 16)

I found that the man's voice got annoying after a while. A woman's voice would've been much better. (Participant 32)

The dominant theme that was distilled from their overall comments was that the majority of subjects found that the Power Break Program was highly beneficial and that they would like to continue doing something like this either at work and/or at home. With respect to the negative comments, the main themes were centred on the aspects of the program being repetitive, boring or qualitatively not to the liking of the participant (e.g., see above).

Figure 1: Percent of Participants in the Power Break Group ($n = 43$) by Ratings of Power Break Program Was Useful

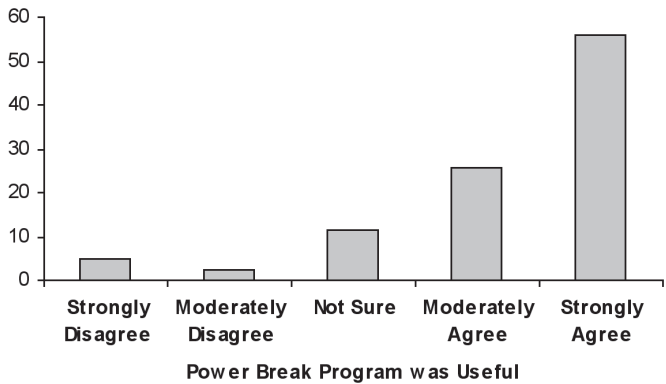
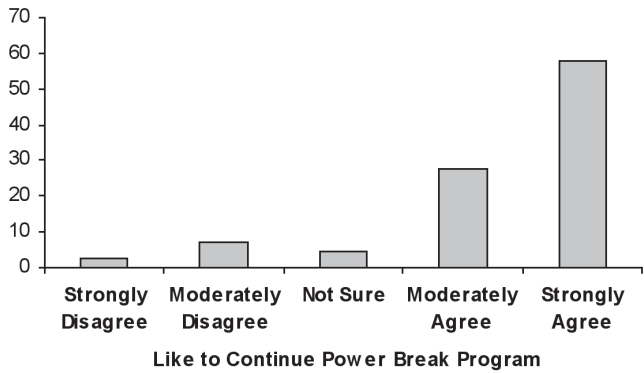


Figure 2: Percent of Participants in the Power Break Group ($n = 43$) by Ratings of Like to Continue Power Break Program



DISCUSSION

The aim of this study was to determine the effect of two 10-minute Power Breaks per day over a four-week period on fatigue, mood, physical health symptoms, and satisfaction with work. It was hypothesised that four weeks of practising the Power Break Program for two 10-minute sessions each day would reduce fatigue and would improve mood, physical health, and satisfaction with work.

Figure 3: Means and Standard Errors for Symptoms Total for Power Break ($n = 43$) and Control Groups ($n = 32$) Pre- and Post- Study

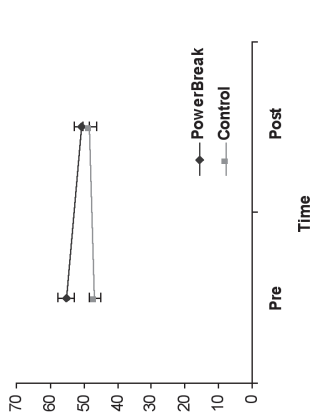


Figure 5: Means and Standard Errors for Tension/Anxiety for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

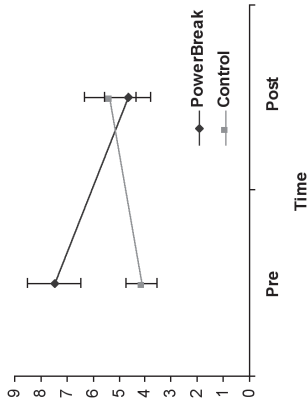


Figure 4: Means and Standard Errors for Depression/Dejection for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

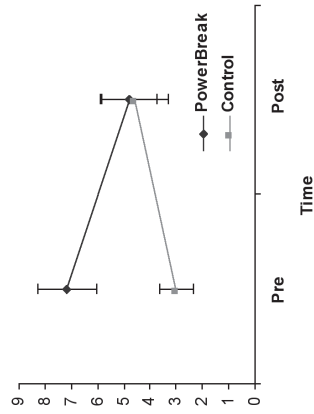


Figure 6: Means and Standard Errors for Anger/Hostility for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

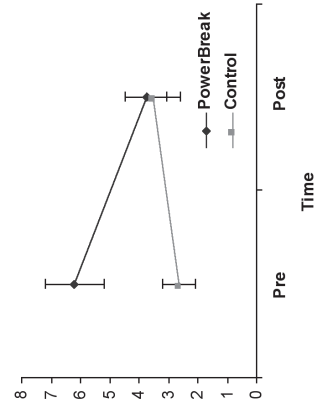


Figure 7: Means and Standard Errors for Fatigue/Inertia for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

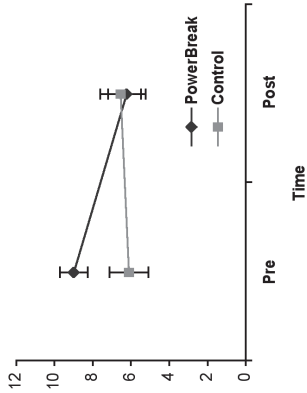


Figure 9: Means and Standard Errors for Vigour/Activity for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

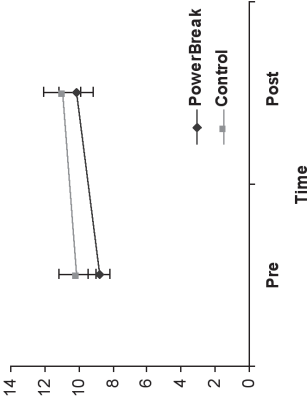


Figure 8: Means and Standard Errors for Confusion/Bewilderment for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

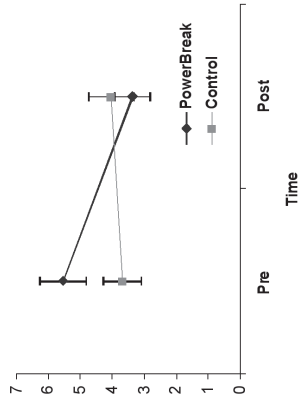


Figure 10: Means and Standard Errors for Total Mood Disturbance for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

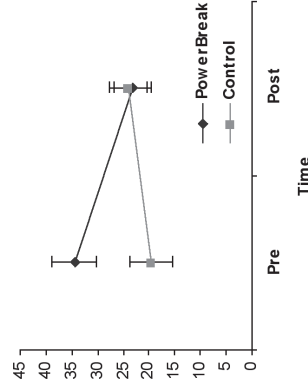


Figure 11: Means and Standard Errors for Satisfaction With Job for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

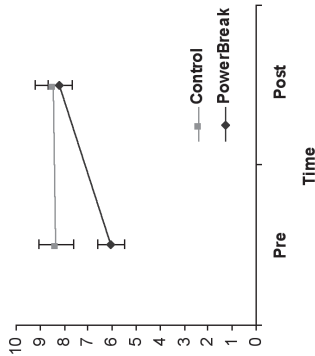


Figure 12: Means and Standard Errors for Satisfaction With Present Pay for Power Break and Control Groups Pre- and Post- Study

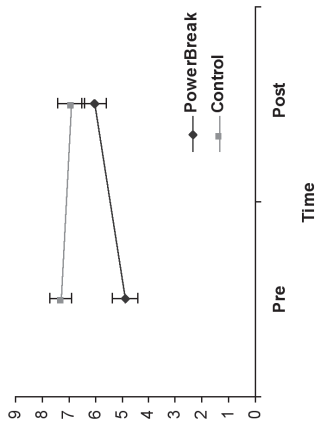


Figure 13: Means and Standard Errors for Satisfaction With Promotion Opportunities for Power Break and Control Groups Pre- and Post- Study

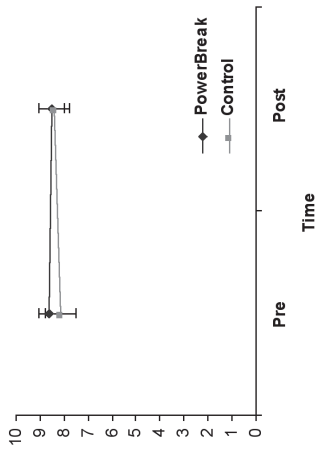


Figure 14: Means and Standard Errors for Satisfaction With Supervision for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study

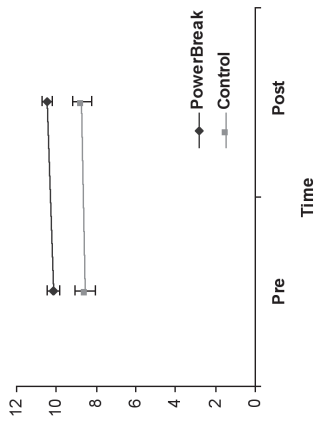
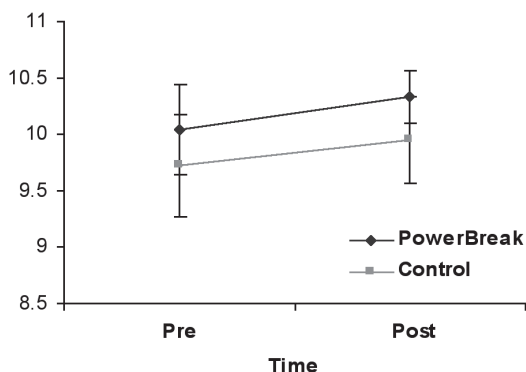


Figure 15: Means and Standard Errors for Satisfaction With People at Work for Power Break ($n = 43$) and Control ($n = 32$) Groups Pre- and Post- Study



Mood and Physical Health Symptoms

The findings of the study partly supported the hypothesis that the Power Break Program would reduce self-reported fatigue and negative mood. Self-reported scores for depression/dejection, tension/anxiety, anger/hostility, fatigue/inertia, confusion/bewilderment, and total mood disturbance decreased significantly in the Power Break group, but not in the control group across the study period. There were no real differences reported in terms of positive scale vigour. Vigour scores for both the Power Break and control groups increased slightly across the study period. Similarly, the findings of the study also supported the hypothesis that the Power Break Program would improve self-reported physical health. Participants in the Power Break group showed a significant reduction in reported negative physical symptoms, while participants in the control group showed no change in the mean number of reported symptoms across the study period.

Participants in the Power Break group reported higher scores on each of the negative mood scales and higher levels of physical health symptoms at the beginning of the study in comparison to the control group participants. However, these differences were not large as none of the effects for group in the split-plot ANOVAs were statistically significant. The slightly higher scores may have been due to the fact that participants were allowed to volunteer for either the Power Break or control groups. Given that subjects were not randomly assigned to each group, due to the constraints requested by the employer and

difficulties associated with conducting the study in the actual workplace, it may be that participants who elected to be in the Power Break group did so because they had a higher level of psychological need. Evidence for the idea that psychological need probably led some participants to volunteer for the Power Break and not the control group can be seen in some of the subjective verbal feedback reports made by participants in the Power Break group. The following example illustrates this:

The Power Break program was great. It helped me be more patient at work, but also I was having a bit of health and personal problem in my life during those four weeks. The Power Break helped me through these difficult times by looking at more positive aspects and take each day as it comes with a good smile. Thank you for letting me experience that as it had bought me a lot of positive in my life.

Further evidence supporting this idea can also be seen in the attributions that other participants made in their feedback about the Power Break Program. This idea is also supported by examining the Power Break script, which shows that the nature of the intervention was relatively minimal in terms of suggestions for improved wellness. However, at the same time this attests to the fact there was a psychological need and that it can be met by interventions like the Power Break Program that are relatively simple and cost effective.

Self-selection to the experimental and control groups was a limitation of the study and although the results showed that by the end of the study period the Power Break group reported lower negative mood and physical symptoms scores that were equivalent to levels shown by control participants, the findings need to be regarded with caution. However, the design of the study did allow the issue of participant self-selection to the Power Break group to be overcome by comparing the relative change in the two groups over time using the split-plot ANOVA procedure. In addition, participants in the Power Break and control groups did not differ with respect to age, gender, educational level or previous employment characteristics.

The finding that the brief Power Breaks, undertaken two times each day over the 20 days of the study reduced self-reported fatigue, negative mood, and physical symptoms supports the findings of many of the studies that were examined in the reviews by Baer (2003) and Grossman et al. (2004). These studies showed that brief sessions of relaxation, hypnosis, meditation or combinations of these approaches led to subjects reporting reduced feelings of fatigue and increased feelings of mental and physical well-being. The effects of reduced fatigue and increased feeling of physical and mental well-being

achieved by brief periods of relaxation or meditation in the workplace similar to the Power Break Program employed in the present study appear to be similar to the effects reported after brief power naps (e.g., Bonnet & Arand, 1995; Gillberg et al., 1996; Haslam, 1985; Lumley et al., 1986; Naitoh et al., 1992; Reyner & Horne, 1997; Takahashi & Arito, 2000).

There is no evidence that relaxation breaks, such as those in the Power Break Program, can reduce sleepiness and/or symptoms of sleepiness. However, fatigue is a more common problem at work during the day than sleepiness. The scheduling of appropriate breaks during day shift work may be more useful than advocating power naps.

Satisfaction With Work

The hypothesis that the Power Break Program would significantly improve work satisfaction was partly supported. It was found that satisfaction with job scores increased significantly for the Power Break group, but did not change for the control group across the study period. Scores for present pay satisfaction were significantly lower in the Power Break group in comparison to the control group, at the beginning of the study period, but increased significantly across the study period to equal those of the control group. Scores for satisfaction with supervision were higher for the Power Break group in comparison to the control group, both before and after the study period. There were no significant differences between the Power Break and control groups, before or after the study period, for satisfaction with promotion opportunities and satisfaction with people at work scores. Many of the statements made in the qualitative feedback about the Power Break Program indicated that it improved both satisfaction with work, attitudes to work, and work efficiency

The following examples illustrate this:

With Power Break it was nice to relax, take time off the phone. I was more alert and happy to take a call.

It was pretty good. I thought it had a positive effect on my work and performance.

I found that during the study my body was actually looking forward to having the break. If I missed a break or was late, I found great relief when finally getting around to having the break. Upon returning to work after the break, I felt more able to carry on with my work than if I didn't have the break. I was more clear minded and more alert even if I'd had less sleep the night before. Overall, I found it very advantageous and was disappointed when the 4 weeks was up. It is something I've

started to include in my private life and will continue to do so. I've found that these 2, 15 min. breaks are really helpful and have helped me physically and mentally here at work and at home.

Power Break was a great program. I looked forward to sessions and knew I would feel revived after and enjoy my work more. I miss having a Power Break each day and would strongly recommend they become available for staff in stressful environments, such as call centres.

It was a great stress relief having even just a small time off the phones gave me a little more motivation. Overall I did see a difference in my attitude towards my work.

A major beneficial factor of having the ability to have a Power Break more so was to re-focus on the days targets and objectives.

In the last four weeks, I have discovered that I'm actually more efficient. The Power Break gave me time to relax for 10 minutes and then I was able to come back to work a little bit more focused.

Having our Power Break allowed us to break up the working day. Being off the phone for 10 minutes gave us time to recoup and regather our thoughts and energy. I was hesitant to acknowledge that Power Break would affect me in any way, but toward the end of four weeks I found myself looking forward to it and my attitude toward customers seemed to be a lot better just after each break.

I enjoyed the Power Break Program and felt it helped me relax and be able to continue working without becoming to tired or distracted.

It was also evident from the feedback about the study that many of the participants would like to continue doing the Power Break Program or a similar program. The comments made by participants suggest that there is a need for this type of workplace intervention to reduce stress and improve work performance. The Power Break Program appears to be a simple and cost-effective way to improve workplace wellness and productivity.

Compliance With the Power Break Program

In general, the compliance with the Power Break Program was high. In most instances, lack of compliance was due to participants taking their regular days off or taking holiday leave, rather than not wanting to participate. Thirty-eight of the 43 participants in the Power Break treatment group completed

compliance logs during the four-week trial. The maximum possible level of compliance (100%) consisted of completing the Power Break 40 times (2 times per day x 20 days). The mean compliance level for the 38 subjects who completed the log was $M = 31.87$ days ($SD = 4.10$), or in percentage terms, 79.68% compliance. The findings of this study indicate that the introduction of time off to participate in short 10-minute Power Breaks in the workplace would facilitate compliance and that it may be time well spent for both employees and employers.

Satisfaction With the Power Break Program

Participants were requested to rate satisfaction with the Power Break Program on a 5-point, single-item Likert scale with ratings varying from Strongly disagree to Strongly agree. About 12% were not sure if Power Break was useful, while the majority rated it as either moderately (25.6%) or strongly (55.8%) useful.

Would you like to Continue Using a Power Break During Work?

Participants were also requested to rate whether they would like to continue doing the Power Break Program on a 5-point, single-item Likert scale with rating varying from Strongly disagree to Strongly agree. The majority rated either moderately (27.9%) or strongly (58.1%) that they would like to continue doing the Power Break Program.

Conclusions

The Power Break Program avoids the issues associated with power naps in the corporate workplace. These problems are that people find it difficult to fall asleep during daytime napping opportunities (Akerstedt, 1988), special napping facilities are required, some people may sleep for too long, long naps and even short naps may be associated with significant sleep inertia (Dinges et al., 1985; Jewett et al., 1999), and many employers and employees have a negative view of sleeping in the workplace during the day. The Power Break Program reduced fatigue, negative mood and physical symptoms and improved satisfaction with work in a telephone call centre. Telephone call centres have a high turnover of staff due to the demands of the work environment. Call centres can be stressful environments to work in, because staff members have to deal with a wide range of human

emotions over the telephone and the work itself can be very repetitive. The Power Break Program consisted of an effective, but minimal intervention that could be adapted easily to most workplaces. The Power Break Program also appeared to meet a psychological need of many of the participants and it was effective in delivering a positive outcome to participants in this area. Further studies need to be carried out to verify and extend the limited findings of the present study. Future studies should also examine whether short relaxation breaks like the Power Break program can be effective in reducing sleepiness and sleepiness symptoms. The issue of sleepiness was not addressed in the current study and sleepiness is a major issue in many workplaces (Akerstedt, 1988).

REFERENCES

- Akerstedt, T. (1988). Sleepiness as a consequence of shift work. *Sleep, 11*, 17–34.
- Aschoff, J. (1994). Naps as integral parts of the wake time within the human sleep–wake cycle. *Journal of Biological Rhythms, 9*, 145–155.
- Baer, R. A. (2003). Mindfulness training as a clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10*, 125–143.
- Bogart, G. (1991). The use of meditation in psychotherapy: A review of the literature. *American Journal of Psychotherapy, 45*, 383–412.
- Bonnet, M. H. (1991). The effect of varying prophylactic naps on performance, alertness and mood throughout a 52-hour continuous operation. *Sleep, 14*, 307–315.
- Bonnet, M. H., & Arand, D. L. (1995). Consolidated and distributed nap schedules and performance. *Journal of Sleep Research, 4*, 71–77.
- Campbell, S. S., Dawson, D., & Zulley, J. (1993). When the human circadian system is caught napping: Evidence for endogenous rhythms close to 24 hours. *Sleep, 16*, 638–640.
- Canter, P. H., & Ernst, E. (2003). The cumulative effects of transcendental meditation on cognitive function — a systematic review of randomised controlled trials. *Weiner Klinische Wochenschrift, 115*, 758–766.
- Dinges, D. F., Orne, M. T., & Orne, E. C. (1985). Assessing performance upon abrupt awakening from naps during quasi-continuous operations. *Behavior Research Methods, Instruments and Computers, 17*, 37–45.
- Dunnell, K., & Cartwright, A. (1972). *Medicine takers, prescribers and hoarders*. London: Routledge & Kegan Paul.
- Gillberg, M. (1984). The effects of two alternative timings of a one-hour nap on early morning performance. *Biological Psychology, 19*, 45–54.
- Gillberg, M., Kecklund, G., Axelsson, J., & Akerstedt, T. (1996). The effects of a short daytime nap after restricted night sleep. *Sleep, 19*, 570–575.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research, 57*, 35–43.

- Gruzelier, J. H. (2002). A review of the impact of hypnosis, relaxation, guided imagery and individual differences on aspects of immunity and health. *Stress*, 5, 147–163.
- Harma, M., Knauth, P., & Ilmarinen, J. (1989). Daytime napping and its effects on alertness and short-term memory performance in shiftworkers. *International Archives of Occupational and Environmental Health*, 61, 341–345.
- Haslam, D. R. (1985). Sleep deprivation and naps. *Behavior Research Methods, Instruments and Computers*, 17, 46–54.
- Helmus, T., Rosenthal, L., Bishop, C., Roehrs, T., Syron, M. L., & Roth, T. (1997). Excessive daytime sleepiness: The alerting effects of short and long naps in narcoleptic, sleep-deprived, and alert individuals. *Sleep*, 20, 251–257.
- Horne, J. A., & Reyner, L. A. (1996). Counteracting driver sleepiness: Effects of napping, caffeine, and placebo. *Psychophysiology*, 33, 306–309.
- Jewett, M. E., Wyatt, J. K., Ritz-De Cecco, A., Khalsa, S. B., Dijk, D. J., & Czeisler, C. A. (1999). Time course of sleep inertia dissipation in human performance and alertness. *Journal of Sleep Research*, 8, 1–8.
- Lumley, M., Roehrs, T., Zorick, F., Lamphere, J., & Roth, T. (1986). The alerting effects of naps in sleep-deprived subjects. *Psychophysiology*, 23, 403–408.
- Matsumoto, K., & Harada, M. (1994). The effect of night-time naps on recovery from fatigue following night work. *Ergonomics*, 37, 899–907.
- McNair, D. M., Lorr, M., & Droppleman, L. F. (1981). *Profile of Mood States manual*. San Diego: Educational and Industrial Testing Service.
- Naitoh, P., Englund, C. E., & Ryman, D. (1982). Restorative power of naps in designing continuous work schedules. *Journal of Human Ergology*, 11 (Suppl.), 259–278.
- Naitoh, P., Kelly, T. L., & Babkoff, H. (1992). Napping, stimulant and four-choice performance. In R. J. Broughton & R. D. Ogilvie (Eds.), *Sleep, arousal and performance* (pp. 198–219). Boston: Birkhauser.
- Reyner, L. A., & Horne, J. A. (1997). Suppression of sleepiness in drivers: Combination of caffeine with a short nap. *Psychophysiology*, 34, 721–725.
- Rosa, R. R. (1993). Napping at home and alertness on the job in rotating shift workers. *Sleep*, 16, 727–735.
- Russell, S. S., Spitzmuller, C., Lin, L. F., Stanton, J. M., Smith P. C., & Ironson, G. H. (2004). Shorter can also be better: The Abridged Job in General Scale. *Educational and Psychological Measurement*, 64, 878–893.
- Sallinen, M., Harma, M., Akerstedt, T., Rosa, R., & Lillqvist, O. (1998). Promoting alertness with a short nap during a night shift. *Journal of Sleep Research*, 7, 240–247.
- Shacham, S. (1983). A shortened version of the profile of mood states. *Journal of Personality Assessment*, 47, 305–306.
- Smith, J. E., Richardson, J., Hoffman, C., & Pilkington, K. (2005). Mindfulness-based stress reduction as supportive therapy in cancer care: Systematic review. *Journal of Advanced Nursing*, 52, 315–327.
- Smith, P. C., Kendall, L., & Hulin, C. L. (1969). *The measurement of satisfaction in work and retirement*. Chicago: Rand McNally.

- Takahashi, M., & Arito, H. (2000). Maintenance of alertness and performance by a brief nap after lunch under prior sleep deficit. *Sleep*, 23, 813–819.
- Watson, D., & Pennebaker, J. W. (1989). Health complaints, stress and distress: Exploring the central role of negative affectivity. *Psychological Review*, 96, 255–266.

REFLECTIONS: THE ESSENCE OF THERAPY — AS OLD AS TIME

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Effective therapy is actually a very simple process, yet we have turned it into an arcane “science.” I believe that virtually all our patients come to us with a single problem, this being their insistence on thinking in ways that harm them rather than in ways that help them. Our main task is, then, to help them change this damaging pattern. Reduced to its simplest form, our therapeutic endeavours involve helping patients to think in different ways and to talk to themselves in a more helpful manner. To illustrate how this might be achieved, let’s look at four case studies. These affirm that there is no single path to excellence and that simple, straightforward methods will usually achieve desirable outcomes.

As I read the literature on hypnotherapy, listen to the “scientific” papers outlining the theory upon which our clinical work might be based, and attend the various workshops provided to help us improve our techniques, I am becoming increasingly aware of the way in which we are needlessly complicating what we do. Effective therapy is actually a very simple process, yet we have turned it into an arcane “science.”

Hypnoanalysis is an example of what I mean. I remember attending a workshop presented by a leading proponent of this approach. She was very excited by a recent case, one in which a favourable result was achieved “very quickly indeed.” Actually, the time involved was five years, with an average of four sessions a week. Later we learned that the client had already experienced eight years of conventional psychoanalysis. The end result may have been very satisfactory, although there were doubts expressed about this, but the time period involved would be well beyond that available to the Australian hypnotherapist. This workshop was a very valuable learning experience for

me, but not in the manner intended by the presenter. What I learned was that, if I was to be an effective therapist, I needed to find another approach which would produce the results desired by the client far more quickly.

Attending Ericksonian conferences provided another valuable learning experience, again not necessarily that intended by the workshop presenters. Although I was greatly impressed by their expertise, subtlety, clever use of words, and excellent presentation skills, I felt that it must be possible to achieve comparable results without the incredibly high levels of creativity and language skills which they seemed to regard as essential. As I marvelled at the ingenuity of multiple embedded metaphors, double binds, and tonal shadings, I had the sneaking suspicion that such brilliance might be more for the benefit of the therapist than the patient. By using such involved skills, therapists would be able to keep themselves more interested in what they were doing without necessarily helping clients resolve their problems.

My present fear for the future of hypnosis is that its teaching may be placed in the hands of university academics who have little or no practice experience. For many years, I was a university academic and, during this time, I could see that, by the very nature of their training, most academics were unable to simplify the material they presented. On the contrary, basically simple concepts were made unnecessarily complicated by arcane jargon which served no real purpose other than to indicate to students that the subject they were studying was so complex that a new language must be created to explain its intricacies. In reality, they have this compelling need to complicate their material with a jargon difficult for others to understand, mainly because it enhances their own position as “the keeper of the secrets.”

During the 1960s, influential psychotherapist Carl Rogers conducted a series of investigations into the training of clinical psychologists in the United States. These were never written up in the academic literature, but he did refer to the results of the studies in his books, particularly *Freedom to Learn* (1969). Rogers believed that the university courses designed to train clinical psychologists systematically extinguished those qualities — such as genuineness, warmth, and empathy — most characteristic of successful clinicians. Something very similar has occurred in Australia with the training of nurses being removed from the hospitals, where the emphasis was on practicality, to the universities, with the emphasis on theory. My fear is that university teaching of hypnosis would accomplish something similar.

It is easy to overlook the simple, underlying truth of most of our work. I believe that virtually all our patients come to us with a single problem, this

being their insistence on thinking in ways that harm them, rather than in ways that help them. Our main task is, then, to help them change this damaging pattern. Frank (1972) made somewhat the same point when he commented that patients seek therapy primarily because they are demoralised. This state he defined in terms of people being unable to handle life situations adequately, particularly when they and others around them felt they should be able to cope with such situations. Reduced to its simplest form, our therapeutic endeavours involve helping patients to think in different ways and to talk to themselves in a more helpful manner. To illustrate how this might be achieved, let's look at four case studies.

WEIGHT LOSS

Sally regarded herself as being very overweight, this being the main reason why her self-image was so poor. After years of unhappiness, she sought psychiatric help to improve matters. Her prime objective was to lose weight. However, her psychiatrist treated the overweight as a symptom of far deeper and more important problems. In particular, he saw Sally's relationship with her father as the main source of her unhappiness, although difficulties in relating to her siblings and peers also contributed to her problem. Nine months of therapy helped her to gain considerable insight into these problems. Sally could now speak very intelligently about them. Unfortunately, she was still overweight. In fact, she had gained additional kilos during the course of therapy.

With Sally, I had a total of two 50-minute sessions. The first of these followed a pattern I have found to be extremely effective with a wide range of presenting problems (Stanton, 1996). It uses a combination of physical calming, placing desired attributes such as determination and confidence into the unconscious mind, "dumping" whatever is no longer needed in life, in Sally's case unwanted weight and rich foods, and creating the future she wants in her own "special place." Nothing particularly original there. In the second session, a number of neuro-linguistic programming brief therapy techniques were combined in a procedure I have termed "The 15-Minute Solution" (Stanton, 1996). These included the "Swish," anchoring, installing belief in her ability to be the weight she wanted to be, and a rapid trance procedure designed to engage the unconscious mind in producing the desired outcome.

Sally began discarding weight almost immediately and, over the next five months, achieved her desired outcome. As she gradually achieved her target weight, her confidence in her ability to take more control over her weight

and over her life increased markedly. As it did, she felt increasingly good about herself, with her self-esteem improving markedly due to her new-found ability to take more control over her mind, over her weight, and over her life. In other words, two 50-minute sessions in which Sally learned ways of changing the way she thought about her weight and about herself enabled her to achieve the goals she had sought nine months previously.

REFRAMING A PANIC ATTACK

Sally's success in losing weight could be seen as a reframing process. This is, I believe, the therapist's key tool because it implies taking something about which the patient is thinking negatively and changing it in some way so that he or she now thinks more positively. Gary is a case in point. He sought my help in coping with severe panic attacks. Should he be driving when an attack occurred, he would be unable to continue, having to pull over to the side of the road until the palpitating heart, blurred vision, shaking hands, and hyperventilation had eased.

After some discussion, Gary recognized that the cause of his panic seemed to be a feeling of discomfort in his chest. This he interpreted as a sign that he was going to have a heart attack and die. His heart had been checked out by both his general practitioner and two different specialists, none of whom were able to identify anything abnormal. Thus it would appear that it was Gary's perception of the symptom rather than anything physical that was triggering the panic attacks. Reframing of this perception appeared to be one possible way to alleviate the problem.

Gary loved windsurfing with his two teenaged sons. Every spare minute found them out on the water. As hypnotherapists, our experience tells us that people can often derive as much, sometimes even more, pleasure from imagining themselves doing something than if they were actually performing those actions. So we reframed the chest discomfort as a signal to go "mentally" windsurfing. At the first sign of any uneasiness in the chest, Gary imagined himself windsurfing. Thus the trigger that had previously been perceived as a threat, reacted to by panic symptoms, now became a cue to enjoy himself. Gary still has the chest discomfort, but has not had a panic attack for over three years.

This change was accomplished in a single session. As Talmon (1990) has pointed out, "the most frequent length of therapy for every one of the therapists [working at the Department of Psychiatry at the Kaiser Permanente

Medical Center] was a single session.” Further, three-quarters of those clients seen for this brief interaction expressed complete satisfaction that they had received everything they required.

Such brevity demands a simplicity that is impossible to accomplish with very sophisticated methods. Obviously, where the rapid treatment approach does not produce the desired outcomes, it will become necessary to become increasingly depth oriented. However, in over 30 years as a therapist I have found that less than 5% of my patients do not respond favourably to the brief, relatively simple, straightforward approach.

REFRAMING OF HATRED

Another case, equally as simple and straightforward as that of Gary, also involved reframing. Robert, the 34-year-old managing director of a family catering business, developed an intense hatred of a cousin, Paul, who also worked for the firm. Paul was very attracted to Judith, Robert’s wife, attempting to convince her to leave her husband and live with him.

The line I took with Robert during our single-session encounter centred on a change of perception. I was able to convince him that, for each of us, people exist not as they are but as “ideas” in our minds. Although we may not be able to change people themselves, we are able to change our “idea” of them. Some examples I suggested were that Robert think of Paul as a loser, a clown, naked, wearing long underwear, or any other mental image that would help him think of his cousin in ridiculous and ineffectual terms.

After this mental reframing, we moved to another perceptual reframe. I pointed out to Robert that Paul had paid him a great compliment. Through his behaviour, he was saying that Robert had made a wonderful choice of wife, one far better than he had been able to do. His wife, too, has paid him a compliment for she had she rejected Paul, choosing to remain with her husband as the more worthy person.

Although it might seem that something as simple as the reframing outlined above could not really effect any lasting change, Robert’s attitude to Paul did change. Although he did not like him, and made no effort to seek his company, he was now able to work with him in the business and no longer allowed thoughts of his perfidy to occupy his mind. His hatred had abated, no longer interfering with his life as it had been doing.

SELF-ESTEEM

Jane possessed the lowest self-esteem I have ever encountered in a patient. Although an attractive woman, she would not enter a movie theatre while the lights were on and would always leave before they came on at the end of the film. Her self-talk was a constant stream of criticism, blame, “put-downs,” and guilt.

I suggested she make each day a challenge, pointing out that when we wake in the morning we are presented with the opportunity to start fresh on a new life. Each time she caught herself speaking to herself in a negative way she was to stop and say three times: “I love and approve of myself exactly as I am.” Though no great believer in the power of affirmations, I am willing to do whatever may produce the desired therapeutic results. This particular affirmation does appear, frequently, to facilitate positive outcomes. I also suggested she repeat it when looking in a mirror, particularly while putting on her make-up. Jane felt she really couldn’t speak to herself in this way because it just wasn’t true. However, I managed to instill some doubt about the accuracy of her present negative self-talk so she reluctantly agreed to accept the challenge I had outlined.

The following week, a changed person arrived for her second appointment. Jane was far better dressed, sported a different hair-do and more attractive make up. For the first two days, she said she hated substituting the positive affirmation for the negative self-talk. However, from that point it got better, and now, she said, she can hardly wait for the next negative to tell herself that she is totally acceptable as she is. A four-year follow up indicated Jane had maintained her improved self-image.

DISCUSSION AND CONCLUSION

The main reason I am writing this article is one of reassurance for the inexperienced. It is easy, when participating in a workshop or listening to experts presenting papers and seminars, to become overwhelmed by the material presented. An oft-voiced comment is, “I could never do that. It is just too involved and subtle.” Fortunately, you do not have to do “that.” Reassure yourself with the thought that even though you may not be able to do what the expert is talking about, you can probably achieve the same result, or maybe even better, working far more simply and directly. There is no single path to excellence and my own experience in psychology and education has taught me that simple, straightforward methods will usually achieve desirable

outcomes. Not that you might not want to experiment and expand your repertoire, but do not get seduced into the belief that there is a right or best way of doing therapy.

Torrey (1972) illustrated this in his cross-cultural study of four different cultures. In his investigation to identify the key elements of successful psychotherapy, he located four factors that are effective in therapy. The first of these is a shared world view by the patient and the therapist which really means that, if the therapist can put a label on whatever it is that is troubling the patient, this is the first step in effecting a cure. Whether the label is correct or not is completely irrelevant. As Torrey has pointed out, the witchdoctor might suggest that the patient's problem is caused by his inhabitation by a spirit, whereas the modern psychiatrist might apply the label of childhood trauma.

The second factor brought out by Torrey is the particular qualities of the therapist and, in this respect, he follows the line of Carl Rogers, stressing the importance of genuineness, unconditional acceptance, and emphatic understanding. It is the therapist who can be a human being in his own right and not hide behind the role of the remote professional who can accept the patient as he is, rather than as he would like him to be, and who can accept the viewpoint of the patient, who seems best able to help him change in the ways he wants to change.

Torrey's third factor is belief-expectancy. He would argue that a patient has a certain belief about the possibilities of his cure, just as the therapist believes he is able to be given assistance in this endeavour. As Gindes (1951) points out: "Psychotherapy is a process that takes place between two believers." If a person really believes that something is so, the chances of justifying that belief appear to be greatly increased. Thus it is useful for the therapist to maximise the expectancy of a successful outcome.

Torrey's fourth point involves technique. He would argue that whether a therapist uses hypnosis, behaviour modification, depth therapy or any other approach is largely irrelevant as long as the therapist believes that this technique will work. This means that there is no one right way to conduct therapy, a reassuring thought for the inexperienced. Do not allow yourself to be overwhelmed by the clever, often brilliant techniques presented at conferences and workshops feeling, "I could never do these things." You don't have to. Probably you will be able to achieve results just as impressive in other ways that might be much simpler. Adopt those approaches with which you feel comfortable and adapt them to suit your own personality. Focus on practice, rather than theory, for it has been indicated on many occasions that over 90%

of psychological theories prove incapable of being applied in clinical situations. The basic guiding tenet that would appear to characterise most successful clinicians is that if something works, keep doing it. If it doesn't work, don't blame resistance in the patient, but do something different.

REFERENCES

- Frank, J. D. (1972). The bewildering world of psychotherapy. *Journal of Social Issues*, 28, 27–43.
- Gindes, B. C. (1951). *New concepts of hypnosis*. New York: Julian Press.
- Rogers, C. R. (1969). *Freedom to learn*. Columbus, OH: Merrill.
- Stanton, H. E. (1996). Self-empowerment and the 15-minute solution. *Australian Journal of Clinical and Experimental Hypnosis*, 24, 137–144.
- Talmon, M. (1990). *Single-session therapy*. San Francisco: Jossey-Bass.
- Torrey, E. F. (1972). *The mind game: Witchdoctors and psychiatrists*. New York: Emerson Hall.

ABOUT SPONTANEOUS TRANCE AND THE USE OF INTROJECTS OR EGO STATES AS HELPERS IN HYPNOTHERAPY

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In this article, four cases are outlined to illustrate the phenomena of spontaneous hypnosis and of negative trance states. The author reviews the literature on the negative and positive aspects of spontaneous trance states and reviews their role in the development of a vicious circle which may cause and maintain anxiety, depression, and possibly also other feelings, thoughts and behaviours. This article argues that the presence of high hypnotic capacity is an important factor and describes various ways of treating people by using hypnotherapy when a practitioner deduces that a patient is in a spontaneous negative hypnotic state. The treatment is simple and logical and often proves to be fast and effective. The treatment is normally based on the written responses to a questionnaire and through hypnoanalysis and an internal communication during hypnosis, between the patient and a younger part of his/her self.

ABOUT SPONTANEOUS TRANCE STATES

It is increasingly evident that hypnosis is a natural phenomenon occurring spontaneously and often helpfully during times of emotional and physical stress ... We must know that the presence of great emotional or physical stress evokes a state which is indistinguishable from that of hypnosis. The unconscious response to injury is similar to the effect of a strongly given posthypnotic suggestion.

(Rossi & Cheek, 1988, p. 239)

To understand the mechanism illustrated in the following cases, we must be aware that imprinting must take place under conditions of emotional and physical stress and in our own minds to consciously not limit the concept of “injury” to physical injury. Injury may also be any kind of influence giving rise

to imprints of thoughts, feelings, behaviours or even internal body reactions ready to be released at a later occasion, as is known from state dependent memory learning and behaviour (SDMLB).

Herbert Spiegel has suggested (Rossi & Cheek, 1988) that the result of imprinting is comparable to the classic post-hypnotic suggestion, as they share amnesia for the activation stimulus, compulsion to reproduce the imprinted reaction, and rationalisation for the evoked behaviour.

We should also remember Edgar Barnett's words: "Hypnosis is the process of communication with the unconscious mind recognisable by the presence of unconscious response to suggestion, such response being characterised by lack of voluntary initiation" and "all kinds of unconscious mental activity can be included within this simple definition of hypnosis" (Barnett, 1981, pp. 22, 23).

According to this premise, trance may be present in many unconsciously released activities; not only feelings such as fear or anxiety, but also unconsciously released thoughts and behaviour. This means that trance also may occur under circumstances where people apparently are fully awake. This article interposes the words "hypnosis" and "trance" states throughout to remind readers that while hypnosis is a term that involves a set protocol, trance states can occur spontaneously inside and outside the therapy room.

THE IDEA OF NEGATIVE TRANCE

Daniel Araoz (1982) launched the idea of negative self-hypnosis (NSH) in 1979. We may see it as a hypnotic state, but not necessarily a deeper hypnotic state, in which we are dominated by negative feelings, because of negative thoughts and negative self-imagery caused by uncritical thinking.

Araoz regards NSH to be the common denominator of psychogenic problems. He says: "This process seems to be present in all people who find themselves fixated in behaviors, attitudes, beliefs, fears, reactions, patterns, drives, goals, thoughts and loves with which they are dissatisfied. NSH seems to be the most common denominator of psychogenic problems," and he says further: "It consists of the nonconscious negative statements and defeatist mental images that a person indulges in, encourages, and, often, even works hard at fostering, while, at the same time, consciously saying to him/herself that s/he wants to solve the problem, wants to change, wants to get better. As long as NSH is at work no improvement is possible. But why call this mental process NSH? Because in it we find three hypnotic elements included in any serious understanding of hypnosis: 1) noncritical thinking which becomes a

negative activation of subconscious processes; 2) active negative imagery; and 3) powerful posthypnotic suggestions in the form of negative self-affirmations coming from the non-critical thinking and the negative imagery” (Araoz, 1982, p. 56).

The question arises as to which methods are usually employed to overcome NSH. If ego-state therapy creates good feelings, these may replace the negative feelings in the NSH and create a positive hypnotic state (PSH). If cognitive therapy counteracts the processing of negative thinking, it may change the NSH to a PSH and so on.

The author asked another question: What would the effect be, if we did what should appear most logical — namely, reorient the patient from the NSH? The author decided to experiment with this idea, as throughout the years I had become increasingly aware that people who were asking for hypnotherapy quite frequently could be regarded as if they themselves — or a part of them — had gone into a spontaneous hypnotic state for a long time before they came to see me and had actually never reoriented completely away from it. They did not know why they felt so bad or behaved so oddly, but only that the symptoms troubled them a lot. Often they had been examined and treated by professionals without results before seeing me, and typically they had been suspected of having a neurological disease.

Therefore, on one occasion I decided to examine the effect of reorienting one of them away from the NSH. This produced a strikingly successful outcome and the patient improved and recovered within a short time (Case 1 refers).

After this, I became even more aware of these conditions and also found reasons to regard people suffering from PTSD as victims of a spontaneous hypnotic state that they needed to reorient away from, before they could free themselves completely for their post-traumatic stress disorder and finally get rid of anxiety and depression. The treatment was reorientation alone (as in Case 2) or a combination of ego-state therapy and reorientation (as in Case 3 and Case 4).

CASE 1: SPONTANEOUS HYPNOSIS RELATED TO STRESS

A description sent to me from a 43-year-old patient evidenced signs of their being in a spontaneous hypnotic state. The patient wrote:

“My most serious problem is the sudden attacks of anxiety that I have experienced during the past eleven years. They appear without warning and

like a bolt from the blue. I feel so awful. It is like an anxiety inside my brain that threatens to get out. At the same time, I feel that my breathing is blocked and sometimes I sweat all over.”

The patient could not find anything to be afraid of, apart from a vague feeling, now and then, of not being good enough. He always had to put up a good performance, tried to be very helpful, was afraid of making mistakes and worried in case he might be on bad terms with his colleagues. The attacks appeared at the moment he heard the telephone, when he was waiting for a train, when he was in warehouses, when he had to stop his car at the red signal, when he was going to work — but never returning from work, and never when he had a day off.

He had now been absent from work owing to this illness for five months. During a short visit at his place of work when he was engaging in small talk with his colleagues, he experienced a severe panic attack where he was sweating and he described the effects:

“I felt a big pressure in my head and got a headache and at a following meeting with my colleagues I was not clear-headed, nor able to think constructively at all. Suddenly, I could not remember how old my sister was and I could not contribute anything at the meeting. My muddle-headedness continued for the rest of the day. I felt as if I were in a cover [dissociation] and experienced a pulsation in my temples.”

The symptoms lasted for 24 hours. Suddenly he fell into a short sleep and: “Then I was completely fresh again and out of the attack which had started 24 hours before. I feel awful when I experience these attacks and I cannot live with them.”

He experienced also: “A dizziness most often related to my work, related to meetings, to being in a major meeting or just being at my place of work. The dizziness means that I feel that I am floating, that I have no capability of thinking constructively. At the same time, I feel an inner restlessness, I feel insecure and restrain myself as well as I can, because I am afraid of feeling worse.”

Sixteen months earlier, the patient had told his general practitioner that he was feeling queer. His doctor had given him antidepressants that made him dull while “these horrible panic attacks” continued unchanged and: “Nine months ago, I felt out of things [dissociation again]. I experienced it as one experiences background noise, although I was speaking directly with a person in front of me or on the telephone. I felt very bad and went to my doctor for help.”

The patient found the condition incapacitating, as he had lost all desire to meet people and it prevented him from going on holidays, or to the cinema,

and made him feel afraid when somebody visited him. He had been treated by his GP, by a psychiatrist, and by a psychologist — all without effect. As a child, he had been hospitalised and treated for epilepsy, but he did not know why. Now he was again suspected of having epilepsy and so a neurologist examined him and a CT scan was taken, but nothing abnormal was found.

Session 1: 16 February 2000

The patient was cooperative, appeared to have excellent imaginative skills, went readily into a hypnotic state by following progressive relaxation, and easily learned self-hypnosis.

Session 2: 9 March 2000

At the second consultation three weeks later, he had only had one slight case of anxiety and felt the improvement to be fantastic. He now received suggestions from Waxman's (1989) ego-strengthening routine and learned how to get into contact with strong positive emotions when needed via a conditioned reflex. This would offer him the opportunity to reorient himself back to a normal waking state with neutral feelings when he needed to.

More and more something told me that this patient's story could indicate that, for years and possibly since his childhood, he had experienced trance phenomena which worried him and that he possibly went into a spontaneous trance state too easily. Furthermore, I have often had an impression of people's dizziness being provoked by anxiety.

Here I saw a patient showing features indicating that now and then he might experience a spontaneous hypnotic sleep and spontaneous hypnotic phenomena, like amnesia and dissociation, and that this gave him a sense of lack of control. All this frightened him and caused him stress. His ability for state dependent learning, memory and behaviour (SDMLB) could release and worsen his anxiety more readily when he was exposed to stress and was influenced by factors related to earlier experiences of anxiety. He was simply relearning how to go into a negative trance state over and over again.

Session 3: 23 March 2000

At the third consultation I explained this to him and he immediately asked me: "Do you mean that I go into a negative trance state and experience anxiety and that I can wake myself up from that condition and from that fear?"

I confirmed this and asked him to give it a try by using his skills of waking himself, just as he did when doing self-hypnosis.

At the same consultation, I made a tape recording for him designed to teach him how to protect himself from stress, by learning to be less helpful and to let people take responsibility for themselves where indicated. This routine is mainly a future-pacing technique that I developed and which very often proves successful.

A month later, I received a letter from him telling me the following:

“I write this to you to report that I am feeling tremendously well ... I have simply a good life now ... I have also quit overdoing my helpfulness ... As you must surely remember, one of my problems was what I called my anxiety-attacks. You suggested to me that I was in a negative hypnotic state and taught me to reorient myself from it. I can tell you that it proves effective every time I do it. Now, NSH appears only when I feel ‘tired’ at a meeting. Then I give myself the signal to wake myself up and immediately I am on top again ... I don’t experience dizziness any more ... I have also become much more open towards other people ... I have quite a different way of thinking now ... When I open my eyes in the morning I feel glad immediately and sing. When I am driving to my work, I sing, and when I return home I sing ... My wife says that I have become a totally different person ... I look optimistically upon life. I have self-confidence. Just lovely.”

Case 1 Discussion

The background for his “illness” was an inappropriate use of valuable resources. The resources were a high hypnotic capacity, good imaginative skills, and the ability to dissociate. This resulted in feelings and experiences that scared him, because he was not able to interpret them as normal phenomena. The treatment was based on making him acquainted with them as being normal resources that he could learn to make use of and learn how to control. It was important to teach him how to reduce stress, as this was forcing him to enter more negative trance states.

In this way, he learned to make use of his valuable resources, in particular his high hypnotic capacity, which he learned to control by using self-hypnosis. The result was that he freed himself from symptoms and learned to understand the importance of keeping one’s hypnotic capacity under control.

The immediate relief from symptoms after the first consultation could possibly have resulted from the reorientation from trance when using the

tape, as well as from the relaxation. But his story raises the question: Do some people have so high a hypnotic capacity that it becomes a burden, and in some cases exposes them to a fear of having a disease and that this then puts them at risk of being misdiagnosed with accompanying unnecessary examinations? I think so.

Seven years have passed since I first saw the patient. Now and then I happen to see him in town and enjoy ascertaining that he still is in a very good mood state and still has full capacity for undertaking his work.

CASE 2: ANXIETY WITHOUT OBVIOUS REASON

A patient approached me for help because of an anxiety that had bothered him for many years.

Before we met for the first time, I had sent him a questionnaire and from his reply I noted that he was a 59-year-old schoolteacher who had been teaching in a public school for many years. He gave the following description of his problem:

“I experience that I am forced to speak in short sentences and for short periods only, as my breathing becomes odd and I have difficulty in swallowing and a sense of restlessness in my body. At major meetings with my students’ parents, I really have to struggle with myself.”

The only event he could think of, as possibly being related to the onset of his symptoms, was a spontaneous pneumothorax (collapsed lung) 25 years previously. Further, he wrote: “I have a phobia for heights and I suffer from insomnia.” His fear of heights was initiated when he was visiting the Whispering Gallery in Saint Paul’s Cathedral in London 15 years previously.

The uneasy feelings occurred mainly in stressful situations and they forced the patient to restrain himself from attending meetings. The mere thought of an upcoming meeting stressed him and became a nagging worry for days beforehand.

“I am fighting against myself,” he wrote and he understood that it had restricted him from realising a promising career for himself. He had chosen to do without opportunities for advancement that he had been offered and he had chosen to avoid going to parties and celebrations. He had developed a fear of water, too, so he had given up his previous leisure activity of canoeing, and during the past few years he had been unable to cross a very broad and solid bridge crossing a small river in his home town.

He had confronted himself with his fear and tried to persuade himself to do these things, and that had resulted in a small effect on his ability to speak more normally when he was stressed, but his fears of heights and of water remained unaltered.

When he felt anxious, he had a pronounced feeling of being out of his body. “When I am at home in my house, I normally feel well, and the streets where I normally walk seldom cause me any problems; as well, I have participated in some journeys without problems. My feelings of well-being depend upon how much I feel in control and upon what is expected from me.”

The patient was taking one mild sleeping pill every evening. He took no more medicine. Twelve years ago, he had tried acupuncture for his anxiety, and nine years ago he had had five consultations with a psychologist but did not feel better afterwards. My spontaneous impression of the patient was that he was a dynamic, vital person, and full of fun. There were no outward direct signs of his anxiety.

Session 1: 11 January 2005

The patient went easily into a very relaxed state by progressive muscle relaxation. His imaginative skills were very good and he could easily recall a very relaxing experience and see it playing as a movie. The session was tape-recorded and the patient was asked to listen to the tape once daily. He was also taught self-hypnosis and learned that comfortably in the first session.

Session 2: 18 January 2005

One week later, the patient told me that he “disappeared” when listening to the tape. A fast induction technique using arm-levitation immediately made the patient go into a deep hypnotic state experiencing arm-catalepsy. Unconscious finger signals for yes and no were established and his unconscious mind quickly localised the background for his anxiety and gave him permission to make the experience conscious in the form of a movie. In the movie, he saw the 30-year-old part of himself teaching at the blackboard. He experienced that the 30-year-old part was being caught by a sudden strong fear.

I asked the patient to question the 30-year-old part concerning the reason for his fear and he answered: “He doesn’t know.” When I then asked the 59-year-old patient to find the reason for the younger part’s fear, the answer was: “I don’t know.”

Here I came face to face with the problem of an unstructured anxiety, which was impossible to treat using ego-state therapy. However, a patient with anxiety or fear may be regarded as being in a hypnotic state already (Rossi & Cheeck, 1988). Since the patient's experience of being dissociated could be interpreted as if a part of him was in a hypnotic state, a logical treatment would be to reorient that part from the hypothetical hypnotic state back to a normal wide-awake state. That should be possible via his younger part, his introject.

At first, I asked the patient who was in a trance: "Might it be possible that the 30-year-old part of you, who is standing at the blackboard and experiences fear without obvious reason for it, is so concentrated on his feeling of fear that this brings him into an alert hypnotic state, making him relearn his fear and in that way is keeping him captive in a vicious circle?" The patient nodded affirmatively, whereupon I said: "Then ask him to reorient himself back to a normal waking state. You have learned self-hypnosis yourself and know how he can do that. Tell him and nod your head when he has reoriented himself." The patient nodded after a few seconds and I asked: "How is he now?" The patient answered: "His fear has gone away." I asked the patient to reorient himself now, and in the future if the old fear should reappear. The patient left the consultation feeling very well.

Session 3: 23 February 2005

After five weeks had passed, I saw him again. He was happy and ready to laugh and told me that he had enjoyed very much being free from his fear and restlessness. Every day he had also enjoyed walking over the bridge (mentioned previously) and looking down onto the river without feeling any anxiety. Also, he had managed to paint the windows on the first floor in his house standing on a ladder five metres above the ground, and had succeeded in talking much more fluently and breathing normally in front of an audience.

However, just the day before the appointment he had experienced an incipient fear, and again it had happened in a situation where he was standing at the blackboard. But he had had the presence of mind to give himself the signal to reorient from the potential negative self-hypnosis and his fear disappeared completely by the time he had counted to three.

Case 2 Discussion

The spontaneous spreading of recovery It is worth noting that, as well as the fear dissipating in many different situations over time, the recovery also gradually spread to all the situations previously connected with unnecessary fear and not only to situations where he was standing at the blackboard. Perhaps this might have been due to a spontaneous ability of the mind to generalise. But one cannot help but ask: Does reorientation from an NSH also causes a reorientation on a deeper level from other states experiencing negative self-hypnosis?

The vicious circle Hypnosis (a state of concentration) was, in this case, released by the anxiety, which then concentrated the mind, which kept up the trance state, which kept up the anxiety and so on. The demonstration of this way of thinking, regarding an apparent formation and continued presence of a vicious circle, is important and deserves to be extended to include the possible existence of other vicious circles that might explain the formation of other nervous conditions and thus lead to simple treatments. Some patients may express unconscious knowledge about this when they say: "The mere thought of anxiety makes me anxious." Here they are unconsciously aware of the vicious circle at work.

My conclusion was, and still is: If no origin of a fear is revealed, the following may be true: Fear may come out of thin air and start a vicious circle; or a vicious circle could also possibly explain the maintenance of, for instance, inappropriate thoughts, behaviour and reactions (conscious as well as unconscious). Therefore, it might be worth looking for negative hypnotic states (NSH), because a logical and easy treatment of NSH may then be to stop a vicious circle by stopping the trance state. This is also illustrated in Cases 3 and 4. The individual himself can do the reorientation by himself or encourage his introject, which could be regarded as being in a trance state to reorient to a normal state free of anxiety.

Looking for a common denominator What could be a common denominator in treating a client by reorienting from a presumed negative trance state and the way we do hypnotherapy? The common denominator could be the turning of the mind from concentration upon the problem to de-concentration. A validation of this idea may be illustrated in Case 4, where the reorientation from trance (moving from a state of concentration of the mind to de-concentration) makes a visually oriented patient experience turning from tunnel-vision to normal vision.

CASE 3: THE USE OF REORIENTATION AS A USEFUL ADJUNCT IN EGO-STATE THERAPY IN TREATMENT OF POST-TRAUMATIC-STRESS DISORDER

A woman, aged 42 years, applied to me for help. She wrote:

“I am very uneasy and stressed and also on my guard much of the time. I feel responsible for everything. I feel very insecure and I am so anxious to please. It is difficult for me to notice my own feelings and my guilt feelings are also a problem. Part of it has been a problem for me all my life, but it has worsened gradually since 1990 when I was 26 years and a bank clerk; I was exposed to a bank robbery while I was in the 10th week of my first pregnancy. Often, I have nightmares about catastrophes and about feeling pressed and sometimes I wake up whimpering and holding my arms over my head. It may be about someone who will kill me or situations where my children are in danger and I am having difficulty saving them. I feel insecure about mentally ill persons. I have a phobia of flying. I imagine everything that could go wrong and it is difficult for me to trust other people. Constantly, I worry about my husband or my children, when I hear an ambulance or if they do not return home on time.”

In stress situations, she dissociated and explained that it felt like “being inside a cheese-dish with a dome.” During the bank robbery, the patient was lying on the floor while the robber was pointing a pump gun at her. She felt very scared and experienced being dissociated. A psychologist was called to the bank for counselling, after the robbery, but she did not feel motivated and did not want to talk about her trauma, even though she felt so badly affected that she did not dare ride her bike home. She decided to consult another psychologist.

Two years after the robbery, she quit her job and started her education as a teacher. Eight years after the robbery, she suddenly experienced a flashback while seeing a stage play. She lost control and ran out of the theatre, and thus once more she sought help from a psychologist and went to see her regularly through half a year. Fifteen years after the robbery, she felt somewhat better but was still overcome by her nightmares and anxiety despite the treatment from the three psychologists and despite finally being treated with an antidepressant. Therefore she decided to try hypnotherapy and came to see me after having read my book, *Hypnose og Hypnoterapi*.

Session 1: 3 August 2005

The patient learned progressive relaxation and that was a peaceful experience for her. Her imaginative skills were very good. She was visual/kinesthetic/olfactory and auditory and she could easily experience dissociation.

Session 2: 10 August 2005

As I had taught the patient self-hypnosis in the first session and how to use the cinema technique to visualize some previous good experiences she already felt a little better, calmer, and she had only had a single nightmare. As I intended to do ego-state-therapy I once more wanted to activate powerful resources in her before the therapy and therefore asked her to remember a very good previous experience and to make it into a film. She told me now that she saw her 5-year-old daughter being very happy in that film. Then she saw the bank robbery on a new film. She saw herself lying on the carpet being very, very afraid of a hooded robber who was pointing at her with his pump gun. And she saw a female colleague looking very defiantly at him.

I initiated an ego-state treatment and encouraged the patient to experience moving into the film and supporting her scared younger self. She reacted with very strong anxiety and burst into tears and dared not follow my suggestion, but she agreed with my suggestion that the 26-year-old ego-state go into a negative trance state and focus on her own fear and agree “in her thinking” to be at her side and help her to reorient herself from the NSH. After the first reorientation her fear had diminished very much, and after one more reorientation it had gone completely. Now she could perform a successful ego-state treatment having no problems.

The fear of death that she relived while seeing herself in her film of the robbery activated a memory in which she had felt the same fear — namely the moment when she discovered her little son having cramps due to fever. This happened some years ago but apparently it could still cause flashbacks. Therefore I decided to interrupt the affect bridge leading to that event and asked the patient to let a film begin in which she saw her son having convulsions and herself going into shock. Again the patient started crying and again she accepted my suggestion that her introject had brought her into a negative hypnotic state. Upon my request she reoriented her younger self. That made her fear — and the patient’s fear — vanish immediately and a supplementary ego-state treatment could now be carried out successfully.

She left the consultation room with a cheerful remark that maybe she would not need to come again for another consultation. Actually, she postponed the planned consultation two months later. Readers may also consider the use of reorientation from an NSH in this session as a tool to overcome resistance.

Session 3: 6 December 2005

The patient described the combined treatment with reorientation and ego-state treatment as being redemptive, or like a miracle, and before the consultation she wrote the following:

“I can’t remember when I ever have felt so relaxed, not even before the robbery. The nightmares have stopped and I have no more flashbacks. I take my job much more easily than before and I am not afraid of being criticised like I was before. I am not drawn down into such deep holes, and I can much more easily pull myself up. I don’t have the same guilt feeling as before and can now demand responsible behaviour from other people and not only from myself.”

However, her phobia about flying remained unchanged. The treatment at this consultation was focused on the background for some minor problems in her marriage.

Session 4 (Final): 23 February 2006

Her phobia of flying was treated by reconditioning her for the symptoms, which started on a flight to Crete. She managed to do the reconditioning without discomfort.

I do not know the final outcome, as I have not heard from her after that.

CASE 4: BEING HYPNOTISED FORTUITOUSLY BY A THERAPIST? DEPRESSION AND ANXIETY TREATED BY EGO-STATE TREATMENT AND REORIENTATION

A 37-year-old woman asked for help and wrote:

“I can’t relax and enjoy life. I am constantly feeling alert. Almost every day, I have a headache and now and then I get migraine. I feel tensed up and boxed in, am getting attacks of anxiety and often I have a feeling of unreality. In my throat, I have a feeling of sadness, but I can’t cry. I don’t like sex, although I love my current husband very, very much. Eleven years ago, I managed with help from the police to escape from my first husband, together with my two children, after a nightmarish marriage lasting three years. My husband was an

alcoholic, who humiliated and exposed my children and me to mental and physical torture and often threatened us with suicide.”

Ten years ago she met a new man and married him. He respects her and her children and she loves him very much. Two years ago, she unexpectedly started to feel depressed and suffered migraine attacks two to three times a week. Conversations with her GP had no effect and she was referred to a psychiatrist. But something odd happened at the psychiatrist's: “After 10 minutes, he diagnosed that I was manic-depressive and changed my medication to lithium. This was an experience that completely knocked me off my feet and I never forgot the choking fear I felt after that.”

Session 1: 17 March 2005

At the interview, the patient appeared quiet, calm, resigned, and attentive. She reacted very well to a progressive relaxation technique that was audiotaped. In this relaxed state, she imagined a beautiful view in Norway and all her representational systems seemed active. She could easily dissociate and learned self-hypnosis readily.

Session 2: 31 March 2005

The patient had been listening to the tape once a day and it had assisted her to calm down. At the next interview she once more mentioned the psychiatrist, how upsetting she had found him and in particular she mentioned his eyes as being intense and gazing. Her remark made me think: Could she have let the psychiatrist “hypnotise” her without her knowledge and without the psychiatrist being aware of it?

She was trained in double dissociation using the cinema technique and she was also able to generate unconscious finger signals. An audiotape with Hartland's ego-stimulation (Waxman, 1989) and with Ellis' (Ellis, 1962) method of rational emotive therapy (RET) suggestions was made, and after the reorientation she felt extremely well.

Session 3: 11 April 2005

At the interview, the patient reported that she was feeling substantially better in herself, but was interested in being treated with hypnotherapy for her depression and anxiety, in order to get well and to be freed from her medication. Before the treatment I asked her if she could imagine that somehow she had slipped into a negative trance state without her knowledge,

and if this could have triggered the bad feelings she had experienced. The patient thought that this was possible.

The treatment took place in the imaginary quiet and beautiful room that was functioning as her cinema. Unconscious finger signals were established while the patient was in trance. The treatment was based upon the unconscious material brought forward using hypnoanalysis. Two days later, the patient wrote me a letter in which she described the result of the intervention.

“After having brought me into hypnosis, Gravesen is guiding me to make contact with my unconscious part. I establish contact and ask my unconscious part to help me. I ask it to tell me the first time my anxiety appeared and ask it to show me what happened — but not more than I could deal with, and just like in a film, the pictures are rolling on. At first, there are incoherent flashes of action, but finally it ends up as a bright film in which I see myself distinctly as being 23 years old (today I am 37).

“I watch the younger part and Gravesen asks me how she is. I tell him that she is very scared because her ex-husband has phoned her claiming that he is going to commit suicide now. Gravesen asks me to help her by telling her what I know today (history has proven this) that he will not suicide and that he will not do it all the other times as he is simply going to use it as a threat. I can see how scared she feels and because I need her to really listen to me, I hold her face with my hands and force her to look at me. I am looking straight into her eyes and I can feel her chin that is wet from her tears. I am smiling at her and I realise that she understands me now. Calmly, I tell her that she is not responsible for his condition or his behaviour and that I know that it looks dark now. I tell her urgently that some day she will be very fine and that there is light ahead. I can see relief in her face and together we walk hand in hand (her hands are so small) out into the corridor, where we are standing face to face with her husband. Gravesen says that she should be allowed to express her real feelings to him if she needs to, but funnily enough we both see him as the poor chap he is and the only thing she is telling him is: ‘You are sick.’

“I have my own lovely room and I am bringing her to that. I get her to sit in a fantastic beautiful chair, and place myself on a footstool in front of her, and with my hands I stroke and massage her feet until she is completely relaxed. We are both smiling. Gravesen helps me to see her getting older until she progresses to my age.

“With help from Gravesen, I again ask my unconscious to show me another time when I felt very bad. Pretty fast a picture of myself appears, where I am approximately 31 and where I am suffering from a severe depression.

“Gravesen suggests that I ask her why she is so depressed. I am telling him that she is so afraid of losing her new husband whom she loves so much and that she doesn’t feel that she deserves that good fortune he so much wants to give her. She is feeling that she ought to punish herself. Once more Gravesen asks me to tell her what I know today: that she is not going to lose him and that he loves her. I sit down beside her, placing one arm around her shoulder, and all the while with the other arm I caress her chin. I am telling her that she is sincerely loved and that she also has a right to be happy. I am smiling at her and she knows that it is true. She is feeling well now.

“My unconscious mind now shows me another time where I am sitting with a man, the psychiatrist, who catches me with his expertise and with his very dark brown intense eyes. I watch myself sitting in a chair and she only sees these eyes and is listening intensely to his diagnosis that makes her so scared. She is 36. Gravesen asks me to bring her out of her hypnosis. I put myself besides her and speak into her ear, telling her to count forward from one to five. Constantly I am holding her arm and I can feel her blouse so distinctly. Once she has counted from one to five she suddenly sees the entire room and no longer just his eyes. She and I are smiling, pleased and relieved, and Gravesen says that we are allowed to make the professional look a little ridiculous. We opt for putting a big white badge on his chest upon which is written with big, black letters: ‘Clown.’

“Gravesen asks me to bring her (the 36 –year-old) with me to my home where I live today. We are feeling so happy and relieved now. Gravesen asks me if we are ready to let go all the old trash from the past and we nod and smile. We are standing in front of each other holding each other by the hand, feeling so strong, so relieved and so happy; together we ask for all the old trash to disappear. In a circle around us, a lot of withered beach leaves are piling up and now they start to whirl around our feet and suddenly they are blowing to the left, up in the sky — and away.

“Gravesen now asks me to return to the here and now by counting from one to five. I would never have thought it possible to feel such relief, so much happiness and at last a feeling of freedom.”

The patient sent me a final message five weeks after the last consultation:

“I just want to tell you that I am fine and that things are looking up day by day. I listen to your tape every day and now I have been medicine free for one week in concert with my GP. I reduced the dose gradually. Naturally it was not without side effects, but it was my own choice to do it relatively fast. Today, I am feeling for the first time that I have passed the worst effects of abstinence

and therefore have the energy to write to you letting you know that I feel incredibly well.

“When I compare how I am now with the description I gave you before my treatment, it is like this: I am relaxed and have a feeling of inner peace, more energy and greater strength. I feel optimistic and without anxiety concerning my future, I feel more confident, happier and more easily provoked to laughter (a quite new, but lovely, side that I appreciate very much). Positive thoughts are killing negative thoughts — it happens automatically — and I am fully capable of showing my family how precious they are to me and I feel for sure that it will continue like this. I want to underscore that all these ‘miracles’ have not made me lose my down-to-earth approach to life. I am actually as down-to-earth as I have always been. That is just what is so fantastic. It feels so natural.”

I would like to comment on this. When you, as a therapist, can accept that some people spontaneously go into a trance state without being aware of it, you should become aware of incidents in patients’ descriptions which indicate that they have experienced this. This patient’s observations, regarding the psychiatrist’s face and eyes and her simultaneous experience of anxiety because of what he was telling her, should give food for thought that she might have learned or relearned an anxiety here and that a spontaneous trance state might have created a hypnotic command based on this. In this fashion, she might have been caught in a vicious circle of bad feelings or thoughts which created a continuing anxiety and/or depression because a part of her moved into an NSH. The effect of the reorientation could be indicative of that. The reorientation makes sure that she no longer concentrates on the initial event (illustrated by her description of defocusing) and so supports the use of ego-state therapy.

This case should help us become aware of the risk of a spontaneous trance state developing and even continuing following a person’s contact with any kind of an authority. This possibility should be taught in basic courses to medical and mental health staff.

My experience of being aware of the simultaneous presence of various spontaneous hypnotic states has become very important to me. I like to localise these states by using search criteria in a hypnoanalytic process. The localisation makes it possible to communicate with the introject. This makes it possible to evaluate the relevance of the event for the patient’s situation today. The reorientation from a potential NSH does not seem to have unwanted side effects and almost invariably the patient will remain in trance and only the introject involved will reorient from the trance.

It is my hope that this method will improve the prospects for treatment of many conditions that usually are resistant to treatment, for example, eating disturbances and compulsive and obsessive conditions.

REFERENCES

- Araoz, D. A. (1982). *Hypnosis and sex therapy*. New York: Brunner/Mazel.
- Barnett, E. A. (1981). *Analytical hypnotherapy*. Kingston, Ontario: Junica.
- Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: L. Stuart.
- Gravesen, J.-J. (2004). *Hypnose og Hypnoterapi*. Aarhus, Denmark: KLIM.
- Rossi, E. L., & Cheek, D. B. (1988). *Mind-Body Therapy*. New York: Norton.
- Waxman, D. (1989). *Hartland's medical and dental hypnosis* (3rd ed.). London: Baillière Tindall.

HYPNOSIS IN HANDLING UNFINISHED BUSINESS IN BEREAVEMENT

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Kim suffered from complicated bereavement due to her husband's sudden death in a traffic accident and her mother's suicide within a few months. Hypnosis was used with deep relaxation and grief psychotherapy to achieve imaginative involvement, subjective reality, and constructive memory to help her to complete the unfinished business. After two hypnotic sessions, there was significant improvement in her emotional distress and fixation. On the grief journey, Kim was able to achieve a psychological closure to the multiple losses. She learned to let go of sorrow and to divert energy to other positive life aspects.

PRESENTING PROBLEM

Kim was a 46-year-old nurse instructor working in the public sector. Her husband had died suddenly in a traffic accident in November 2002 while he had been on a business trip in China. By the time Kim received the news, he had already died. The relevance of this is that Kim and her two daughters were not able to accompany him during the last moment of his life (in Chinese culture, seeing the dying beloved ones to say goodbye is very important). This became the major “unfinished business” for Kim. She felt extremely unhappy and distressed when she thought about her husband waiting for his death and she imagined him as lonely, desperate, and fearful, left in an unfamiliar environment.

Kim was self-referred to my office in January 2003 after she had completed all the necessary burial procedures and ceremonies. Normal reactions in acute phases of bereavement were demonstrated; bargaining and “what if” thinking were present as well. For instance, Kim thought her husband's life could have

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been saved if the accident had happened in Hong Kong where there is more advanced medical treatment. She felt regret for her husband — he deserved longevity and enjoyment, given that he had worked so hard in his life. Kim described how her most difficult moment was when she had to go to China alone to view her husband's dead body with an indecent presentation in the mortuary. She felt very lonely, cold, miserable, sad, and vulnerable. But overall, Kim could still manage her usual vocational duties and family responsibilities during this difficult period.

BACKGROUND INFORMATION

Psycho-Social Functioning

Kim stated that she had no history of psychological problems. She described herself as tough, rational, and independent. She had lots of friends to share pleasurable activities with and could tell them her inner feelings. She professed no religious beliefs and did not report undertaking regular physical exercise.

Family

Previously, Kim had lived with her mother, husband, and two daughters (aged 15 and 11). Her husband had been a successful businessman and had made a great financial contribution to his family. Both daughters had demonstrated success in their academic performance and general conduct. Overall, the family relationship was supportive and harmonious. Kim was herself the second daughter among four siblings and these siblings had offered her a lot of support after her husband's death. Her family background was uneventful and there was no history of mental illness.

Employment

Since 1985, Kim had been working as an instructor in a nursing school. In October 2002, she was transferred to her current position. She reported satisfactory performance and harmonious working relationships.

Medical

Her medical history was uneventful.

Assessment of Psychological State

A thorough psychological assessment was conducted. Diagnostic criteria for major mood disorder were not met. Kim remained emotionally stable, except she became agitated when recalling her experience of viewing her husband's body. The Brief Symptom Inventory – BSI (Derogatis, 1993) was administered; it is a 53-item self-report instrument, consisting of 9 sub-scales and 3 global indices. The Global Severity Index provides the best indicator of the current level or depth of psychological distress. Based on the test findings, Kim's scores were not significant on any of the symptom sub-scales.

FIRST YEAR OF GRIEF JOURNEY (SESSIONS 1–13)

Since her husband's death, Kim found herself attracted to news about traffic accidents. As she had not visited the accident scene, she wanted to figure out what had actually happened by examining other stories of traffic accidents. Even though her mood became extremely low afterward, Kim still felt the urge to know the details. At the same time, daily hassles (e.g., electrical appliances broke down, she needed to learn to handle finance and to solve family problems alone) reminded her of the loss of her husband because these chores had previously been handled by him. She needed to adjust to life without the support of the deceased.

Throughout 2003, many sad incidents happened in the community and to Kim's family (presented below in chronological order). The massive casualties and multiple losses reactivated her psychological pain of losing loved significant others suddenly and permanently. These events further complicated her first year of the bereavement process:

- The US Space Shuttle exploded and all the astronauts died.
- More news about her husband's accident was reported. The driver (her husband's very good friend) was convicted of careless driving and was arrested. A passenger suffered serious brain injury and became mentally deficient.
- A local sport star died prematurely.
- A famous local pop singer committed suicide.
- The outbreak of SARS in Hong Kong occurred and nearly 300 people died, including five healthcare professionals.
- Kim was notified that she had to pay taxation on behalf of her husband.
- Her mother (aged 81) was diagnosed with mood disorder and was admitted to hospital in June. After her discharge, her condition fluctuated and Kim suffered from carer's stress.

- Her mother-in-law died suddenly in July.
- A serious traffic accident happened and around 20 people died. This triggered Kim's memories and pain about her husband's accident again.
- In late July, Kim's mother committed suicide at home. As a psychiatric nurse, Kim felt guilty for her inability to take care of her mother's psychological well-being. A sense of failure, confusion, and powerlessness was noted. Additionally, her siblings and in-laws were too afraid to go to the mortuary. Again, Kim needed to view the dead body alone. The awful feelings and memories of viewing her husband's body were triggered. This also reminded her of the pain of being a widow because Kim believed that her husband would have been willing to go with her to see her mother's body if he was still alive. A sense of insecurity towards the future developed because the number of people she could rely on was becoming fewer. Anger towards her mother and God for imposing additional burdens on her in her difficult grief journey was described.
- The Hong Kong Air Cadet Service Team had an accident — a helicopter dropped and two pilots died.
- Two other local legend singers (also Kim's favorites) died of cancer.

SECOND YEAR OF GRIEF JOURNEY (SESSIONS 14–22)

Kim described her difficult times in facing the critical moments of her grief journey; for example, the anniversary of husband's death, his birthday, important festivals, etcetera. All bits and pieces of life events reminded her of the permanent loss of her life partner. Low mood, life boredom, fleeting thoughts of death, and broken sleep were reported. Her energy and activity level deteriorated. She was preoccupied with memories of her husband and her negative emotions (especially loneliness). Maladaptive coping mechanisms were noted. For example, Kim spent too much time and energy in reading stories about people's deaths. She began to develop "an interest" in visiting her husband's graveyard almost every weekend. Little energy was re-invested in other aspects of her life. It was noted that she was stuck in the grieving process. However, the diagnostic criteria for major mood disorders were not met.

According to DSM-IV (APA, 1994), Kim was suffering from Complicated Bereavement due to multiple losses and causalities within a short period of time. Although her grief towards her mother's suicide was more settled, she had particular difficulties and psychological distress in handling her husband's personal belongings, memories and cognition related to his death. Her mood

would decline for a long time whenever she thought about or came across the following issues:

- Husband was very lonely, fearful and helpless to face his death without the company of any family member.
- Her husband's medical record described in detail his physical and emotional sufferings. This triggered the most intense level of emotional distress in Kim.
- Information related to her husband's accident.
- Life was not fair to her husband, who should have had more time to enjoy his life and to see his children's achievements after years of hard work and wealth accumulation.
- Life was not fair to Kim as well. The couple should have been allowed time together after the children had grown up.
- Her husband's personal belonging, including his bank accounts, clothing accessories, academic records, handwriting, letters from the bank, etc. Moreover, she intentionally delayed the inheritance of her husband's wealth.

Grief psychotherapy was continued. The treatment foci for the second year rested on helping Kim adapt more to life without the deceased, to have proper psychological closure, and to re-invest her life energy in constructive activities. Kim was motivated to move on. She decreased ruminations about her husband's death and her excessive visits to his grave. Instead, personal interests, continuing education, physical exercise, pleasurable activities, church attendance, life skills learning (e.g., financial management) were initiated.

Kim was encouraged to tidy up her husband's personal belongings as a symbolic psychological closure by the second anniversary of his death. With support and guidance from her therapist, she managed to handle some of his belongings at home, and his bank accounts. Nevertheless, she failed to deal emotionally with her husband's medical record. Whenever she looked at it, distressing and heart-breaking thoughts about her husband's lonely death surfaced. Her mood would immediately decline for a long period of time.

Rationale for Using Hypnosis

It is documented that bereavement and trauma improve with hypnotherapy (McFarlane, 1989; Mutter, 1987). Building on Spiegel's "8 Cs" treatment approach to trauma (Evans, 2003), hypnosis could uncover repressed traumatic thoughts and memories. The traumatic event was then re-experienced by having the client picture it on an imaginary screen. With suggestions to

provide protection, dignity and mastery over the situation, the client could re-live the trauma with a sense of calmness.

Kim's psychological trauma in losing her husband was condensed and symbolised as the dreadful experience of viewing his body. By providing the necessary resources and personnel to re-live the painful experience, it was hoped that her distress could be reduced whenever heart-breaking memories were triggered. The treatment process provided ceremonial boundaries around the memories, implying they were to be put aside once the session ended. Furthermore, during the trance it was suggested to Kim that she complete any "unfinished business." In her subjectively recreated reality, her husband received better care and was surrounded by family members in his last moments. The tragedy had happened, and it could not be changed. But still, her husband could be remembered as dying with more dignity and peacefulness. All these ideas might help Kim bring a psychological closure to her grief journey.

SESSION 23 — COMPLETING UNFINISHED BUSINESS

The treatment goal of using hypnosis was to reduce Kim's emotional distress towards her most traumatic thoughts — that her husband had died alone and the insensitive presentation of his corpse. The session started with teaching general relaxation techniques to help Kim better control her physiological arousal. This also prepared her to go into the more traumatic scene later; that is, to accompany her husband while he passed the last moments in his life. Kim was asked to think about a pleasurable and relaxing experience where she was totally free of negative emotions. She reported shopping with her daughters in Japan during the Chinese New Year. They put the sorrow aside and became absorbed in the enjoyment. Some time was spent sketching the details of the experience. To reduce Kim's insecurity, an action plan and procedures for hypnosis were briefed before actual implementation.

Hypnotic Induction

The induction phase took about 5–8 minutes and involved extended diaphragmatic breathing with counting. Kim was instructed to focus her attention on breathing as a soothing rhythm which allowed her every muscle to relax. Deeper relaxation and release of tension were suggested with each exhaled breath.

Deepening

To enhance the deepening stage, Kim was asked to imagine her favourite place — shopping in Japan during Chinese New Year. She was encouraged to use all her senses to re-experience the joy, freedom, comfort, and relaxation. When she felt she was “there,” she was asked to give an ideomotor signal by raising a finger. Suggestions were then made that her “inner heart” (in Chinese, heart — rather than brain — is believed to be responsible for emotion) was aware of a growing sense of peace, calmness, and rejoicing. With family members, Kim could enjoy rewards from life. She had lots of time, to just relax, enjoy, and to be totally free from the worries and sorrows of the outside world. She was able to re-experience this feeling any time she needed to by hearing the words in the back of her mind: *My family members are with me.*

Kim’s muscle tone, particularly around her face and neck, was becoming looser and more relaxed. Her skin colour lightened, and her breathing slowed and deepened. All these signs indicated that a moderate trance depth had been obtained.

Trance Utilisation

During the trance, Kim was invited to imagine leaving the Japanese trip and walking along a path to her husband’s hospital in China. Being slowly led into the ward, she was to imagine seeing her husband in his bed, weak and pale, but still alive. It was then suggested to Kim that she could make a change to the ending that allowed her to have complete control. For example, she could *do what makes your husband feel more comfortable at that moment. What would you like to say or to ask your husband — any words of comfort and reassurance? Does your husband have any wishes, plans or arrangements for the family? Do you have any promises to give your husband that could lessen his worries and sorrow? Would you like to bring other people into the scene to accompany you and your husband?* Kim was encouraged to return to the safe place (Japanese trip) to experience again the tranquil, pleasant thoughts, and feelings of mind–body relaxation if she found the situation too distressful and overwhelming. Moreover, she was told to give an ideomotor signal again when she had finished and was ready to leave the scene. Termination of the hypnotic state was attained by asking Kim to come back into the room, and then to slowly open her eyes.

Hypnosis Debriefing

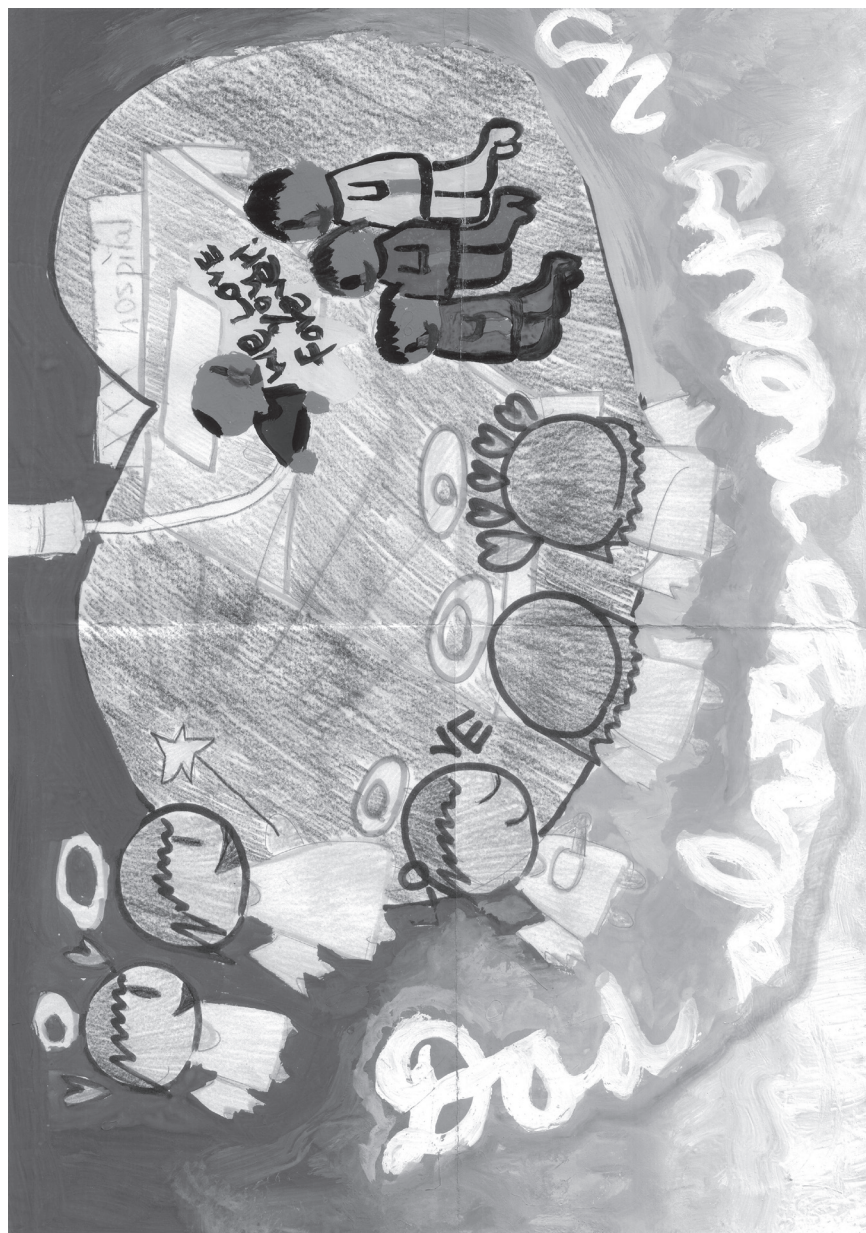
At the end of the session, Kim was invited to tell me what changes she had made to the scene of her husband's dying. Though the experience was sad, she enjoyed changing the situation by completing some "unfinished business"; for example, she brought him clean clothing to change into; she wiped the blood off his face and body in preparation for a more decent presentation, etcetera.

SESSION 24 — SAYING GOODBYE TO HER HUSBAND WITH BLESSINGS

In the 24th session, Kim reported that her mood and energy level had further improved. By the completion of the second anniversary of her husband's death, she determined to tidy up all his personal belongings. She grouped and sealed these into two boxes, labelled as "Husband's Footprints in Life" and "Husband's Deepest Love in Life." The process had triggered further memories of her husband. Still, her emotion was stable, her regret was somewhat alleviated and she brought along his last belonging — his medical record — to the session, hoping that the therapist would help her handle it as a proper closure to her grief journey.

Preparation Before the Session

To handle this challenging task, some groundwork was done beforehand. I invited Kim's younger daughter, Jane, to help. Jane was a sensitive and kind-hearted Christian with a strong faith. She was also good at drawing. I asked her to draw the death scene of her father in hospital, but within a peaceful and loving atmosphere, in the presence of all family members. The drawing was beautiful and meaningful. Her father was lying on the bed. Three family members were kneeling beside it and saying a prayer together. There were angels in the background, and every family member was taken care of by a guardian angel. The colours were soft and harmonious. Moreover, as I had foreseen Session 24 might be difficult for Kim, I had asked Jane to come towards the end of session. But Kim knew nothing about either the drawing or Jane's arrival.



Hypnotic Induction and Deepening

The induction technique was similar to that used in Session 23. Considering the following hypnotic experience would be anxiety-inducing and emotionally draining, the deepening script was modified with the addition of the Quick Coherence Technique (Childre & Howard, 1999). Instead of focusing on the abdomen, Kim was told to breathe through her heart, together with suggestions: *Many unpleasant things happened during these past two years, making your heart tired and wounded, so it is high time to give it healing and rejuvenation. Each inhalation will give you all that your body needs, including healing, energy, and nurturance. And each exhalation will take away the wound, exhaustion, sorrow, pain, and fear from your body.* She was also told to put her hands on her chest and to feel her heart rhythm. Along with breathing through the heart, it was suggested to Kim that she find her heart rhythm becoming more steady and powerful, signifying that her heart was getting healed and becoming stronger. The increased inner strength would empower her to cope with the experience in the later part of trance. In order to allow Kim to achieve a pleasurable and relaxing experience, she was then asked to imagine going to Japan with her two daughters. Suggestions of pleasant visual, auditory, temperature, and kinesthetic imagery were made amidst feeling of safety, harmony, happiness, comfort, and mind–body relaxation.

Trance Utilisation

It was then suggested to Kim that she go home after returning from her Japanese trip. She would sit comfortably on a large sofa and switch on the TV. It showed a news report — about her husband's traffic accident in China. She saw how the vehicle crashed, how her husband got himself out of the vehicle, how he suffered internal bleeding, how he became weak and waited for an ambulance to come. It was observed that Kim's breathing became more rapid and shallow; she began to frown. She was encouraged to continue the Quick Coherence Technique as well as to do slow deep breathing to supply her body with energy, nurturance, healing, nutrition, etcetera and to lessen the sense of injury, sadness, fatigue and anxiety. It was suggested that there was a remote control and Kim could stop or pause the TV program at any time. With ideomotor signals, she could even go to Japan for a rest, and recharge her energy before returning to the TV news.

Kim did not request that I stop the TV news and so we continued: *Ambulances come. Your husband and other passengers are sent to hospital. Medical professionals carry*

out resuscitation, but your husband's condition declines rapidly. Although he maintains consciousness, he begins to appear pale, to feel increasingly painful, and to vomit blood. His body temperature, pulse, heartbeats, and blood pressure drop [these were reported in his medical record]. Your husband begins to be aware that he may die. He becomes gloomy, impatient, and irritable [as stated in the medical record], thinking about his beloved family members in Hong Kong who do not know what has happened to him. Monitoring Kim's anxiety levels by observing her breathing and facial expressions, I suggested to her that she stop the TV news, focus on her heart breathing, and go on the Japan shopping experience for a break. When Kim was ready to return, she could indicate this by raising a finger. There were changes in anxiety levels — first with a heightening, then a period of calming, and back to steady breathing and peaceful facial expressions.

As the TV program continued, it was suggested to Kim she see herself on the screen: *You are walking along the hospital corridor to your husband's ward. Your husband feels surprised, but is delighted to see you. At that time, you are quite sure that his life will not continue for long. As a couple, take this final opportunity to spend time together, to talk about your past, express gratitude towards each other, and discuss your children's future, etc.* [Once again, Kim was encouraged to say or do whatever made them feel better. At that moment, there was a knock on my office door. It was Jane — she came early. I signalled her to wait outside. Although Kim was supposedly unable to hear the knocking in her deep trance, I decided to make use of it.]

When your husband and you are talking about your children, there is a knock at the door. It is your two daughters! Your husband is even more delighted and settled on seeing their arrival. He asks that his daughters go to the bedside and he talks to them individually. [By making use of Jane's drawing, I suggested the following ending.] *While your husband is talking to your daughters, you look around and see that there are several angels near the ceiling looking at your family. They are your guardian angels and will take care of your whole family after your husband dies. Losing a husband is sad; the traffic accident is a tragedy. It happened and cannot be remedied, but these guardian angels will help you cope with the days without your husband, and protect you against all possible adversities. Gradually, your husband becomes weak; his life comes to an end. As a Christian, Jane suggests saying a prayer together until the final moment of his life. It is a sad moment to see your beloved husband dying. Saying goodbye is not easy, but your husband has little regret now because he has met up with his family members before death. He slowly closes his eyes and passes away in peace and love.*

When Kim was in trance, I asked her to open her eyes and look at Jane's drawing in my hands; it was exactly the peaceful dying scene suggested in the

trance. Then I opened my office door to let Jane in. Similar to the situation described in the trance, Kim felt surprised at her daughter's sudden arrival. She was agitated, held Jane, and burst into tears immediately. (It was actually the first time I saw Kim cry in her bereavement. She might have been too repressed about her emotions previously). This was quite different from the real life experience two years ago, in which Kim was required to view her husband's body in the mortuary and had to return home alone; this time she re-experienced his death with support from family members in her subjective reality (and in real life as well). She no longer felt so lonely and helpless in facing life's adversities. Both her husband's projected, and her real, unfinished businesses were also completed.

Post-Hypnotic Suggestions

I let Kim spend some private time with Jane. Then post-hypnotic techniques were used: By putting Jane's drawing on top of the death record, it was suggested that: *Regrets for your husband's sudden death are now already being overridden by love of all the family members in the drawing. There is no heart-breaking pain and regret any more. When you remember your husband in the future, you'll only experience love and peace.* The medical record (together with Jane's drawing) was kept in my office temporarily. When she left the session, I gave Kim the 4R-copy of the drawing. It was to remind her of the peace and love experienced in the trance, in case distressful memories and feelings of her husband's death were triggered again.

Follow-up Treatment

In the next session, Kim reported that she was preoccupied with Jane's drawing for a few days. She loved it very much, and had carefully put the 4R-copy in a frame placed beside husband's photo. She found the hypnotic suggestions appealing — her husband had died peacefully and lovingly with the presence of all family members and guardian angels. She "got things off her chest" when hearing the script: *Losing a husband is sad; the traffic accident is a tragedy. It can be very bad for your family. Nevertheless, with the guardian angels' protection, you can overcome adversity.* When recalling her husband's dying scene, Kim felt little sorrow or heart-breaking emotions and her relationship with her daughters further improved. Kim became more content with her life and enjoyed different elements of life.

Four sessions per month were scheduled. Kim reported that she did not experience any distress when seeing her husband's belongings. Her sad memories of him were replaced by happy ones. So she believed a psychological closure to her bereavement was successfully achieved. At the end of Session 28, we both agreed further sessions would be scheduled on a needs basis.

DISCUSSION

The use of hypnosis, cognitive therapy, exposure exercise, and general relaxation in the treatment of trauma has been well documented (Evans, 2003; McFarlane, 1989; Mutter, 1987). Sufferers are likely to experience strong emotional reactions to reliving their trauma. One of the treatment goals is to normalise their reactions, and to explain their controlled expression. Suggestions for personal mastery and relaxation are therefore used to help clients recall the repressed incidents. The memory is then consolidated and reframed in a meaningful and therapeutic way (Spiegel, 1989).

This approach appeared to work well in Kim's case, for her psychological trauma in viewing her husband's body in the mortuary and for her complicated bereavement which followed. Hypnosis allowed her to re-experience pleasurable feelings and to imagine herself with calmness and competence in facing her husband's death. In subjective reality, Kim was encouraged to complete her husband's and her own unfinished business. A sense of peace, love, and harmony was suggested, thus providing an emotional experience which was contrary to her previous distressful and heart-breaking memories.

The beauty of this case was that I tried to add real-life elements into Kim's hypnotic experience. For instance, I used Jane's drawing to guide the ending of the dying scene. Her knocking on my office door was incorporated into the trance. The unexpected arrival also resembled her daughters' unexpected arrival at the hospital and accompanying Kim to face the death, in the trance state. All these images were intended to enhance the power and vividness of Kim's subjective reality, in which her complicated grief, unfinished business, and regrets about her husband's sudden death were settled. Post-hypnotic suggestions and the 4R-copy of the drawing of the peaceful dying scene, instead of the previously heart-breaking memories, were imprinted in Kim's mind. As a result, whenever Kim thought of her husband's death, she "felt" that he had died peacefully with the blessings of all family members and guardian angels. Additionally, cognitive restructuring was conducted, helping Kim

become aware of the silver lining behind the trauma. She was encouraged to acknowledge her personal growth and grace along her grief journey. She also believed that she was much better equipped to deal with future life stressors.

REFERENCES

- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.
- Childre, D. L., & Howard, M. (1999). *The Institute of HeartMath's revolutionary program for engaging the power of the heart's intelligence*. New York: HarperCollins.
- Derogattis, L. R. (1993). *Brief Symptom Inventory*. Minneapolis: NCS Pearson Incorporation.
- Evans, B. J. (2003). Hypnosis for post-traumatic stress disorders: Treatment implications. *Australian Journal of Clinical and Experimental Hypnosis*, 31, 54–73.
- McFarlane, A. C. (1989). The treatment of post-traumatic stress disorder. *British Journal of Medical Psychology*, 62, 81–90.
- Mutter, C. B. (1987). Post-traumatic stress disorder: Hypnotherapeutic approach in a most unusual case. *American Journal of Clinical Hypnosis*, 30, 81–86.
- Spiegel, D. (1989). Hypnosis in the treatment of victims of sexual abuse. *Psychiatric Clinics of North America*, 12, 295–305.

SCRIPTS

HYPNOSIS ANTENATAL TRAINING FOR CHILDBIRTH (HATCh): INTERVENTION SCRIPT 2

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The HATCh trial seeks to determine the efficacy or otherwise of antenatal group hypnosis preparation for childbirth in late pregnancy (Cyna, Andrew, & Whittle, 2006). This single-centre, randomised controlled trial uses a three-arm parallel group design in the largest tertiary maternity unit in South Australia. Group 1 participants receive antenatal hypnosis training in preparation for childbirth administered by a qualified hypnotherapist with the use of audio CDs on hypnosis for re-enforcement; Group 2 consists of antenatal hypnosis training in preparation for childbirth using audio CDs on hypnosis administered by a nurse with no training in hypnotherapy; Group 3 participants continue with their usual preparation for childbirth with no additional intervention. The script outlined here is used on the three audio CDs given to Groups 1 and 2 trial participants, weekly on three occasions prior to the expected date of delivery of the baby. An additional audio CD is also given to trial participants for use in labour. In this edition of the AJCEH, we publish the scripts for Session 2 only. Please see the May 2007 issue for Scripts 1 and 4. Script 3 will appear in May 2008.

The HATCh (Hypnosis Antenatal Training for Childbirth) trial (Cyna et al., 2006) seeks to determine the efficacy or otherwise of antenatal group hypnosis

The HATCh trial has received support from the Women's and Children's Hospital Foundation, the Australian Society of Anaesthetists, and the NH&MRC (Project Grant No:453446).

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preparation for childbirth in late pregnancy using a structured intervention. We also aim to compare two methods of delivering antenatal group hypnosis. One method uses a hypnotherapist to deliver the intervention followed by an audio CD on hypnosis for re-enforcement of the techniques learned. The other method is to use an audio CD on hypnosis alone, administered by a nurse with no hypnotherapy training. Participants were advised that the CDs were for HATCH trial participant use only (Cyna et al., 2007) The two scripts detail the suggestions on the second audio CD and the third audio CD given to Groups 1 and 2 HATCH trial participants. This intervention is administered to trial participants after 34 weeks gestation during the second and third self-hypnosis training sessions.

HATCH TRANSCRIPT SESSION 2

As you settle down comfortably you can feel the supportiveness of the chair or whatever. You can listen closely to the sound of my voice and you can enjoy how easy it is to relax ... and to go into daydreaming type thinking. One part of your mind may listen to my words and another part of your mind may think of different words and you can still enjoy the ease of going into daydream type thinking. You know that you can go into daydreaming type thinking and you can take yourself into hypnosis in any way that is useful for you right now. That's right, and those of you who would like to roll up your eyes can do so, roll up your eyes, and close the eyelids and take a deep breath and relax the eyes and breathe out and float down, deeper and deeper down and you know that as you breathe in you can feel strong and as you breathe out you can relax, so with every breathe in you feel stronger and with every breath out you feel more relaxed and comfortable, breath in and feel stronger, like you can cope, you're in control, breathe out, let the shoulders sag and relax.

More and more comfortable with every breath. Any discomfort you can watch just as you watch the developing comfort, and as you feel the comfort you can feel it even more, any movement you make will bring you comfort, and you can enjoy the developing comfort. More and more comfortable with every breath. Breathing out any tension into the air, a little bit more and a little bit more with every breath. Just letting any tension go, letting go a little bit more and a little bit more with every breath, more and more comfortable with every breath.

Outside noises all becoming a part of your developing sense of ease and comfort, comfort and relaxation spreading all the way through the body from the top of the head rippling all the way down, down through the arms, down through the trunk of the body, down through the legs, down into the feet, down into the toes, so the whole body just

sinks down, deeper and deeper relaxed. And one part of your mind may like to continue to enjoy the growing sense of ease and comfort in the body while another part of your mind may like to drift and float to the top of your staircase [see Script 1 (Cyna et al., 2007)], standing there at the top noticing how the steps look, the colour of the steps, and the numbers from nought to 10 on your relaxation scale.

The feeling under your feet, notice that and you can look forward to going down the steps, down to a special safe place for you, down to where you are as relaxed as you can be. We've got 10 steps to go down and the deeper down we go, the more comfortable you become, deeper and deeper relaxed the closer we go to the number 10. So here we go, going down 1, 2, 3, feel yourself going deeper, 4, 5, 6, the colour of the steps becoming even deeper and richer, the deeper down we go, 7, 8, 9, almost there, almost ready to go all the way down now to as relaxed as you can be, 10 way down deep deep deep.

Now we are at the bottom of the stairs and you can choose a path to a special safe place for you. Maybe the place you've been to before, maybe a special beach, I don't know, but it's a place where you can be as comfortable and relaxed as you want to be for just now. And you can enjoy filling in all the detail, what you can see, colours, patterns of light and shade, what you can hear, loud sounds, soft sounds, what nice smells you can smell, nice tastes, and what textures you can feel against your body, like the temperature that's just right for you. Like the feeling under your feet, and you can fill in the detail, and really be here now. And you can be as comfortable and relaxed as you want to be, as you can be for just now.

And right now, you have no need of your cares and worries, that's right, you know that you can allow yourself the relief of offloading any cares or worries that you don't need or want right now, offloading them into a container like a box or a basket, any cares or worries you may have about the rest of your pregnancy, perhaps about your health or the baby's health, offload them into the container, any cares or worries about labour and how well it will go, offload them, any cares or worries you may have about after your baby is born, and how you will establish your new routine with your baby, any cares or worries that you don't need or want right now, offload them into the container. And then you can just send that container off and away. Very small and far away. Maybe you'll put it on a cloud, or on a boat, or attach some brightly coloured helium filled balloons so it just drifts off smaller and further, further and smaller off to the horizon, you don't allow it to completely disappear so you know where it is and you can get those cares and worries back another later time if you need to look at them again, but for now you can enjoy the feeling of relief, of release and relief as those cares and worries just drift off very small and far away and when they are just a little dot resting on the horizon you can feel a wave of release and relief flow all through you and go deeper and deeper relaxed.

And as you enjoy even deeper comfort and relaxation, you know that right now your body is nurturing your baby, growing your baby, bigger and stronger. Preparing your baby for entry into the world, your body knows what to do. Every kick or movement of your baby is a reminder of how your body knows how to nurture your growing baby; your body knows what to do. Trust in the body and your body has been preparing for almost nine months, preparing just for the safe and comfortable delivery of your baby, your physiology has been changing, preparing for birth like an athlete in training your body to know what to do, trust in the body all you need to do is relax and let the body do what it knows how to do, deliver your baby safely and comfortably. You can let your body flow quite naturally, and relax into the flow and go with the flow and deliver your baby safely and comfortably.

You know you are relaxed, and you can relax and let the uterus do what it knows how to do, deliver your baby safely and comfortably. Every contraction will bring you closer and closer to meeting your baby and you can relax during a contraction and breathe and relax, and when the contraction fades away you can forget about it because it's done its job and brought you closer and closer to the joy of meeting your baby. And when the contraction fades away and it's over you can forget about it and you can enjoy a nice long rest. Between contractions a nice long rest. And during your labour there are some times you can particularly look forward to. Times when you can feel a surge of strength and energy and excitement and confidence and go even deeper relaxed.

You can look forward to the cervix being 2 to 3 centimetres dilated because then you'll know that you are in established labour and that soon you will meet your baby and you can feel a surge of energy and excitement and confidence as you relax deeper and deeper. And you can look forward to the cervix being 4 to 5 centimetres dilated because then you are entering the accelerated phase of labour and you're probably more than halfway there and will so soon be meeting your baby for the very first time. And you can feel a surge of energy and excitement and confidence as you relax deeper and deeper and you don't even need to remember why.

And you can look forward to the cervix being fully dilated at 10 centimetres because then you're ready to help the uterus push out your baby, you're ready to meet your baby and you can be completely re-energised. So how about imagining that we're ahead in time, and you imagine that you are in labour and imagine that you are in the first stage of labour and you are relaxed and imagine that a contraction is over and you're ready to forget about it, you're ready to enjoy your nice long rest. And you can float back up to the top of the stairs and open your eyes, leaving the body deeply relaxed from the neck down, ready to enjoy your nice long rest, that's right you can float back up to the top of the stairs, open your eyes, leaving the body deeply relaxed from the neck down, ready to enjoy your nice long rest, eyes open now, and now, imagine the first sign of a contraction,

like a tightness, like a hardness in the abdomen, like a wonderful power that's working for you, and you roll up your eyes, close the eyes and breathe in, feel strong, and relax, breathe out and float back down back down into hypnosis, float back down the stairs, down to your special place. Where you can be even more comfortable and relaxed, as comfortable and relaxed as you want to be for just now, and with every breath you feel even stronger and even more relaxed as you breathe any tension away.

More and more relaxed as you breathe through the contraction, down to your special place. And as you float down it's as if you are moving further and further away from the contraction, it's as if the contraction is just moving into the distance as you enjoy all the comfort of your special place. And as you imagine the contraction fading away, you know when it's over you can forget about it, it's done its job and you are closer to the joy of meeting your baby for the very first time. And you can allow your labour to progress at just the right rate for you and your baby. And as you imagine that contraction being over you can forget about it, float back up to the top of the stairs, open your eyes, leaving the body deeply relaxed from the neck down, ready to enjoy your nice long rest. That's right; eyes open now, looking forward to your nice long rest. Closer and closer to meeting your baby. And now imagine the first sign of another contraction, like a tightness, like a hardness in the abdomen, like a wonderful power that's working for you, and you roll up your eyes, close your eyes, breathe in and feel strong, breathe out and relax, float down, relaxing deeper and deeper as you float down the stairs, deeper and deeper relaxed with every breath down to your special place very comfortable and if your special place is a beach, you may like to watch a wave, a wave that starts like a line of colour on the ocean and it builds up like a contraction, the colour changes, it gets a crest of foam and then you see it breaking onto the shore, hear it breaking onto the shore, taste the salty spray and the water just runs away, the wave recedes just like a contraction fades away more and more distance and you know you'll never see that wave again you'll never have that contraction again you can forget about it, it's brought you closer and closer to the high tide mark and the safe and comfortable arrival of your baby.

And you know no two waves are quite the same, and you can allow your labour to progress at just the right rate for you and your baby. And when that wave has gone and the contraction is over, you can forget about it, and know you're coming closer and closer to meeting your baby for the very first time. And you can float back up to the top of the stairs, opening the eyes leaving the body deeply relaxed from the neck down ready to enjoy your nice long rest.

That's right, eyes open looking forward to your nice long rest. And now, you can imagine the first sign of a contraction, like a tightness, like a hardness, like a wonderful power that is working for you, and you roll up the eyes, close the eyes, breathe in and feel strong, breathe out and relax and float down, deeper and deeper down, down the

steps, down to all the comfort of your special place, and as you continue to breathe feeling stronger with every breath in, feeling more relaxed with every breath out, this time you may like to imagine some physical activity. Like walking or swimming or rowing or paddling and as the contraction gets stronger you breathe even deeper and feel even stronger and feel even more relaxed as the contraction gets stronger. And as the contractions get stronger you can be pleased in knowing that they are even more effective and bringing you even closer to meeting your baby.

And you can get further and further away from the contraction, the contraction can just move into the distance and when the contraction is over you know you can forget about it, it's done its job it's brought you closer to meeting your baby and you know that you labour is progressing at just the right rate for you and your baby. And as you imagine the contraction is over you can forget about it, you're closer to meeting your baby, and you can float back up to the top of the stairs, open the eyes, leaving the body deeply relaxed from the neck down, looking forward to your nice long rest. That's right, eyes open looking forward to your nice long rest.

And now, imagine the first sign of a contraction, it's a wonderful power working for you, roll up your eyes, close your eyes, breathe in and feel strong, breathe out and relax and float down, down into hypnosis, down the stairs down to your special place, deeper and deeper down, more and more relaxed further and further away from the contraction. The contraction just moving into the distance, just moving away and you may like to imagine that you are rocking, rocking on an exercise ball, or rocking on a chair, or on a bed, and it's amazing how the body can relax and yet rock as if it's rocking with its own momentum, and you can relax into the momentum, relax into the to and fro, relax into the back and forth, feeling the supportiveness beneath you as you relax and rock, and you relax and rock and rock and relax further and further away from the contraction, the contraction moving into the distance, fading away, and you know that when the contraction is over you can forget about it, you'll never have that contraction again. It's done its job; you're coming closer and closer to the joy of meeting your baby for the very first time. And your labour is progressing at just the right rate for you and your baby and when the contraction is over you can float back up to the top of the stairs. Open your eyes, leaving the body deeply relaxed from the neck down, ready to enjoy your nice long rest. That's right. And as you imagine the first sign of a contraction the wonderful power that is working for you, you roll up your eyes, close your eyes breathe in and feel strong and breathe out and relax and float back down, back to where you're very safe and comfortable this time do whatever is right for you.

Go where you can be as comfortable and relaxed as you can be for just now. Do whatever is right for you, whatever you need to do to be as comfortable and relaxed as you need to be for just now and I don't know why but as the contractions get stronger

they will seem even shorter and as the contractions get stronger, the rest between will seem even longer. So as the contractions get stronger they'll seem shorter, and as the contractions get stronger the rest between will seem even longer. And it will just happen without you even knowing why, deeper and deeper relaxed as the cervix dilates from nought to 10. Deeper and deeper relaxed as you come closer and closer to the number 10. And when the cervix is dilated at 10 centimetres you'll be ready for second stage, ready to help the uterus push your baby out into the world, you'll be so close to meeting your baby, and when the cervix is 10 centimetres dilated you can look forward to a surge of energy and excitement and feel completely re-energised and thanks to all your nice long rests you will have more energy than you could possibly need to help push your baby out into the world.

That's right; all your nice long rests will have given you more energy than you could possibly need to deliver your baby safely and comfortably. So, in second stage when you feel that pressure in your bottom, all the ligaments will stretch and stretch and expand and stretch and you'll feel like you have so much room to deliver your baby, that's right, you know that your body has been preparing for this for nine months, your body is ready, all the pregnancy hormones have made the ligaments so elastic that when you feel pressure in the bottom all the ligaments will just stretch and stretch and expand and stretch and you can relax into the stretch and it will happen without you even trying and you will have so much room to deliver your baby safely and comfortably. And you know that as skin stretches it becomes quite numb and the perineum can be quite numb as you deliver your baby safely and comfortably. During a contraction in second stage you can push and push you can imagine something a bit funny, a bit silly.

You can imagine standing in front of the bathroom basin with a full tube of toothpaste in your hands, you're holding it at the bottom of the tube. Both thumbs on one side, four fingers on the other, and the lid is off, and you're going to squeeze all that toothpaste out into the sink, that's right, squeeze it out, all out all out into the sink, move the thumbs and fingers further along the toothpaste tube and squeeze it all out, all out into the sink, and you might be quite amused by this, and you can deliver your baby safely and comfortably, your body knows what to do, it's been in training and you can just let your body do what it knows how to do, you can relax into the flow, trust in the body you've trained yourself to relax and let the body flow.

And you can feel so pleased and proud of yourself, so pleased and proud of your commitment, of your time, so pleased and proud of your abilities, you are relaxed and you can deliver your baby safely and comfortably, and you can feel so pleased and proud of yourself, and you can imagine your joy at meeting your baby for the very first time. Imagine your pleased and proud feelings as you look at your baby, as you hold your

baby, as you feel your baby's soft skin as you listen out for your baby's first little sounds. I wonder what colour hair your baby will have, I wonder what colour eyes, and did you know that babies, when they are first born, are quite alert? And your baby will open its eyes and look at you, and did you know the distance, the distance a baby's eyes can clearly focus on, is the distance between your eyes and their eyes when you hold them in your arms, so when you hold your baby and look at your baby, your baby will look at you, and see you clearly. Imagine your joy, imagine your pleased and proud feelings as you hold your baby for the very first time as your baby looks at you and sees you clearly for the very first time.

You can deliver your baby safely and comfortably, trusting your body, you have the ability to relax and you can use your relaxation for any turn of events because whatever the situation you have the ability, you have the freedom to relax, to do whatever is necessary for your comfort. You can relax, you are in control, you have the ability to do what you need to do to be comfortable, you are in control, and you can use your relaxation for any turn of events. You can use your relaxation after the baby is born, you can relax and deliver the placenta quickly and easily with minimal bleeding and the uterus can contract down tightly, you can relax and let your body heal quickly and easily, you can relax and let your breasts fill with just the right milk for you and your baby. You can feed your baby in comfort and relaxation, all you need to do is breathe, let the shoulders sag, relax and let your milk flow at just the right rate for you and your baby. You can relax into establishing a routine that's just right for you and your baby, you have the ability to relax and you have the freedom to do whatever is necessary for your own comfort and you know that at all times you need only tune in to what is helpful for you and your baby.

You have the ability you have the freedom to tune out to any unhelpful words, comments or sounds, you have the ability to tune out to anything unhelpful as if it's in a foreign language or like the white noise of an untuned TV channel. Unhelpful comments or sounds will be like a foreign language or like a white noise, you have the ability, you have the freedom to only tune into what is helpful, helpful for you and your baby. You have the control like a TV remote control, you have the control, and now you have the ability and freedom to let everything helpful that I have said to go deeply into the unconscious mind, and everything helpful will be there for you when you need it and you won't even need to try to remember, everything helpful will be there for you.

When you need it, and when everything helpful that I have said is deeply in the unconscious mind, then in your own time and your own way you can gently bring yourself back to the here and now so that when you open your eyes you will be relaxed and refreshed, senses back to normal and looking forward to your ability to deliver your baby safely and comfortably.

DISCUSSION

If effective, the audio CDs on hypnosis would be a simple, inexpensive way to improve the childbirth experience, reduce complications associated with pharmacological interventions, and yield cost savings in maternity care, and this trial will provide evidence to guide clinical practice (Cyna et al., 2006).

REFERENCES

- Cyna, A. M., Andrew, M. I., Robinson, J. S., Crowther, C.A., Baghurst, P., Turnbull, D., Wicks, G., & Whittle, C. (2006). Hypnosis Antenatal Training for Childbirth (HATCH): A randomised controlled trial [NCT00282204]. *BioMedCentral Pregnancy Childbirth*, 6(5). <http://www.biomedcentral.com/1471-2393/6/5>.
- Cyna, A. M., Andrew, M. I., & Whittle, C. (2007). Hypnosis Antenatal Training for Childbirth (HATCH): Intervention scripts 1 and 4. *Australian Journal of Clinical and Experimental Hypnosis*, 35, 83–94.

COMPLEX PAIN

Helen Rowe

Queensland University of Technology

This script was prepared for a person, Kathleen, who suffered from complex regional pain syndrome, had been off work for about a year, and was about to return to the workforce when she came to consult me. The return to work agreement was that she would start initially for 90 minutes per week and then gradually build up her hours over time, depending on how she coped.

She experienced constant nerve pain in both arms, and hypersensitivity to touch, movement, and temperature. Even air-conditioning felt painful to her. She was fearful of losing her position, even though her employers stated they would create a job for her if necessary. We mutually developed a return to work plan that detailed the duties that she could perform and negotiated with her employers about practical issues.

Kathleen was a client who many professionals had found very difficult to assist. “Nothing helps!” “Yes, but!” So I thought that perhaps some suggestion would be helpful. This script followed several sessions in general relaxation, visualisation, etcetera. She had successfully experienced hypnosis in the past for a significant loss in her life.

The following hypnosis session was part of a broader counselling session and normal protocols were followed for permission to utilise hypnosis.

*Let's begin to prepare ... I'd like you to find a comfortable position ... And become ready to relax ... become ready to let go ... of tension ...
Can you ... now ... find a point that you can stare at with comfort ...
choose to fix your eyes on a point ... that is comfortable for you ... good
... and you can stare at this spot quite easily ...*

as you continue to stare at your spot ... you can notice how with the effort ... of staring ... it can begin to move ... Perhaps up a little, or down a little ... Maybe, it's not moving yet ...

and I don't know when it started ... to seem blurry and out of focus when your eyes begin to feel quite tired ... so ... tired ... that they begin to want to close ...

and it almost seems like it is ... easier to allow them to just gently ... close ...

and you can feel the relief that ... they have closed.

As you allow them to ... relax ... You can now continue to relax ... and begin to feel that sense of relaxation spread into your chest ...

you can ... begin to be aware of how your chest rises and falls each time you breathe ... And with each breath out ... it seems like you can let go a little more ... and more ... as if you can relax ... quite deeply ... and deeper ... and deeper ... The muscles in your body can let go ... Little by little ... every time you breathe out ... and it feels good ... to be able to relax ... your body ... more and more deeply ... the muscles in [progressively move from feet through legs, pelvis ... etc.]

your face ... eyes ... jaw ... until you are ready

to travel ... to your special place ... where you will be able to

prepare yourself ... you can travel down the flight of stairs and I will count

for you ... So that you can be free to look out ... in anticipation ... of being

in ... your own special place ... a place where even though your conscious

mind has concerns about working ... **your unconscious mind can feel**

remarkably and surprisingly free ... Let's count as you travel down the

flight of stairs. And if you want to count ahead of me or if I count ahead of

you ... It doesn't really matter ... **because your unconscious mind will soon be so**

free to decide how best you can prepare ...

One ... you can begin to notice the warmth of the sun shining ... lighting

up the stairway before you ... two ... three ... anticipating being

there ... four ... five ... noticing the smell of the sea air

... and six ... seven ... the sound of the water ...

eight ... nine ... your eyes drink in the beauty of this place ...

Ten ... you step out onto the sand and move out into ...

this place of peace ... where your unconscious mind can help you to

prepare for your return to work ... to practise for the return ... in this

safe place ... Here you can prepare, can help your body to be soft ... and loose ... And forget ... a little ... if not even more ... the discomfort in your arms ... while you are there ...

Your unconscious mind can take ... care of it for you ... which is a lovely relief ... not having to do anything ...

And it may surprise you to notice how you can go even deeper with the knowledge that your unconscious can dim the discomfort for a while ...

Perhaps for even longer ... than you expect ... And you know somehow ... that you don't have to worry about how ... you can shut out the air-conditioning ... and that you don't have to worry about ... the people around ... asking questions ...

You will be pleased when you begin to notice ... how the people around seem to be supporting you ... much more than you thought ... in this slowly successful return to what you like to do ...

And you can be pleasantly surprised ...

at how well you can easily focus ... on just doing okay when you are at work ... because

... lots of little okays ... all add up ... don't they ... to what you really want ... and what you can achieve ... because you have achieved amazing things before ... and you can achieve even more amazing things yet ...

Like how you can create a light ... Can you notice it? ... I'm not sure what colour it is ...

perhaps a soft healing green ... or pink ... or perhaps today it is another colour ... (and you can let me know it is there by raising a finger)

I'm not sure if it is a clear bright light ... or soft and a little hazy ... perhaps it even changes ... or moves ... I don't know ...

[embellish, depending on what one observes in client]

Quite an amazing light really ...

So is your ability to scan your body and

notice ... so quickly ... just where the light is needed ... to heal the suffering nerves ... in your body ... the nerves that have temporarily forgotten how to ...

respond normally to ordinary movements and ordinary temperatures ... how they used to and how ... they will again

remember ... and react as you know they know how to ... and
 you can direct that light more ... and more ... powerfully ... to heal your
 own body. But it is not surprising really ... Kathleen ... you have such
 a strong spirit ... that healing can occur so easily ... when you begin to

heal ... healing ... nerves healing ... nervous system healing
 and calming ... more calm ... It is as if your body **really enjoys the
 light**

that washes through it ... as if the parts that have suffered in the
 past ... recognise ... the light ... and what the light can do ... the
 cells have been waiting for the light ... the
 colour ... the warmth ... and are excited ... yet calmed by its **presence**
 [anchor]

so that you can begin to notice ... I'm
 not sure exactly when ... perhaps even as soon as tonight ... or
 tomorrow ... but especially when you go to work again ... on the first
 day ... how calm you can be ... and you can
 be really proud of yourself ... all the doctors and psychologists and
 therapists could only help somewhat ... could not do what you will
 do ... your unconscious mind can do ... gradually healing the damage
 healing ... calming ... remembering how to
 be ... normally ...

calmly ... feeling warm from the inside ... it is as if the light can
 penetrate into the very cells of your nerves, your skin, your muscle,
 your bones ... into the very atoms of your cells and into the spaces
 between the cells ... to warm ... like you have your own internal
 heaters ... warming ... and healing ... and calming [anchor]

Perhaps by 10%

or even 20% ... or more ... And I won't be surprised ... but I'm sure it will be
 interesting to watch other people's reactions when they see how things are
 changing so well for you others will ... be impressed

at your calming and healing your body by much more than that ... even 50
 or 60% before long ... and you can do this ... keep the things in your life
 that you love... And have the wisdom ... to heal ... let go of the
 things you no longer need ... in your life ... and with this knowledge
 of how to scan your body and

notice ... so quickly ... just where the light is needed ... to heal
 the suffering nerves ... in your body ... the nerves that had

temporarily forgotten how to ...
 respond normally to ordinary movements and ordinary
 temperatures ... how they used to and how ... they do again
 remember ... and react as you know they know how to ... and
 you can direct that light more ... and more ... powerfully ... to heal your
 own body. Knowing now that you can use your [anchor]
 so that your conscious mind can tap into the healing ability of your conscious
 mind to warm and calm and heal ... especially when you need it ...
 you can leave this beautiful place and begin to
 climb the stairs ... 10 ... with remarkably new confidence ... 9 ... with
 renewed confidence ... 8 ... because your conscious mind is beginning to
 what your unconscious mind ... 7 already knew ... 6 ... and as you return
 to this room ... becoming more and more alert ... Refreshed ...
 5 ... normally alert ... with normal bodily functioning ... And
 sensations ... 4 ... 3 ... 2 ... feeling prepared ... 1... and when you
 are ready ... opening your eyes ... so much more ready ... to move
 forward.

Kathleen indicated that she found great help in this script and asked for a copy at the next session. Her return to work was gradual and she still needed therapy to help her cope with the loss of her general health.

REVIEWS

Hypnosis and Communication in Dental Practice

David Simons, Cath Potter, and Graham Temple

London: Quintessence Publishing, 2007. 280 + xvi pp. £38

This is a book I wished I could have read many years ago; it would have taught me much that I have had to learn through years of practice. It embodies a great deal of clinical experience coupled with an extensive knowledge of hypnosis to produce a work which is at once both eminently readable and of immediate practical application.

Although written primarily for dentists, the information it contains related to communication is applicable to any form of human interaction, and students of hypnosis from other professions will find the concise summaries of most of the commonly used techniques, as well as the insight into peculiarly dental problems, to be very useful.

The book is presented in eight parts which will guide even the novice practitioner to be able to achieve a considerable level of skill in the presented techniques, especially in the areas of communication. Although considerable detail is given on hypnotic techniques, with numerous scripts throughout the book, there is no substitute for supervised practice in achieving the best outcomes in using hypnosis, and anyone who is seriously interested in this modality would be well advised to contact their local professional hypnosis society for appropriate training. Having said that, this book is an excellent primer for the practical applications of hypnosis in dentistry, and would be essential reading for anyone contemplating the introduction of hypnosis into their practice.

Part 1 briefly reviews the history of hypnosis in medicine and the nature of hypnosis. This is a fairly conventional chapter, and similar to that found in many books of this nature.

The second part discusses the concept of rapport in some depth, and reviews the various ways it can be enhanced, as well as the ways it can be inhibited.

It examines the basis of many misconceptions about hypnosis and the ethical problems associated with stage hypnosis, and concludes with a comprehensive summary of the ways we can improve our patient communication skills.

Basic induction, deepening, and alerting techniques are covered in Part 3. The three chapters here include many scripted examples which can be combined in various ways to assist the novice. There are a further two chapters dedicated to hypnotic communication: types of suggestions (direct and indirect), pace, rhythm, repetition, "yes set," use of "trying," embedded suggestions, and double binds. It concludes with a very useful section on the use of metaphors and their effectiveness, imagery, sensory modes, habit control, and relaxation.

Part 4 details many of the clinically useful hypnotic techniques: ego-strengthening, ideomotor signalling, post-hypnotic suggestions, anchoring, and self-hypnosis. Included here are chapters on the management of specific dental problems: the management of bleeding, of salivation, and of aphthous ulcers. All of these chapters contain sample scripts and clinical examples.

An overview of psychodynamic therapy, including abreactions and the affect bridge, are presented in Part 5. This is followed by a review of the dimensions of pain, fear, and anxiety and their treatment, with a full chapter devoted to the management of pain. Again, there are many sample scripts included in these chapters.

Commonly encountered dental problems are discussed in Part 6, with a chapter each on habit management, bruxism, gagging, thumb-sucking and nail-biting, and smoking cessation. In the opinion of this reviewer, treatment of nicotine addiction is rather peripheral to dental care and is better treated by a multi-level approach (e.g., CBT and hypnosis). This does not mean that dentists cannot give useful support to these patients during routine care, and this chapter describes the usual treatments very well.

Hypnosis with children, and the use of hypnosis as an adjunct to sedation, is the subject of Part 7. Children offer some of the most rewarding uses of hypnosis as they are generally less sceptical and are willing to become imaginatively involved in a story, and several techniques specially suitable for children are presented. Hypnosis used with sedation offers the advantages of deeper relaxation with less drug, more rapid recovery, and the use of post-hypnosis suggestion. It will deepen the effects of nitrous oxide and can overcome the fears of the needle phobic for IV sedation.

The book concludes in Part 8 with a discussion of ethical considerations, training, and qualifications.

I can summarise the work of this book no better than have the authors:

“The ultimate aim of this book is to improve the quality of your working life, and thereby to enhance the quality of dentistry for you, your patients and the entire dental team.”

Highly recommended to anyone with an interest in dentistry, hypnosis, and patient communication.

JAMES M. AULD
Dental surgeon

**Hypnosis and Conscious States:
The Cognitive Neuroscience Perspective**

Graham A. Jamieson (Ed.)

London: Oxford University Press. 2007. 336 pp. £75 hardcover;
£29.95 paper.

Graham Jamieson has addressed a gap in the literature which he identified many years ago. At that time, he was involved in the (perhaps) thankless task of ensuring that clinicians understood some of the issues involved in research in this area as they pursued postgraduate diplomas in hypnotherapy. Certainly, for me, this collection of chapters from some of our foremost researchers in the hypnosis field has finally helped me understand precisely what Jamieson meant when he bemoaned the lack of such a book. Hypnosis research is firmly located in its place as an important element in the study of consciousness, and the common assumptions that the unity of such consciousness is basic to being human.

For those of us who gratefully abandoned statistics and the rigours of writing research papers when we finished university, this book provides very useful information about what might be happening in the brains of those with whom we work who suffer pain, both physical and psychological. However, while it draws one back to the intriguing questions with which we struggled while completing hypnosis studies — for example, is hypnosis an altered state of consciousness, or is it characterised by more mundane mental processes? — it is not a book which will make a good, light bedtime read.

Fortunately, Jamieson provides a very readable introductory chapter, which overviews the major issues currently underpinning research in hypnosis and underlines the need to integrate phenomenological, behavioural, and neurophysiological data. This chapter was far more meaningful to me after I had read the other 15 chapters, thus providing a preview and a review. Additionally,

as a guide for the “not so scientific,” amongst whom I include myself, the book is organised around a number of themes relevant to these major identified issues. From four chapters relating to functional brain networks, one proceeds to a small section of two chapters dealing with dissociation. One of these chapters, penned by Jamieson and Erik Woody, provides a very useful and timely historical review of the pivotal theories of hypnosis. The next four chapters examine states of consciousness, while the final section covers the psychobiology of trance and is composed of five contributions.

This book is so densely packed with information that it is difficult to provide details of its many facets. Students interested in understanding the breadth of research, and the kinds of theories of consciousness which contribute to same, will find much here to interest them. Practitioners will possibly be more interested in those chapters which appealed to me. These were related to the philosophy of mind, typified by the chapter presented by Tim Bayne entitled “Hypnosis and the Unity of Consciousness.” Another chapter which appealed to me was contributed by William J. Ray. Entitled “The Experience of Agency and Hypnosis from an Evolutionary Perspective,” it examines the possible usefulness of hypnosis in terms of attachment and social cohesion. Woody and Henry Szechtman discuss affective and motivational states, or what they called “feelings of knowing,” as well as the importance of rapport in the development of the state we call hypnosis. Again, I enjoyed this kind of speculative discussion, as I did the chapter by Peter Naish on “Time Distortion.”

As a person with a penchant for concrete learning, who appreciates the presence of diagrams and pictures to augment my understanding of the kinds of theoretical materials contained herein, I would have to say that I appreciated those chapters (8, 10, and 13, especially) which provided some diagrammatic and tabulated information to assist me to grasp the important concepts. I read the book away from my accustomed haunts, and was considerably hampered by the lack of a diagram of those parts of the brain which were specified in the neurophysiological chapters. This left me, once again, with a great admiration for brains, such as the ones that neurophysiologists obviously possesses, which can so competently identify the seminal issues in consciousness (and hypnosis) research, and identify the gaps and inconsistencies therein. This is an important contribution to the development of “mutually informative dialogue between the emerging cognitive neuroscience of consciousness and hypnosis research” for which Graham Jamieson is a convincing advocate.

SUSAN HUTCHINSON-PHILLIPS

ASH Qld President

The Psychology of Eating and Drinking

Alexandra W. Logue

New York: Brunner-Routledge. 2006. 384 pp. \$US29.95

Reading this book reminded me of the reasons I became a practitioner, rather than a researcher. Here is a woman who admits to enjoying the manipulation of numbers! As well, the book gives evidence of familiarity with all published (and more esoteric pieces of) research in the area of eating and drinking.

However, the value of familiarity with such literature for the practitioner was also reinforced. Although cognizant of much that the book contained, I found material to stimulate reconsideration of work I am undertaking with those battling with a self-defeating relationship to food and drink. As well, I was again reminded that those mechanisms in the human body which adapted the human race for survival in the wild have become (for many) an impediment to optimal health in modern society. A couple of examples garnered from my reading of this book may serve to whet the appetite to dip into this highly readable offering.

Our natural preference for high-fat, calorie-dense food, so useful where food shortage was a given of existence, is currently aiding in an obesity pandemic. The equally useful drop in metabolic rate, which assisted our early ancestors to survive such famine, has rather diabolic effects on the body of the constant (and yo-yo) dieter, striving to attain the Western thin ideal. Dieting, with this kind of metabolic reaction, is a decidedly no-win sport.

In the preface, the author mentions that her optional, advanced course relating to the psychology of eating and drinking was extremely popular with students at New York State University. If the style of her oral delivery was as interesting as the informal, yet highly informative, style of this book, her popularity as a lecturer is understandable.

The early chapters in the book cover selected research results relating to satiety, thirst, tastes, and genetic and environmental contributions to eating and drinking behaviour. Later chapters are devoted to specific issues germane to self-defeating eating and drinking. Causes of each problematic behaviour investigated in the literature, and research regarding successful/common therapies, are covered in each chapter. Eating disorders, over-eating and obesity, alcohol abuse, type 2 diabetes, smoking, and eating related to the reproductive cycle are each the subject of one chapter. A final chapter about

national cuisines adds a non-pathological flavour, and draws together many of the themes the author has developed.

Perhaps my favourite tid-bit of information from this book concerns the widespread gastronomic delight in chocolate. According to Dr Logue, one ounce of milk chocolate contains 150 calories (which gives it great survival value in the wild). As well, it contains wonderful micro-nutrients such as calcium, potassium, magnesium, and Vitamins A and B3. Caffeine, a useful energy-raising stimulant, is also part of its composition. What an asset it would have been in the dinosaur days. However, in this age of fast food, requiring little foraging energy, it simply adds adipose cells to whatever parts of our anatomy are genetically programmed to carry excess fat. And once those little adipose cells have been laid down, unless they are “full” they can continue to cause hunger, even when we have shed what we consider to be the excess avoirdupois.

Although this book is not entrée sized, but very much a main course, it is an interesting, entertaining, and informative read.

SUSAN HUTCHINSON-PHILLIPS

ASH Qld President

Hypnosis as a Psychotherapy Tool

Susie Rotch

Melbourne: HypnoBook, JoJo Publishing. 2004. 32 pp. \$24.95 + P&H

While I am not a fan of “one size fits all” DVD/CD material for clients/patients, preferring to record individual CDs as I work with individuals, I was impressed by the concept of this program. As well, it was very exciting to discover that we have an alternative to the ubiquitous American product which has, up till now, been our only choice in this style of program.

This manual is subtitled “An Introduction to Hypnosis for Personal Growth.” It is Suzie Rotch’s introduction manual for use with her self-help DVD programs and journals in the Living Skills HypnoBook Library. A series of DVDs and accompanying manuals cover chronic pain and illness, low self-esteem, sexual and sleeping difficulties, anger and specific fears (public speaking and flying), anxiety and depression — 10 DVDs in all.

My initial concerns, as outlined in the opening sentence of the review, were somewhat dispelled when I grasped that the style of hypnosis offered

involved the use of Ericksonian (often via Bandler and Grinder) techniques, including confusional messages and visual imagery. As well, each program included the provision of a journal where goal setting, cognitive restructuring and behavioural changes can be personally tailored by/for each client.

The rationale for the use of this kind of hypnosis, provided in the manual, is clear and very easy to understand. Not only is the information simply expounded for its expected audience of clients/patients, but it also seemed that it had enormous potential for use in the education of trainee hypnotherapists.

While I was only provided with the manual to review, I believed that I could not do the series justice simply by reading this book. Contact with Suzie Rotch led to her provision of one of the recent releases in the series, *Overcoming Anxiety: Managing Anxiety*, for my perusal and comment. This included the DVD and the manual/journal as one convenient package.

The manual accompanying the DVD makes the concepts covered easily grasped. Anxiety is conceptualised in terms of the gap between ideal and perceived selves, and the goal of the program is outlined as helping to alleviate helplessness by taking control of the perceptions and actions which dictate how one lives life. As explanation for the benefits of hypnosis, the parts played by the unconscious, preconscious, and conscious aspects of mind are discussed. Goal setting is introduced, step by step, with spaces assigned in the manual for the enumeration and elucidation of personal hopes. Clients are encouraged, in the following section, to consider times of success in the past, to harness history in the interest of achieving current goals. Calm confidence is the generic goal which Rotch offers. Further space is devoted to visualising a day, a month, and a life of calm confidence.

CBT is harnessed in the interests of cognitive restructuring, and the daily diary is pressed into service in the interests of helping clients achieve their goals. A wellbeing support checklist is included covering categories such as eating, sleeping, exercising, meaningful activities and relationships, aesthetic environment and spiritual values. Finally, step-by-step instructions are included for use of the DVD, and a space is demarcated for celebrating achievements.

Watching the DVD was an interesting experience — and Rotch has collaborated with a well-know film producer to provide the images which form the background to her beautifully scripted hypnotic presentations. This particular DVD draws on the story of the Ugly Duckling as its major inspiration. However, the hypnotic script involves confusional techniques and word plays which make it very entrancing indeed. In the interests of this

review I watched every second of the DVD; however, the induction was so beautiful that I struggled to keep my eyes open and to resist the invitation to become wonderfully and blissfully hypnotised.

Unfortunately I did not have time to work on a personal anxiety/worry, to find out whether the program works as effectively as Rotch claims. Herein lies an excellent project for a postgraduate research study. It would be very interesting to establish the utility of the program.

I was very impressed, overall, and cannot wait to use this manual and DVD as an adjunct to therapy with clients. At a price of \$49.95 (plus postage and handling) per program, these offerings are very affordable. Many self-help programs are more expensive than this, and do not have the structure or simplicity of this series. If you are interested in viewing/sampling one of these impressive tools, Suzie Rotch responded within 24 hours of my contacting her on thrive@livingskillslibrary.com. On her website, www.livingskillslibrary.com, you can also find details of her interesting new offering for therapists, relating to Groupwork.

SUSAN HUTCHINSON-PHILLIPS

ASH Qld President

INFORMATION FOR AUTHORS

1. Contributions should conform to the style outlined in the *Publication Manual of the American Psychological Association* (5th ed., 2001), except that spelling should conform to the *Macquarie Dictionary*. Page references in the following notes are to the *Publication Manual*. The attention of authors is especially drawn to the organizational overview in the fifth edition (pp. xiii–xxviii).
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